Semiotics for Beginners

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Introduction

If you go into a bookshop and ask them where to find a book on semiotics you are likely to meet with a blank look. Even worse, you might be asked to define what semiotics is - which would be a bit tricky if you were looking for a beginner's guide. It's worse still if you do know a bit about semiotics, because it can be hard to offer a simple definition which is of much use in the bookshop. If you've ever been in such a situation, you'll probably agree that it's wise not to ask. Semiotics could be anywhere. The shortest definition is that it is *the study of signs*. But that doesn't leave enquirers much wiser. 'What do you mean by a sign?' people usually ask next. The kinds of signs that are likely to spring immediately to mind are those which we routinely refer to as 'signs' in everyday life, such as road signs, pub signs and star signs. If you were to agree with them that semiotics can include the study of all these and more, people will probably assume that semiotics is about 'visual signs'. You would confirm their hunch if you said that signs can also be drawings, paintings and photographs, and by now they'd be keen to direct you to the art and photography sections. But if you are thick-skinned and tell them that it also includes words, sounds and 'body language' they may reasonably wonder what all these things have in common and how anyone could possibly study such disparate phenomena. If you get this far they've probably already 'read the signs' which suggest that you are either eccentric or insane and communication may have ceased.

Assuming that you are not one of those annoying people who keeps everyone waiting with your awkward question, if you are searching for books on semiotics you could do worse than by starting off in the *linguistics* section.
It is... possible to conceive of a science which studies the role of signs as part of social life. It would form part of social psychology, and hence of general psychology. We shall call it semiology (from the Greek semeion, 'sign'). It would investigate the nature of signs and the laws governing them. Since it does not yet exist, one cannot say for certain that it will exist. But it has a right to exist, a place ready for it in advance. Linguistics is only one branch of this general science. The laws which semiology will discover will be laws applicable in linguistics, and linguistics will thus be assigned to a clearly defined place in the field of human knowledge. (Saussure 1983, 15-16; Saussure 1974, 16)

Thus wrote the Swiss linguist Ferdinand de Saussure (1857-1913), a founder not only of linguistics but also of what is now more usually referred to as semiotics (in his Course in General Linguistics, 1916). Other than Saussure (the usual abbreviation), key figures in the early development of semiotics were the American philosopher Charles Sanders Peirce (sic, pronounced 'purse') (1839-1914) and later Charles William Morris (1901-1979), who developed a behaviourist semiotics. Leading modern semiotic theorists include Roland Barthes (1915-1980), Algirdas Greimas (1917-1992), Yuri Lotman (1922-1993), Christian Metz (1931-1993), Umberto Eco (b 1932) and Julia Kristeva (b 1941). A number of linguists other than Saussure have worked within a semiotic framework, such as Louis Hjelmslev (1899-1966) and Roman Jakobson (1896-1982). It is difficult to disentangle European semiotics from structuralism in its origins; major structuralists include not only Saussure but also Claude Lévi-Strauss (b. 1908) in
anthropology (who saw his subject as a branch of semiotics) and Jacques Lacan (1901-1981) in psychoanalysis. Structuralism is an analytical method which has been employed by many semioticians and which is based on Saussure's linguistic model. Structuralists seek to describe the overall organization of sign systems as 'languages' - as with Lévi-Strauss and myth, kinship rules and totemism, Lacan and the unconscious and Barthes and Greimas and the 'grammar' of narrative. They engage in a search for 'deep structures' underlying the 'surface features' of phenomena. However, contemporary social semiotics has moved beyond the structuralist concern with the internal relations of parts within a self-contained system, seeking to explore the use of signs in specific social situations. Modern semiotic theory is also sometimes allied with a Marxist approach which stresses the role of ideology.

Semiotics began to become a major approach to cultural studies in the late 1960s, partly as a result of the work of Roland Barthes. The translation into English of his popular essays in a collection entitled Mythologies (Barthes 1957), followed in the 1970s and 1980s by many of his other writings, greatly increased scholarly awareness of this approach. Writing in 1964, Barthes declared that 'semiology aims to take in any system of signs, whatever their substance and limits; images, gestures, musical sounds, objects, and the complex associations of all of these, which form the content of ritual, convention or public entertainment: these constitute, if not languages, at least systems of signification' (Barthes 1967, 9). The adoption of semiotics in Britain was influenced by its prominence in the work of the Centre for Contemporary Cultural Studies (CCCS) at the University of Birmingham whilst the centre was under the direction of the neo-Marxist sociologist Stuart Hall (director 1969-79). Although semiotics may be less central now within cultural and media studies (at least in its earlier, more structuralist form), it remains essential for anyone in the field to understand it. What individual scholars have to assess, of course, is whether and how semiotics may be useful in shedding light on any aspect of their concerns. Note that Saussure's term, 'semiology' is sometimes used to refer to the
Saussurean tradition, whilst 'semiotics' sometimes refers to
the Peircean tradition, but that nowadays the term 'semiotics'
is more likely to be used as an umbrella term to embrace the
whole field (Nöth 1990, 14).

Semiotics is not widely institutionalized as an academic
discipline. It is a field of study involving many different
theoretical stances and methodological tools. One of the
broadest definitions is that of Umberto Eco, who states that
'semiotics is concerned with everything that can be taken as a
sign' (Eco 1976, 7). Semiotics involves the study not only of
what we refer to as 'signs' in everyday speech, but of
anything which 'stands for' something else. In a semiotic
sense, signs take the form of words, images, sounds, gestures
and objects. Whilst for the linguist Saussure, 'semiology' was
'a science which studies the role of signs as part of social
life', for the philosopher Charles Peirce 'semiotic' was the
'formal doctrine of signs' which was closely related to Logic
(Peirce 1931-58, 2.227). For him, 'a sign... is something
which stands to somebody for something in some respect or
capacity' (Peirce 1931-58, 2.228). He declared that 'every
thought is a sign' (Peirce 1931-58, 1.538; cf. 5.250ff,
5.283ff). Contemporary semioticians study signs not in
isolation but as part of semiotic 'sign systems' (such as a
medium or genre). They study how meanings are made: as
such, being concerned not only with communication but also
with the construction and maintenance of reality. Semiotics
and that branch of linguistics known as semantics have a
common concern with the meaning of signs, but John
Sturrock argues that whereas semantics focuses on what
words mean, semiotics is concerned with how signs mean
(Sturrock 1986, 22). For C W Morris (deriving this threefold
classification from Peirce), semiotics embraced semantics,
along with the other traditional branches of linguistics:

- *semantics*: the relationship of signs to what they stand
  for;
- *syntactics* (or *syntax*): the formal or structural relations
  between signs;
- *pragmatics*: the relation of signs to interpreters
  (Morris 1938, 6-7).
Semiotics is often employed in the analysis of texts (although it is far more than just a mode of textual analysis). Here it should perhaps be noted that a 'text' can exist in any medium and may be verbal, non-verbal, or both, despite the logocentric bias of this distinction. The term text usually refers to a message which has been recorded in some way (e.g. writing, audio- and video-recording) so that it is physically independent of its sender or receiver. A text is an assemblage of signs (such as words, images, sounds and/or gestures) constructed (and interpreted) with reference to the conventions associated with a genre and in a particular medium of communication.

The term 'medium' is used in a variety of ways by different theorists, and may include such broad categories as speech and writing or print and broadcasting or relate to specific technical forms within the mass media (radio, television, newspapers, magazines, books, photographs, films and records) or the media of interpersonal communication (telephone, letter, fax, e-mail, video-conferencing, computer-based chat systems). Some theorists classify media according to the 'channels' involved (visual, auditory, tactile and so on) (Nöth 1995, 175). Human experience is inherently multisensory, and every representation of experience is subject to the constraints and affordances of the medium involved. Every medium is constrained by the channels which it utilizes. For instance, even in the very flexible medium of language 'words fail us' in attempting to represent some experiences, and we have no way at all of representing smell or touch with conventional media. Different media and genres provide different frameworks for representing experience, facilitating some forms of expression and inhibiting others. The differences between media lead Emile Benveniste to argue that the 'first principle' of semiotic systems is that they are not 'synonymous': 'we are not able to say "the same thing" in systems based on different units (in Innis 1986, 235) in contrast to Hjelmslev, who asserted that
'in practice, language is a semiotic into which all other semiotics may be translated' (cited in Genosko 1994, 62).

The everyday use of a medium by someone who knows how to use it typically passes unquestioned as unproblematic and 'neutral': this is hardly surprising since media evolve as a means of accomplishing purposes in which they are usually intended to be incidental. And the more frequently and fluently a medium is used, the more 'transparent' or 'invisible' to its users it tends to become. For most routine purposes, awareness of a medium may hamper its effectiveness as a means to an end. Indeed, it is typically when the medium acquires transparency that its potential to fulfil its primary function is greatest.

The selectivity of any medium leads to its use having influences of which the user may not always be conscious, and which may not have been part of the purpose in using it. We can be so familiar with the medium that we are 'anaesthetized' to the mediation it involves: we 'don't know what we're missing'. Insofar as we are numbed to the processes involved we cannot be said to be exercising 'choices' in its use. In this way the means we use may modify our ends. Amongst the phenomena enhanced or reduced by media selectivity are the ends for which a medium was used. In some cases, our 'purposes' may be subtly (and perhaps invisibly), redefined by our use of a particular medium. This is the opposite of the pragmatic and rationalistic stance, according to which the means are chosen to suit the user's ends, and are entirely under the user's control.

An awareness of this phenomenon of transformation by media has often led media theorists to argue deterministically that our technical means and systems always and inevitably become 'ends in themselves' (a common interpretation of Marshall McLuhan's famous aphorism, 'the medium is the message'), and has even led some to present media as wholly
autonomous entities with 'purposes' (as opposed to functions) of their own. However, one need not adopt such extreme stances in acknowledging the transformations involved in processes of mediation. When we use a medium for any purpose, its use becomes part of that purpose. Travelling is an unavoidable part of getting somewhere; it may even become a primary goal. Travelling by one particular method of transport rather than another is part of the experience. So too with writing rather than speaking, or using a word processor rather than a pen. In using any medium, to some extent we serve its 'purposes' as well as it serving ours. When we engage with media we both act and are acted upon, use and are used. Where a medium has a variety of functions it may be impossible to choose to use it for only one of these functions in isolation. The making of meanings with such media must involve some degree of compromise. Complete identity between any specific purpose and the functionality of a medium is likely to be rare, although the degree of match may on most occasions be accepted as adequate.

I am reminded here of an observation by the anthropologist Claude Lévi-Strauss that in the case of what he called *bricolage*, the process of creating something is not a matter of the calculated choice and use of whatever materials are technically best-adapted to a clearly predetermined purpose, but rather it involves a 'dialogue with the materials and means of execution' (*Lévi-Strauss 1974, 29*). In such a dialogue, the materials which are ready-to-hand may (as we say) 'suggest' adaptive courses of action, and the initial aim may be modified. Consequently, such acts of creation are not purely instrumental: the *bricoleur* "speaks" not only with things... but also through the medium of things' (*ibid., 21*): the use of the medium can be expressive. The context of Lévi-Strauss's point was a discussion of 'mythical thought', but I would argue that bricolage can be involved in the use of any medium, for any purpose. The act of writing, for instance, may be shaped not only by the writer's conscious purposes but also by features of the media involved - such as the kind of language and writing tools used - as well as by the social and psychological processes of mediation involved. Any 'resistance' offered by the writer's materials can be an
intrinsic part of the process of writing. However, not every writer acts or feels like a bricoleur. Individuals differ strikingly in their responses to the notion of media transformation. They range from those who insist that they are in total control of the media which they 'use' to those who experience a profound sense of being shaped by the media which 'use' them (Chandler 1995).

Norman Fairclough comments on the importance of the differences between the various mass media in the channels and technologies they draw upon.

The press uses a visual channel, its language is written, and it draws upon technologies of photographic reproduction, graphic design, and printing. Radio, by contrast, uses an oral channel and spoken language and relies on technologies of sound recording and broadcasting, whilst television combines technologies of sound- and image-recording and broadcasting...

These differences in channel and technology have significant wider implications in terms of the meaning potential of the different media. For instance, print is in an important sense less personal than radio or television. Radio begins to allow individuality and personality to be foregrounded through transmitting individual qualities of voice. Television takes the process much further by making people visually available, and not in the frozen modality of newspaper photographs, but in movement and action. (Fairclough 1995, 38-9)

Whilst technological determinists emphasize that semiotic ecologies are influenced by the fundamental design features of different media, it is important to recognize the importance of socio-cultural and historical factors in shaping how different media are used and their (ever-shifting) status within particular cultural contexts. For instance, many contemporary cultural theorists have remarked on the growth of the importance of visual media compared with linguistic media in contemporary society and the associated shifts in
the communicative functions of such media. Thinking in 'ecological' terms about the interaction of different semiotic structures and languages led the Russian cultural semiotician Yuri Lotman to coin the term 'semiosphere' to refer to 'the whole semiotic space of the culture in question' (Lotman 1990, 124-125). The concept is related to ecologists' references to 'the biosphere' and perhaps to cultural theorists' references to the public and private spheres, but most reminiscent of Teilhard de Chardin's notion (dating back to 1949) of the 'noosphere' - the domain in which mind is exercised. Whilst Lotman referred to such semiospheres as governing the functioning of languages within cultures, John Hartley comments that 'there is more than one level at which one might identify a semiosphere - at the level of a single national or linguistic culture, for instance, or of a larger unity such as "the West", right up to "the species"'; we might similarly characterize the semiosphere of a particular historical period (Hartley 1996, 106). This conception of a semiosphere may make semioticians seem territorially imperialistic to their critics, but it offers a more unified and dynamic vision of semiosis than the study of a specific medium as if each existed in a vacuum.

There are, of course, other approaches to textual analysis apart from semiotics - notably rhetorical analysis, discourse analysis and 'content analysis'. In the field of media and communication studies content analysis is a prominent rival to semiotics as a method of textual analysis. Whereas semiotics is now closely associated with cultural studies, content analysis is well-established within the mainstream tradition of social science research. Whilst content analysis involves a quantitative approach to the analysis of the manifest 'content' of media texts, semiotics seeks to analyse media texts as structured wholes and investigates latent, connotative meanings. Semiotics is rarely quantitative, and often involves a rejection of such approaches. Just because an item occurs frequently in a text does not make it significant. The structuralist semiotician is more concerned with the relation of elements to each other. A social semiotician would also emphasize the importance of the significance which readers attach to the signs within a text. Whereas
Content analysis focuses on explicit content and tends to suggest that this represents a single, fixed meaning. Semiotic studies focus on the system of rules governing the 'discourse' involved in media texts, stressing the role of semiotic context in shaping meaning. However, some researchers have combined semiotic analysis and content analysis (e.g. Glasgow University Media Group 1980; Leiss et al. 1990; McQuarrie & Mick 1992).

Some commentators adopt C W Morris's definition of semiotics (in the spirit of Saussure) as 'the science of signs' (Morris 1938, 1-2). The term 'science' is misleading. As yet semiotics involves no widely-agreed theoretical assumptions, models or empirical methodologies. Semiotics has tended to be largely theoretical, many of its theorists seeking to establish its scope and general principles. Peirce and Saussure, for instance, were both concerned with the fundamental definition of the sign. Peirce developed elaborate logical taxonomies of types of signs. Subsequent semioticians have sought to identify and categorize the codes or conventions according to which signs are organized. Clearly there is a need to establish a firm theoretical foundation for a subject which is currently characterized by a host of competing theoretical assumptions. As for methodologies, Saussure's theories constituted a starting point for the development of various structuralist methodologies for analysing texts and social practices. These have been very widely employed in the analysis of a host of cultural phenomena. However, such methods are not universally accepted: socially-oriented theorists have criticized their exclusive focus on structure, and no alternative methodologies have as yet been widely adopted. Some semiotic research is empirically-oriented, applying and testing semiotic principles. Bob Hodge and David Tripp employed empirical methods in their classic study of Children and Television (Hodge & Tripp 1986). But there is at present little sense of semiotics as a unified enterprise building on cumulative research findings.

Semiotics represents a range of studies in art, literature, anthropology and the mass media rather than an independent academic discipline. Those involved in semiotics include
linguists, philosophers, psychologists, sociologists, anthropologists, literary, aesthetic and media theorists, psychoanalysts and educationalists. Beyond the most basic definition, there is considerable variation amongst leading semioticians as to what semiotics involves. It is not only concerned with (intentional) communication but also with our ascription of significance to anything in the world. Semiotics has changed over time, since semioticians have sought to remedy weaknesses in early semiotic approaches. Even with the most basic semiotic terms there are multiple definitions. Consequently, anyone attempting semiotic analysis would be wise to make clear which definitions are being applied and, if a particular semiotician's approach is being adopted, what its source is. There are two divergent traditions in semiotics stemming respectively from Saussure and Peirce. The work of Louis Hjelmslev, Roland Barthes, Claude Lévi-Strauss, Julia Kristeva, Christian Metz and Jean Baudrillard (b 1929) follows in the 'semiological' tradition of Saussure whilst that of Charles W Morris, Ivor A Richards (1893-1979), Charles K Ogden (1989-1957) and Thomas Sebeok (b 1920) is in the 'semiotic' tradition of Peirce. The leading semiotician bridging these two traditions is the celebrated Italian author Umberto Eco, who as the author of the bestseller The Name of the Rose (novel 1980, film 1986) is probably the only semiotician whose film rights are of any value (Eco 1980).

Saussure argued that 'nothing is more appropriate than the study of languages to bring out the nature of the semiological problem' (Saussure 1983, 16; Saussure 1974, 16). Semiotics draws heavily on linguistic concepts, partly because of the influence of Saussure and because linguistics is a more established discipline than the study of other sign systems. Structuralists adopted language as their model in exploring a
much wider range of social phenomena: Lévi-Strauss for myth, kinship rules and totemism; Lacan for the unconscious; Barthes and Greimas for the 'grammar' of narrative. Julia Kristeva declared that 'what semiotics has discovered... is that the law governing or, if one prefers, the major constraint affecting any social practice lies in the fact that it signifies; i.e. that it is articulated like a language' (cited in Hawkes 1977, 125). Saussure referred to language (his model being speech) as 'the most important' of all of the systems of signs (Saussure 1983, 15; Saussure 1974, 16). Language is almost unvariably regarded as the most powerful communication system by far. For instance, Marvin Harris observes that 'human languages are unique among communication systems in possessing semantic universality... A communication system that has semantic universality can convey information about all aspects, domains, properties, places, or events in the past, present or future, whether actual or possible, real or imaginary' (cited in Wilden 1987, 138). Perhaps language is indeed fundamental: Emile Benveniste observed that 'language is the interpreting system of all other systems, linguistic and non-linguistic' (in Innis 1986, 239), whilst Claude Lévi-Strauss noted that 'language is the semiotic system par excellence; it cannot but signify, and exists only through signification' (Lévi-Strauss 1972, 48).

Saussure saw linguistics as a branch of 'semiology':

Linguistics is only one branch of this general science [of semiology]. The laws which semiology will discover will be laws applicable in linguistics... As far as we are concerned... the linguistic problem is first and foremost semiological... If one wishes to discover the true nature of language systems, one must first consider what they have in common with all other systems of the same kind... In this way, light will be thrown not only upon the linguistic problem. By considering rites, customs etc. as signs, it will be possible, we believe, to see them in a new perspective. The need will be felt to consider them as semiological phenomena and to explain them in terms of the laws of semiology. (Saussure 1983, 16-17; Saussure 1974, 16-17)
Whilst Roland Barthes declared that 'perhaps we must invert Saussure's formulation and assert that semiology is a branch of linguistics', others have accepted Saussure's location of linguistics within semiotics (Barthes 1985, xi). Other than himself, Jean-Marie Floch instances Hjelmslev and Greimas (Floch 2000, 93). However, even if we theoretically locate linguistics within semiotics it is difficult to avoid adopting the linguistic model in exploring other sign systems. Semioticians commonly refer to films, television and radio programmes, advertising posters and so on as 'texts', and to 'reading television' (Fiske and Hartley 1978). Media such as television and film are regarded by some semioticians as being in some respects like 'languages'. The issue tends to revolve around whether film is closer to what we treat as 'reality' in the everyday world of our own experience or whether it has more in common with a symbolic system like writing. Some refer to the 'grammar' of media other than language. For James Monaco, 'film has no grammar', and he offers a useful critique of glib analogies between film techniques and the grammar of natural language (ibid., 129). There is a danger of trying to force all media into a linguistic framework. With regard to photography (though one might say the same for film and television), Victor Burgin insists that: 'There is no 'language' of photography, no single signifying system (as opposed to technical apparatus) upon which all photographs depend (in the sense in which all texts in English depend upon the English language); there is, rather, a heterogeneous complex of codes upon which photography may draw' (Burgin 1982b, 143).

We will shortly examine Saussure's model of the sign, but before doing so it is important to understand something about the general framework within which he situated it. Saussure made what is now a famous distinction between langue (language) and parole (speech). Langue refers to the system of rules and conventions which is independent of, and pre-exists, individual users; parole refers to its use in particular instances. Applying the notion to semiotic systems in general rather than simply to language, the distinction is one between between code and message, structure and event or system and usage (in specific texts or contexts). According to the
Saussurean distinction, in a semiotic system such as cinema, 'any specific film is the speech of that underlying system of cinema language' (Langholz Leymore 1975, 3). Saussure focused on langue rather than parole. To the traditional, Saussurean semiotician, what matters most are the underlying structures and rules of a semiotic system as a whole rather than specific performances or practices which are merely instances of its use. Saussure's approach was to study the system 'synchronously' if it were frozen in time (like a photograph) - rather than 'diachronically' - in terms of its evolution over time (like a film). Structuralist cultural theorists subsequently adopted this Saussurean priority, focusing on the functions of social and cultural phenomena within semiotic systems. Theorists differ over whether the system precedes and determines usage (structural determinism) or whether usage precedes and determines the system (social determinism) (although note that most structuralists argue that the system constrains rather than completely determines usage).

The structuralist dichotomy between usage and system has been criticized for its rigidity, splitting process from product, subject from structure (Coward & Ellis 1977, 4, 14). The prioritization of structure over usage fails to account for changes in structure. Marxist theorists have been particularly critical of this. In the late 1920s, Valentin Volosinov (1884/5-1936) and Mikhail Bakhtin (1895-1975) criticized Saussure's synchronic approach and his emphasis on internal relations within the system of language (Voloshinov 1973; Morris 1994). Volosinov reversed the Saussurean priority of langue over parole: 'The sign is part of organized social intercourse and cannot exist, as such, outside it, reverting to a mere physical artifact' (Voloshinov 1973, 21). The meaning of a sign is not in its relationship to other signs within the language system but rather in the social context of its use. Saussure was criticized for ignoring historicity (ibid., 61). The Prague school linguists Roman Jakobson and Yuri Tynyanov declared in 1927 that 'pure synchronism now proves to be an illusion', adding that 'every synchronic system has its past and its future as inseparable structural elements of the system' (cited in Voloshinov 1973, 166).
Writing in 1929, Volosinov observed that 'there is no real moment in time when a synchronic system of language could be constructed... A synchronic system may be said to exist only from the point of view of the subjective consciousness of an individual speaker belonging to some particular language group at some particular moment of historical time' (Voloshinov 1973, 66). Whilst the French structuralist Claude Lévi-Strauss applied a synchronic approach in the domain of anthropology, most contemporary semioticians have sought to reprioritize historicity and social context. Language is seldom treated as a static, closed and stable system which is inherited from preceding generations but as constantly changing. The sign, as Voloshinov put it, is 'an arena of the class struggle' (ibid., 23). Seeking to establish a wholeheartedly 'social semiotics', Robert Hodge and Gunther Kress declare that 'the social dimensions of semiotic systems are so intrinsic to their nature and function that the systems cannot be studied in isolation' (Hodge & Kress 1988, 1).

Whilst Saussure may be hailed as a founder of semiotics, semiotics has become increasingly less Saussurean. Teresa de Lauretis describes the movement away from structuralist semiotics which began in the 1970s:

In the last decade or so, semiotics has undergone a shift of its theoretical gears: a shift away from the classification of sign systems - their basic units, their levels of structural organization - and towards the exploration of the modes of production of signs and meanings, the ways in which systems and codes are used, transformed or transgressed in social practice. While formerly the emphasis was on studying sign systems (language, literature, cinema, architecture, music, etc.), conceived of as mechanisms that generate messages, what is now being examined is the work performed through them. It is this work or activity which constitutes and/or transforms the codes, at the same time as it constitutes and transforms the individuals using the codes, performing the work; the individuals who are, therefore, the subjects of semiosis.
'Semiosis', a term borrowed from Charles Sanders Peirce, is expanded by Eco to designate the process by which a culture produces signs and/or attributes meaning to signs. Although for Eco meaning production or semiosis is a social activity, he allows that subjective factors are involved in each individual act of semiosis. The notion then might be pertinent to the two main emphases of current, or poststructuralist, semiotic theory. One is a semiotics focused on the subjective aspects of signification and strongly influenced by Lacanian psychoanalysis, where meaning is construed as a subject-effect (the subject being an effect of the signifier). The other is a semiotics concerned to stress the social aspect of signification, its practical, aesthetic, or ideological use in interpersonal communication; there, meaning is construed as semantic value produced through culturally shared codes. (de Lauretis 1984, 167)

This text outlines some of the key concepts in semiotics, together with relevant critiques, beginning with the most fundamental concept of the sign itself. I hope it will prove to be a useful companion to the reader in finding their own path through the subject. But before launching on an exploration of this intriguing but demanding subject let us consider why we should bother: why should we study semiotics? This is a pressing question in part because the writings of semioticians have a reputation for being dense with jargon: Justin Lewis notes that 'its advocates have written in a style that ranges from the obscure to the incomprehensible' (Lewis 1991, 25); another critic wittily remarked that 'semiotics tells us things we already know in a language we will never understand' (Paddy Whannel, cited in Seiter 1992, 1). The semiotic establishment is a very exclusive club but, as David Sless remarks, 'semiotics is far too important an enterprise to be left to semioticians' (Sless 1986, 1).

Semiotics is important because it can help us not to take 'reality' for granted as something having a purely objective existence which is independent of human interpretation. It teaches us that reality is a system of signs. Studying semiotics can assist us to become more aware of reality as a
construction and of the roles played by ourselves and others in constructing it. It can help us to realize that information or meaning is not 'contained' in the world or in books, computers or audio-visual media. Meaning is not 'transmitted' to us - we actively create it according to a complex interplay of codes or conventions of which we are normally unaware. Becoming aware of such codes is both inherently fascinating and intellectually empowering. We learn from semiotics that we live in a world of signs and we have no way of understanding anything except through signs and the codes into which they are organized. Through the study of semiotics we become aware that these signs and codes are normally transparent and disguise our task in 'reading' them. Living in a world of increasingly visual signs, we need to learn that even the most 'realistic' signs are not what they appear to be. By making more explicit the codes by which signs are interpreted we may perform the valuable semiotic function of 'denaturalizing' signs. In defining realities signs serve ideological functions. Deconstructing and contesting the realities of signs can reveal whose realities are privileged and whose are suppressed. The study of signs is the study of the construction and maintenance of reality. To decline such a study is to leave to others the control of the world of meanings which we inhabit.

**Signs**

We seem as a species to be driven by a desire to make meanings: above all, we are surely Homo significans - meaning-makers. Distinctively, we make meanings through our creation and interpretation of 'signs'. Indeed, according to Peirce, 'we think only in signs' ([Peirce 1931-58, 2.302](#)). Signs take the form of words, images, sounds, odours, flavours, acts or objects, but such things have no intrinsic meaning and become signs only when we invest them with meaning.
'Nothing is a sign unless it is interpreted as a sign', declares Peirce (Peirce 1931-58, 2.172). Anything can be a sign as long as someone interprets it as 'signifying' something - referring to or standing for something other than itself. We interpret things as signs largely unconsciously by relating them to familiar systems of conventions. It is this meaningful use of signs which is at the heart of the concerns of semiotics.

The two dominant models of what constitutes a sign are those of the linguist Ferdinand de Saussure and the philosopher Charles Sanders Peirce. These will be discussed in turn.

Saussure offered a 'dyadic' or two-part model of the sign. He defined a sign as being composed of:

- a 'signifier' (signifiant) - the form which the sign takes; and
- the 'signified' (signifié) - the concept it represents.

The sign is the whole that results from the association of the signifier with the signified (Saussure 1983, 67; Saussure 1974, 67). The relationship between the signifier and the signified is referred to as 'signification', and this is represented in the Saussurean diagram by the arrows. The horizontal line marking the two elements of the sign is referred to as 'the bar'.

If we take a linguistic example, the word 'Open' (when it is invested with meaning by someone who encounters it on a shop doorway) is a sign consisting of:

- a signifier: the word open;
- a signified concept: that the shop is open for business.

A sign must have both a signifier and a signified. You cannot have a totally meaningless signifier or a completely formless signified (Saussure 1983, 101; Saussure 1974, 102-103). A
A linguistic sign is not a link between a thing and a name, but between a concept and a sound pattern. The sound pattern is not actually a sound; for a sound is something physical. A sound pattern is the hearer's psychological impression of a sound, as given to him by the evidence of his senses. This sound pattern may be called a 'material' element only in that it is the representation of our sensory impressions. The sound pattern may thus be distinguished from the other element associated with it in a linguistic sign. This other element is generally of a more abstract kind: the concept. (Saussure 1983, 66; Saussure 1974, 66)

Saussure was focusing on the linguistic sign (such as a word) and he 'phonocentrically' privileged the spoken word, referring specifically to the image acoustique ('sound-image' or 'sound pattern'), seeing writing as a separate, secondary, dependent but comparable sign system (Saussure 1983, 15,
Within the ('separate') system of written signs, a signifier such as the written letter 't' signified a sound in the primary sign system of language (and thus a written word would also signify a sound rather than a concept). Thus for Saussure, writing relates to speech as signifier to signified. Most subsequent theorists who have adopted Saussure's model are content to refer to the form of linguistic signs as either spoken or written. We will return later to the issue of the post-Saussurean 'rematerialization' of the sign.

As for the signified, most commentators who adopt Saussure's model still treat this as a mental construct, although they often note that it may nevertheless refer indirectly to things in the world. Saussure's original model of the sign 'brackets the referent': excluding reference to objects existing in the world. His signified is not to be identified directly with a referent but is a concept in the mind - not a thing but the notion of a thing. Some people may wonder why Saussure's model of the sign refers only to a concept and not to a thing. An observation from the philosopher Susanne Langer (who was not referring to Saussure's theories) may be useful here. Note that like most contemporary commentators, Langer uses the term 'symbol' to refer to the linguistic sign (a term which Saussure himself avoided): 'Symbols are not proxy for their objects but are vehicles for the conception of objects... In talking about things we have conceptions of them, not the things themselves; and it is the conceptions, not the things, that symbols directly mean. Behaviour towards conceptions is what words normally evoke; this is the typical process of thinking'. She adds that 'If I say "Napoleon", you do not bow to the conqueror of Europe as though I had introduced him, but merely think of him' (Langer 1951, 61).

Thus, for Saussure the linguistic sign is wholly immaterial - although he disliked referring to it as 'abstract' (Saussure 1983, 15; Saussure 1974, 15). The immateriality of the Saussurean sign is a feature which tends to be neglected in many popular commentaries. If the notion seems strange, we need to remind ourselves that words have no value in themselves - that is their value. Saussure noted that it is not the metal in a coin that fixes its value (Saussure 1983, 117;
Several reasons could be offered for this. For instance, if linguistic signs drew attention to their materiality this would hinder their communicative transparency (Langer 1951, 73). Furthermore, being immaterial, language is an extraordinarily economical medium and words are always ready-to-hand. Nevertheless, a principled argument can be made for the revaluation of the materiality of the sign, as we shall see in due course.

Saussure noted that his choice of the terms signifier and signified helped to indicate 'the distinction which separates each from the other' (Saussure 1983, 67; Saussure 1974, 67). Despite this, and the horizontal bar in his diagram of the sign, Saussure stressed that sound and thought (or the signifier and the signified) were as inseparable as the two sides of a piece of paper (Saussure 1983, 111; Saussure 1974, 113). They were 'intimately linked' in the mind 'by an associative link' - 'each triggers the other' (Saussure 1983, 66; Saussure 1974, 66). Saussure presented these elements as wholly interdependent, neither pre-existing the other (Silverman 1983, 103). Within the context of spoken language, a sign could not consist of sound without sense or of sense without sound. He used the two arrows in the diagram to suggest their interaction. The bar and the opposition nevertheless suggests that the signifier and the signified can be distinguished for analytical purposes. Poststructuralist theorists criticize the clear distinction which the Saussurean bar seems to suggest between the signifier and the signified; they seek to blur or erase it in order to reconfigure the sign or structural relations. Some theorists have argued that 'the signifier is always separated from the signified... and has a real autonomy' (Lechte 1994, 68), a point to which we will return in discussing the arbitrariness of the sign. Commonsense tends to insist that the signified takes precedence over, and pre-exists, the signifier: 'look after the sense', quipped Lewis Carroll, 'and the sounds will take care of themselves' (Alice's Adventures in Wonderland, chapter 9). However, in dramatic contrast, post-Saussurean theorists have seen the model as implicitly granting primacy to the signifier, thus reversing the commonsensical position.
Louis Hjelmslev used the terms 'expression' and 'content' to refer to the signifier and signified respectively (Hjelmslev 1961, 47ff). The distinction between signifier and signified has sometimes been equated to the familiar dualism of 'form and content'. Within such a framework the signifier is seen as the form of the sign and the signified as the content. However, the metaphor of form as a 'container' is problematic, tending to support the equation of content with meaning, implying that meaning can be 'extracted' without an active process of interpretation and that form is not in itself meaningful (Chandler 1995 104-6).

Saussure argued that signs only make sense as part of a formal, generalized and abstract system. His conception of meaning was purely structural and relational rather than referential: primacy is given to relationships rather than to things (the meaning of signs was seen as lying in their systematic relation to each other rather than deriving from any inherent features of signifiers or any reference to material things). Saussure did not define signs in terms of some 'essential' or intrinsic nature. For Saussure, signs refer primarily to each other. Within the language system, 'everything depends on relations' (Saussure 1983, 121; Saussure 1974, 122). No sign makes sense on its own but only in relation to other signs. Both signifier and signified are purely relational entities (Saussure 1983, 118; Saussure 1974, 120). This notion can be hard to understand since we may feel that an individual word such as 'tree' does have some meaning for us, but its meaning depends on its context in relation to the other words with which it is used.

Together with the 'vertical' alignment of signifier and signified within each individual sign (suggesting two structural 'levels'), the emphasis on the relationship between signs defines what are in effect two planes - that of the signifier and the signifier. Later, Louis Hjelmslev referred to the planes of 'expression' and 'content' (Hjelmslev 1961, 60).
Saussure himself referred to *sound* and *thought* as two distinct but correlated planes. 'We can envisage... the language... as a series of adjoining subdivisions simultaneously imprinted both on the plane of vague, amorphous thought (A), and on the equally featureless plane of sound (B)' (*Saussure 1983, 110-111; Saussure 1974, 112*).

The arbitrary division of the two continua into signs is suggested by the dotted lines whilst the wavy (rather than parallel) edges of the two 'amorphous' masses suggest the lack of any 'natural' fit between them. The gulf and lack of fit between the two planes highlights their relative autonomy. Whilst Saussure is careful not to refer directly to 'reality', Fredric Jameson reads into this feature of Saussure's system that 'it is not so much the individual word or sentence that "stands for" or "reflects" the individual object or event in the real world, but rather that the entire system of signs, the entire field of the *langue*, lies parallel to reality itself; that it is the totality of systematic language, in other words, which is analogous to whatever organized structures exist in the world of reality, and that our understanding proceeds from one whole or Gestalt to the other, rather than on a one-to-one basis' (*Jameson 1972, 32-33*).

What Saussure refers to as the 'value' of a sign depends on its relations with other signs within the system - a sign has no 'absolute' value independent of this context (*Saussure 1983, 80; Saussure 1974, 80*). Saussure uses an analogy with the game of chess, noting that the value of each piece depends on its position on the chessboard (*Saussure 1983, 88; Saussure 1974, 88*). The sign is more than the sum of its parts. Whilst *signification* - what is signified - clearly depends on the relationship between the two parts of the sign, the *value* of a sign is determined by the relationships between the sign and other signs within the system as a whole (*Saussure 1983, 112-113; Saussure 1974, 114*).
The notion of value... shows us that it is a great mistake to consider a sign as nothing more than the combination of a certain sound and a certain concept. To think of a sign as nothing more would be to isolate it from the system to which it belongs. It would be to suppose that a start could be made with individual signs, and a system constructed by putting them together. On the contrary, the system as a united whole is the starting point, from which it becomes possible, by a process of analysis, to identify its constituent elements. (Saussure 1983, 112; Saussure 1974, 113)

As an example of the distinction between signification and value, Saussure notes that 'The French word mouton may have the same meaning as the English word sheep; but it does not have the same value. There are various reasons for this, but in particular the fact that the English word for the meat of this animal, as prepared and served for a meal, is not sheep but mutton. The difference in value between sheep and mouton hinges on the fact that in English there is also another word mutton for the meat, whereas mouton in French covers both' (Saussure 1983, 114; Saussure 1974, 115-116).

Saussure's relational conception of meaning was specifically differential: he emphasized the differences between signs. Language for him was a system of functional differences and oppositions. 'In a language, as in every other semiological system, what distinguishes a sign is what constitutes it' (Saussure 1983, 119; Saussure 1974, 121). As John Sturrock points out, 'a one-term language is an impossibility because its single term could be applied to everything and differentiate nothing; it requires at least one other term to give it definition' (Sturrock 1979, 10). Advertising furnishes a good example of this notion, since what matters in 'positioning' a product is not the relationship of advertising signifiers to real-world referents, but the differentiation of each sign from the others to which it is related. Saussure's concept of the relational identity of signs is at the heart of structuralist theory. Structuralist analysis focuses on the structural relations which are functional in the signifying system at a particular moment in history. 'Relations are
important for what they can explain: meaningful contrasts and permitted or forbidden combinations' (Culler 1975, 14).

Saussure emphasized in particular negative, oppositional differences between signs, and the key relationships in structuralist analysis are binary oppositions (such as nature/culture, life/death). Saussure argued that 'concepts... are defined not positively, in terms of their content, but negatively by contrast with other items in the same system. What characterizes each most exactly is being whatever the others are not' (Saussure 1983, 115; Saussure 1974, 117; my emphasis). This notion may initially seem mystifying if not perverse, but the concept of negative differentiation becomes clearer if we consider how we might teach someone who did not share our language what we mean by the term 'red'. We would be unlikely to make our point by simply showing them a range of different objects which all happened to be red - we would be probably do better to single out a red object from a sets of objects which were identical in all respects except colour. Although Saussure focuses on speech, he also noted that in writing, 'the values of the letter are purely negative and differential' - all we need to be able to do is to distinguish one letter from another (Saussure 1983, 118; Saussure 1974, 119-120). As for his emphasis on negative differences, Saussure remarks that although both the signified and the signifier are purely differential and negative when considered separately, the sign in which they are combined is a positive term. He adds that 'the moment we compare one sign with another as positive combinations, the term difference should be dropped... Two signs... are not different from each other, but only distinct. They are simply in opposition to each other. The entire mechanism of language... is based on oppositions of this kind and upon the phonic and conceptual differences they involve' (Saussure 1983, 119; Saussure 1974, 120-121).

Although the signifier is treated by its users as 'standing for' the signified, Saussurean semioticians emphasize that there is no necessary, intrinsic, direct or inevitable relationship between the signifier and the signified. Saussure stressed the arbitrariness of the sign (Saussure 1983, 67, 78; Saussure 1974, 67, 78) - more specifically the arbitrariness of the link between the signifier and the signified (Saussure 1983, 67;
Saussure 1974, 67). He was focusing on linguistic signs, seeing language as the most important sign system; for Saussure, the arbitrary nature of the sign was the first principle of language (Saussure 1983, 67; Saussure 1974, 67). Arbitrariness was identified later by Charles Hockett as a key 'design feature' of language (Hockett 1958; Hockett 1960; Hockett 1965). The feature of arbitrariness may indeed help to account for the extraordinary versatility of language (Lyons 1977, 71). In the context of natural language, Saussure stressed that there is no inherent, essential, 'transparent', self-evident or 'natural' connection between the signifier and the signified - between the sound or shape of a word and the concept to which it refers (Saussure 1983, 67, 68-69, 76, 111, 117; Saussure 1974, 67, 69, 76, 113, 119). Note that Saussure himself avoids directly relating the principle of arbitrariness to the relationship between language and an external world, but that subsequent commentators often do, and indeed, lurking behind the purely conceptual 'signified' one can often detect Saussure's allusion to real-world referents (Coward & Ellis 1977, 22). In language at least, the form of the signifier is not determined by what it signifies: there is nothing 'treeish' about the word 'tree'. Languages differ, of course, in how they refer to the same referent. No specific signifier is 'naturally' more suited to a signified than any other signifier; in principle any signifier could represent any signified. Saussure observed that 'there is nothing at all to prevent the association of any idea whatsoever with any sequence of sounds whatsoever' (Saussure 1983, 76; Saussure 1974, 76); 'the process which selects one particular sound-sequence to correspond to one particular idea is completely arbitrary' (Saussure 1983, 111; Saussure 1974, 113).

This principle of the arbitrariness of the linguistic sign was not an original conception: Aristotle had noted that 'there can be no natural connection between the sound of any language and the things signified' (cited in Richards 1932, 32). In Plato's Cratylus Hermogenes urged Socrates to accept that 'whatever name you give to a thing is its right name; and if you give up that name and change it for another, the later name is no less correct than the earlier, just as we change the
name of our servants; for I think no name belongs to a particular thing by nature' (cited in Harris 1987, 67). 'That which we call a rose by any other name would smell as sweet', as Shakespeare put it. Whilst the notion of the arbitrariness of language was not new, but the emphasis which Saussure gave it can be seen as an original contribution, particularly in the context of a theory which bracketed the referent. Note that although Saussure prioritized speech, he also stressed that 'the signs used in writing are arbitrary, The letter t, for instance, has no connection with the sound it denotes' (Saussure 1983, 117; Saussure 1974, 119).

The arbitrariness principle can be applied not only to the sign, but to the whole sign-system. The fundamental arbitrariness of language is apparent from the observation that each language involves different distinctions between one signifier and another (e.g. 'tree' and 'free') and between one signified and another (e.g. 'tree' and 'bush'). The signified is clearly arbitrary if reality is perceived as a seamless continuum (which is how Saussure sees the initially undifferentiated realms of both thought and sound): where, for example, does a 'corner' end? Commonsense suggests that the existence of things in the world preceded our apparently simple application of 'labels' to them (a 'nomenclaturist' notion which Saussure rejected and to which we will return in due course). Saussure noted that 'if words had the job of representing concepts fixed in advance, one would be able to find exact equivalents for them as between one language and another. But this is not the case' (Saussure 1983, 114-115; Saussure 1974, 116). Reality is divided up into arbitrary categories by every language and the conceptual world with which each of us is familiar could have been divided up very differently. Indeed, no two languages categorize reality in the same way. As John Passmore puts it, 'Languages differ by differentiating differently' (cited in Sturrock 1986, 17). Linguistic categories are not simply a consequence of some predefined structure in the world. There are no 'natural' concepts or categories which are simply 'reflected' in language. Language plays a crucial role in 'constructing reality'.
If one accepts the arbitrariness of the relationship between signifier and signified then one may argue counter-intuitively that the signified is determined by the signifier rather than vice versa. Indeed, the French psychoanalyst Jacques Lacan, in adapting Saussurean theories, sought to highlight the primacy of the signifier in the psyche by rewriting Saussure's model of the sign in the form of a quasi-algebraic sign in which a capital 'S' (representing the signifier) is placed over a lower case and italicized 's' (representing the signified), these two signifiers being separated by a horizontal 'bar' (Lacan 1977, 149). This suited Lacan's purpose of emphasizing how the signified inevitably 'slips beneath' the signifier, resisting our attempts to delimit it. Lacan poetically refers to Saussure's illustration of the planes of sound and thought as 'an image resembling the wavy lines of the upper and lower Waters in miniatures from manuscripts of Genesis; a double flux marked by streaks of rain', suggesting that this can be seen as illustrating the 'incessant sliding of the signified under the signifier' - although he argues that one should regard the dotted vertical lines not as 'segments of correspondence' but as 'anchoring points' (points de capiton - literally, the 'buttons' which anchor upholstery to furniture). However, he notes that this model is too linear, since 'there is in effect no signifying chain that does not have, as if attached to the punctuation of each of its units, a whole articulation of relevant contexts suspended 'vertically', as it were, from that point' (ibid., 154). In the spirit of the Lacanian critique of Saussure's model, subsequent theorists have emphasized the temporary nature of the bond between signifier and signified, stressing that the 'fixing' of 'the chain of signifiers' is socially situated (Coward & Ellis 1977, 6, 13, 17, 67). Note that whilst the intent of Lacan in placing the signifier over the signified is clear enough, his representational strategy seems a little curious, since in the modelling of society orthodox Marxists routinely represent the fundamental driving force of 'the [techno-economic] base' as (logically) below 'the [ideological] superstructure'.
The arbitrariness of the sign is a radical concept because it proposes the autonomy of language in relation to reality. The Saussurean model, with its emphasis on internal structures within a sign system, can be seen as supporting the notion that language does not 'reflect' reality but rather constructs it. We can use language 'to say what isn't in the world, as well as what is. And since we come to know the world through whatever language we have been born into the midst of, it is legitimate to argue that our language determines reality, rather than reality our language' (Sturrock 1986, 79). In their book *The Meaning of Meaning*, Ogden and Richards criticized Saussure for 'neglecting entirely the things for which signs stand' (Ogden & Richards 1923, 8). Later critics have lamented his model's detachment from social context (Gardiner 1992, 11). Robert Stam argues that by 'bracketing the referent', the Saussurean model 'severs text from history' (Stam 2000, 122). We will return to this theme of the relationship between language and 'reality' in our discussion of 'modality and representation'.

The arbitrary aspect of signs does help to account for the scope for their interpretation (and the importance of context). There is no one-to-one link between signifier and signified; signs have multiple rather than single meanings. Within a single language, one signifier may refer to many signifieds (e.g. puns) and one signified may be referred to by many signifiers (e.g. synonyms). Some commentators are critical of the stance that the relationship of the signifier to the signified, even in language, is always completely arbitrary (e.g. Lewis 1991, 29). Onomatopoeic words are often mentioned in this context, though some semioticians retort that this hardly accounts for the variability between different languages in their words for the same sounds (notably the sounds made by familiar animals) (Saussure 1983, 69; Saussure 1974, 69).

Saussure declares that 'the entire linguistic system is founded upon the irrational principle that the sign is arbitrary'. This provocative declaration is followed immediately by the acknowledgement that 'applied without restriction, this principle would lead to utter chaos' (Saussure 1983, 131; Saussure 1974, 133). If linguistic signs were to be totally
arbitrary in every way language would not be a system and its communicative function would be destroyed. He concedes that 'there exists no language in which nothing at all is motivated' (*ibid.*). Saussure admits that 'a language is not completely arbitrary, for the system has a certain rationality' ([Saussure 1983, 73; Saussure 1974, 73]). The principle of arbitrariness does not mean that the form of a word is accidental or random, of course. Whilst the sign is not determined *extralinguistically* it is subject to *intralinguistic* determination. For instance, signifiers must constitute well-formed combinations of sounds which conform with existing patterns within the language in question. Furthermore, we can recognize that a compound noun such as 'screwdriver' is not wholly arbitrary since it is a meaningful combination of two existing signs. Saussure introduces a distinction between *degrees* of arbitrariness:

The fundamental principle of the arbitrary nature of the linguistic sign does not prevent us from distinguishing in any language between what is intrinsically arbitrary - that is, unmotivated - and what is only relatively arbitrary. Not all signs are absolutely arbitrary. In some cases, there are factors which allow us to recognize different degrees of arbitrariness, although never to discard the notion entirely. *The sign may be motivated to a certain extent* ([Saussure 1983, 130; Saussure 1974, 131; original emphasis, see also following pages])

Here then Saussure modifies his stance somewhat and refers to signs as being 'relatively arbitrary'. Some subsequent theorists (echoing *Althusserian Marxist terminology*) refer to the relationship between the signifier and the signified in terms of 'relative autonomy' ([Tagg 1988, 167; Lechte 1994, 150]). The *relative* conventionality of relationships between signified and signifier is a point to which I return below.

It should be noted that whilst the relationships between signifiers and their signifieds are *ontologically* arbitrary (philosophically, it would not make any difference to the status of these entities in 'the order of things' if what we call 'black' had always been called 'white' and *vice versa*), this is
not to suggest that signifying systems are socially or historically arbitrary. Natural languages are not, of course, arbitrarily established, unlike historical inventions such as Morse Code. Nor does the arbitrary nature of the sign make it socially 'neutral' or materially 'transparent' - for example, in Western culture 'white' has come to be a privileged signifier (Dyer 1997). Even in the case of the 'arbitrary' colours of traffic lights, the original choice of red for 'stop' was not entirely arbitrary, since it already carried relevant associations with danger. As Lévi-Strauss noted, the sign is arbitrary a priori but ceases to be arbitrary a posteriori - after the sign has come into historical existence it cannot be arbitrarily changed (Lévi-Strauss 1972, 91). As part of its social use within a code (a term which became fundamental amongst post-Saussurean semioticians), every sign acquires a history and connotations of its own which are familiar to members of the sign-users' culture. Saussure remarked that although the signifier 'may seem to be freely chosen', from the point of view of the linguistic community it is 'imposed rather than freely chosen' because 'a language is always an inheritance from the past' which its users have 'no choice but to accept' (Saussure 1983, 71-72; Saussure 1974, 71). Indeed, 'it is because the linguistic sign is arbitrary that it knows no other law than that of tradition, and [it is] because it is founded upon tradition that it can be arbitrary' (Saussure 1983, 74; Saussure 1974, 74). The arbitrariness principle does not, of course mean that an individual can arbitrarily choose any signifier for a given signified. The relation between a signifier and its signified is not a matter of individual choice; if it were then communication would become impossible. 'The individual has no power to alter a sign in any respect once it has become established in the linguistic community' (Saussure 1983, 68; Saussure 1974, 69). From the point-of-view of individual language-users, language is a 'given' - we don't create the system for ourselves. Saussure refers to the language system as a non-negotiable 'contract' into which one is born (Saussure 1983, 14; Saussure 1974, 14) - although he later problematizes the term (ibid., 71). The ontological arbitrariness which it involves becomes invisible to us as we learn to accept it as 'natural'.
The Saussurean legacy of the arbitrariness of signs leads semioticians to stress that the relationship between the signifier and the signified is *conventional* - dependent on social and cultural conventions. This is particularly clear in the case of the linguistic signs with which Saussure was concerned: a word means what it does to us only because we collectively agree to let it do so. Saussure felt that the main concern of semiotics should be 'the whole group of systems grounded in the arbitrariness of the sign'. He argued that: 'signs which are entirely arbitrary convey better than others the ideal semiological process. That is why the most complex and the most widespread of all systems of expression, which is the one we find in human languages, is also the most characteristic of all. In this sense, linguistics serves as a model for the whole of semiology, even though languages represent only one type of semiological system' (Saussure 1983, 68; Saussure 1974, 68). He did not in fact offer many examples of sign systems other than spoken language and writing, mentioning only: the deaf-and-dumb alphabet; social customs; etiquette; religious and other symbolic rites; legal procedures; military signals and nautical flags (Saussure 1983, 15, 17, 68, 74; Saussure 1974, 16, 17, 68, 73). Saussure added that 'any means of expression accepted in a society rests in principle upon a collective habit, or on convention - which comes to the same thing' (Saussure 1983, 68; Saussure 1974, 68). However, whilst purely conventional signs such as words are quite independent of their referents, other less conventional forms of signs are often somewhat less independent of them. Nevertheless, since the arbitrary nature of linguistic signs is clear, those who have adopted the Saussurean model have tended to avoid 'the familiar mistake of assuming that signs which appear natural to those who use them have an intrinsic meaning and require no explanation' (Culler 1975, 5).

At around the same time as Saussure was
formulating his model of the sign, of 'semiology' and of a structuralist methodology, across the Atlantic independent work was also in progress as the pragmatist philosopher and logician Charles Sanders Peirce formulated his own model of the sign, of 'semiotic' and of the taxonomies of signs. In contrast to Saussure's model of the sign in the form of a 'self-contained dyad', Peirce offered a triadic model:

- The **Representamen**: the form which the sign takes (not necessarily material);
- An **Interpretant**: not an interpreter but rather the sense made of the sign;
- An **Object**: to which the sign refers.

'A sign... [in the form of a *representamen*] is something which stands to somebody for something in some respect or capacity. It addresses somebody, that is, creates in the mind of that person an equivalent sign, or perhaps a more developed sign. That sign which it creates I call the *interpretant* of the first sign. The sign stands for something, its *object*. It stands for that object, not in all respects, but in reference to a sort of idea, which I have sometimes called the *ground* of the *representamen* (Peirce 1931-58, 2.228). The interaction between the *representamen*, the *object* and the *interpretant* is referred to by Peirce as 'semiosis' (ibid., 5.484). Within Peirce's model of the sign, the traffic light sign for 'stop' would consist of: a red light facing traffic at an intersection (the *representamen*); vehicles halting (the *object*) and the idea that a red light indicates that vehicles must stop (the *interpretant*).

Peirce's model of the sign includes an *object* or referent - which does not, of course, feature directly in Saussure's model. The *representamen* is similar in meaning to Saussure's *signifier* whilst the *interpretant* is similar in meaning to the *signified* (Silverman 1983, 15). However, the *interpretant* has a quality unlike that of the *signified*: it is itself a sign in the mind of the interpreter. Peirce noted that 'a sign... addresses somebody, that is, creates in the mind of that person an equivalent sign, or perhaps a more developed sign. The sign which it creates I call the *interpretant* of the first sign' (Peirce 1931-58, 2.228). Umberto Eco uses the phrase
'unlimited semiosis' to refer to the way in which this could lead (as Peirce was well aware) to a series of successive interpretants (potentially) *ad infinitum* (ibid., 1.339, 2.303). Elsewhere Peirce added that 'the meaning of a representation can be nothing but a representation' (ibid., 1.339). Any initial interpretation can be re-interpreted. That a signified can itself play the role of a signifier is familiar to anyone who uses a dictionary and finds themselves going beyond the original definition to look up yet another word which it employs. This concept can be seen as going beyond Saussure's emphasis on the value of a sign lying in its relation to other signs and it was later to be developed more radically by poststructuralist theorists. Another concept which is alluded to within Peirce's model which has been taken up by later theorists but which was explicitly excluded from Saussure's model is the notion of dialogical thought. It stems in part from Peirce's emphasis on 'semiosis' as a *process* which is in distinct contrast to Saussure's synchronic emphasis on *structure* (Peirce 1931-58, 5.484, 5.488). Peirce argued that 'all thinking is dialogic in form. Your self of one instant appeals to your deeper self for his assent' (Peirce 1931-58, 6.338). This notion resurfaced in a more developed form in the 1920s in the theories of Mikhail Bakhtin (Bakhtin 1981). One important aspect of this is its characterization even of internal reflection as fundamentally social.

Peirce, clearly fascinated by tripartite structures, made a phenomenological distinction between the sign itself [or the representamen] as an instance of 'Firstness', its object as an instance of 'Secondness' and the interpretant as an instance of 'Thirdness'. Such unfamiliar terms are relatively modest examples of Peircean coinages, and the complexity of his terminology and style has been a factor in limiting the influence of a distinctively Peircean semiotics.

Variants of Peirce's triad are often presented as 'the semiotic triangle' (as if there were only one version). Here is a version which is quite often encountered and which changes only the unfamiliar Peircean terms (Nöth 1990, 89):
- **Sign vehicle**: the form of the sign;
- **Sense**: the sense made of the sign;
- **Referent**: what the sign 'stands for'.

One fairly well-known semiotic triangle is that of Ogden and Richards, in which the terms used are (a) 'symbol', (b) 'thought or reference' and (c) 'referent' ([Ogden & Richards 1923, 14](#)). The broken line at the base of the triangle is intended to indicate that there is not necessarily any observable or direct relationship between the sign vehicle and the referent. Unlike Saussure's abstract *signified* (which is analogous to term B rather than to C) the *referent* is an 'object'. This need not exclude the reference of signs to abstract concepts and fictional entities as well as to physical things, but Peirce's model allocates a place for an objective reality which Saussure's model did not directly feature (though Peirce was not a naive realist, and argued that all experience is mediated by signs). Note, however, that Peirce emphasized that 'the dependence of the mode of existence of the thing represented upon the mode of this or that representation of it... is contrary to the nature of reality' ([Peirce 1931-58, 5.323](#)). The inclusion of a referent in Peirce's model does not automatically make it a better model of the sign than that of Saussure. Indeed, as John Lyons notes:

There is considerable disagreement about the details of the triadic analysis even among those who accept that all three components, A, B and C, must be taken into account. Should A be defined as a physical or a mental entity? What is the psychological or ontological status of B? Is C something that is referred to on a particular occasion? Or is it the totality of things that might be referred to by uttering the sign...? Or, yet a third
possibility, is it some typical or ideal representative of this class? (Lyons 1977, 99)

The notion of the importance of sense-making (which requires an interpreter - though Peirce doesn't feature that term in his triad) has had a particular appeal for communication and media theorists who stress the importance of the active process of interpretation, and thus reject the equation of 'content' and meaning. Many of these theorists allude to semiotic triangles in which the interpreter (or 'user') of the sign features explicitly (in place of 'sense' or 'interpretant'). This highlights the process of semiosis (which is very much a Peircean concept). The meaning of a sign is not contained within it, but arises in its interpretation. Whether a dyadic or triadic model is adopted, the role of the interpreter must be accounted for - either within the formal model of the sign, or as an essential part of the process of semiosis. David Sless declares that 'statements about users, signs or referents can never be made in isolation from each other. A statement about one always contains implications about the other two' (Sless 1986, 6). Paul Thibault argues that the interpreter features implicitly even within Saussure's apparently dyadic model (Thibault 1997, 184).

Note that semioticians make a distinction between a sign and a 'sign vehicle' (the latter being a 'signifier' to Saussureans and a 'representamen' to Peirceans). The sign is more than just a sign vehicle. The term 'sign' is often used loosely, so that this distinction is not always preserved. In the Saussurean framework, some references to 'the sign' should be to the signifier, and similarly, Peirce himself frequently mentions 'the sign' when, strictly speaking, he is referring to the representamen. It is easy to be found guilty of such a slippage, perhaps because we are so used to 'looking beyond' the form which the sign happens to take. However, to reiterate: the signifier or representamen is the form in which the sign appears (such as the spoken or written form of a word) whereas the sign is the whole meaningful ensemble.

Whereas Saussure emphasized the arbitrary nature of the (linguistic) sign, most semioticians stress that signs differ in how arbitrary/conventional (or by contrast 'transparent') they
are. Symbolism reflects only one form of relationship between signifiers and their signifieds. Whilst Saussure did not offer a typology of signs, Charles Peirce was a compulsive taxonomist and he offered several logical typologies (Peirce 1931-58, 1.291, 2.243). However, his divisions and subdivisions of signs are extraordinarily elaborate: indeed, he offered the theoretical projection that there could be 59,049 types of signs! Peirce himself noted wryly that this calculation 'threatens a multitude of classes too great to be conveniently carried in one's head', adding that 'we shall, I think, do well to postpone preparation for further divisions until there be a prospect of such a thing being wanted' (Peirce 1931-58, 1.291). However, even his more modest proposals are daunting: Susanne Langer commented that 'there is but cold comfort in his assurance that his original 59,049 types can really be boiled down to a mere sixty-six' (Langer 1951, 56). Unfortunately, the complexity of such typologies rendered them 'nearly useless' as working models for others in the field (Sturrock 1986, 17). However, one of Peirce's basic classifications (first outlined in 1867) has been very widely referred to in subsequent semiotic studies (Peirce 1931-58, 1.564). He regarded it as 'the most fundamental' division of signs (ibid., 2.275). It is less useful as a classification of distinct 'types of signs' than of differing 'modes of relationship' between sign vehicles and their referents (Hawkes 1977, 129). Note that in the subsequent account, I have continued to employ the Saussurean terms signifier and signified, even though Peirce referred to the relation between the 'sign' (sic) and the object, since the Peircean distinctions are most commonly employed within a broadly Saussurean framework. Such incorporation tends to emphasize (albeit indirectly) the referential potential of the signified within the Saussurean model. Here then are the three modes together with some brief definitions of my own and some illustrative examples:

**Symbol/symbolic**: a mode in which the signifier does not resemble the signified but which is fundamentally arbitrary or purely conventional - so that the relationship must be learnt: e.g. language in general (plus specific languages, alphabetical
letters, punctuation marks, words, phrases and sentences), numbers, morse code, traffic lights, national flags;

**Icon/iconic**: a mode in which the signifier is perceived as resembling or imitating the signified (recognizably looking, sounding, feeling, tasting or smelling like it) - being similar in possessing some of its qualities: e.g. a portrait, a cartoon, a scale-model, onomatopoeia, metaphors, 'realistic' sounds in 'programme music', sound effects in radio drama, a dubbed film soundtrack, imitative gestures;

**Index/indexical**: a mode in which the signifier is not arbitrary but is directly connected in some way (physically or causally) to the signified - this link can be observed or inferred: e.g. 'natural signs' (smoke, thunder, footprints, echoes, non-synthetic odours and flavours), medical symptoms (pain, a rash, pulse-rate), measuring instruments (weathercock, thermometer, clock, spirit-level), 'signals' (a knock on a door, a phone ringing), pointers (a pointing 'index' finger, a directional signpost), recordings (a photograph, a film, video or television shot, an audio-recorded voice), personal 'trademarks' (handwriting, catchphrase) and indexical words ('that', 'this', 'here', 'there').

The three forms are listed here in decreasing order of conventionality. Symbolic signs such as language are (at least) highly conventional; iconic signs always involve some degree of conventionality; indexical signs 'direct the attention to their objects by blind compulsion' ([Peirce 1931-58, 2.306](https://peirce.s CR). **Indexical** and **iconic** signifiers can be seen as more constrained by referential *signifieds* whereas in the more conventional **symbolic** signs the *signified* can be seen as being defined to a greater extent by the *signifier*. Within each form signs also vary in their degree of conventionality. Other criteria might be applied to rank the three forms differently. For instance, Hodge and Kress suggest that indexicality is based on an act of judgement or inference whereas iconicity is closer to 'direct perception' making the highest 'modality'
that of iconic signs. Note that the terms 'motivation' (from Saussure) and 'constraint' are sometimes used to describe the extent to which the signified determines the signifier. The more a signifier is constrained by the signified, the more 'motivated' the sign is: iconic signs are highly motivated; symbolic signs are unmotivated. The less motivated the sign, the more learning of an agreed convention is required. Nevertheless, most semioticians emphasize the role of convention in relation to signs. As we shall see, even photographs and films are built on conventions which we must learn to 'read'. Such conventions are an important social dimension of semiotics.

Peirce and Saussure used the term 'symbol' differently from each other. Whilst nowadays most theorists would refer to language as a symbolic sign system, Saussure avoided referring to linguistic signs as 'symbols', since the ordinary everyday use of this term refers to examples such as a pair of scales (signifying *justice*), and he insisted that such signs are 'never wholly arbitrary. They are not empty configurations'. They 'show at least a vestige of natural connection' between the signifier and the signified - a link which he later refers to as 'rational' (*Saussure 1983*, 68, 73; *Saussure 1974*, 68, 73). Whilst Saussure focused on the arbitrary nature of the linguistic sign, a more obvious example of arbitrary symbolism is mathematics. Mathematics does not need to refer to an external world at all: its signifieds are indisputably *concepts* and mathematics is a system of relations (*Langer 1951*, 28).

For Peirce, a symbol is 'a sign which refers to the object that it denotes by virtue of a law, usually an association of general ideas, which operates to cause the symbol to be interpreted as referring to that object' (*Peirce 1931-58*, 2.249). We interpret symbols according to 'a rule' or 'a habitual connection' (*ibid.*, 2.292, 2.297, 1.369). 'The symbol is connected with its object by virtue of the idea of the symbol-using animal, without which no such connection would exist' (*ibid.*, 2.299). It 'is constituted a sign merely or mainly by the fact that it is used and understood as such' (*ibid.*, 2.307). It 'would lose the character which renders it a sign if there were no interpretant' (*ibid.*, 2.304). A symbol is 'a conventional sign, or one
depending upon habit (acquired or inborn) (ibid., 2.297). 'All words, sentences, books and other conventional signs are symbols' (ibid., 2.292). Peirce thus characterizes linguistic signs in terms of their conventionality in a similar way to Saussure. In a rare direct reference to the arbitrariness of symbols (which he then called 'tokens'), he noted that they 'are, for the most part, conventional or arbitrary' (ibid., 3.360). A symbol is a sign 'whose special significance or fitness to represent just what it does represent lies in nothing but the very fact of there being a habit, disposition, or other effective general rule that it will be so interpreted. Take, for example, the word "man". These three letters are not in the least like a man; nor is the sound with which they are associated' (ibid., 4.447). He adds elsewhere that 'a symbol... fulfills its function regardless of any similarity or analogy with its object and equally regardless of any factual connection therewith' but solely because it will be interpreted as a sign (ibid., 5.73; original emphasis).

Turning to icons, Peirce declared that an iconic sign represents its object 'mainly by its similarity' (Peirce 1931-58, 2.276). A sign is an icon 'insofar as it is like that thing and used as a sign of it' (ibid., 2.247). Indeed, he originally termed such modes, 'likenesses' (e.g. ibid., 1.558). He added that 'every picture (however conventional its method)' is an icon (ibid., 2.279). Icons have qualities which 'resemble' those of the objects they represent, and they 'excite analogous sensations in the mind' (ibid., 2.299; see also 3.362). Unlike the index, 'the icon has no dynamical connection with the object it represents' (ibid.). Just because a signifier resembles that which it depicts does not necessarily make it purely iconic. The philosopher Susanne Langer argues that 'the picture is essentially a symbol, not a duplicate, of what it represents' (Langer 1951, 67). Pictures resemble what they represent only in some respects. What we tend to recognize in an image are analogous relations of parts to a whole (ibid., 67-70). For Peirce, icons included 'every diagram, even although there be no sensuous resemblance between it and its object, but only an analogy between the relations of the parts of each' (Peirce 1931-58, 2.279). 'Many diagrams resemble their objects not at all in looks; it is only in respect to the
relations of their parts that their likeness consists' ([ibid., 2.282]). Even the most 'realistic' image is not a replica or even a copy of what is depicted. We rarely mistake a representation for what it represents.

Semioticians generally maintain that there are no 'pure' icons - there is always an element of cultural convention involved. Peirce stated that although 'any material image' (such as a painting) may be perceived as looking like what it represents, it is 'largely conventional in its mode of representation' ([Peirce 1931-58, 2.276]). 'We say that the portrait of a person we have not seen is convincing. So far as, on the ground merely of what I see in it, I am led to form an idea of the person it represents, it is an icon. But, in fact, it is not a pure icon, because I am greatly influenced by knowing that it is an effect, through the artist, caused by the original's appearance... Besides, I know that portraits have but the slightest resemblance to their originals, except in certain conventional respects, and after a conventional scale of values, etc.' ([ibid., 2.92]).

Guy Cook asks whether the iconic sign on the door of a public lavatory for men actually looks more like a man than like a woman. 'For a sign to be truly iconic, it would have to be transparent to someone who had never seen it before - and it seems unlikely that this is as much the case as is sometimes supposed. We see the resemblance when we already know the meaning' ([Cook 1992, 70]). Thus, even a 'realistic' picture is symbolic as well as iconic.

Iconic and indexical signs are more likely to be read as 'natural' than symbolic signs when making the connection between signifier and signified has become habitual. Iconic signifiers can be highly evocative. Kent Grayson observes: 'Because we can see the object in the sign, we are often left with a sense that the icon has brought us closer to the truth than if we had instead seen an index or a symbol' ([Grayson 1998, 36]). He adds that 'instead of drawing our attention to
the gaps that always exist in representation, iconic experiences encourage us subconsciously to fill in these gaps and then to believe that there were no gaps in the first place... This is the paradox of representation: it may deceive most when we think it works best' \textit{(ibid., 41)}.

The linguist John Lyons notes that iconicity is 'always dependent upon properties of the medium in which the form is manifest' \textit{(Lyons 1977, 105)}. He offers the example of the onomatopoeic English word \textit{cuckoo}, noting that it is only iconic in the phonic medium (speech) and not in the graphic medium (writing). Whilst the phonic medium can represent characteristic sounds (albeit in a relatively conventionalized way), the graphic medium can represent characteristic shapes (as in the case of Egyptian hieroglyphs) \textit{(Lyons 1977, 103)}.

We will return shortly to the importance of the materiality of the sign.

\textit{Indexicality} is perhaps the most unfamiliar concept. Peirce offers various criteria for what constitutes an index. An index 'indicates' something: for example, 'a sundial or clock \textit{indicates} the time of day' \textit{(Peirce 1931-58, 2.285)}. He refers to a 'genuine relation' between the 'sign' and the \textit{object} which does not depend purely on 'the interpreting mind' \textit{(ibid., 2.92, 298)}. The \textit{object} is 'necessarily existent' \textit{(ibid., 2.310)}. The index is connected to its object 'as a matter of fact' \textit{(ibid., 4.447)}. There is 'a real connection' \textit{(ibid., 5.75)}. There may be a 'direct physical connection' \textit{(ibid., 1.372, 2.281, 2.299)}. An indexical sign is like 'a fragment torn away from the object' \textit{(ibid., 2.231)}. Unlike an icon (the object of which may be fictional) an index stands 'unequivocally for this or that existing thing' \textit{(ibid., 4.531)}. Whilst 'it necessarily has some quality in common' with it, the signifier is 'really affected' by the signified; there is an 'actual modification' involved \textit{(ibid., 2.248)}. The relationship is not based on 'mere resemblance' \textit{(ibid.)}: 'indices... have no significant resemblance to their objects' \textit{(ibid., 2.306)}. 'Similarity or analogy' are not what define the index \textit{(ibid., 2.305)}. 'Anything which focusses the attention is an index. Anything which startles us is an index' \textit{(ibid., 2.285; see also 3.434)}. Indexical signs 'direct the attention to their objects by blind compulsion' \textit{(ibid., 2.306; see also 2.191, 2.428)}. 'Psychologically, the action of indices
depends upon association by contiguity, and not upon association by resemblance or upon intellectual operations' \((\textit{ibid.})\).

Whilst a photograph is also perceived as resembling that which it depicts, Peirce noted that a photograph is not only iconic but also \textit{indexical}: 'photographs, especially instantaneous photographs, are very instructive, because we know that in certain respects they are exactly like the objects they represent. But this resemblance is due to the photographs having been produced under such circumstances that they were physically forced to correspond point by point to nature. In that aspect, then, they belong to the... class of signs... by physical connection [the indexical class]' \((\textit{Peirce 1931-58, 2.281}; \text{see also 5.554})\). So in this sense, since the photographic image is an index of the effect of light on photographic emulsion, all \textit{unedited} photographic and filmic images are indexical (although we should remember that conventional practices are always involved in composition, focusing, developing and so on). Such images do of course 'resemble' what they depict, and it has been suggested the 'real force' of the photographic and filmic image 'lies in its iconic signification' \((\textit{Deacon et al. 1999, 188})\). However, whilst digital imaging techniques are increasingly eroding the indexicality of photographic images, it is arguable that it is the indexicality still routinely attributed to the medium which is primarily responsible for interpreters treating them as 'objective' records of 'reality'. Peirce observed that 'a photograph... owing to its optical connection with its object, is evidence that that appearance corresponds to a reality' \((\textit{Peirce 1931-58, 4.447})\). In many contexts photographs are indeed regarded as 'evidence', not least in legal contexts. As for the moving image, video-cameras are of course widely used 'in evidence'. Documentary film and location footage in television news programmes depend upon the indexical nature of the sign. In such genres indexicality seems to warrant the status of the material as \textit{evidence}. Photographic and filmic images may also be \textit{symbolic}: in an empirical study of television news, Davis and Walton found that A relatively small proportion of the total number of shots is iconic or \textit{directly} representative of the people, places and
events which are subjects of the news text. A far greater proportion of shots has an oblique relationship to the text; they 'stand for' the subject matter indexically or symbolically (Davis & Walton 1983b, 45).

It is easy to slip into referring to Peirce's three forms as 'types of signs', but they are not necessarily mutually exclusive: a sign can be an icon, a symbol and an index, or any combination. Peirce was fully aware of this: for instance, he insisted that 'it would be difficult if not impossible to instance an absolutely pure index, or to find any sign absolutely devoid of the indexical quality' (Peirce 1931-58, 2.306). A map is indexical in pointing to the locations of things, iconic in its representation of the directional relations and distances between landmarks and symbolic in using conventional symbols the significance of which must be learnt. The film theorist Peter Wollen argues that 'the great merit of Peirce's analysis of signs is that he did not see the different aspects as mutually exclusive. Unlike Saussure he did not show any particular prejudice in favour of one or the other. Indeed, he wanted a logic and a rhetoric which would be based on all three aspects' (Wollen 1969, 141). Film and television use all three forms: icon (sound and image), symbol (speech and writing), and index (as the effect of what is filmed); at first sight iconic signs seem the dominant form, but some filmic signs are fairly arbitrary, such as 'dissolves' which signify that a scene from someone's memory is to follow.

Hawkes notes, following Jakobson, that the three modes 'co-exist in the form of a hierarchy in which one of them will inevitably have dominance over the other two', with dominance determined by context (Hawkes 1977, 129). Whether a sign is symbolic, iconic or indexical depends primarily on the way in which the sign is used, so textbook examples chosen to illustrate the various modes can be misleading. The same signifier may be used iconically in one context and symbolically in another: a photograph of a woman may stand for some broad category such as 'women' or may more specifically represent only the particular woman who is depicted. Signs cannot be classified in terms of the three modes without reference to the purposes of their users within particular contexts. A sign may consequently be
treated as symbolic by one person, as iconic by another and as indexical by a third. As Kent Grayson puts it, 'When we speak of an icon, an index or a symbol, we are not referring to objective qualities of the sign itself, but to a viewer's experience of the sign' (Grayson 1998, 35). Signs may also shift in mode over time. As Jonathan Culler notes, 'In one sense a Rolls-Royce is an index of wealth in that one must be wealthy in order to purchase one, but it has been made a conventional sign of wealth by social usage' (Culler 1975, 17).

Despite his emphasis on studying 'the language-state' 'synchronously' (as if it were frozen at one moment in time) rather than 'diachronically' (studying its evolution), Saussure was well aware that the relationship between the signified and the signifier in language was subject to change over time (Saussure 1983, 74ff; Saussure 1974, 74ff). However, this was not the focus of his concern. Critics of structuralist approaches emphasize that the relation between signifier and signified is subject to dynamic change: Rosalind Coward and John Ellis argue that any 'fixing' of 'the chain of signifiers' is both temporary and socially determined (Coward & Ellis 1977, 6, 8, 13).

In terms of Peirce's three modes, a historical shift from one mode to another tends to occur. Although Peirce made far more allowance for non-linguistic signs than did Saussure, like Saussure, he too granted greater status to *symbolic* signs: 'they are the only general signs; and generality is essential to reasoning' (Peirce 1931-58, 3.363; see also 4.448 & 4.531). Saussure's emphasis on the importance of the principle of arbitrariness reflects his prioritizing of symbolic signs whilst Peirce referred to *Homo sapiens* as 'the symbol-using animal' (Peirce 1931-58, 2.299). The idea of the evolution of sign-systems towards the symbolic mode is consistent with such a perspective. Peirce speculates 'whether there be a life in signs, so that - the requisite vehicle being present - they will go through a certain order of development'. Interestingly, he does not present this as necessarily a matter of progress towards the 'ideal' of symbolic form since he allows for the theoretical possibility that 'the same round of changes of form is described over and over again' (ibid., 2.111). Whilst
granting such a possibility, he nevertheless notes that 'a regular progression... may be remarked in the three orders of signs, Icon, Index, Symbol' (ibid., 2.299). Peirce posits iconicity as the original default mode of signification, declaring the icon to be 'an originalian sign' (ibid., 2.92), defining this as 'the most primitive, simple and original of the categories' (ibid., 2.90). Compared to the 'genuine sign... or symbol', an index is 'degenerate in the lesser degree' whilst an icon is 'degenerate in the greater degree'. Peirce noted that signs were 'originally in part iconic, in part indexical' (ibid., 2.92). He adds that 'in all primitive writing, such as the Egyptian hieroglyphics, there are icons of a non-logical kind, the ideographs' and he speculates that 'in the earliest form of speech there probably was a large element of mimicry' (ibid., 2.280). However, over time, linguistic signs developed a more symbolic and conventional character (ibid., 2.92, 2.280). 'Symbols come into being by development out of other signs, particularly from icons' (ibid., 2.302).

The historical evidence does indicate a tendency of linguistic signs to evolve from indexical and iconic forms towards symbolic forms. Alphabets were not initially based on the substitution of conventional symbols for sounds. Marcel Danesi notes that 'archaeological research suggests... that the origins of alphabetical writing lie in symbols previously made out of elemental shapes that were used as image-making objects - much like the moulds that figurine and coin-makers use today. Only later did they take on more abstract qualities' (Danesi 1999, 35; see Schmandt-Besserat 1978). Some of the letters in the Greek and Latin alphabets, of
course, derive from iconic signs in Egyptian hieroglyphs. The early scripts of the Mediterranean civilizations used pictographs, ideographs and hieroglyphs. Many of these were iconic signs resembling the objects and actions to which they referred either directly or metaphorically. Over time, picture writing became more symbolic and less iconic (Gelb 1963). This shift from the iconic to the symbolic may have been 'dictated by the economy of using a chisel or a reed brush' (Cherry 1966, 33); in general, symbols are semiotically more flexible and efficient (Lyons 1977, 103). The anthropologist Claude Lévi-Strauss identified a similar general movement from motivation to arbitrariness within the conceptual schemes employed by particular cultures (Lévi-Strauss 1974, 156).

Taking a historical perspective is one reason for the insistence of some theorists that 'signs are never arbitrary' (Kress & van Leeuwen 1996, 7). Gunther Kress, for instance, emphasizes the motivation of the sign users rather than of the sign (see also Hodge & Kress 1988, 21-2). Rosalind Coward and John Ellis insist that 'every identity between signifier and signified is the result of productivity and a work of limiting that productivity' (Coward & Ellis 1977, 7).

A distinction is sometimes made between digital and analogical signs. Indeed, Anthony Wilden declares that 'no two categories, and no two kinds of experience are more fundamental in human life and thought than continuity and discontinuity' (Wilden 1987, 222). Whilst we experience time as a continuum, we may represent it in either analogue or digital form. A watch with an analogue display (with hour, minute and second hands) has the advantage of dividing an hour up like a cake (so that, in a lecture, for instance, we can 'see' how much time is left). A watch with a digital display (displaying the current time as a changing number) has the advantage of precision, so that we can easily see exactly what time it is 'now'. Even an analogue display is now simulated on some digital watches.

We have a deep attachment to analogical modes and we tend to regard digital representations as 'less real' or 'less authentic' - at least initially (as in the case of the audio CD
compared to the vinyl LP). The analogue/digital distinction is frequently represented as 'natural' versus 'artificial'. Perhaps this is connected in part with the notion that the unconscious - that which we regard as 'deepest' within us - appears to operate analogically (Wilden 1987, 224). The privileging of the analogical may be linked with the status of the unconscious and the defiance of rationality in romantic ideology (which still dominates our conception of ourselves as 'individuals'). The deliberate intention to communicate tends to be dominant in digital codes, whilst in analogue codes 'it is almost impossible... not to communicate' (ibid., 225). Beyond any conscious intention, we communicate through gesture, posture, facial expression, intonation and so on. Analogical codes unavoidably 'give us away', revealing such things as our moods, attitudes, intentions and truthfulness (or otherwise). However, although the appearance of the 'digital watch' in 1971 and the subsequent 'digital revolution' in audio- and video-recording have led us to associate the digital mode with electronic technologies, digital codes have existed since the earliest forms of language - and writing is a 'digital technology'. Signifying systems impose digital order on what we often experience as a dynamic and seamless flux. The very definition of something as a sign involves reducing the continuous to the discrete. As we shall see later, binary (either/or) distinctions are a fundamental process in the creation of signifying structures. Digital signs involve discrete units such as words and 'whole numbers' and depend on the categorization of what is signified.

Analogical signs (such as visual images, gestures, textures, tastes and smells) involve graded relationships on a continuum. They can signify infinite subtleties which seem 'beyond words'. Emotions and feelings are analogical signifieds. Unlike symbolic signifiers, motivated signifiers (and their signifieds) blend into one another. There can be no comprehensive catalogue of such dynamic analogue signs as smiles or laughs. Analogue signs can of course be digitally reproduced (as is demonstrated by the digital recording of sounds and of both still and moving images) but they cannot be directly related to a standard 'dictionary' and syntax in the
way that linguistic signs can. Bill Nichols notes that 'the graded quality of analogue codes may make them rich in meaning but it also renders them somewhat impoverished in syntactical complexity or semantic precision. By contrast the discrete units of digital codes may be somewhat impoverished in meaning but capable of much greater complexity or semantic signification' (Nichols 1981, 47; see also Wilden 1987, 138, 224). The art historian Ernst Gombrich insists that 'statements cannot be translated into images' and that 'pictures cannot assert' - a contention also found in Peirce (Gombrich 1982, 138, 175; Peirce 1931-58, 2.291). Nevertheless, whilst images serving such communicative purposes may be more 'open to interpretation', contemporary visual advertisements are a powerful example of how images may be used to make implicit claims which advertisers often prefer not to make more openly in words.

The Italian semiotician Umberto Eco has criticized the apparent equation of the terms 'arbitrary', 'conventional' and 'digital' by some commentators. He notes the way in which the following widespread pairings misleadingly suggest that the terms vertically aligned here are synonymous (Eco 1976, 190). He observes, for instance, that a photograph may be both 'motivated' and 'digital'. Nor is 'conventionality' (dependence on social and cultural conventions) equivalent to 'arbitrariness' (the lack of any intrinsic connection between the signifier and the signified). Yet it is easy to slip into treating such terms as equivalent - the current text far from immune to this. We may, as we shall see later, be so fond of analogy that we are often (perhaps unavoidably) its unwitting victims.

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Another distinction between sign vehicles relates to the linguistic concept of tokens and types which derives from Peirce (Peirce 1931-58, 4.537). In relation to words in a
spoken utterance or written text, a count of the tokens would be a count of the total number of words used (regardless of type), whilst a count of the types would be a count of the different words used, ignoring repetitions. In the language of semantics, tokens instantiate (are instances of) their type. 'Word' and 'word' are instances of the same type. Language depends on the distinction between tokens and types, between the particular instance and the general category. This is the basis of categorization. John Lyons notes that whether something is counted as a token of a type is relative to one's purposes - for instance:

- Are tokens to include words with different meanings which happen to be spelt or pronounced in the same way?
- Does a capital letter instantiate the same type as the corresponding lower-case letter?
- Does a word printed in italics instantiate the same type as a word printed in Roman?
- Is a word handwritten by X ever the same as a word handwritten by Y? (Lyons 1977, 13-15)

From a semiotic point-of-view, such questions could only be answered by considering in each case whether the different forms signified something of any consequence to the relevant sign-users in the context of the specific signifying practice being studied.

Eco lists three kinds of sign vehicles, and it is notable that the distinction relates in part at least to material form:

- signs in which there may be any number of tokens (replicas) of the same type (e.g. a printed word, or exactly the same model of car in the same colour);
- 'signs whose tokens, even though produced according to a type, possess a certain quality of material uniqueness' (e.g. a word which someone speaks or which is handwritten);
- 'signs whose token is their type, or signs in which type and token are identical' (e.g. a unique original oil-
The type-token distinction may influence the way in which a text is interpreted. In his influential essay on 'The Work of Art in the Age of Mechanical Reproduction', the literary-philosophical theorist Walter Benjamin (1892-1940) noted that technological society is dominated by reproductions of original works - tokens of the original type (Benjamin 1992, 211-244). Indeed, even if we do see, for instance, 'the original' of a famous oil-painting, we are highly likely to have seen it first in the form of innumerable reproductions (books, postcards, posters - sometimes even in the form of pastiches or variations on the theme) and we may only be able to 'see' the original in the light of the judgements shaped by the copies or versions which we have encountered (see Intertextuality). In the postmodern era, the bulk of our texts are indeed 'copies without originals'.

The type-token distinction in relation to signs is important in social semiotic terms not as an absolute property of the sign vehicle but only insofar as it matters on any given occasion (for particular purposes) to those involved in using the sign. Minute differences in a pattern could be a matter of life and death for gamblers in relation to variations in the pattern on the backs of playing-cards within the same pack, but stylistic differences in the design of each type of card (such as the Ace of Spades), are much appreciated by collectors as a distinctive feature of different packs of playing-cards.

As already indicated, Saussure saw both the signifier and the signified as non-material 'psychological' forms; the language itself is 'a form, not a substance' (Saussure 1983, 111, 120; Saussure 1974, 113, 122). He uses several examples to reinforce his point. For instance, in one of several chess analogies, he notes that 'if pieces made of ivory are substituted for pieces made of wood, the change makes no difference to the system' (Saussure 1983, 23; Saussure 1974, 22). Pursuing this functional approach, he notes elsewhere that the 8.25pm Geneva-to-Paris train is referred to as 'the same train' even though the combinations of locomotive, carriages and personnel may change. Similarly, he asks why
a street which is completely rebuilt can still be 'the same street'. He suggests that this is 'because it is not a purely material structure' (Saussure 1983, 107; Saussure 1974, 108). Saussure insists that this is not to say that such entities are 'abstract' since we cannot conceive of a street or train outside of its material realization - 'their physical existence is essential to our understanding of what they are' (Saussure 1983, 107; Saussure 1974, 109; see also ibid, 15). This can be related to the type-token distinction. Since Saussure sees language in terms of formal function rather than material substance, then whatever performs the same function within the system can be regarded as just another token of the same type. With regard to language, Saussure observes that 'sound, as a material element... is merely ancillary, a material the language uses' (Saussure 1983, 116; Saussure 1974, 118). Linguistic signifiers are 'not physical in any way. They are constituted solely by differences which distinguish one such sound pattern from another' (Saussure 1983, 117; Saussure 1974, 118). He admits at one point, with some apparent reluctance, that 'linguistic signs are, so to speak, tangible: writing can fix them in conventional images' (Saussure 1983, 15; Saussure 1974, 15). However, referring to written signs, he comments that 'the actual mode of inscription is irrelevant, because it does not affect the system... Whether I write in black or white, in incised characters or in relief, with a pen or a chisel - none of that is of any importance for the meaning' (Saussure 1983, 118; Saussure 1974, 120). One can understand how a linguist would tend to focus on form and function within language and to regard the material manifestations of language as of peripheral interest. 'The linguist... is interested in types, not tokens' (Lyons 1977, 28).

This was not only the attitude of the linguist Saussure, but also of the philosopher Peirce: 'The word "man"... does not consist of three films of ink. If the word "man" occurs hundreds of times in a book of which myriads of copies are printed, all those millions of triplets of patches of ink are embodiments of one and the same word... each of those embodiments a replica of the symbol. This shows that the word is not a thing' (Peirce 1931-58, 4.447). Peirce did refer to the materiality of the sign: 'since a sign is not identical
with the thing signified, but differs from the latter in some respects, it must plainly have some characters which belong to it in itself... These I call the material qualities of the sign'. He granted that materiality is a property of the sign which is 'of great importance in the theory of cognition'. Materiality had 'nothing to do with its representative function' and it did not feature in his classificatory schemes. However, he alludes briefly to the signifying potential of materiality: 'if I take all the things which have certain qualities and physically connect them with another series of things, each to each, they become fit to be signs'. For instance, if the colour of a red flower matters to someone then redness is a sign \((\text{ibid.}, 5.287)\).

Whilst Saussure chose to ignore the materiality of the linguistic sign, most subsequent theorists who have adopted his model have chosen to reclaim the materiality of the sign (or more strictly of the signifier). Semioticians must take seriously any factors to which sign-users ascribe significance, and the material form of a sign does sometimes make a difference. Contemporary theorists tend to acknowledge that the material form of the sign may generate connotations of its own. As early as 1929 Valentin Voloshinov published *Marxism and the Philosophy of Language* which included a materialist critique of Saussure's psychological and implicitly idealist model of the sign. Voloshinov described Saussure's ideas as 'the most striking expression' of 'abstract objectivism' \((\text{Voloshinov 1973, 58})\). He insisted that 'a sign is a phenomenon of the external world' and that 'signs... are particular, material things'. Every sign 'has some kind of material embodiment, whether in sound, physical mass, colour, movements of the body, or the like' \((\text{ibid.}, 10-11; \text{cf. 28})\). For Voloshinov, all signs, including language, have 'concrete material reality' \((\text{ibid.}, 65)\) and the physical properties of the sign matter.

Psychoanalytic theory also contributed to the revaluation of the signifier - in Freudian dream theory the sound of the signifier could be regarded as a better guide to its possible signified than any conventional 'decoding' might have suggested \((\text{Freud 1938, 319})\). For instance, Freud reported that the dream of a young woman engaged to be married
featured flowers - including lilies-of-the-valley and violets. Popular symbolism suggested that the lilies were a symbol of chastity and the woman agreed that she associated them with purity. However, Freud was surprised to discover that she associated the word 'violet' phonetically with the English word 'violate', suggesting her fear of the violence of 'defloration' (another word alluding to flowers) (Freud 1938, 382-3). If this sounds familiar, this particular dream motif featured in the film Final Analysis (1992). As the psychoanalytical theorist Jacques Lacan emphasized (originally in 1957), the Freudian concepts of condensation and displacement illustrate the determination of the signified by the signifier in dreams (Lacan 1977, 159ff). In condensation, several thoughts are condensed into one symbol, whilst in displacement unconscious desire is displaced into an apparently trivial symbol (to avoid dream censorship).

Poststructuralist theorists have sought to revalorize the signifier. The phonocentrism which was allied with Saussure's suppression of the materiality of the linguistic sign was challenged in 1967, when the French poststructuralist Jacques Derrida, in his book Of Grammatology, attacked the privileging of speech over writing which is found in Saussure (as well as in the work of many other previous and subsequent linguists) (Derrida 1976). From Plato to Lévi-Strauss, the spoken word had held a privileged position in the Western worldview, being regarded as intimately involved in our sense of self and constituting a sign of truth and authenticity. Speech had become so thoroughly naturalized that 'not only do the signifier and the signified seem to unite, but also, in this confusion, the signifier seems to erase itself or to become transparent' (Derrida 1981, 22). Writing had traditionally been relegated to a secondary position. The deconstructive enterprise marked 'the return of the repressed' (Derrida 1978, 197). In seeking to establish 'Grammatology' or the study of textuality, Derrida championed the primacy of the material word. He noted that the specificity of words is itself a material dimension. 'The materiality of a word cannot be translated or carried over into another language. Materiality is precisely that which translation relinquishes' -
this English translation presumably illustrating some such loss (*ibid.*, 210). Roland Barthes also sought to revalorize the role of the signifier in the act of writing. He argued that in 'classic' literary writing, the writer 'is always supposed to go from signified to signifier, from content to form, from idea to text, from passion to expression' (*Barthes 1974, 174*). However, this was directly opposite to the way in which Barthes characterized the act of writing. For him, writing was a matter of working with the signifiers and letting the signifieds take care of themselves - a paradoxical phenomenon which other writers have often reported (*Chandler 1995, 60ff*). Subsequent theorists have also sought to 'rematerialize' the linguistic sign, stressing that words are *things* and that texts are part of the material world (e.g. *Coward & Ellis 1977; Silverman & Torode 1980*).

Jay David Bolter argues that 'signs are always anchored in a medium. Signs may be more or less dependent upon the characteristics of one medium - they may transfer more or less well to other media - but there is no such thing as a sign without a medium' (*Bolter 1991, 195-6*). This is a little misleading, because, as Justin Lewis notes, 'the sign has no material existence, since meaning is brought to words or objects, not inscribed within them. Only the signifier - the unit prior to meaning - exists as a material entity' (*Wren-Lewis 1983, 181*). Nevertheless, Bolter's point does apply to the sign vehicle, and as Hodge and Tripp note, 'fundamental to all semiotic analysis is the fact that any system of signs (semiotic code) is carried by a material medium which has its own principles of structure' (*Hodge & Tripp 1986, 17*). Furthermore, some media draw on several interacting sign systems: television and film, for example, utilize verbal, visual, auditory and locomotive signs. The medium is not 'neutral'; each medium has its own constraints and, as Umberto Eco notes, each is already 'charged with cultural signification' (*Eco 1976, 267*). For instance, photographic and audio-visual media are almost invariably regarded as more 'real' than other forms of representation. Gunther Kress and Theo van Leeuwen argue that 'the material expression of the text is always significant; it is a separately variable semiotic feature' (*Kress & van Leeuwen 1996, 231*).
Changing the signifier at the level of the form or medium may thus influence the signified - the sense which readers make of what is ostensibly the same 'content'. Breaking up a relationship by fax is likely to be regarded in a different light from breaking up in a face-to-face situation.

I have alluded to the problematic distinction between form and content. The linguist Louis Hjelmslev acknowledged that 'there can be no content without an expression, or expressionless content; neither can there be an expression without a content, or content-less expression' (Hjelmslev 1961, 49). However, he offered a framework which facilitated analytical distinctions (ibid., 47ff). Whilst he referred to 'planes' of expression and content (Saussure's signifier and signified), he enriched this model (ibid., 60). His contribution was to suggest that both expression and content have substance and form. Thus there are four categories: substance of expression, form of expression, substance of content, form of content. Various theorists such as Christian Metz have built upon this theoretical distinction and they differ somewhat in what they assign to the four categories (see Tudor 1974, 110; Baggaley & Duck 1976, 149; Metz 1981).

<table>
<thead>
<tr>
<th>Substance</th>
<th>Form</th>
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<tbody>
<tr>
<td><strong>Signifiers:</strong> plane of expression</td>
<td><strong>Substance of expression:</strong> physical materials of the medium (e.g. photographs, recorded voices, printed words on paper)</td>
</tr>
<tr>
<td><strong>Signifieds:</strong> plane of content</td>
<td><strong>Substance of content:</strong> 'human content' (Metz), textual world, subject matter, genre</td>
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Whereas Saussure had insisted that language is 'a form, not a substance', Hjelmslev's framework allows us to analyse texts according to their various dimensions and to grant to each of these the potential for signification. Such a matrix provides a useful framework for the systematic analysis of texts, broadens the notion of what constitutes a sign, and reminds us that the materiality of the sign may in itself signify.

From an explicitly social semiotic perspective, Gunther Kress and Theo van Leeuwen adapt a linguistic model from Michael Halliday and insist that any semiotic system has three essential *metafunctions*:

- the *ideational* metafunction - 'to represent, in a referential or pseudo-referential sense, aspects of the experiential world outside its particular system of signs';
- the *interpersonal* metafunction - 'to project the relations between the producer of a sign... and the receiver/reproducer of that sign'; and
- the *textual* metafunction - 'to form texts, complexes of signs which cohere both internally and within the context in and for which they were produced'. (Kress & van Leeuwen 1996, 40-41)

Specific semiotic systems are called *codes*.

## Modality and Representation

Whilst semiotics is often encountered in the form of textual analysis, it also involves philosophical theorising on the role of signs in the construction of reality. Semiotics involves studying representations and the processes involved in representational practices, and to semioticians, 'reality' always involves representation.

To semioticians, a defining feature of signs is that they are treated by their users as 'standing for' or representing other things. Jonathan Swift's satirical account of the fictional academicians of Lagago highlights the inadequacies of the commonsense notion that signs stand directly for physical things in the world around us.
A Scheme for entirely abolishing all Words whatsoever... was urged as a great Advantage in Point of Health as well as Brevity. For it is plain, that every Word we speak is in some Degree a Diminution of our Lungs by Corrosion, and consequently contributes to the shortning of our Lives. An Expedient was therefore offered, that since Words are only Names for Things, it would be more convenient for all Men to carry about them, such Things as were necessary to express the particular Business they are to discourse on. And this Invention would certainly have taken Place, to the great Ease as well as Health of the Subject, if the Women in conjunction with the Vulgar and Illiterate had not threatened to raise a Rebellion, unless they might be allowed the Liberty to speak with their Tongues, after the manner of their Ancestors; such constant irreconcilable Enemies to Science are the common People. However, many of the most Learned and Wise adhere to the New Scheme of expressing themselves by Things, which hath only this Inconvenience attending it, that if a Man's Business be very great, and of various kinds, he must be obliged in Proportion to carry a greater bundle of Things upon his Back, unless he can afford one or two strong Servants to attend him. I have often beheld two of those Sages almost sinking under the Weight of their Packs, like Pedlars among us; who, when they met in the Streets, would lay down their Loads, open their Sacks, and hold Conversation for an Hour together; then put up their Implements, help each other to resume their Burthens, and take their Leave.
But for short Conversations a Man may carry Implements in his Pockets and under his Arms, enough to supply him, and in his House he cannot be at a loss: Therefore the Room where Company meet who practise this Art, is full of all Things ready at Hand, requisite to furnish Matter for this kind of artificial Converse.

Another great Advantage proposed by this Invention, was that it would serve as a Universal Language to be understood in all civilized Nations, whose Goods and Utensils are generally of the same kind, or nearly resembling, so that their Uses might easily be comprehended. And thus Embassadors would be qualified to treat with foreign Princes or Ministers of State to whose Tongues they were utter Strangers.

(Jonathan Swift [1726/1735]: *Gulliver's Travels*, Part III, 'A Voyage to Laputa, Balnibarbi, Luggnagg, Glubbdubdrib and Japan', Chapter V)
The proposal by the academicians of Lagago to substitute objects for words highlights problems with the simplistic notion of signs being direct substitutes for things. The academicians adopted the philosophical stance of naive realism in assuming that words simply mirror objects in an external world. They believed that 'Words are only Names for Things', a stance involving the assumption that 'things' necessarily exist independently of language prior to them being 'labelled' with words. According to this position (which accords with a still widespread popular misconception of language) there is a one-to-one correspondence between word and referent (sometimes called language-world *isomorphism*), and language is simply a *nomenclature* - an item-by-item naming of things in the world. As Saussure put it, this is 'the superficial view taken by the general public' (*Saussure 1983, 16, 65; Saussure 1974, 16, 65*).

Within the lexicon of a language, it is true that most of the words are 'lexical words' (or nouns) which refer to 'things', but most of these things are abstract concepts rather than physical objects in the world. Only 'proper nouns' have specific referents in the everyday world, and only some of these refer to a unique entity (e.g. Llanfairpwllgwyngyllgogerychwyrndrobwllllantysiliogogogoch - the name of a Welsh village). As Rick Altman notes, 'A language made up entirely of proper nouns, like the one used in horse racing forms, offers significant representational benefits; every name clearly corresponds to and identifies a single horse' (*Altman 1999, 87*). However, the communicative function of a fully-functioning language requires the scope of reference to move beyond the particularity of the individual instance. Whilst each leaf, cloud or smile is different from all others, effective
communication requires general categories or 'universals'. Anyone who has attempted to communicate with people who do not share their language will be familiar with the limitations of simply pointing to things. You can't point to 'mind', 'culture' or 'history'; these are not 'things' at all. The vast majority of lexical words in a language exist on a high level of abstraction and refer to classes of things (such as 'buildings') or to concepts (such as 'construction'). Language depends on categorization, but as soon as we group instances into classes (tokens into types), we lose any one-to-one correspondence of word and thing (if by 'things' we mean specific objects). Furthermore, other than lexical words, the remaining elements of the lexicon of a language consist of 'function words' (or grammatical words, such as 'only' and 'under') which do not refer to objects in the world at all. The lexicon of a language consists of many kinds of signs other than simply nouns. Clearly, language cannot be reduced to the naming of things.

The less naive realists might note at this point that words do not necessarily name only physical things which exist in an objective material world but may also label imaginary things and also concepts. Peirce's referent, for instance, is not limited to things which exist in the physical world but may include non-existent objects and ideas. However, as Saussure noted, the notion of words as labels for concepts 'assumes that ideas exist independently of words' (Saussure 1983, 65; Saussure 1974, 65). and for him, 'no ideas are established in advance... before the introduction of linguistic structure' (Saussure 1983, 110; cf. 114-115, 118; Saussure 1974, 112; cf. 116, 120). It remains a rationalist and 'nomenclaturist' stance on language when words are seen as 'labels' for pre-existing ideas as well as for objects. It is reductionist: reducing language to the purely referential function of naming things. When we use language, its various kinds of signs relate to each other in complex ways which make nonsense of the reduction of language to a nomenclature. Referentiality may be a function of language but it is only one of its functions. Furthermore, as Vivien Burr puts it, 'whatever the nature of the "real" world, we cannot assume that the words in our language refer to it or describe it' (Burr
The philosophically flawed assumption that it is a necessary condition of a sign that the signifier has a referent has been termed the 'referential illusion' by Roland Barthes (Barthes 1957) and the 'referential fallacy' by Michael Riffaterre (Genosko 1994, 38, 51; Allen 2000, 115).

A radical response to realists is that things do not exist independently of the sign systems which we use; 'reality' is created by the media which seem simply to represent it. Language does not simply name pre-existing categories; categories do not exist in 'the world' (where are the boundaries of a cloud; when does a smile begin?). We may acknowledge the cautionary remarks of John Lyons that such an emphasis on reality as invariably perceptually seamless may be an exaggeration. Lyons speculates that 'most of the phenomenal world, as we perceive it, is not an undifferentiated continuum'; and our referential categories do seem to bear some relationship to certain features which seem to be inherently salient (Lyons 1977, 247; my emphasis; cf. ibid., 260). In support of this caveat, we may note that the Gestalt psychologists reported a universal human tendency to separate a salient figure from what the viewer relegates to the [back]ground (see Gombrich on 'the outline' in art: Gombrich 1982, 283). However, such observations clearly do not demonstrate that the lexical structure of language reflects the structure of an external reality. As Saussure noted, if words were simply a nomenclature for a pre-existing set of things in the world, translation from one language to another would be easy (Saussure 1983, 114-115; Saussure 1974, 116) whereas in fact languages differ in how they categorize the world - the signifieds in one language do not neatly correspond to those in another. Within a language, many words may refer to 'the same thing' but reflect different evaluations of it (one person's 'hovel' is another person's 'home'). Furthermore, what is signified by a word is subject to historical change. In this sense, 'reality' or 'the world' is created by the language we use: this argument insists on the primacy of the signifier. Even if we do not adopt the radical stance that 'the real world' is a product of our sign systems, we must still acknowledge that there are many things in the experiential world for which we have no words and that most words do not correspond to
objects in the known world at all. Thus, all words are 'abstractions', and there is no direct correspondence between words and 'things' in the world.

Saussure's model of the sign involves no direct reference to reality outside the sign. This was not a 'denial' of extralinguistic reality as such but a reflection of his understanding of his own role as a linguist. Saussure accepted that in most scientific disciplines the 'objects of study' were 'given in advance' and existed independently of the observer's 'point of view'. However, he stressed that in linguistics, by contrast, 'it is the viewpoint adopted which creates the object' (Saussure 1983, 8; Saussure 1974, 8). Whilst such a statement might go without comment in a discipline with an acknowledged self-sufficiency (such as mathematics), in the context of human language one can understand how it might be criticized as an idealist model. In the Saussurean model the signified is only a mental concept; concepts are mental constructs, not 'external' objects.

However, as Rodowick notes, 'stressing the relation of difference or nonidentity between an object and the form or substance of its expression need not imply the absence of representation' (Rodowick 1994, 162). A concept may, of course, refer to something in experiential reality but the Saussurean stance is a denial of the 'essentialist' argument that signifieds are distinct, autonomous entities in an objective world which are definable in terms of some kind of unchanging 'essence' (Culler 1985, 24). Saussurean semiotics asserts the non-essential nature of objects. Just like signifiers, signifieds are part of the sign system; signifieds are socially constructed. According to the Whorfian stance, the signified is an arbitrary product of our culture's 'way of seeing'. The Saussurean perspective 'tends to reverse the precedence which a nomenclaturist accords to the world outside language, by proposing that far from the world determining the order of our language, our language determines the order of the world' (Sturrock 1986, 17).

In contrast to the Saussurean model, Peirce's model of the sign explicitly features the referent - something beyond the sign to which the sign vehicle refers (though not necessarily a material thing). However, it also features the interpretant
which leads to an 'infinite series' of signs, so at the same time Peirce's model also seems to suggest the relative independence of signs from any referents (Silverman 1983, 15). For Peirce, reality can only be known via signs. If representations are our only access to reality, determining their accuracy is a critical issue. Peirce adopted from logic the notion of 'modality' to refer to the truth value of a sign, acknowledging three kinds: actuality, (logical) necessity and (hypothetical) possibility (Hodge & Kress 1988, 26). Furthermore, his classification of signs in terms of the mode of relationship of the sign vehicle to its referent reflects their modality - their apparent transparency in relation to 'reality' (the symbolic mode, for instance, having low modality). Peirce asserted that, logically, signification could only ever offer a partial truth because it if offered the complete truth it would destroy itself by becoming identical with its object (cited in Grayson 1998, 40).

Theorists who veer towards the extreme position of philosophical idealism (for whom reality is purely subjective and is constructed in our use of signs) may see no problem with the Saussurean model. Indeed, the Saussurean model has itself been described as 'idealistic' (Culler 1985, 117). Those drawn towards philosophical realism (for whom a single objective reality exists indisputably 'outside' us) would challenge it. According to this stance, reality may be 'distorted' by the media which we use to apprehend it but such media play no part in 'constructing' the world. Even those who adopt an intermediate constructionist (or constructivist) position - that language and other media play a major part in 'the social construction of reality' - may tend to object to an apparent indifference towards social reality in Saussure's model. Those on the political left in particular would object to its sidelining of the importance of the material conditions of existence. Umberto Eco provocatively asserts that 'semiotics is in principle the discipline studying everything which can be used in order to lie' (Eco 1976, 7).

From the perspective of social semiotics the original Saussurean model is understandably problematic. Whatever our philosophical positions, in our daily behaviour we routinely act on the basis that some representations of reality
are more reliable than others. And we do so in part with reference to cues within texts which semioticians (following linguists) call 'modality markers'. Such cues refer to what are variously described as the plausibility, reliability, credibility, truth, accuracy or facticity of texts within a given genre as representations of some recognizable reality. Gunther Kress and Theo van Leeuwen acknowledge that

A social semiotic theory of truth cannot claim to establish the absolute truth or untruth of representations. It can only show whether a given 'proposition' (visual, verbal or otherwise) is represented as true or not. From the point of view of social semiotics, truth is a construct of semiosis, and as such the truth of a particular social group, arising from the values and beliefs of that group. (Kress and van Leeuwen 1996, 159).

From such a perspective, reality has authors; thus there are many realities rather than the single reality posited by objectivists. This stance is related to Whorfian framings of relationships between language and reality. Constructionists insist that realities are not limitless and unique to the individual as extreme subjectivists would argue; rather, they are the product of social definitions and as such far from equal in status. Realities are contested, and textual representations are thus 'sites of struggle'.

Modality refers to the reality status accorded to or claimed by a sign, text or genre. More formally, Robert Hodge and Gunther Kress declare that 'modality refers to the status, authority and reliability of a message, to its ontological status, or to its value as truth or fact' (Hodge & Kress 1988, 124). In making sense of a text, its interpreters make 'modality judgements' about it, drawing on their knowledge of the world and of the medium. For instance, they assign it to fact or fiction, actuality or acting, live or recorded, and they assess the possibility or plausibility of the events depicted or the claims made in it.
Clearly, the extent to which a text may be perceived as 'real' depends in part on the medium employed. Writing, for instance, generally has a lower modality than film and television. However, no rigid ranking of media modalities is possible. John Kennedy showed children a simple line drawing featuring a group of children sitting in a circle with a gap in their midst (Kennedy 1974). He asked them to add to this gap a drawing of their own, and when they concentrated on the central region of the drawing, many of them tried to pick up the pencil which was depicted in the top right-hand corner of the drawing! Being absorbed in the task led them to unconsciously accept the terms in which reality was constructed within the medium. This is not likely to be a phenomenon confined to children, since when absorbed in narrative (in many media) we frequently fall into a 'suspension of disbelief' without compromising our ability to distinguish representations from reality. Charles Peirce reflected that 'in contemplating a painting, there is a moment when we lose the consciousness that it is not the thing, the distinction of the real and the copy disappears' (Peirce 1931-58, 3.362).

Whilst in a conscious comparison of a photographic image with a cartoon image of the same thing the photograph is likely to be judged as more 'realistic', the mental schemata involved in visual recognition may be closer to the stereotypical simplicity of cartoon images than to
photographs. People can identify an image as a hand when it is drawn as a cartoon more quickly than when they are shown a photograph of a hand (Ryan & Schwartz 1956). This underlines the importance of perceptual codes in constructing reality. Umberto Eco argues that through familiarity an iconic signifier can acquire primacy over its signified. Such a sign becomes conventional 'step by step, the more its addressee becomes acquainted with it. At a certain point the iconic representation, however stylized it may be, appears to be more true than the real experience, and people begin to look at things through the glasses of iconic convention' (Eco 1976, 204-5).

Modality cues within texts include both formal features of the medium and content features such as the following (typical high modality cues are listed here as the first in each pair), though it is their interaction and interpretation, of course, which is most important.

**Formal features**
- 3D-flat
- detailed-abstract
- colour-monochrome
- edited-unedited
- moving-still
- audible-silent

**Content features**
- possible-impossible
- plausible-implausible
- familiar-unfamiliar
- current-distant in time
- local-distant in space
Cornelius Gijsbrechts (1670):
*A Cabinet of Curiosities with an Ivory Tankard*
(showing reverse of cupboard door)
Oil on Canvas, *Statens Museum for Kunst*

The media which are typically judged to be the most 'realistic' are photographic - especially film and television. James Monaco suggests that 'in film, the signifier and the signified are almost identical... The power of language systems is that there is a very great difference between the signifier and the signified; the power of film is that there is not' (*Monaco 1981, 127-8*). This is an important part of what Christian Metz was referring to when he described the cinematic signifier as 'the imaginary signifier'. In being less reliant than writing on symbolic signs, film, television and photography suggest less of an obvious gap between the signifier and its signified, which make them seem to offer 'reflections of reality' (even in that which is imaginary). But photography does not reproduce its object: it 'abstracts from, and mediates, the actual' (*Burgin 1982a, 61*). Whilst we do not mistake one for the other we do need to remind ourselves that a photograph or a film does not simply record an event, but is only one of an infinite number of possible representations. All media texts, however 'realistic', are representations rather than simply recordings or reproductions of reality. As the film theorist D N Rodowick puts it, 'Rather than reproducing the "world" spontaneously and automatically, as the ideology of realism would have the spectator believe, the cinematic apparatus always operates selectively, limiting, filtering and transforming the images that are its raw material' (*Rodowick 1994, 77*).

The film theorist André Bazin refers to the 'reproductive fallacy' as being that the only kind of representation which can show things 'as they really are' is one which is (or appears to be) exactly like that which it represents in every respect. Except in the case of digitally-sourced reproductions, texts are constructed from different materials from that which they represent, and representations cannot be replicas. For Bazin, aesthetic realism depended on a broader 'truth to reality' (*Bazin 1974, 64; Lovell 1983, 81*).
Modality judgements involve comparisons of textual representations with models drawn from the everyday world and with models based on the genre; they are therefore obviously dependent on relevant experience of both the world and the medium. Robert Hodge and David Tripp's semiotic study of *Children and Television* focuses on the development of children's modality judgements (Hodge & Tripp 1986).

Ien Ang (1985) argues that watching television soap operas can involve a kind of psychological or emotional realism for viewers which exists at the connotative rather than the denotative level. Viewers find some representations emotionally or psychologically 'true-to-life' (even if at the denotative level the treatment may seem 'unrealistic'). I would argue that especially with long-running soaps (which may become more 'real' to their fans over time) what we could call generic realism is another factor. Viewers familiar with the characters and conventions of a particular soap opera may often judge the programme largely in its own generic terms rather than with reference to some external 'reality'. For instance, is a character's current behaviour consistent with what we have learnt over time about that character? The soap may be accepted to some extent as a world in its own right, in which slightly different rules may sometimes apply. This is of course the basis for what Coleridge called the 'willing suspension of disbelief' on which drama depends.

Robert Hodge and Gunther Kress argue that:

> Different genres, whether classified by medium (e.g. comic, cartoon, film, TV, painting) or by content (e.g. Western, Science Fiction, Romance, news) establish sets of modality markers, and an overall value which acts as a baseline for the genre. This baseline can be different for different kinds of viewer/reader, and for different texts or moments within texts. *(Hodge & Kress 1988, 142)*

What are recognized as 'realistic' styles of representation reflect an aesthetic code. Over time, certain methods of
production within a medium and a genre become naturalized. The content comes to be accepted as a 'reflection of reality'. In the case of popular television and film, for instance, the use of 'invisible editing' represents a widespread set of conventions which has come to seem 'natural' to most viewers. In 'realistic' texts what is foregrounded is the 'content' rather than the 'form' or style of production. As in the dominant mode of 'scientific' discourse, the medium and codes are discounted as neutral and transparent and the makers of the text retreat to invisibility. Consequently, 'reality' seems to pre-exist its representation and to 'speak for itself'; what is said thus has the aura of 'truth'. John Tagg argues that

The signifier is treated as if it were identical with a pre-existent signified and... the reader's role is purely that of a consumer... Signifier and signified appear not only to unite, but the signifier seems to become transparent so that the concept seems to present itself, and the arbitrary sign is naturalized by a spurious identity between reference and referents, between the text and the world. (Tagg 1988, 99)

However, Tagg adds that such a stance need not involve positing 'a closed world of codes' (ibid., 101) or the denial of the existence of what is represented outside the process which represents it (ibid., 167). He stresses 'the crucial relation of meaning to questions of practice and power', arguing that 'the Real is a complex of dominant and dominated discourses which given texts exclude, separate or do not signify' (ibid., 101).

The Belgian surrealist René Magritte (1898-1967) painted La Trahison des Images (The Treachery of Images) in 1936. It depicts a side-on view of a smoker's pipe and the text 'Ceci n'est pas une pipe' ('This is not a pipe'). The image provided here is
similar but the text is different - this is not a reproduction of Magritte's painting(!). Both examples - Magritte's painting and this version - give us pause for thought. Each 'realistically' depicts an object which we easily recognize. If it were a language lesson or a child's 'reading book' (the style reminds me of old-fashioned *Ladybird* books for children), we might expect to see the words 'This is a pipe'. To depict a pipe and then provide a label which insists that 'this is not a pipe' initially seems perverse. Is it purely irrational or is there something which we can learn from this apparent paradox? What could it mean? As our minds struggle to find a stable, meaningful interpretation we may not be too happy that there is no single, 'correct' answer to this question - although those of us who are relatively 'tolerant of ambiguity' may accept that it offers a great deal of food for thought about levels (or modes) of reality. The indexical word 'this' can be seen as a key to the interpretation of this painting: what exactly does the word 'this' refer to? Anthony Wilden suggests several alternative interpretations:

- this [pipe] is not a pipe;
- this [image of a pipe] is not a pipe;
- this [painting] is not a pipe;
- this [sentence] is not a pipe;
- [this] this is not a pipe;
- [this] is not a pipe.

*(Wilden 1987, 245)*

Although we habitually relate the 'meaning' of texts to the stated or inferred purposes of their makers, Magritte's own purposes are not essential to our current concerns. It suits our purposes here to suggest that the painting could be taken as meaning that this representation (or any representation) is not that which it represents. That this image of a pipe is 'only an image' and that we can't smoke it seems obvious - nobody 'in their right mind' would be so foolish as to try to pick it up and use it as a functional pipe (although many readers will have heard by now of the unfortunate, deluded man who 'mistook his wife for a hat'). However, we do habitually refer to such realistic depictions in terms which suggest that they are nothing more nor less than what they depict. Any
representation is more than merely a reproduction of that which it represents: it also contributes to the construction of reality. Even 'photorealism' does not depict unmediated reality. The most realistic representation may also symbolically or metaphorically 'stand for' something else entirely. Furthermore, the depiction of a pipe is no guarantee of the existence of a specific pipe in the world of which this is an accurate depiction. Indeed, it seems a fairly generalized pipe and could therefore be seen (as is frequently true of language lessons, children's encyclopedia entries and so on) as an illustration of the 'concept' of a pipe rather than of a specific pipe. The label seeks to anchor our interpretation - a concept to which we will return later - and yet at the same time the label is part of the painting itself rather than a title attached to the frame. Magritte's painting could be seen as a kind of defamiliarization: we are so used to seeing things and attaching labels to them that we seldom look deeper and do not see things in their specificity. One function of art (and of surrealistic art in particular) is 'to make the familiar strange' (as the Russian formalists put it).

Alfred Korzybski (1879-1950), the founder of a movement known as 'General Semantics', declared that 'the map is not the territory' and that 'the word is not the thing' (Korzybski 1933; cf. Chase 1938 and Hayakawa 1941). The non-identity of sign and thing is, of course, a very basic Saussurean principle. However, whilst Saussure's model is anti-realist, the General Semanticists adopted the realist stance that language comes 'between' us and the objective world and they sought to reform our verbal behaviour to counteract the linguistic distortion of 'reality'. They felt that one reason for the confusion of signifiers and referential signifieds was that we sometimes allow language to take us further up the 'ladder of abstraction' than we think we are. Here is a homely example of levels of verbal abstraction in relation to a cow called 'Bessie':
18. The cow known to science ultimately consists of atoms, electrons etc. according to present-day scientific inference...
19. The cow we perceive is not the word but the object of experience, that which our nervous system abstracts (selects)...
20. The word 'Bessie' (cow) is the name we give to the object of perception of level 2. The name is not the object; it merely stands for the object and omits reference to many characteristics of the object.
21. The word 'cow' stands for the characteristics we have abstracted as common to cow, cow, cow... cow. Characteristics peculiar to particular cows are left out.
22. When Bessie is referred to as 'livestock' only those characteristics she has in common with pigs, chickens, goats, etc. are referred to.
23. When Bessie is included among 'farm assets' reference is made only to what she has in common with all other saleable items on the farm.
24. When Bessie is referred to as an 'asset' still more of her characteristics are left out.
25. The word 'wealth' is an extremely high level of abstraction, omitting almost all reference to the characteristics of Bessie. (McKim 1972, 128; the origins of this example are in Korzybski, via Hayakawa 1941, 121ff)

The ladder metaphor is consistent with how we routinely refer to levels of abstraction - we talk of thinkers with 'their heads in the clouds' and of 'realists' with their 'feet on the ground'. As we move up the ladder we move from the particular to the general, from concrete reality to abstract generalization. The General Semanticists were of course hard-headed realists and what they wanted was for people to keep their feet firmly planted on the ground. In alerting language users to levels of abstraction, the General Semanticists sought to avoid the confusion of higher logical types with lower logical types. 'A map' is of a higher (more general) logical type than 'the territory', and linguistic representation in particular lends itself to this process of abstraction. Clearly we can learn more about a place by
visiting it than by simply looking at a map of it, and we can
tell more about a person by meeting them than by merely
looking at a photograph of them. Translation from lower
levels to higher levels involves an inevitable loss of
specificity - like earth being filtered through a series of
increasingly fine sieves or like photocopies being repeatedly
made of the 'copies' which they produce. Being alert for the
consequent losses, absences or exclusions is important to the
semiotician as well as the 'general semanticist'. Whilst the
logician may be able to keep such levels separate, in most
acts of communication some 'slippage' occurs routinely,
although we are normally capable of identifying what kind of
messages we are dealing with, assigning them to appropriate
levels of abstraction. Semioticians observe that some kind of
'translation' is unavoidable in human communication. Claude
Lévi-Strauss declared that 'understanding consists in the
reduction of one type of reality to another' (Lévi-Strauss
1961, 61). Algirdas Greimas observed that 'signification is...
nothing but... transposition from one level of language to
another, from one language to a different language, and
meaning is nothing but the possibility of such transcoding' (cited in Jameson 1972, 215-216).

Whilst it can be useful to consider abstraction in terms of
levels and logical typing, the implicit filter metaphor in the
General Semanticists' 'ladder of abstraction' is too uni-
dimensional. Any given 'object' of perception could be
categorised in a variety of ways rather than in terms of a
single 'objective' hierarchy. The categories applied depend on
such factors as experience, roles and purposes. This raises
issues of interpretation. For instance, looking at an
advertisement featuring a woman's face, some viewers might
assume that the image stood for women in general, others
that she represented a particular type, role or group, and yet
others might recognise her as a particular individual.
Knowing the appropriate level of abstraction in relation to
interpreting such an image would depend primarily on
familiarity with the relevant cultural codes.

The General Semanticists set themselves the therapeutic goal
of 'purifying' language in order to make its relationship to
reality more 'transparent', and from such roots sprang projects
such as the development of 'Basic English' (Ogden 1930). Whatever reservations we may have about such goals, Korzybski's popularization of the principle of arbitrariness could be seen as a useful corrective to some of our habits of mind. As a caveat Korzybski's aphorism seems unnecessary: we all know that the word 'dog' cannot bark or bite, but in some circumstances we do behave as if certain signifiers are inseparable from what they stand for. 'Commonsense' still leads us routinely to identify sign and thing, representation with what it represents. Terence Hawkes notes that 'Saussure points out that native speakers tend to assume a necessary "fitness", an unquestionable "identity" between signifier and signified, between "the sound image" made by the word "tree" and the concept of an actual tree. This assumption is the basis of language's anaesthetic function' (Hawkes 1977, 70).

In his massively influential book *The Interpretation of Dreams*, Sigmund Freud argued that 'dream-content is, as it were, presented in hieroglyphics, whose symbols must be translated... It would of course be incorrect to read these symbols in accordance with their values as pictures, instead of in accordance with their meaning as symbols' (Freud 1938, 319). He also observed that 'words are often treated in dreams as things' (ibid., 330). Magritte played with our habit of identifying the signifier with the signified in a series of drawings and paintings in which objects are depicted with verbal labels which 'don't belong to them'. In his oil-painting entitled *The Interpretation of Dreams* we are confronted with images of six familiar objects together with verbal labels. Such arrangements are familiar, particularly in the language-learning context suggested by the blackboard-like background. However, we quickly realize that the words
do not match the images under which they appear. If we then rearrange them in our minds, we find that the labels do not correspond to any of the images. The relation between the image of an object and the verbal label attached to it is thus presented as arbitrary.

The confusion of the representation with the thing represented is a feature of schizophrenia and psychosis (Wilden 1987, 201). 'In order to able to operate with symbols it is necessary first of all to be able to distinguish between the sign and the thing it signifies' (Leach 1970, 43). However, the confusion of 'levels of reality' is also a normal feature of an early phase of cognitive development in childhood. Jerome Bruner observed that for pre-school children thought and the object of thought seem to be the same thing, but that during schooling one comes to separate word and thing (Bruner 1966). The substitution of a sign for its referent (initially in the form of gestures and imitative sounds) constitutes a crucial phase in the infant's acquisition of language. The child quickly discovers the apparently magical power of words for referring to things in their absence - this property of displacement being a key 'design feature' of language (Piaget 1971, 64; Hockett 1958; Hockett 1960; Hockett 1965). Helen Keller, who became blind and deaf at the age of eighteen months, was gradually taught to speak by her nurse (Keller 1945). At the age of nine whilst playing with water she felt with her hand the motions of the nurse's throat and mouth vibrating the word 'water'. In a sudden flash of revelation she cried out words to the effect that 'everything has a name!'. It is hardly surprising that even in middle childhood children sometimes appear to have difficulty in separating words from what they represent. Piaget illustrates the 'nominal realism' of young children in an interview with a child aged nine-and-a-half:

"Could the sun have been called 'moon' and the moon 'sun'? - 'No.' 'Why not?' - 'Because the sun shines brighter than the moon...' 'But if everyone had called the sun 'moon', and the moon 'sun', would we have known it was wrong?' - 'Yes, because the sun is always bigger, it always stays like it is and so does the moon.' 'Yes, but the sun isn't changed, only its name. Could it
have been called... etc.? - 'No... Because the moon rises in the evening, and the sun in the day.'
(Piaget 1929: 81-2)

Thus for the child, words do not seem at all arbitrary. Similarly, Sylvia Scribner and Michael Cole found that unschooled Vai people in Liberia felt that the names of sun and moon could not be changed, one of them expressing the view that these were God-given names (Scribner & Cole 1981, 141).

The anthropologist Claude Levy-Bruhl claimed that people in 'primitive' cultures had difficulty in distinguishing between names and the things to which they referred, regarding such signifiers as as an intrinsic part of their signifieds (cited in Olson 1994, 28). The fear of 'graven images' within the Judeo-Christian tradition and also magical practices and beliefs such as Voodoo are clearly related to such a phenomenon. Emphasizing the epistemological significance of writing, David Olson argues that the invention (around 4000 years ago) of 'syntactic scripts' (which superceded the use of tokens) enabled referential words to be distinguished more easily from their referents, language to be seen as more than purely referential, and words to be seen as (linguistic) entities in their own right. He suggests that such scripts marked the end of 'word magic' since referential words came to be seen as representations rather than as intrinsic properties or parts of their referents. However, in the Middle Ages words and images were still seen as having a natural connection to things (which had 'true names' given by Adam at the Creation). Words were seen as the names of things rather than as representations. As Michel Foucault (1926-84) has shown, only in the early modern period did scholars come to see words and other signifiers as representations which were subject to conventions rather than as copies (Foucault 1970). By the seventeenth century clear distinctions were being made between representations (signifiers), ideas (signifieds) and things (referents). Scholars now regarded signifiers as referring to ideas rather than directly to things. Representations were conventionalized constructions which were relatively independent both of what they represented and of their authors; knowledge involved
manipulating such signs. Olson notes that once such distinctions are made, the way is open to making modality judgements about the status of representations - such as their perceived truth or accuracy (Olson 1994, 68-78, 165-168, 279-280). Whilst the seventeenth century shift in attitudes towards signs was part of a search for 'neutrality', 'objectivity' and 'truth', in more recent times, of course, we have come to recognize that 'there is no representation without intention and interpretation' (Olson 1994, 197).

It is said that someone once asked an astronomer how he had discovered the name of a previously unknown star! Sophisticated literates are able to joke about the notion that names 'belong' to things. In one of Aldous Huxley's novels an old farmworker points out his pigs: "'Look at them, sir,' he said, with a motion of his hand towards the wallowing swine. 'Rightly is they called pigs' (Chrome Yellow, Chapter 5). Literate adults may not often seem to be prey to this sort of nominal realism. However, certain signifiers become regarded by some as far from 'arbitrary', acquiring almost magical power - as in relation to 'graphic' swearing and issues of prejudice - highlighting the point that signifiers are not socially arbitrary. Children are just as aware of this: many are far from convinced by adult advice that 'sticks and stones may break my bones, but names can never hurt me'. By adding his own label to an advertisement, Thomas Streeter at the University of Vermont alerts us to the way in which referents can be redefined by the skilful use of verbal anchors. So reminding ourselves that
'the word is not the thing' may be more useful than it might at first seem to be.

The literary theorist Catherine Belsey argues that

Language is *experienced* as a nomenclature because its existence precedes our "understanding" of the world. Words seem to be symbols for things because things are inconceivable outside the system of differences which constitutes the language. Similarly, these very things seem to be represented in the mind, in an autonomous realm of thought, because thought is in essence symbolic, dependent on the differences brought about by the symbolic order. And so language is 'overlooked', suppressed in favour of a quest for meaning in experience and/or in the mind. The world of things and subjectivity then become the twin guarantors of truth. *(Belsey 1980, 46)*

Hamlet refers to: 'the purpose of playing, whose end, both at the first and now, was and is, to hold, as 'twere, the mirror up to nature' *(Shakespeare, *Hamlet*, III, ii)*, and being 'true-to-life' is probably still a key criterion in judgements of literary worth. However, Belsey comments:

The claim that a literary form reflects the world is simply tautological. If by 'the world' we understand the world we experience, the world differentiated by language, then the claim that realism reflects the world means that realism reflects the world constructed in language. This is a tautology. If discourses articulate concepts through a system of signs which signify by means of their relationship to each other rather than to entities in the world, and if literature is a signifying practice, all it can reflect is the order inscribed in particular discourses, not the nature of the world. *(ibid.)*

The medium of language comes to acquire the illusion of 'transparency': this feature of the medium tends to blind its users to the part it plays in constructing their experiential worlds. 'Realistic' texts reflect a mimetic purpose in
representation - seeking to imitate so closely that which they depict that they may be experienced as virtually identical (and thus unmediated). Obviously, purely verbal signifiers cannot be mistaken for their real world referents. Whilst it is relatively easy for us to regard words as conventional symbols, it is more difficult to recognize the conventionality of images which resemble their signifieds. Yet even an image is not what it represents - the presence of an image marks the absence of its referent. The difference between signifier and signified is fundamental. Nevertheless, when the signifiers are experienced as highly 'realistic' - as in the case of photography and film - it is particularly easy to slip into regarding them as identical with their signifieds. In contrast even to realistic painting and drawing, photographs seem far less obviously 'authored' by a human being. Just as 'the word is not the thing' and 'the map is not the territory' nor is a photograph or television news footage that which it depicts. Yet in the 'commonsense' attitude of everyday life we routinely treat high modality signifiers in this way. Indeed, many realistic filmic narratives and documentaries seem to invite this confusion of representation with reality (Nichols 1981, 21). Thus television is frequently described as a 'window on the world' and we usually assume that 'the camera never lies'. We know of course that 'the dog in the film can bark but it cannot bite' (Hall 1980, 131) (though, when 'absorbed', we may 'suspend disbelief' in the context of what we know to be enacted drama). However, we are frequently inclined to accept 'the evidence of our own eyes' even when events are mediated by the cameras of journalists. Highly 'realistic' representations in any medium always involve a point-of-view. Representations which claim to be 'real' deny the unavoidable difference between map and territory. Lewis Carroll satirized the logical consequences of neglecting the importance of this difference:

'That's another thing we've learned from your Nation,' said Mein Herr, 'map-making. But we've carried it much further than you. What do you consider the largest map that would be really useful?'

'About six inches to the mile.'
'Only six inches!' exclaimed Mein Herr. 'We very soon got to six yards to the mile. Then we tried a hundred yards to the mile. And then came the grandest idea of all! We actually made a map of the country, on the scale of a mile to the mile'

'Have you used it much?' I enquired.

'It has never been spread out, yet,' said Mein Herr: 'the farmers objected: they said it would cover the whole country, and shut out the sunlight! So we now use the country itself, as its own map, and I assure you it does nearly as well.'

(Lewis Carroll, *Sylvie and Bruno Concluded*, Chapter 11)

In the sense that there is always an unavoidable difference between the represented and its representation, 'the camera always lies'. We do not need to adopt the 'scientific' realism of the so-called General Semantics concerning the 'distortion of reality' by our signifying systems, but may acknowledge instead that reality does not exist independently of signs, turning our critical attention to the issue of whose realities are privileged in particular representations - a perspective which, avoiding a retreat to subjectivism, pays due tribute to the unequal distribution of power in the social world.

Whilst Saussurean semioticians (with language as their model) have emphasized the arbitrary relationship of the signifier to the signified, some subsequent theorists have stressed 'the primacy of the signifier' - Jacques Lacan even praised Lewis Carroll's Humpty Dumpty as 'the master of the signifier'
for his declaration that 'when I use a word, it means just what I choose it to mean - neither more nor less'. Many postmodernist theorists postulate a complete disconnection of the signifier and the signified. An 'empty' or 'floating signifier' is variously defined as a signifier with a vague, highly variable, unspecifiable or non-existent signified. Such signifiers mean different things to different people: they may stand for many or even any signifieds; they may mean whatever their interpreters want them to mean. In such a state of radical disconnection between signifier and signified, 'a sign only means that it means' (Goldman & Papson 1994, 50). Such a disconnection is perhaps clearest in literary and aesthetic texts which foreground the act and form of expression and undermine any sense of a 'natural' or 'transparent' connection between a signifier and a referent. However, Jonathan Culler suggests that to refer to an 'empty signifier' is an implicit acceptance of its status as a signifier and is thus 'to correlate it with a signified' even if this is not known; 'the most radical play of the signifier still requires and works through the positing of signifieds' (Culler 1985, 115). Shakespeare famously referred to 'a tale told by an idiot, full of sound and fury, signifying nothing' (Macbeth V, iii). The notion of the 'floating signifier' can be found around the year 1950 in Lévi-Strauss (see Lechte 1994, 26-7, 64, 73). Roland Barthes referred specifically to non-linguistic signs as being so open to interpretation that they constituted a 'floating chain of signifieds' (Barthes 1977, 39). The first explicit reference to an 'empty signifier' of which I am aware is that of Barthes in his essay 'Myth Today' (Barthes 1957; cf. Culler 1975, 19). Barthes defines an empty signifier as one with no definite signified. There are some similarities with the linguistic concept of an 'empty category' (Lechte 1994, 64) and with Hjelmslev's figurae or non-signifying sign elements (ibid., 137; see Articulation).

Whereas Saussure saw the signifier and the signified (however arbitrary their relationship) as being as inseparable as the two sides of a piece of paper, poststructuralists have rejected the stable and predictable relationship embedded in
his model. The French psychoanalyst Jacques Lacan wrote of 'the incessant sliding of the signified under the signifier' (Lacan 1977, 154) - he argued that there could be no anchoring of particular signifiers to particular signifieds - although this in itself is hardly contentious in the context of psychoanalysis. Jacques Derrida refers also to the 'freeplay' of signifiers: they are not fixed to their signifieds but point beyond themselves to other signifiers in an 'indefinite referral of signifier to signified' (Derrida 1978, 25). He championed the 'deconstruction' of western semiotic systems, denying that there were any ultimate determinable meanings. Whilst for Saussure the meaning of signs derives from how they differ from each other, Derrida coined the term **différance** to allude also to the way in which meaning is endlessly deferred. There is no 'transcendent signified' (Derrida 1978, 278-280; Derrida 1976, 20). These notions were anticipated by Peirce in his version of 'unlimited semiosis', although he emphasized that in practice this potentially endless process is inevitably cut short by the practical constraints of everyday life (Gallie 1952, 126). Unlike Peirce, postmodernist theories grant no access to any reality outside signification. For Derrida, 'il n'y a riens hors du texte' ('there is nothing outside the text') - although this assertion need not necessarily be taken 'literally' (Derrida 1976, 158, 163). For materialist marxists and realists, postmodernist idealism is intolerable: 'signs cannot be permitted to swallow up their referents in a never-ending chain of signification, in which one sign always points on to another, and the circle is never broken by the intrusion of that to which the sign refers' (Lovell 1983, 16). Some theorists note that an emphasis on the unavoidability of signification does not necessitate denying any external reality. David Sless comments that 'I am not suggesting that the only things in the universe are signs or texts, or that without signs nothing could exist. However, I am arguing that *without signs nothing is conceivable* (Sless 1986, 156). We may note in passing that since the phrase 'the empty (or free-floating) signifier' has become something of an academic 'sound-bite' the term itself is ironically in danger of being an empty signifier.
The notion of reality as degenerative is found in the Romantic mythology of a primal state of unmediatedness (referring to children before language or human beings before The Fall) (Chandler 1995, 31-2). In his book *The Image*, Daniel Boorstin charted the rise of what he called 'pseudo-events' - events which are staged for the mass media to report (Boorstin 1961). However, any 'event' is a social construction - bounded 'events' have no objective existence, and all news items are 'stories' (Galtung & Ruge 1981).

We might posit three key historical shifts in representational paradigms in relation to Peirce's differential framing of the referential status of signs:

- an **indexical** phase - the signifier and the referent are regarded as directly connected;
- an **iconic** phase - the signifier is not regarded as part of the referent but as depicting it transparently;
- a **symbolic** phase - the signifier is regarded as arbitrary and as referring only to other signs.

Such a schematization bears some similarity to that of the postmodernist Jean Baudrillard. Baudrillard interprets many representations as a means of concealing the absence of reality; he calls such representations 'simulacra' (or copies without originals) (Baudrillard 1984). He sees a degenerative evolution in modes of representation in which signs are increasingly empty of meaning:

These would be the successive phases of the image:

1. It is the reflection of a basic reality.
2. It masks and perverts a basic reality.
3. It masks the *absence* of a basic reality.
4. It bears no relation to any reality whatever: it is its own pure simulacrum.

(Baudrillard 1988, 170)

Baudrillard argues that when speech and writing were created, signs were invented to point to material or social reality, but the bond between signifier and signified became eroded. As advertising, propaganda and commodification set in, the sign began to hide 'basic reality'. In the postmodern age of 'hyper-reality' in which what are only illusions in the media of communication seem very real, signs hide the absence of reality and only pretend to mean something. For Baudrillard, simulacra - the signs which characterize late capitalism - come in three forms: counterfeit (imitation) - when there was still a direct link between signifiers and their signifieds; production (illusion) - when there was an indirect link between signifier and signified; and simulation (fake) - when signifiers came to stand in relation only to other signifiers and not in relation to any fixed external reality. It is hardly surprising that Douglas Kellner has criticized Baudrillard as a 'semiological idealist' who ignores the materiality of sign production (cited in Stam 2000, 306).

Baudrillard's claim that the Gulf War never happened is certainly provocative (Baudrillard 1995).

Such perspectives, of course, beg the fundamental question, 'What is "real"?' The semiotic stance which problematizes 'reality' and emphasizes mediation and convention is sometimes criticized as extreme 'cultural relativism' by those who veer towards realism - such critics often object to an apparent sidelining of referential concerns such as 'accuracy' (e.g. Gombrich 1982, 188, 279, 286). However, even philosophical realists would accept that much of our knowledge of the world is indirect; we experience many things primarily (or even solely) as they are represented to us within our media and communication technologies. Since representations cannot be identical copies of what they represent, they can never be neutral and transparent but are instead constitutive of reality. As Judith Butler puts it, we need to ask, 'What does transparency keep obscure?' (Butler 1999, xix). Semiotics helps us to not to take representations
for granted as 'reflections of reality', enabling us to take them apart and consider whose realities they represent.

**Paradigms and Syntagms**

Semiotics is probably best-known as an approach to textual analysis, and in this form it is characterized by a concern with *structural analysis*. Structuralist semiotic analysis involves identifying the constituent units in a semiotic system (such as a text or socio-cultural practice) and the structural relationships between them (oppositions, correlations and logical relations).

Saussure was 'concerned exclusively with three sorts of systemic relationships: that between a signifier and a signified; those between a sign and all of the other elements of its system; and those between a sign and the elements which surround it within a concrete signifying instance' (Silverman 1983, 10). He emphasized that meaning arises from the differences between signifiers; these differences are of two kinds: *syntagmatic* (concerning positioning) and *paradigmatic* (concerning substitution). Saussure called the latter *associative relations* (*Saussure 1983, 121; Saussure 1974, 122*), but Roman Jakobson's term is now used. The distinction is a key one in structuralist semiotic analysis. These two dimensions are often presented as 'axes', where the horizontal axis is the syntagmatic and the vertical axis is the paradigmatic. The plane of the syntagm is that of the *combination* of 'this-and-this-and-this' (as in the sentence, 'the man cried') whilst the plane of the paradigm is that of the *selection* of 'this-or-this-or-this' (e.g. the replacement of the last word in the same sentence with 'died' or 'sang'). Whilst syntagmatic relations are possibilities of combination, paradigmatic relations are functional contrasts - they involve *differentiation*. Temporally, syntagmatic relations refer intratextually to other signifiers *co-present* within the text, whilst paradigmatic relations refer *intertextually* to signifiers...
which are absent from the text (Saussure 1983, 122; Saussure 1974, 123). The 'value' of a sign is determined by both its paradigmatic and its syntagmatic relations. Syntagms and paradigms provide a structural context within which signs make sense; they are the structural forms through which signs are organized into codes.

Paradigmatic relationships can operate on the level of the signifier, the signified or both (Saussure 1983, 121-124; Saussure 1974, 123-126; Silverman 1983, 10; Harris 1987, 124). A paradigm is a set of associated signifiers or signifieds which are all members of some defining category, but in which each is significantly different. In natural language there are grammatical paradigms such as verbs or nouns. 'Paradigmatic relations are those which belong to the same set by virtue of a function they share... A sign enters into paradigmatic relations with all the signs which can also occur in the same context but not at the same time' (Langholz Leymore 1975, 8). In a given context, one member of the paradigm set is structurally replaceable with another. 'Signs are in paradigmatic relation when the choice of one excludes the choice of another' (Silverman & Torode 1980, 255). The use of one signifier (e.g. a particular word or a garment) rather than another from the same paradigm set (e.g. respectively, adjectives or hats) shapes the preferred meaning of a text. Paradigmatic relations can thus be seen as 'contrastive'. Note that the significance of the differences between even apparently synonymous signifiers is at the heart of Whorfian theories about language. Saussure's notion of 'associative' relations was broader and less formal than what is normally meant by 'paradigmatic' relations. He referred to 'mental association' and included perceived similarities in form (e.g. homophones) or meaning (e.g. synonyms). Such similarities were diverse and ranged from strong to slight, and might refer to only part of a word (such as a shared prefix or suffix). He noted that there was no end (or commonly agreed order) to such associations (Saussure 1983, 121-124; Saussure 1974, 123-126).

In film and television, paradigms include ways of changing shot (such as cut, fade, dissolve and wipe). The medium or genre are also paradigms, and particular media texts derive
meaning from the ways in which the medium and genre used differs from the alternatives. The aphorism of Marshall McLuhan (1911-80) that 'the medium is the message' can thus be seen as reflecting a semiotic concern: to a semiotician the medium is not 'neutral'.

A syntagm is an orderly combination of interacting signifiers which forms a meaningful whole within a text - sometimes, following Saussure, called a 'chain'. Such combinations are made within a framework of syntactic rules and conventions (both explicit and inexplicit). In language, a sentence, for instance, is a syntagm of words; so too are paragraphs and chapters. 'There are always larger units, composed of smaller units, with a relation of interdependence holding between both' (Saussure 1983, 127; Saussure 1974, 128): syntagms can contain other syntagms. A printed advertisement is a syntagm of visual signifiers. Syntagmatic relations are the various ways in which elements within the same text may be related to each other. Syntagms are created by the linking of signifiers from paradigm sets which are chosen on the basis of whether they are conventionally regarded as appropriate or may be required by some rule system (e.g. grammar). Syntagmatic relations highlight the importance of part-whole relationships: Saussure stressed that 'the whole depends on the parts, and the parts depend on the whole' (Saussure 1983, 126; Saussure 1974, 128).

Syntagms are often defined as 'sequential' (and thus temporal - as in speech and music), but they can represent spatial relationships. Saussure himself (who emphasized 'auditory signifiers' which 'are presented one after another' and 'form a chain') noted that visual signifiers (he instanced nautical flags) 'can exploit more than one dimension simultaneously' (Saussure 1983, 70; Saussure 1974, 70). Spatial syntagmatic relations are found in drawing, painting and photography. Many semiotic systems - such as drama, cinema, television and the world wide web - include both spatial and temporal syntagms.

Thwaites et al. argue that within a genre, whilst the syntagmatic dimension is the textual structure, the paradigmatic dimension can be as broad as the choice of
subject matter *(Thwaites et al. 1994, 95)*. In this framing, *form* is a syntagmatic dimension whilst *content* is a paradigmatic dimension. However, form is also subject to paradigmatic choices and content to syntagmatic arrangement.

Jonathan Culler offers an example of the syntagmatic relations and paradigmatic contrasts involved in Western menus:

In the food system... one defines on the syntagmatic axis the combinations of courses which can make up meals of various sorts; and each course or slot can be filled by one of a number of dishes which are in paradigmatic contrast with one another (one wouldn't combine roast beef and lamb chops in a single meal; they would be alternatives on any menu). These dishes which are alternative to one another often bear different meanings in that they connote varying degrees of luxury, elegance, etc. *(Culler 1985, 104)*.

*Roland Barthes (1967)* outlined the paradigmatic and syntagmatic elements of the 'garment system' in similar terms. The paradigmatic elements are the items which cannot be worn at the same time on the same part of the body (such as hats, trousers, shoes). The syntagmatic dimension is the juxtaposition of different elements at the same time in a complete ensemble from hat to shoes.
Expanding on an example offered by David Lodge, Susan Spiggle explains in more detail how this might apply to a girl wearing a tee-shirt, jeans and sandals:

1. She selects signs from three paradigms (i.e. sets of possible signs - upper body garments, lower body garments, and footwear). Each paradigm contains a possible set of pieces from which she can choose only one. From the upper-body-garment paradigm (including blouses, tee-shirts, tunics, sweaters), she selects one. These items share a similar structure, function, and/or other attribute with others in the set: they are related to one another on the basis of similarity. She further selects items related by similarity from the lower-body-garment and footwear paradigms. A socially defined, shared classification system or code shapes her selections.

2. She combines the selected signs through rules (i.e., tee-shirts go with sandals, not high heels), sending a message through the ensemble - the syntagm. Selection requires her to perceive similarity and opposition among signs within the set (the paradigm), classifying them as items having the same function or structure, only one of which she needs. She can substitute, or select, a blouse for the tee-shirt - conveying a different message. The combination, tee-shirt–jeans–sandals, requires her to know the 'rules by which garments are acceptably combined... The combination... is, in short, a kind of sentence' (Lodge 1977, 74). The tee-shirt–jeans–sandals syntagm conveys a different meaning (sends a different message) at the beach than at a formal occasion. (Spiggle 1998, 159)

In the case of film, our interpretation of an individual shot depends on both paradigmatic analysis (comparing it, not necessarily consciously, with the use of alternative kinds of shot) and syntagmatic analysis (comparing it with preceding
and following shots). The same shot used within another sequence of shots could have quite a different preferred reading. Actually, filmic syntagms are not confined to such temporal syntagms (which are manifested in montage: the sequencing of shots) but include the spatial syntagms found also in still photography (in mise-en-scène: the composition of individual frames).

Both syntagmatic and paradigmatic analysis treat signs as part of a system - exploring their functions within codes and sub-codes - a topic to which we will return. Although we will discuss syntagmatic and paradigmatic relations separately, it should be emphasized that the semiotic analysis of a text or corpus has to tackle the system as a whole, and that the two dimensions cannot be considered in isolation. The description of any semiotic system involves specifying both the membership of all of the relevant paradigmatic sets and also the possible combinations of one set with another in well-formed syntagms. For the analyst, according to Saussure (who was, of course, focusing on the language system as a whole), 'the system as a united whole is the starting point, from which it becomes possible, by a process of analysis, to identify its constituent elements'; one cannot try to construct the system by working upwards from the constituent elements (Saussure 1983, 112; Saussure 1974, 113).

However, Roland Barthes argued that 'an important part of the semiological undertaking' was to divide texts 'into minimal significant units... then to group these units into paradigmatic classes, and finally to classify the syntagmatic relations which link these units' (Barthes 1967, 48; cf. Langholz Leymore 1975, 21 and Lévi-Strauss 1972, 211). In practice, the analyst is likely to need to move back and forth between these two approaches as the analysis proceeds.

**Syntagmatic Analysis**

Saussure, of course, emphasized the theoretical importance of the relationship of signs to each other. He also noted that 'normally we do not express ourselves by using single linguistic signs, but groups of signs, organised in complexes which themselves are signs' (Saussure 1983, 127; Saussure
However, in practice he treated the individual word as the primary example of the sign. Thinking and communication depend on \textit{discourse} rather than isolated signs. Saussure's focus on the language \textit{system} rather than on its \textit{use} meant that discourse was neglected within his framework. The linking together of signs was conceived solely in terms of the grammatical possibilities which the system offered. This is a key feature of the Saussurean framework which led some theorists to abandon semiotics altogether in favour of a focus on 'discourse' whilst leading others to seek to reformulate a more socially-oriented semiotics (e.g. Hodge & Kress 1988). However, this is not to suggest that structural analysis is worthless. Analysts still engage in formal studies of narrative, film and television editing and so on which are based on structuralist principles. It remains important for anyone interested in the analysis of texts to be aware of what these principles are. Structuralists study texts as \textit{syntagmatic} structures. The syntagmatic analysis of a text (whether it is verbal or non-verbal) involves studying its structure and the relationships between its parts. Structuralist semioticians seek to identify elementary constituent \textit{segments} within the text - its syntags. The study of syntagmatic relations reveals the conventions or 'rules of combination' underlying the production and interpretation of texts (such as the grammar of a language). The use of one syntagmatic structure rather than another within a text influences meaning.

Before discussing narrative, perhaps the most widespread form of syntagmatic structure and one which dominates structuralist semiotic studies, it is worth reminding ourselves that there are other syntagmatic forms. Whilst \textit{narrative} is based on \textit{sequential} (and causal) relationships (e.g. in film and television narrative sequences), there are also syntagmatic forms based on \textit{spatial} relationships (e.g. \textit{montage} in posters and photographs, which works through juxtaposition) and on \textit{conceptual}
relationships (such as in exposition or argument). The distinctions between the modes of narrative, description, exposition and argument are not clear-cut (Brooks & Warren 1972, 44). Many texts contain more than one type of syntagmatic structure, though one may be dominant.

*Exposition* relies on the conceptual structure of argument or description. A useful discussion of the syntagmatic structure of *argument* (in relation to the mass media) can be found in Tolson (1996). Briefly, the structure of an argument is both serial and hierarchical. It involves three basic elements:

- a proposition or series of propositions;
- evidence;
- justifications.

(Tolson 1996, 29-33)

The conventions of expository prose in English have been listed as follows: 'A clearly defined topic, introduction, body which explicates all but nothing more than the stated topic, paragraphs which chain from one to the next, and a conclusion which tells the reader what has been discussed... no digression... is permitted on the grounds that it would violate unity' (R B Kaplan & S Ostler, cited by Swales 1990, 65). Such structural conventions are associated by some theorists with 'masculine' rather than 'feminine' modes of discourse (Goodman 1990; Easthope 1990). Masculine modes are held to involve clearly observable linear structures with 'tight', orderly and logical arguments leading to 'the main point' without backtracking or side-tracking. They can be seen as 'defensive' structures which seek to guard the author against academic criticism. As such these structures tend to support 'masculine' modes of discourse and to exclude 'women's ways of knowing'. Even without tying such conventions to gender bias it is clear that they facilitate certain modes of discourse and frustrate others.

One of the features which Anthony Easthope characterizes as stereotypically 'masculine' is a concern for seamless textual unity (Easthope 1990). Formal writing in general tends to have less obvious 'loose ends' than does casual discourse. Whilst, for the existentialist at least, there are always loose
ends in the interpretation of experience, in most expository writing 'loose-ends' are considered to be 'out of place': stylistic seamlessness, unity and coherence are expected. A writing teacher asserts that 'in a finished work... the flimsy scaffolding is taken away' (Murray 1978, 90-1). Another author, drawing attention to this, remarks: 'the seams do not (I hope) show' (Smith 1982, 2). Seamlessness has a particularly high priority in science: 'the scientific article is expected to be a finished and polished piece of work' (Hagstrom 1965, 31). A cohesive structure reinforces a sense of the argument as 'coherent'. The tidiness of academic texts may also misleadingly suggest the enduring nature of the positions which they represent.

The basic three-part structure of introduction, main body and conclusion is satirized in the sardonic advice: 'First say what you're going to say, then say it, then say what you've already said.' Whilst this formulation masks the inexplicitness of academic writing, it highlights its structural closure. Structural closure suggests that 'the matter is closed' - that the text is 'finished'. Seamlessness and sequential structures reinforce an impression of the ground having been covered, of all the questions having been answered, of nothing important having been left out. Though it is a lie, closure suggests mastery of the material through its control of form. As David Lodge puts it, 'scholarly discourse aspires to the condition of monologue inasmuch as it tries to say the last word on a given subject, to affirm its mastery over all previous words on that subject' (Lodge 1987, 96). Of course, despite the occasional comment in reviews that a text is 'an exhaustive treatment' of its subject, no text can say everything that could be said; there is no first or last word on any subject. But competent academic writers typically learn to create an illusion of completeness which amounts to an attempt to prevent the reader from 'but-ing' in. Conventional academic textual structures frame the issues and guide the reader towards the author's resolution of them. Academic discourse uses univocal textual closure as a way of both controlling the reader and subordinating the topic to the author's purposes. Such closed textual structures can be seen as reflecting authorial attempts to create worlds whose
completeness, order and clarity demand our recognition of them as somehow more absolute, more objective, more 'real', than the dynamic flux of everyday experience. Academic authors first fragment that which is experienced as seamless, and then, in conforming to various conventions in the use of the printed word, seek to give an impression of the seamlessness of their creations. The drive towards formal seamlessness suggests an imitation of the existential seamlessness, and hence 'authenticity', of lived experience.

In any expository writing, literary seamlessness may mask weaknesses or 'gaps' in the argument; it also masks the authorial manipulation involved in constructing an apparently 'natural' flow of words and ideas. For instance, the orderliness of the scientific paper offers a misleadingly tidy picture of the process of scientific inquiry. Representation always seems tidier than reality. Seamlessness in writing is a Classical and 'realist' convention which may seem to suggest 'objectivity': whereas Romantic craftsmanship typically features the marks of the maker and may even employ 'alienation' - deliberately drawing attention to the making. Robert Merton argued for the reform of scientific writing, suggesting that 'if true art consists in concealing all signs of art [the Classical convention], true science consists in revealing its scaffolding as well as its finished structure' (Merton 1968, 70). Such 'visible architecture' has similarly been commended in the practice of historians (Megill & McCloskey 1987, 235). As the linguist Edward Sapir famously remarked, 'all grammars leak' (Sapir 1971, 38). Those who would learn from semiotics should search for structural leaks, seams and scaffolding as signs of the making of any representation, and also for what has been denied, hidden or excluded so that the text may seem to tell 'the whole truth'.

Theorists often assert that, unlike verbal language, the visual image is not suited to exposition (e.g. Peirce 1931-58, 2.291; Gombrich 1982, 138, 175). Syntagms are often logocentrically defined purely as sequential or temporal 'chains'. But spatial relations are also syntagmatic. Whilst most obviously associated with art and photography, they are no less structurally important alongside temporal syntagms in
media such as television, cinema and the World Wide Web. Unlike sequential syntagmatic relations, which are essentially about before and after, spatial syntagmatic relations include:

- above/below,
- in front/behind,
- close/distant,
- left/right (which can also have sequential significance),
- north/south/east/west, and
- inside/outside (or centre/periphery).

Such structural relationships are not semantically neutral. George Lakoff and Mark Johnson have shown how fundamental 'orientational metaphors' are routinely linked to key concepts in a culture (Lakoff & Johnson 1980, Chapter 4). Gunther Kress and Theo van Leeuwen identify three key spatial dimensions in visual texts: left/right, top/bottom and centre/margin (Kress & van Leeuwen 1996; Kress & van Leeuwen 1998).

The horizontal and vertical axes are not neutral dimensions of pictorial representation. Since writing and reading in European cultures proceed primarily along a horizontal axis from left to right (as in English but unlike, for instance, Arabic, Hebrew and Chinese), the 'default' for reading a picture within such reading/writing cultures (unless attention is diverted by some salient features) is likely to be generally in the same direction. This is especially likely where pictures are embedded in written text, as in the case of magazines and newspapers. There is thus a potential sequential significance in the left-hand and right-hand elements of a visual image - a sense of 'before' and 'after'. Kress and van Leeuwen relate the left-hand and right-hand elements to the linguistic concept of 'the Given' and 'the New'. They argue that on those occasions when pictures make significant use of the horizontal axis, positioning some elements left of centre and others right of centre, then the left-hand side is 'the side of the "already given", something the reader is assumed to know already', a familiar, well-established and agreed-upon point of departure - something which is commonsensical, assumed and self-evident, whilst the right-hand side is the side of the New. 'For
something to be New means that it is presented as something which is not yet known, or perhaps not yet agreed upon by the viewer, hence as something to which the viewer must pay special attention' - something more surprising, problematic or contestable (Kress & van Leeuwen 1996, 186-192; Kress & van Leeuwen 1998, 189-193). The concepts of the Given and the New owe their origin to Hallidayan linguistics (Halliday 1994).

The vertical compositional axis also carries connotations. Arguing for the fundamental significance of orientational metaphors in framing experience, Lakoff and Johnson observe that (in English usage) up has come to be associated with more and down with less. They outline further associations:

- **up** is associated with goodness, virtue, happiness, consciousness, health, life, the future, high status, having control or power, and with rationality, whilst
- **down** is associated with badness, depravity, sickness, death, low status, being subject to control or power, and with emotion (Lakoff & Johnson 1980, Chapter 4).

For one signifier to be located 'higher' than another is consequently not simply a spatial relationship but also an evaluative one in relation to the signifieds for which they stand. Erving Goffman’s slim volume *Gender Advertisements* (1979) concerned the depictions of male and female figures in magazine advertisements. Although it was unsystematic and only some of his observations have been supported in subsequent empirical studies, it is widely celebrated as a classic of visual sociology. Probably the most relevant of his observations in the context of these notes was that ‘men tend to be located higher than women’ in these ads, symbolically reflecting the routine subordination of women to men in society (Goffman 1979, 43). Offering their own speculative mapping of the connotations of top and bottom, Kress and van Leeuwen argue that where an image is structured along a vertical axis, the upper and lower sections represent an opposition between 'the Ideal' and 'the Real'
respectively. They suggest that the lower section in pictorial layouts tends to be more 'down-to-earth', concerned with practical or factual details, whilst the upper part tends to be concerned with abstract or generalized possibilities (a polarisation between respectively 'particular/general', 'local/global' etc.). In many Western printed advertisements, for instance, 'the upper section tends to... show us "what might be"; the lower section tends to be more informative and practical, showing us "what is"' (Kress & van Leeuwen 1996, 193-201; Kress & van Leeuwen 1998, 193-195).

The third key spatial dimension discussed by Kress and van Leeuwen is that of centre and margin. The composition of some visual images is based primarily not on a left-right or top-bottom structure but on a dominant centre and a periphery. 'For something to be presented as Centre means that it is presented as the nucleus of the information on which all the other elements are in some sense subservient. The Margins are these ancillary, dependent elements' (Kress & van Leeuwen 1996, 206; Kress & van Leeuwen 1998, 196-198). This is related to the fundamental perceptual distinction between figure and ground (see Langholz Leymore 1975, 37ff in relation to advertisements). Selective perception involves 'foregrounding' some features and 'backgrounding' others. We owe the concept of 'figure' and 'ground' in perception to the Gestalt psychologists: notably Max Wertheimer (1880-1943), Wolfgang Köhler (1887-1967) and Kurt Koffka (1886-1941). Confronted by a visual image, we seem to need to separate a dominant shape (a 'figure' with a definite contour) from what our current concerns relegate to 'background' (or 'ground'). In visual images, the figure tends to be located centrally.

In one particular visual form - that of visual advertisements in print - relationships can be investigated, for instance, between key elements of content such as product, props, setting and actors (Millum 1975, 88ff; see also Langholz...
Leymore 1975, 64ff and Leiss et al. 1990, 230ff), and between key aspects of form such as headline, illustration, copy and logo/slogan (Millum 1975, 83).

Turning from spatial to sequential syntagms brings us to narrative (which, as noted, may even underlie left/right spatial structures). Some critics claim that differences between narratives and non-narratives relate to differences among media, instancing individual drawings, paintings and photographs as non-narrative forms; others claim that narrative is a 'deep structure' independent of the medium (Stern 1998, 5). Narrative theory (or narratology) is a major interdisciplinary field in its own right, and is not necessarily framed within a semiotic perspective, although 'the analysis of narrative is an important branch of semiotics' (Culler 1981, 186). Semiotic narratology is concerned with narrative in any mode - literary or non-literary, fictional or non-fictional, verbal or visual - but tends to focus on minimal narrative units and the 'grammar of the plot' (some theorists refer to 'story grammars'). It follows in the tradition of the Russian formalist Vladimir Propp and the French anthropologist Claude Lévi-Strauss.

Christian Metz observed that 'a narrative has a beginning and an ending, a fact that simultaneously distinguishes it from the rest of the world' (Metz 1974, 17). There are no 'events' in the world - narrative form is needed to create an event. Perhaps the most basic narrative syntagm is a linear temporal model composed of three phases - equilibrium-disruption-equilibrium - a 'chain' of events corresponding to the beginning, middle and end of a story (or, as Philip Larkin put it, describing the formula of the classic novel: 'a beginning, a muddle and an end'; my emphasis). In the orderly Aristotelian narrative form, causation and goals turn story (chronological events) into plot: events at the beginning cause those in the middle, and events in the middle cause those at the end. This is the basic formula for classic Hollywood movies in which the storyline is given priority over everything else. The filmmaker Jean-Luc Godard declared that he liked a film to have a beginning, a middle and an end, but not necessarily in that order; in 'classical' (realist) narrative, events are always in that order, providing continuity and closure. Roland Barthes
argued that narrative is basically translatable - 'international, transhistorical, transcultural' (Barthes 1977, 79) and Barbara Stern comments that 'plots can be actualized in any medium capable of communicating two time orders (film, dance, opera, comic strips, interactive media, and so forth) and can be transposed from one medium to another' (Stern 1998, 9). Some theorists argue that the translatability of narrative makes it unlike other codes and such commentators grant narrative the privileged status of a 'metacode'.

Andrew Tolson notes that insofar as they are formulaic, 'narratives reduce the unique or the unusual to familiar and regular patterns of expectation' (Tolson 1996, 43). They provide structure and coherence. In this respect they are similar to schemas for familiar events in everyday life. Of course, what constitutes an 'event' is itself a construction: 'reality' cannot be reduced objectively to discrete temporal units; what counts as an 'event' is determined by the purposes of the interpreter. However, turning experience into narratives seems to be a fundamental feature of the human drive to make meaning. Some theorists have argued that 'human beings are fundamentally story-tellers who experience themselves and their lives in narrative terms' (Burr 1995, 137).

Coherence is no guarantee of referential correspondence. The narrative form itself has a content of its own; the medium has a message. Narrative is such an automatic choice for representing events that it seems unproblematic and 'natural'. Robert Hodge and Gunther Kress argue that the use of a familiar narrative structure serves 'to naturalize the content of the narrative itself' (Hodge & Kress 1988, 230). Where narratives end in a return to predictable equilibrium this is referred to as narrative closure. Closure is often effected as the resolution of an opposition. Structural closure is regarded by many theorists as reinforcing a preferred reading, or in Hodge and Kress's terms, reinforcing the status quo. According to theorists applying the principles of Jacques Lacan, conventional narrative (in dominant forms of literature, cinema and so on) also plays a part in the constitution of the subject. Whilst narrative appears to demonstrate unity and coherence within the text, the subject
participates in the sense of closure (in part through identification with characters). 'The coherence of narrative reciprocally reinscribes the coherence of the subject', returning the subject to the pre-linguistic realm of the Imaginary where the self had greater fixity and less fluidity than in the Symbolic realm of verbal language (Nichols 1981, 78).

The writing style of professional historians has traditionally involved a variant of the nineteenth-century 'realist' novelist's omniscient narrator and fluent narrative. Historians have only fragmentary 'sources', but 'the style exerts pressure to produce a whole and continuous story, sustaining the impression of omniscience, leaping over evidential voids' (Megill & McCloskey 1987, 226). Narrative may imply continuity where there is none. Foucault's poststructuralist history of ideas is radical in insisting instead on 'ruptures', 'discontinuities' and 'disjunctions' (Foucault 1970). Reflecting on his explorations of historiography in his book entitled The Content of the Form, Hayden White observes that 'narrative is not merely a neutral discursive form... but rather entails ontological and epistemic choices with distinct ideological and even specifically political implications' (White 1987, ix). He adds that 'real life can never be truthfully represented as having the kind of formal coherency met with in the conventional, well-made or fabulistic story' (ibid.).

The structuralist semiotician's inductive search for underlying structural patterns highlights the similarities between what may initially seem to be very different narratives. As Barthes notes, for the structuralist analyst 'the first task is to divide up narrative and... define the smallest narrative units... Meaning must be the criterion of the unit: it is the functional nature of certain segments of the story that makes them units - hence the name "functions" immediately attributed to these first units' (Barthes 1977, 88). In a highly influential book, The Morphology of the Folktale, Vladimir Propp interpreted a hundred fairy tales in terms of around 30 'functions'. 'Function is understood as an act of character defined from the point of view of its significance for the course of the action' (Propp 1928, 21). Such functions are basic units of
action. The folktales analysed by Propp were all based on the same basic formula:

The basic tale begins with either injury to a victim, or the lack of some important object. Thus, at the very beginning, the end result is given: it will consist in the retribution for the injury or the acquisition of the thing lacked. The hero, if he is not himself personally involved, is sent for, at which two key events take place.

He meets a donor (a toad, a hag, a bearded old man, etc.), who after testing him for the appropriate reaction (for some courtesy, for instance) supplies him with a magical agent (ring, horse, cloak, lion) which enables him to pass victoriously through his ordeal.

Then of course, he meets the villain, engaging him in the decisive combat. Yet, paradoxically enough, this episode, which would seem to be the central one, is not irreplaceable. There is an alternative track, in which the hero finds himself before a series of tasks or labours which, with the help of his agent, he is ultimately able to solve properly...

The latter part of the tale is little more than a series of retarding devices: the pursuit of the hero on his way home, the possible intrusion of a false hero, the unmasking of the latter, with the ultimate transfiguration, marriage and/or coronation of the hero himself. (Jameson 1972, 65-6)

As Barthes notes, structuralists avoid defining human agents in terms of 'psychological essences', and participants are defined by analysts not in terms of 'what they are' as 'characters' but in terms of 'what they do' (Barthes 1977, 106). Propp listed seven roles: the villain, the donor, the helper, the sought-for-person (and her father), the dispatcher, the hero and the false hero and schematized the various 'functions' within the story as follows:

| Initial Situation | Members of family of hero introduced. |
| 2 | Absentation       | One of the members absents himself from home. |
| 3 | Interdiction     | An interdiction is addressed to the hero.       |
| 4 | Violation        | An interdiction is violated.                    |
| 5 | Reconnaissance   | The villain makes an attempt at reconnaissance. |
| 6 | Delivery         | The villain receives information about his victim. |
| 7 | Trickery         | The villain attempts to deceive the victim.     |
| 8 | Complicity       | The victim submits to deception, unwittingly helps his enemy. |
| 9 | Villainy         | The villain causes harm or injury to members of the family. |
|10 | Lack             | One member of a family lacks something or wants something. |
|11 | Mediation        | Misfortune is known. Hero is dispatched.        |
|12 | Counteraction    | Seekers decide to agree on counteraction.        |
|13 | Departure        | The hero leaves home.                           |
|14 | 1st function of donor | Hero is tested, receives magical agent donor or helper. |
|15 | Hero's Reaction  | Hero reacts to action of the future donor.       |
|16 | Receipt of Magic Agent | Hero acquires the use of magical agent.         |
|17 | Spatial Transference | Hero is led to object of search.              |
|18 | Struggle         | Hero and villain join in direct combat.         |
|19 | Branding         | Hero is branded.                                |
|20 | Victory          | Villain is defeated                            |
|21 | Liquidation      | Initial misfortune or lack is liquidated.       |
|22 | Return           | The hero returns.                              |
|23 | Pursuit          | A chase: the hero is pursued.                   |
|24 | Rescue           | Rescue of hero from pursuit.                   |
|25 | Unrecognized     | The hero, unrecognized, arrives home or in another arrival country. |
|26 | Unfounded claims | A false hero presents unfounded claims.         |
|27 | Difficult task   | A difficult task is proposed to the hero.       |
|28 | Solution         | The task is resolved.                          |
|29 | Recognition      | The hero is recognized.                        |
|30 | Exposure         | The false hero or villain is exposed.           |
|31 | Transfiguration  | The hero is given a new appearance.             |
This form of analysis downplays the specificity of individual texts in the interests of establishing how texts mean rather than what a particular text means. It is by definition, a 'reductive' strategy, and some literary theorists argue that there is a danger that in applying it, 'Russian folk tales become indistinguishable from the latest episode of The Sweeney, from Star Wars or from a Raymond Chandler novel' (Woollacott 1982, 96). Even Barthes noted that 'the first analysts of narrative were attempting... to see all the world's stories... within a single structure' and that this was a task which was 'ultimately undesirable, for the text thereby loses its difference' (Barthes 1974, 3). Difference is, after all, what identifies both the sign and the text. Despite this objection, Fredric Jameson suggests that the method has redeeming features. For instance, the notion of a grammar of plots allows us to see 'the work of a generation or a period in terms of a given model (or basic plot paradigm), which is then varied and articulated in as many ways possible until it is somehow exhausted and replaced by a new one' (Jameson 1972, 124).

Unlike Propp, both Lévi-Strauss and Greimas based their interpretations of narrative structure on underlying oppositions. Lévi-Strauss saw the myths of a culture as variations on a limited number of basic themes built upon oppositions related to nature versus culture. Any myth could be reduced to a fundamental structure. He wrote that 'a compilation of known tales and myths would fill an imposing number of volumes. But they can be reduced to a small number of simple types if we abstract from among the diversity of characters a few elementary functions' (Lévi-Strauss 1972, 203-204). Myths help people to make sense of the world in which they live. Lévi-Strauss saw myths as a kind of a message from our ancestors about humankind and our relationship to nature, in particular, how we became separated from other animals. However, the meaning was not to be found in any individual narrative but in the patterns underlying the myths of a given culture. Myths make sense
only as part of a system. Edmund Leach makes this clearer by relating it to information theory (Leach 1970, 59). If we imagine that we are shouting a message to someone almost out of earshot, we may need to shout the message many times with changes of wording so as to include sufficient 'redundancy' to overcome the interference of various kinds of 'noise'. Some of the versions heard will lack some of the elements originally included, but by collating the different versions the message becomes clearer. Another way of looking at it is to see each mythical narrative as a different instrumental part in a musical score, and it is this elusive 'score' which Lévi-Strauss pursues. He treated the form of myths as a kind of language. He reported that his initial method of analysing the structure of myths into 'gross constituent units' or 'mythemes' involved 'breaking down its story into the shortest possible sentences' (Lévi-Strauss 1972, 211). This approach was based on an analogy with the 'morpheme', which is the smallest meaningful unit in linguistics. In order to explain the structure of a myth, Lévi-Strauss classified each mytheme in terms of its 'function' within the myth and finally related the various kinds of function to each other. He saw the possible combinations of mythemes as being governed by a kind of underlying universal grammar which was part of the deep structure of the mind itself. 'The study of myths is to Lévi-Strauss what the study of dreams was to Freud: the "royal road" to the unconscious' (Wiseman & Groves 2000, 134).

A good example of the Lévi-Straussean method is provided by Victor Larrucia in his own analysis of the story of 'Little Red Riding-Hood' (originating in the late seventeenth century in a tale by Perrault) (Larrucia 1975). According to this method the narrative is summarized in several columns, each corresponding to some unifying function or theme. The original sequence (indicated by numbers) is preserved when the table is read row-by-row.

<table>
<thead>
<tr>
<th>1</th>
<th>Grandmother's illness causes mother to make Grandmother food</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Little Red Riding Hood (LRRH) obeys mother and goes off to wood</td>
</tr>
<tr>
<td>3</td>
<td>LRRH meets (Wolf as) friend and talks</td>
</tr>
<tr>
<td>4</td>
<td>Woodcutter's</td>
</tr>
<tr>
<td>5</td>
<td>LRRH obeys Wolf</td>
</tr>
<tr>
<td>6</td>
<td>Grandmother</td>
</tr>
<tr>
<td>7</td>
<td>Wolf eats</td>
</tr>
</tbody>
</table>
Rather than offering any commentators' suggestions as to what themes these columns represent, I leave it to readers to speculate for themselves. Suggestions can be found in the references (Larrucia 1975; Silverman & Torode 1980, 314ff).

The Lithuanian structuralist semiotician Algirdas Greimas proposed a grammar of narrative which could generate any known narrative structure (Greimas 1983; Greimas 1987). As a result of a 'semiotic reduction' of Propp's seven roles he identified three types of narrative syntagms: syntagms performanciels - tasks and struggles; syntagms contractuels - the establishment or breaking of contracts; syntagms disjonctionnels - departures and arrivals (Greimas 1987; Culler 1975, 213; Hawkes 1977, 94). Greimas claimed that three basic binary oppositions underlie all narrative themes, actions and character types (which he collectively calls 'actants'), namely: subject/object (Propp's hero and sought-for-person), sender/receiver (Propp's dispatcher and hero - again) and helper/opponent (conflations of Propp's helper and donor, plus the villain and the false hero) - note that Greimas argues that the hero is both subject and receiver. The subject is the one who seeks; the object is that which is sought. The sender sends the object and the receiver is its destination. The helper assists the action and the opponent blocks it. He extrapolates from the subject-verb-object sentence structure, proposing a fundamental, underlying 'actantial model' as the basis of story structures. He argues that in traditional syntax, 'functions' are the roles played by
words - the subject being the one performing the action and the object being 'the one who suffers it' (Jameson 1972, 124). Terence Hawkes summarizes Greimas's model: a narrative sequence employs 'two actants whose relationship must be either oppositional or its reverse; and on the surface level this relationship will therefore generate fundamental actions of disjunction and conjunction, separation and union, struggle and reconciliation etc. The movement from one to the other, involving the transfer on the surface of some entity - a quality, an object - from one actant to the other, constitutes the essence of the narrative' (Hawkes 1977, 90). For Greimas, stories thus share a common 'grammar'. However, critics such as Jonathan Culler have not always been convinced of the validity of Greimas's methodology or of the workability or usefulness of his model (Culler 1975, 213-214, 223-224).

Like Greimas, in his book Grammaire du Décaméron (1969), the Bulgarian Tzvetan Todorov also offered a 'grammar' of narrative - in this case based on the stories of Boccaccio's The Decameron (1353). For Todorov the basic syntactic units of narrative consist of propositions (such as X makes love to Y) which can be organized into sequences. A proposition is formed by the combination of character (noun) with an attribute (adjective) or an action (verb). In The Decameron, attributes consisted of states, internal properties and external conditions; there were three basic actions ('to modify a situation', 'to transgress' and 'to punish'). Sequences were based on temporal relations, logical relations and spatial relations. Each story within The Decameron constituted a kind of extended sentence, combining these units in various ways (Hawkes 1977, 95-99).

In a more popular context, Umberto Eco also focused on a finite corpus based on a single author - deriving a basic narrative scheme in relation to the James Bond novels (one could do much the same with the films):

- M moves and gives a task to Bond.
- The villain moves and appears to Bond.
- Bond moves and gives a first check to the villain or the villain gives first check to Bond.
- Woman moves and shows herself to Bond.
- Bond consumes woman: possesses her or begins her seduction.
- The villain captures Bond.
- The villain tortures Bond.
- Bond conquers the villain.
- Bond convalescing enjoys woman, whom he then loses.

(Eco 1966, 52)

Unlike Propp and Greimas, Eco goes beyond the reductive formalism of structural analysis, making links with the broader context of literary and ideological discourses (Woollacott 1982, 96-7).

Syntagmatic analysis can be applied not only to verbal texts but also to audio-visual ones. In film and television, a syntagmatic analysis would involve an analysis of how each frame, shot, scene or sequence related to the others (these are the standard levels of analysis in film theory). At the lowest level is the individual frame. Since films are projected at a rate of 24 frames a second, the viewer is never conscious of individual frames, but significant frames can be isolated by the analyst. At the next level up, a shot is a 'single take' - an unedited sequence of frames which may include camera movement. A shot is terminated by a cut (or other transition). A scene consists of more than one shot set in a single place and time. A sequence spans more than one place and or/time but it is a logical or thematic sequence (having 'dramatic unity'). The linguistic model often leads semioticians to a search for units of analysis in audio-visual media which are analogous to those used in linguistics. In the semiotics of film, crude equivalents with written language are sometimes postulated: such as the frame as morpheme (or word), the shot as sentence, the scene as paragraph, and the sequence as chapter (suggested equivalences vary amongst commentators) (see Lapsley & Westlake 1988, 39ff). For members of the Glasgow University Media Group the basic unit of analysis was the shot, delimited by cuts and with
allowance made for camera movement within the shot and for the accompanying soundtrack (Davis & Walton 1983b, 43). Shots can be broken into smaller meaningful units (above the level of the frame), but theorists disagree about what these might be. Above the level of the sequence, other narrative units can also be posited.

Christian Metz offered elaborate syntagmatic categories for narrative film (Metz 1974, Chapter 5) For Metz, these syntagms were analogous to sentences in verbal language, and he argued that there were eight key filmic syntagms which were based on ways of ordering narrative space and time.

- The autonomous shot (e.g. establishing shot, insert)
- The parallel syntagm (montage of motifs)
- The bracketing syntagm (montage of brief shots)
- The descriptive syntagm (sequence describing one moment)
- The alternating syntagm (two sequences alternating)
- The scene (shots implying temporal continuity)
- The episodic sequence (organized discontinuity of shots)
- The ordinary sequence (temporal with some compression)

However, Metz's 'grande syntagmatique' has not proved an easy system to apply to some films. In their study of children's understanding of television, Hodge and Tripp (1986, 20) divide syntagms into four kinds, based on syntagms existing in the same time (synchronic), different times (diachronic), same space (syntopic), and different space (diatopic).

- Synchronic/syntopic (one place, one time: one shot)
- Diachronic/syntopic (same place sequence over time)
- Synchronic/diatopic (different places at same time)
- Diachronic/diatopic (shots related only by theme)

They add that whilst these are all continuous syntagms (single shots or successive shots), there are also discontinuous syntagms (related shots separated by others).
Beyond the fourfold distinction between frames, shots, scenes and sequences, the interpretative frameworks of film theorists differ considerably. In this sense at least, there is no cinematic 'language'.

**Paradigmatic Analysis**

Whereas syntagmatic analysis studies the 'surface structure' of a text, *paradigmatic analysis* seeks to identify the various paradigms (or pre-existing sets of signifiers) which underlie the manifest content of texts. This aspect of structural analysis involves a consideration of the positive or negative **connotations** of each signifier (revealed through the use of one signifier rather than another), and the existence of 'underlying' thematic paradigms (e.g. binary oppositions such as *public/private*). 'Paradigmatic relations' are the oppositions and contrasts between the signifiers that belong to the same set from which those used in the text were drawn.

Semioticians often focus on the issue of why a particular signifier rather than a workable alternative was used in a specific context: on what they often refer to as 'absences'. Saussure noted that a characteristic of what he called 'associative' relations - what would now be called paradigmatic relations - was that (in contrast to syntagmatic relations) such relations held *in absentia* - in the absence from a specific text of alternative signifiers from the same paradigm (Saussure 1983, 122; Saussure 1974, 123). He also argued that signs take their value within the linguistic system from what they are not (Saussure 1983, 115; Saussure 1974, 117). We have popular sayings in English concerning two kinds of absences: we refer to 'what goes without saying' and 'what is conspicuous by its absence'. What 'goes without saying' reflects what it is assumed that you 'take for granted' as 'obvious'. In relation to the coverage of an issue (such as in 'factual' genres) this is a profoundly ideological absence which helps to *position* the text's readers, the implication being that 'people like us already agree what we think about issues like that'. As for the second kind of absence, an item which is present in the text may flout conventional expectations, making the conventional item 'conspicuous by
its absence' and the unexpected item 'a statement'. This applies no less to cultural practices. If a man wears a suit at his office it says very little other than that he is conforming to a norm. But if one day he arrives in jeans and a tee-shirt, this will be interpreted as 'making a statement'. Analysing textual absences can help to reveal whose interests are served by their omission. Such analysis pays particular attention to the issue of which questions are left unasked.

Paradigmatic analysis involves comparing and contrasting each of the signifiers present in the text with absent signifiers which in similar circumstances might have been chosen, and considering the significance of the choices made. It can be applied at any semiotic level, from the choice of a particular word, image or sound to the level of the choice of style, genre or medium. The use of one signifier rather than another from the same paradigm is based on factors such as technical constraints, code (e.g. genre), convention, connotation, style, rhetorical purpose and the limitations of the individual's own repertoire. The analysis of paradigmatic relations helps to define the 'value' of specific items in a text.

Some semioticians refer to the 'commutation test' which can be used in order to identify distinctive signifiers and to define their significance - determining whether a change on the level of the signifier leads to a change on the level of the signified. Its origins lie in a linguistic test of substitution applied by the Prague Structuralists (including Roman Jakobson). In order to identity within a language its phonemes and their 'distinctive features' (for example, voiced/unvoiced; nazalized/not nazalized), linguists experimented with changes in the phonetic structure of a word in order to see at what point it became a different word. The original commutation test has evolved into a rather more subjective form of textual analysis. Roland Barthes refers to using the commutation test to divide texts into minimal significant units, before grouping these units into paradigmatic classes (Barthes 1967, 48). To apply this test a
particular signifier in a text is selected. Then alternatives to this signifier are considered. The effects of each substitution are considered in terms of how this might affect the sense made of the sign. This might involve imagining the use of a close-up rather than a mid-shot, a substitution in age, sex, class or ethnicity, substituting objects, a different caption for a photograph, etc. It could also involve swapping over two of the existing signifiers, changing their original relationship. The influence of the substitution on the meaning can help to suggest the contribution of the original signifier and also to identify syntagmatic units (Barthes 1967, III 2.3; Barthes 1985, 19-20). The commutation test can identify the sets (paradigms) and codes to which the signifiers used belong. For instance, if changing the setting used in an advertisement contributes to changing the meaning then 'setting' is one of the paradigms; the paradigm set for the setting would consist of all of those alternative signifiers which could have been used and which would have shifted the meaning. Arriving at a party in a Nissan Micra 'says something different' from arriving in an Alfa Romeo. Wearing jeans to a job interview will be interpreted differently from 'power dressing'.

The commutation test may involve any of four basic transformations, some of which involve the modification of the syntagm. However, the consideration of an alternative syntagm can itself be seen as a paradigmatic substitution.

- **Paradigmatic transformations**
  - substitution;
  - transposition;

- **Syntagmatic transformations**
  - addition;
  - deletion.

These four basic tranformational processes were noted as features of perception and recall (Allport & Postman 1945; Newcomb 1952: 88-96). They correspond exactly to the four general categories to which Quintilian (circa 35-100 AD) assigned the rhetorical figures (or tropes) as 'deviations' from 'literal' language (Nöth 1990, 341).
Structuralists emphasize the importance of relations of paradigmatic opposition. The primary analytical method employed by many semioticians involves the identification of binary or polar semantic oppositions (e.g. *us/them*, *public/private*) in texts or signifying practices. Such a quest is based on a form of 'dualism'. Note that the slanting line linking and separating the two terms in such pairings is sometimes referred to by semioticians as 'the bar', a term employed by Jacques Lacan (*Lacan 1977, 149*).

Dualism seems to be deeply-rooted in the development of human categorization. Jakobson and Halle observe that 'the binary opposition is a child's first logical operation' (*Jakobson & Halle 1956, 60*). Whilst there are no opposites in 'nature', the binary oppositions which we employ in our cultural practices help to generate order out of the dynamic complexity of experience. At the most basic level of individual survival humans share with other animals the need to distinguish between 'own species and other, dominance and submission, sexual availability or lack of availability, what is edible and what is not' (*Leach 1970, 39*). The range of human distinctions is far more extensive than those which they share with other animals since it is supported by the elaborate system of categorization which language facilitates. The British anthropologist Sir Edmund Leach reflects that 'a speechless ape presumably has some sort of feelings for the opposition "I"/"Other", perhaps even for its expanded version "We"/"They", but the still more grandiose "Natural"/"Supernatural" ("Man"/"God") could only occur within a linguistic frame... The recognition of a distinction Natural/Supernatural (Real/Imaginary) is a basic marker of humanity' (*Leach 1982, 108-9*).

People have believed in the fundamental character of binary oppositions since at least classical times. For instance, in his *Metaphysics* Aristotle advanced as primary oppositions: *form/matter,*
natural/unnatural, active/passive, whole/part, unity/variety, before/after and being/not-being. But it is not in isolation that the rhetorical power of such oppositions resides, but in their articulation in relation to other oppositions. In Aristotle's Physics the four elements of earth, air, fire and water were said to be opposed in pairs. For more than two thousand years oppositional patterns based on these four elements were widely accepted as the fundamental structure underlying surface reality.

The elements of such frameworks appeared in various combinations, their shifting forms driven in part by the tensions inherent within such schemes. The theory of the elements continued to enjoy widespread influence until the time of scientists such as Robert Boyle (1627-91).

<table>
<thead>
<tr>
<th>Element</th>
<th>Quality</th>
<th>Humour</th>
<th>Body fluid</th>
<th>Organ</th>
<th>Season</th>
<th>Cardinal point</th>
<th>Zodiac signs</th>
<th>Planet</th>
</tr>
</thead>
<tbody>
<tr>
<td>air</td>
<td>hot and moist</td>
<td>sanguine (active and enthusiastic)</td>
<td>blood</td>
<td>heart</td>
<td>spring</td>
<td>South</td>
<td>Gemini, Libra, Aquarius</td>
<td>Jupiter</td>
</tr>
<tr>
<td>fire</td>
<td>hot and dry</td>
<td>choleric (irritable and changeable)</td>
<td>yellow bile</td>
<td>liver</td>
<td>summer</td>
<td>East</td>
<td>Aries, Leo, Sagittarius</td>
<td>Mars</td>
</tr>
<tr>
<td>earth</td>
<td>cold and dry</td>
<td>melancholic (sad and brooding)</td>
<td>black bile</td>
<td>spleen</td>
<td>autumn</td>
<td>North</td>
<td>Taurus, Virgo, Capricorn</td>
<td>Saturn</td>
</tr>
<tr>
<td>water</td>
<td>cold and moist</td>
<td>phlegmatic (apathetic and sluggish)</td>
<td>phlegm</td>
<td>brain</td>
<td>winter</td>
<td>West</td>
<td>Cancer, Scorpio, Pisces</td>
<td>Venus</td>
</tr>
</tbody>
</table>

Lyons comments that 'binary opposition is one of the most important principles governing the structure of languages' (Lyons 1977, 271). Saussure, of course, emphasized the differences between signs rather than their similarities. Opposites (or antonyms) clearly have a very practical function compared with synonyms: that of sorting. Roman Jakobson built on Saussure's work, proposing that linguistic units are bound together by a system of binary oppositions. Such oppositions are essential to the generation of meaning:
the meaning of 'dark' is relative to the meaning of 'light'; 'form' is inconceivable except in relation to 'content'. It is an open question whether our tendency to think in opposites is determined by the prominence of opposites in language or whether language merely reflects a universal human characteristic.

The various conventionally-linked terms with which we are familiar within a culture might more appropriately be described as paired 'contrasts', since they are not always direct 'opposites' (although their use often involves polarization). Distinctions can be made between various types of 'oppositions', perhaps the most important being the following:

- **oppositions** (logical 'contradictories'): mutually exclusive terms (e.g. *alive/dead*, where 'not alive' can only be 'dead');
- **antonyms** (logical 'contraries'): terms which are comparatively graded on the same implicit dimension (e.g. *good/bad*, where 'not good' is not necessarily 'bad') (Lyons 1977, 270ff; Langholz Leymore 1975, 7; Barthes 1985, 162ff).

This is basically a distinction between *digital* and *analogue* oppositions: digital differences are *either/or*; analogue distinctions are *more-or-less*. We may note here that most of the oppositions in English are 'morphologically related' - that is, one term is a negative which is formed by the addition of a prefix such as *un-* or *-in* (e.g. *formal/informal*). Despite this, most of the *commonly used* oppositions in English (and in many other languages) are apparently morphologically *unrelated* (e.g. *good/bad*) (and thus more arbitrary). In English, most morphologically unrelated oppositions are comparative (gradable) and many morphologically related oppositions are *not*, but there many exceptions to this pattern - including terms which may be paired with another which is either morphologically related or unrelated (e.g. *friendly/unfriendly* and *friendly/hostile*). Positive and negative terms can be distinguished even in morphologically unrelated oppositions (such as *good/bad*) by such cues as their most common sequence - a point to which we will
return (Lyons 1977, 275-277). There is no logical necessity for morphologically unrelated oppositions, as Syme explains to Winston in the dystopian novel Nineteen Eighty-Four written by George Orwell in 1949:

It's a beautiful thing, the destruction of words. Of course the great wastage is in the verbs and adjectives... It isn't only the synonyms: there are also the antonyms. After all, what justification is there for a word which is simply the opposite of some other word? A word contains its opposite in itself. Take 'good', for instance. If you have a word like 'good', what need is there for a word like 'bad'? 'Ungood' will do just as well - better, because it's an exact opposite, which the other is not. (Orwell 1989, 54).

John Lyons suggests that the reason why we tend to use morphologically unrelated forms in comparative oppositions is to emphasize the semantic distinction involved: "good" and "bad" are more obviously different lexemes than "friendly" and "unfriendly" (Lyons 1977, 277). He adds that 'gradable opposites manifest the property of polarity more strikingly than do other opposites' (ibid., 279). Furthermore, in everyday discourse we frequently treat comparative terms as if they were discrete categories (ibid., 278). For whatever reasons we seem to favour categorization which is 'black and white'.

It is a feature of culture that binary oppositions come to seem 'natural' to members of a culture. Many pairings of concepts (such as male/female and mind/body) are familiar to members of a culture and may seem commonsensical distinctions for everyday communicational purposes even if they may be regarded as 'false dichotomies' in critical contexts. Rudyard Kipling satirized the apparently universal tendency to divide the people we know directly or indirectly into 'Us' and 'Them' ('We and They', Kipling 1977, 289-290):

All nice people, like us, are We
And everyone else is They:
But if you cross over the sea,
Instead of over the way,
You may end by (think of it!)
Looking on We
As only a sort of They!

The opposition of self/other (or subject/object) is psychologically fundamental. The neo-Freudian psychoanalyst Jacques Lacan wrote in 1957 (in 'The Insistence of the Letter in the Unconscious') that 'the unconscious is structured like a language' (cf. Lacan 1977, 159, 298). The mind imposes some degree of constancy on the dynamic flux of experience by defining 'the Self' in relation to 'the Other'. Initially, in the primal realm of 'the Real' (where there is no absence, loss or lack), the infant has no centre of identity and experiences no clear boundaries between itself and the external world.

The child emerges from the Real and enters 'the Imaginary' at the age of about six- to eighteen-months, before the acquisition of speech. This is a private psychic realm in which the construction of the Self as subject is initiated. In the realm of visual images, we find our sense of self reflected back by an Other with whom we identify. For Lacan, this does not reflect a dichotomy between Self and Other, because not only is Self always defined in terms of Other, but paradoxically, Self is Other. He describes a defining moment in the Imaginary which he calls 'the mirror phase', when seeing one's mirror image (and being told by one's mother, 'That's you!') induces a strongly-defined illusion of a coherent and self-governing personal identity. This marks the child's emergence from a matriarchal state of 'nature' into the patriarchal order of culture.

As the child gains mastery within the pre-existing 'Symbolic order' (the public domain of verbal language), language (which can be mentally manipulated) helps to foster the individual's sense of a conscious Self residing in an 'internal world' which is distinct from 'the world outside'. However, a
degree of individuality and autonomy is surrendered to the constraints of linguistic conventions, and the Self becomes a more fluid and ambiguous relational signifier rather than a relatively fixed entity. Subjectivity is dynamically constructed through discourse. Emile Benveniste argued that 'language is possible only because each speaker sets himself up as a subject by referring to himself as "I" in his discourse. Because of this, "I" posits another person, the one who, being as he is completely exterior to "me", becomes my echo to whom I say "you" and who says "you" to me... Neither of these terms can be considered without the other; they are complementary... and at the same time they are reversible' (Benveniste 1971, 225).

The entry into the Symbolic order may be illustrated with Freud's description (in Beyond the Pleasure Principle, 1920) of the fort-da game played by his grandson at the age of about eighteen months. The child was alternately throwing away and pulling back a cotton-reel, whilst attempting to say the words 'fort!' (gone away!) and 'da!' (there it is!) - thus creating the shortest possible narrative form. According to Freud this represented a symbolization of the mother leaving and returning. It turns a paradigmatic substitution into an elementary syntagm and demonstrates the lure of repetition and difference. Its focus on absence/presence has made it a favourite of post-structuralist theorists such as Lacan and Derrida. It can stand for anything which we have lost or fear losing, and for the pleasure or hope of its recovery. It is thus symbolic of the loss of (amongst other things) the imagined oneness of being in the Imaginary.

Romantics may (at least retrospectively) identify with a childhood sense of growing separation from that which can be described. They tend to echo the poet Shelley (1815) in a vision of primal experience as a mystical sense of oneness, of being within a universal continuum: 'Let us recollect our senses as children. What a distinct and intense apprehension we had of the world and of ourselves... We less habitually distinguished all that we saw and felt from ourselves. They seemed as it were to constitute one mass' (Forman 1880, 261). The Romantic sense of loss in mediation is perhaps most powerfully represented in Rousseau's interpretation of
our use of tools as involving the loss of a primal unity with the world. Such Romantic visions emphasize the unity of the knower and the known. Childhood or primal experience is portrayed by Romantics as virtually 'unmediated'. And yet all but the most naive epistemology suggests that our experience of the world is unavoidably mediated. Indeed, without the separation of Self from Other there would be no 'me' who could hark back to a pre-lapsarian myth of oneness.

'Male' and 'female' are not 'opposites', and yet cultural myths routinely encourage us to treat them as such. Guy Cook offers a simple example of how images of masculinity and femininity can be generated through a series of binary oppositions in a literary text (Cook 1992, 115). He instances two consecutive speeches from the beginning of a scene in Shakespeare's Romeo and Juliet:

JULIET: Wilt thou be gone? It is not yet near day;  
It was the nightingale, and not the lark,  
That pierc’d the fearful hollow of thine ear;  
Nightly she sings on yond pomegranate tree.  
Believe me, love, it was the nightingale.

ROMEO: It was the lark, the herald of the morn,  
No nightingale. Look, love, what envious streaks  
Do lace the severing clouds in yonder east;  
Night's candles are burnt out, and jocund day  
Stands tiptoe on the misty mountain tops.  
I must be gone and live or stay and die.  
(Romeo and Juliet III, v)

Cook notes the following gendered oppositions:

<table>
<thead>
<tr>
<th>Female</th>
<th>Juliet</th>
<th>question</th>
<th>stays</th>
<th>night</th>
<th>garden</th>
<th>nightingale</th>
<th>death</th>
<th>sleeping</th>
<th>hollow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Romeo</td>
<td>answer</td>
<td>goes</td>
<td>day</td>
<td>mountain tops</td>
<td>lark</td>
<td>life</td>
<td>waking</td>
<td>car</td>
</tr>
</tbody>
</table>

Such oppositions tend to retreat to transparency in reading or watching the play. The gendered character of the echoes and parallels is consequently quite surprising when the text is submitted to this kind of analysis. And yet these oppositions do not seem to be purely analytical constructions. Indeed, we may also note that Juliet emphasizes sound whilst Romeo
relies on *vision* (yet another stereotypically gendered association). Through the endless repetition of such subtle patterns - in countless variations - mythologies such as that of heterosexual romance are generated and sustained.

Paired signifiers are seen by structuralist theorists as part of the 'deep [or 'hidden'] structure' of texts, shaping the preferred reading. Such linkages seem to become *aligned* in some texts and codes so that additional 'vertical' relationships (such as *male/mind, female/body*) acquire apparent links of their own - as feminists and queer theorists have noted (Silverman 1983, 36; Grosz 1993, 195; Chaplin 1994, 11; Butler 1999, 17). As Kaja Silverman notes, 'a cultural code is a conceptual system which is organized around key oppositions and equations, in which a term like "woman" is defined in opposition to a term like "man", and in which each term is aligned with a cluster of symbolic attributes' (Silverman 1983, 36).

This notion can be traced to Claude Lévi-Strauss's discussion of analogical relationships which generate systems of meaning within classification systems. Structuralist theorists such as Lévi-Strauss have argued that binary oppositions form the basis of underlying 'classificatory systems' within cultures - constituting fundamental organizing metaphors and metonyms. He saw certain key binary oppositions as the invariants or universals of the human mind, cutting across cultural distinctions. Lévi-Strauss wrote:

> If, as we believe to be the case, the unconscious activity of the mind consists in imposing form upon content, and if these forms are fundamentally the same for all minds - ancient and modern, primitive and civilized (as the study of the symbolic function, expressed in language, so strikingly indicates) - it is necessary and sufficient to grasp the unconscious structure underlying each institution and each custom, in order to obtain a principle of interpretation valid for other institutions and other customs, provided of course that the analysis is carried far enough. ([Lévi-Strauss 1972, 21](#))
Lévi-Strauss undertook synchronic studies of systems of cultural practices, seeking to identify underlying semantic oppositions in relation to such phenomena as myths, totemism and kinship rules. Individual myths and cultural practices defy interpretation, making sense only as a part of a system of differences and oppositions expressing fundamental reflections on the relationship of nature and culture. This is expressed in terms of the relations between humankind and various other phenomena, such as: animals, plants, supernatural beings, heavenly bodies, forms of food and so on. Certain binary distinctions based on the form of human body are universal and seem fundamental - notably male/female and right/left. 'Such natural pairs are invariably loaded with cultural significance - they are made into the prototype symbols of the good and the bad, the permitted and the forbidden' (Leach 1970, 44). Lévi-Strauss argues that within a culture 'analogical thought' leads to some oppositions (such as edible/inedible) being perceived as metaphorically resembling the 'similar differences' of other oppositions (such as native/foreign) (Lévi-Strauss 1974).

Lévi-Strauss reported three stages in his analytical method:

1. define the phenomenon under study as a relation between two or more terms, real or supposed;
2. construct a table of possible permutations between these terms;
3. take this table as the general object of analysis which, at this level only, can yield necessary connections, the empirical phenomenon considered at the beginning being only one possible combination among others, the complete system of which must be reconstructed beforehand. (Lévi-Strauss 1964, 16)

For Lévi-Strauss, myths represent a dreamlike working-over of a fundamental dilemma or contradiction within a culture which can be expressed in the form of a pair of oppositions. The development of the myth constitutes a repeated reframing of this tension through layers of paired opposites which are transformations of the primary pair. These layers begin with classifications based on physical perception and become increasingly more generalized. Claude Lévi-Strauss
has demonstrated how cooking transforms Nature into Culture: South American myths oppose the raw to the cooked (Lévi-Strauss 1970). He comments on his theorizing: 'In order to construct this system of myths about cooking, we found ourselves obliged to use oppositions between terms all more or less drawn from sensory qualities: raw and cooked, fresh and rotten, and so forth. Now we find that the second step in our analysis reveals terms still opposed in pairs, but whose nature is different to the degree that they involve not so much a logic of qualities as one of forms: empty and full, container and contents, internal and external, included and excluded, etc.' (cited in Jameson 1972, 118-119).

In a major review of the anthropological literature, Lévi-Strauss famously and provocatively declared that 'exchange, as a total phenomenon, is from the first a total exchange, comprising food, manufactured objects and that most precious category of goods, women' (Lévi-Strauss 1969, 60-1). We have referred already to his reflections on the significance of our preparation of food. His observations on the social phenomenon of exchange are distinctive because he argued that exogamy (marrying outside the group) and more generally 'the relations between the sexes' are a form of communication (ibid., 493-4). Language, economics and sexuality - thus arguably the basis of all communication - draw on three fundamental oppositions: addressor/addrsee; buyer/seller; masculine/feminine (Coward & Ellis 1977, 58). As Lévi-Strauss noted, social exchanges involve the exchange of 'social values' (Lévi-Strauss 1969, 62). The production of subject positions in relation to these key oppositions can be seen as a primary mechanism for the reproduction of society and its values.

Lévi-Strauss even turned his attention to the textual codes of literature in what is probably the most famous structuralist textual analysis of all. In collaboration with the linguist Roman Jakobson, he undertook an analysis of the sonnet 'Les Chats' by Charles Baudelaire (1821-1867). This involved a detailed outline of the oppositions of parts of speech, poetic forms, semantic features and so on (Lane 1970, 202-221). Since this is such a frequently-cited analysis, the poem and an English rendering are reproduced here for the reader's
convenience. The commentators helpfully note, by the way, that **L'Érèbe** is a 'shady region bordering on Hell' and that Erebus is 'brother of the night' *(Lane 1970, 213).*

Les chats
Les amoureux fervents et les savants austères
Aiment également, dans leur mûre saison,
Les chats puissants et doux, orgueil de la maison,
Qui comme eux sont frileux et comme eux sédentaires.
Amis de la science et de la volupté,
Ils cherchent le silence et l'horrueur des ténèbres;
L'Érèbe les eût pris pour ses courriers funèbres,
S'ils pouvaient au servage incliner leur fierté.

Les chats puissants et doux, orgueil de la maison,
Qui comme eux sont frileux et comme eux sédentaires.
Amis de la science et de la volupté,
Ils cherchent le silence et l'horrueur des ténèbres;
L'Érèbe les eût pris pour ses courriers funèbres,
S'ils pouvaient au servage incliner leur fierté.

In a headnote to the paper, Lévi-Strauss notes that the poem consisted of 'superimposed levels: phonology, phonetics, syntax, prosody, semantics etc.' *(Lane 1970, 202).* The authors demonstrate that 'the different levels on which we touched blend, complement each other or combine' *(ibid., 217).* For instance, they note a link between the grammatical and semantic levels: 'All beings in the sonnet are masculine but the cats and their alter ego, *les grands sphinx*, are of an androgynous nature. This very ambiguity is emphasized throughout the sonnet by the paradoxical choice of feminine substantives [nouns] for so-called masculine rhymes' *(ibid., 221).* Here is a breakdown of the rhyme scheme which,
together with the text, may assist interested readers to note patterns for themselves.

<table>
<thead>
<tr>
<th>Line</th>
<th>Rhyme word</th>
<th>English equivalent</th>
<th>Rhyme scheme</th>
<th>Rhyme form</th>
<th>Grammatical function</th>
<th>Singular/plural form</th>
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</thead>
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<tr>
<td>1</td>
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<td>season</td>
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<td>singular</td>
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<td>3</td>
<td>maison</td>
<td>house</td>
<td>B</td>
<td>masculine</td>
<td>noun f</td>
<td>singular</td>
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<td>4</td>
<td>sédentaires</td>
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<td>a</td>
<td>feminine</td>
<td>adjective</td>
<td>plural</td>
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<td>5</td>
<td>volupté</td>
<td>sensuality</td>
<td>C</td>
<td>masculine</td>
<td>noun f</td>
<td>singular</td>
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<td>6</td>
<td>ténèbres</td>
<td>dark(ness)</td>
<td>d</td>
<td>feminine</td>
<td>noun f</td>
<td>plural</td>
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<td>7</td>
<td>funèbres</td>
<td>funereal</td>
<td>d</td>
<td>feminine</td>
<td>adjective</td>
<td>plural</td>
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<td>8</td>
<td>fierté</td>
<td>pride</td>
<td>C</td>
<td>masculine</td>
<td>noun f</td>
<td>singular</td>
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<td>9</td>
<td>attitudes</td>
<td>postures</td>
<td>e</td>
<td>feminine</td>
<td>noun f</td>
<td>plural</td>
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<td>10</td>
<td>solitudes</td>
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<td>feminine</td>
<td>noun f</td>
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<td>11</td>
<td>fin</td>
<td>end</td>
<td>F</td>
<td>masculine</td>
<td>noun f</td>
<td>singular</td>
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<tr>
<td>12</td>
<td>magiques</td>
<td>magic(al)</td>
<td>g</td>
<td>feminine</td>
<td>adjective</td>
<td>plural</td>
</tr>
<tr>
<td>13</td>
<td>fin</td>
<td>fine</td>
<td>F</td>
<td>masculine</td>
<td>adjective</td>
<td>singular</td>
</tr>
<tr>
<td>14</td>
<td>mystiques</td>
<td>mystic(al)</td>
<td>g</td>
<td>feminine</td>
<td>adjective</td>
<td>plural</td>
</tr>
</tbody>
</table>

We have already noted the association of feminine nouns with masculine rhymes. In reflecting on patterns in this rhyme scheme, the reader may also notice, as Lévi-Strauss and Jakobson pointed out, the curious circumstance that in this sonnet 'all the substantives [nouns] are feminine' and that 'all feminine rhymes are plural' (Lane 1970, 205, 220). The authors argue that 'for Baudelaire, the image of the cat is closely linked to that of the woman', citing the association of 'puissants et doux' with women in other poetry. Lévi-Strauss and Jakobson emphasize the importance of binary oppositions. At the semantic level, other than what they see as 'the oscillation between male and female' in the poem, they argue that another key opposition is animate/inanimate. At a linguistic level a fundamental opposition is metaphor/metonymy. Again, readers may care to identify such oppositions for themselves. The authors argue that the poem seeks to 'resolve' the oppositions which it generates at various levels (ibid., 218-9). Whilst widely-cited, this
analysis is also understandably criticized as arid by those whom structuralism leaves cold. Being an archetypical structuralist analysis, it confines itself to structural relations within the text (Riffaterre 1970).

More broadly, aesthetic 'movements' can be interpreted in terms of paradigms of characteristic oppositions. Each movement can be loosely identified in terms of a primary focus of interest: for instance, realism tends to be primarily oriented towards the world, neo-classicism towards the text and romanticism towards the author (which is not to suggest, of course, that such goals have not been shared by other movements). Such broad goals generate and reflect associated values. Within a particular movement, various oppositions constitute a palette of possibilities for critical theorists within the movement. For instance, the codes of romanticism are built upon various implicit or explicit articulations of such oppositions as: expressive/instrumental, feeling/thought, emotion/reason, spontaneity/deliberation, passion/calculation, inspiration/effort, genius/method, intensity/reflection, intuition/judgement, impulse/intention, unconsciousness/design, creativity/construction, originality/conventionality, creation/imitation, imagination/learning, dynamism/order, sincerity/facticity, natural/artificial and organic/mechanical. The alignment of some of these pairs generates further associations: for instance, an alignment of spontaneity/deliberation with sincerity/facticity equates spontaneity with sincerity. More indirectly, it may also associate their opposites, so that deliberation reflects insincerity or untruthfulness. Romantic literary theorists often proclaimed spontaneity in expressive writing to be a mark of sincerity, of truth to feeling - even when this ran counter to their own compositional practices (Chandler 1995, 49ff). Even within 'the same' aesthetic movement, various theorists construct their own frameworks, as is illustrated in Abrams' study of romantic literary theory (Abrams 1971). Each opposition (or combination of oppositions) involves an implicit contrast with the priorities and values of another aesthetic movement: thus (in accord with the Saussurean principle of negative differentiation) an aesthetic movement is defined by what it is not. The
The evolution of aesthetic movements can be seen as the working-out of tensions between such oppositions. Similarly, within textual analysis, it has been argued that the structure of particular texts (or myths) works to position the reader to privilege one set of values and meanings over the other. Sometimes such oppositions may appear to be resolved in favour of dominant ideologies but poststructuralists argue that tensions between them always remain unresolved.

One aesthetic movement, that of Surrealism, can be seen as centrally concerned with the resolution of opposites. Charles Forceville argues that:

One of the central tenets of Surrealism was that ultimately all opposites (feeling vs. reason; beauty vs. ugliness; substance vs. spirit, etc.) are merely apparent opposites. In the last resort each two 'antitheses' are aspects of a deeper unity, and the Surrealists saw it as their task to show this unity. From this point of view, it is hardly surprising that metaphor, with its crucial characteristic of rendering one thing in terms of another, could play an important role in bridging the seemingly irreconcilable opposites. (Forceville 1996, 59)

As we shall see shortly, this Surrealist mission has much in common with poststructuralist goals.

Paradigmatic analysis has also been applied to popular culture. Exploring a basic opposition of wilderness/civilization, Jim Kitses analysed the film genre of the western in relation to a series of oppositions: individual/community; nature/culture; law/gun sheep/cattle (Kitses 1970). John Fiske makes considerable analytical use of such oppositions in relation to mass media texts (Fiske 1987). Umberto Eco analysed the James Bond novels in terms of a series of oppositions: Bond/villain; West/Soviet Union; anglo-saxon/other countries; ideals/cupidity; chance/planning; excess/moderation; perversion/innocence; loyalty/disloyalty (Eco 1966).
Binary oppositions can be traced even in visual images. Jean-Marie Floch compares and contrasts the logos of the two major computer companies, IBM and Apple, revealing their differences to be based on a series of associated binary oppositions, the most obvious of which are listed here (Floch 2000, 41). The contrast could hardly involve a clearer opposition. Appropriately, Apple's logo seems to be defined purely in opposition to the more established/establishment image of IBM.

<table>
<thead>
<tr>
<th></th>
<th>IBM</th>
<th>Apple</th>
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<tbody>
<tr>
<td><strong>Structure</strong></td>
<td>repetition</td>
<td>non repetition</td>
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<td></td>
<td>disconnected lines</td>
<td>joined lines</td>
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<tr>
<td><strong>Colour</strong></td>
<td>monochromatic</td>
<td>polychromatic</td>
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<tr>
<td></td>
<td>cold</td>
<td>warm</td>
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<tr>
<td><strong>Forms</strong></td>
<td>substance ('bold')</td>
<td>outline</td>
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<td>straight</td>
<td>curved</td>
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A past chairman of the Apple Products division is quoted as saying, 'Our logo is a great mystery: it is a symbol of pleasure and knowledge, partially eaten away and displaying the colours of the rainbow, but not in the proper order. We couldn't wish for a more fitting logo: pleasure, knowledge, hope and anarchy' (Floch 2000, 54). Clearly, the bitten apple refers both to the story of the Tree of Knowledge in the Garden of Eden and to the association of IBM with the east coast and 'the Big Apple' of New York. The psychedelic mixed-up rainbow (green, yellow, orange, red, violet and blue) signifies the west coast hippie era of the 1960s, with its associations of idealism and 'doing your own thing'. Thus, despite representing a binary opposition to the IBM logo, the multi-coloured Apple logo seeks to signify a rejection of the binarism reflected in the 'black-and-white' (or rather monochrome) linearity of IBM's logo. Competing companies clearly need to establish distinct identities, and such identities are typically reflected in their logos. This example may tempt
the reader to compare the visual identities of other competing corporations.

Oppositions are rarely equally weighted. The Russian linguist and semiotician Roman Jakobson introduced the theory of markedness: 'Every single constituent of any linguistic system is built on an opposition of two logical contradictories: the presence of an attribute ("markedness") in contraposition to its absence ("unmarkedness")' (cited in Lechte 1994, 62). The concept of markedness can be applied to the poles of a paradigmatic opposition: paired signs consist of an 'unmarked' and a 'marked' form. This applies, as we shall see, both at the level of the signifier and at the level of the signified. The 'marked' signifier is distinguished by some special semiotic feature (Nöth 1990, 76). In relation to linguistic signifiers, two characteristic features of marked forms are commonly identified: these relate to formal features and generic function. The more 'complex' form is marked, which typically involves both of the following features:

- **Formal marking.** In morphologically related oppositions, marking is based on the presence or absence of some particular formal feature. The marked signifier is formed by adding a distinctive feature to the unmarked signifier (for instance, the marked form 'unhappy' is formed by adding the prefix un- to the unmarked signifier 'happy') (Greenberg 1966; Clark & Clark, 1977; Lyons 1977, 305ff).

- **Distributional marking.** Formally marked terms show a tendency to be more restricted in the range of contexts in which they occur (Lyons 1977, 306-307).

In English, linguistically unmarked forms include the present tense of verbs and the singular form of nouns. The active voice is normally unmarked, although in the restricted genre of traditional academic writing the passive voice is still often the unmarked form.

The markedness of linguistic signs includes semantic marking: a marked or unmarked status applies not only to signifiers but also to signifieds. According to 'the binary
thesis' 'a signified's content is determined by a series of binary contrasts in which one term is marked and the other unmarked' (Holdcroft 1991, 127). With morphologically related pairings there is an obvious relation between formal and semantic marking, and John Lyons suggests that distributional marking in oppositions is probably determined by semantic marking (Lyons 1977, 307). One form of semantic marking relates to specificity. The unmarked term is often used as a generic term whilst the marked term is used in a more specific sense. General references to humanity used to use the term 'Man' (which in this sense was not intended to be sex-specific), and of course the word 'he' has long been used generically. In English the female category is generally marked in relation to the male, a point not lost on feminist theorists (Clark & Clark 1977, 524). Lyons notes, however, that it is not always the female term which is marked - he refers to several farmyard animals as exceptions - bull, cock, ram and drake - suggesting that this is perhaps because such animals are normally reared in smaller numbers (Lyons 1977, 308).

Where terms are paired the pairing is rarely symmetrical but rather hierarchical. With apologies to George Orwell we might coin the phrase that 'all signifieds are equal, but some are more equal than others'. With many of the familiarly paired terms, the two signifieds are accorded different values. The unmarked term is primary, being given precedence and priority, whilst the marked term is treated as secondary or even suppressed and excluded as an 'absent signifier'. When morphological cues (such as un- or -in) are lacking, the 'preferred sequence' or most common order of paired terms usually distinguishes the first as a semantically positive term and the second as a negative one (Lyons 1977, 276; Malkiel 1968). 'Term B' is referred to by some theorists as being produced as an 'effect' of 'Term A'. The unmarked term is presented as fundamental and originative whilst the marked term 'is conceived in relation to it' as derivative, dependent, subordinate, supplemental or ancillary (Culler 1985, 112; Adams 1989, 142). This framing ignores the fact that the unmarked term is logically and structurally dependent on the marked term to lend it substance. Even the arch-structuralist
Lévi-Strauss acknowledged that 'the very notion of opposition implies that the two forms were originally conceived of as complementary terms, forming a part of the same classification' (in Lane 1970, 202). Derrida demonstrated that within the oppositional logic of binarism neither of the terms (or concepts) makes sense without the other. This is what he calls 'the logic of supplementarity': the 'secondary' term which is represented as 'marginal' and external is in fact constitutive of the 'primary' term and essential to it (Derrida 1976). The unmarked term is defined by what it seeks to exclude. Consequently, the boundaries of foundational oppositions, seemingly 'absolute', have to be policed because 'transgressions' are inevitable (Eagleton 1983, 133).

In the pairing of oppositions or contraries, Term B is defined relationally rather than substantively. The linguistic marking of signifiers in many of these pairings is referred to as 'privative' - consisting of suffixes or prefixes signifying lack or absence - e.g. non-, un- or -less. In such cases, Term B is defined by negation - being everything that Term A is not. For example, when we refer to 'non-verbal communication', the very label defines such a mode of communication only in negative relation to 'verbal communication'. Indeed, the unmarked term is not merely neutral but implicitly positive in contrast to the negative connotations of the marked term. For the French psychoanalyst Jacques Lacan the marked term in the pairing of men/women is negatively defined within 'the symbolic order' in terms of the absence or lack of a privileged signifier associated with control and power - the phallus (though see feminist critiques of Lacan's phallocentrism, e.g. Lovell 1983, 44-45). The association of the marked term with absence and lack is of course problematized by those who have noted the irony that the dependence of Term A on Term B can be seen as reflecting a lack on the part of the unmarked term (Fuss 1991, 3).

The unmarked form is typically dominant (e.g. statistically within a text or corpus) and therefore seems to be 'neutral', 'normal' and 'natural'. It is thus 'transparent' - drawing no attention to its invisibly privileged status, whilst the deviance of the marked form is salient. Where it is not totally
excluded, the 'marked' form is foregrounded - presented as 'different'; it is 'out of the ordinary' - an extraordinary deviational 'special case' which is something other than the standard or default form of the unmarked term (Nöth 1990, 76; Culler 1989, 271). Unmarked/marked may thus be read as norm/deviation. It is notable that empirical studies have demonstrated that cognitive processing is more difficult with marked terms than with unmarked terms (Clark & Clark 1977). Marked forms take longer to recognize and process and more errors are made with these forms.

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<th>80%+*</th>
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<td>theory/practice</td>
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* indicates a high frequency of markedness in cognitive processing.
<table>
<thead>
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<th>medium</th>
<th>high</th>
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<tr>
<td>near/far</td>
<td>health/illness</td>
<td>fact/fiction</td>
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<td>self/other</td>
<td>comedy/tragedy</td>
<td>form/content</td>
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<tr>
<td>figure/ground</td>
<td>insider/outsider</td>
<td>form/function</td>
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<td>rich/poor</td>
<td>happy/sad</td>
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<td>fact/opinion</td>
<td>superior/inferior</td>
<td>original/copy</td>
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<td>system/use</td>
<td>present/absent</td>
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<td>hero/villain</td>
<td>clean/dirty</td>
<td>appearance/reality</td>
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<td>fact/value</td>
<td>natural/artificial</td>
<td>competence/performance</td>
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<td>text/context</td>
<td>speaker/listener</td>
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<td>raw/cooked</td>
<td>classical/romantic</td>
<td>speech/writing</td>
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<td>substance/style</td>
<td>type/token</td>
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<td>base/superstructure</td>
<td>nature/technology</td>
<td>signifier/signified</td>
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<td>rights/obligations</td>
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<td>reason/emotion</td>
<td>wild/domestic</td>
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<td>knower/known</td>
<td>sacred/profane</td>
<td>stability/change</td>
</tr>
<tr>
<td>literal/metaphorical</td>
<td>maker/user</td>
<td>realism/idealism</td>
</tr>
</tbody>
</table>

* Dominant order as % of total occurrences of both forms

Markedness of some explicit oppositions in online texts retrieved using Infoseek, Sept. 2000

On the limited evidence from frequency counts of explicit verbal pairings in written text, I would suggest that whilst it is very common for one term in such pairings to be marked, in some instances there is not a clearly marked term. For instance, in general usage there seems to be no inbuilt preference for one term in a pairing such as old/young (one is just as likely to encounter young/old). Furthermore, the extent to which a term is marked is variable. Some terms seem to be far more clearly marked than others: frequency counts based on texts on the World-Wide Web suggest that in the pairing public/private, for instance, private is very clearly the marked term ( accorded secondary status). How strongly a term is marked also depends on contextual frameworks such as genres and sociolects, and in some contexts a pairing may be very deliberately and explicitly reversed when an interest group seeks to challenge the ideological priorities which the markedness may be taken to reflect. Not all of the pairs listed will seem to be 'the right way round' to everyone - you may find it interesting to identify which ones seem counter-intuitive to you and to speculate as to why this seems so.
However 'natural' familiar dichotomies and their markedness may seem, their historical origins or phases of dominance can often be traced. For instance, perhaps the most influential dualism in the history of Western civilization can be attributed primarily to the philosopher René Descartes (1596-1650) who divided reality into two distinct ontological substances - *mind* and *body*. This distinction insists on the separation of an *external* or 'real' world from an *internal* or 'mental' one, the first being *material* and the second *non-material*. It created the poles of *objectivity* and *subjectivity* and fostered the illusion that 'I' can be distinguished from my body. Furthermore, Descartes' rationalist declaration that 'I think, therefore I am' encouraged the *privileging* of mind over body. He presented the subject as an autonomous individual with an ontological status *prior to* social structures (a notion rejected by poststructural theorists). He established the enduring assumption of the independence of the knower from the known. Cartesian dualism also underpins a host of associated and aligned dichotomies such as *reason/emotion, male/female, true/false, fact/fiction, public/private, self/other* and *human/animal*. Indeed, many feminist theorists lay a great deal of blame at Descartes' door for the orchestration of the ontological framework of patriarchal discourse. One of the most influential of theorists who have sought to study the ways in which reality is constructed and maintained within discourse by such dominant frameworks is the French historian of ideas, Michel Foucault, who focused on the analysis of 'discursive formations' in specific historical and socio-cultural contexts (*Foucault 1970; Foucault 1974*).

The strategy of 'deconstruction' which was adopted by the post-structuralist philosopher Jacques Derrida (1976) sought to challenge the phonocentric privileging of *speech* over *writing* in western culture and to demonstrate the instability of this opposition (*Derrida 1976; Derrida 1978*). Derrida also challenged the privileging of the signified over the signifier, seeing it as a perpetuation of the traditional opposition of matter and spirit or substance and thought. He noted that within such discourse the *material* form is always subordinated to the *less material* form. Derrida sought to blur the distinction between signifier and signified, insisting that
'the signified always already functions as a signifier' (Derrida 1976, 7). He similarly challenged other loaded oppositions such as presence over absence, nature over culture, masculine over feminine and literal over metaphorical. Other 'critical theorists' have similarly sought to 'valorize term B' in the semiotic analysis of textual representations, though most are content with simply reversing the valorization rather than more radically seeking to destabilize the oppositional framework. This strategy is reflected in the way in which some activists in minority groups have hijacked the dominant language of the majority - as in the case of a campaign against homophobia which was launched by the Terrence Higgins Trust in the UK in September 1999 under the slogan 'It's prejudice that's queer'. The posters used neatly inverted heterosexist notions by substituting homophobia for homosexuality: 'I can't stand homophobes, especially when they flaunt it'; 'My son is homophobic, but I hope it's just a phase'; and 'homophobes shouldn't be left alone with kids'. This strategy of ironic reversal had been foreshadowed in the wittily subversive formulation that 'we don't yet know what causes heterosexuality' (found in gay webpages).

Following on from Derrida's deconstruction of Saussure's *Course in General Linguistics*, Robert Hodge and Gunther Kress have offered a useful visual mapping of Saussure's model of semiotics in terms of its own explicit oppositions. The diagram shown below is based on theirs. The leftmost terms represent those which were privileged by Saussure whilst those on the right represent those which he marginalizes in the *Course*. Seeking to revalorize those terms which Saussure had devalorized, Hodge and Kress build their own more explicitly social and materialist framework for semiotics on 'the contents of Saussure's rubbish bin'. Their agenda for an 'alternative semiotics' is based on:
7. culture, society and politics as intrinsic to semiotics;
8. other semiotic systems alongside verbal language;
9. *parole*, the act of speaking, and concrete signifying practices in other codes;
10. diachrony, time, history, process and change;
11. the processes of signification, the transactions between signifying systems and structures of reference;
12. structures of the signified;
13. the material nature of signs.

(Hodge & Kress 1988, 17)

The concept of markedness can be applied more broadly than simply to paradigmatic pairings of words or concepts. Whether in textual or social practices, the choice of a marked form 'makes a statement'. Where a text deviates from conventional expectations it is 'marked'. Conventional, or 'over-coded' text (which follows a fairly predictable formula)
is unmarked whereas unconventional or 'under-coded' text is marked. Marked or under-coded text requires the interpreter to do more interpretative work.

The existence of marked forms is not simply a structural feature of semiotic systems. Kathryn Woodward argues that 'it is through the marking out of... differences that social order is produced and maintained' (Woodward 1997, 33). Unmarked forms reflect the naturalization of dominant cultural values. The French feminist Hélène Cixous has emphasized the gendered character of binary oppositions, which are consistently weighted in favour of the male (cited in Woodward 1997, 36 and Allen 2000, 152). As Trevor Millum notes:

> The standards by which mankind in general and societies and individuals in particular have estimated the values of male and female are not neutral, but, as Simnel puts it, 'in themselves essentially masculine'. To be male is to be in some way normal, to be female is to be different, to depart from the norm, to be abnormal. (Millum 1975, 71)

Applying the concept of marked forms to mass media genres, Merris Griffiths, then one of my own research students, examined the production and editing styles of television advertisements for toys. Her findings showed that the style of advertisements aimed primarily at boys had far more in common with those aimed at a mixed audience than with those aimed at girls, making 'girls' advertisements' the marked category in commercials for toys. Notably, the girls' ads had significantly longer shots, significantly more dissolves (fade out/fade in of shot over shot), less long shots and more close-ups, less low shots, more level shots and less overhead shots. The gender-differentiated use of production features which characterized these children’s commercials reflected a series of binary oppositions - fast vs. slow, abrupt vs. gradual, excited vs. calm, active vs. passive, detached vs. involved. Their close association in such ads led them to line up consistently together as ‘masculine’ vs. ‘feminine’ qualities. The 'relative autonomy' of formal features in commercials seems likely to function as a constant symbolic
reaffirmation of the broader cultural stereotypes which associate such qualities with gender - especially when accompanied by gender-stereotyped content. Readers may care to reflect on the way in which 'dark goods' and 'light goods' have traditionally been sold in high-street electrical shops. Dark goods such as televisions, video-recorders, camcorders and sound-systems were primarily targeted at men and the sales staff focused on technical specifications. Light goods such as refrigerators, washing-machines and cookers were targeted at women and the sales staff focused on appearance. The extent to which this particular pattern still survives in your own locality may be checked by some investigative 'window-shopping'.

'Binarism' has been defined as 'the passion of those who tend to see everything as divided into two categories' (Hervey 1982, 24). There is a delightfully ironic quip (variously attributed) that 'The world is divided into those who divide people into two types, and those who don't'. The interpretive usefulness of simple dichotomies is often challenged on the basis that life and (perhaps by a misleading 'realist' analogy) texts are 'seamless webs' and thus better described in terms of continua. But it is useful to remind ourselves that any interpretive framework cuts up its material into manageable chunks. The test of its appropriateness can surely only be assessed in terms of whether it advances our understanding of the phenomenon in question.

The structuralist semiotician Algirdas Greimas introduced the semiotic square (which he adapted from the 'logical square' of scholastic philosophy) as a means of analysing paired concepts more fully (Greimas 1987, xiv, 49). The semiotic square is intended to map the logical conjunctions and disjunctions relating key semantic features in a text. Fredric Jameson notes that 'the entire mechanism... is capable of generating at least ten conceivable positions out of a rudimentary binary opposition' (in Greimas 1987, xiv). Whilst this suggests that
the possibilities for signification in a semiotic system are richer than the *either/or* of binary logic, but that they are nevertheless subject to 'semiotic constraints' - 'deep structures' providing basic axes of signification.

The symbols $S_1$, $S_2$, $\text{Not } S_1$ and $\text{Not } S_2$ represent positions within the system which may be occupied by concrete or abstract notions. The double-headed arrows represent bilateral relationships. The upper corners of the Greimasian square represent an opposition between $S_1$ and $S_2$ (e.g. white and black). The lower corners represent positions which are not accounted for in simple binary oppositions: $\text{Not } S_2$ and $\text{Not } S_1$ (e.g. non-white and non-black). $\text{Not } S_1$ consists of more than simply $S_2$ (e.g. that which is not white is not necessarily black). In the horizontal relationships represent an opposition between each of the left-hand terms ($S_1$ and $\text{Not } S_2$) and its paired right-hand term ($\text{Not } S_1$ and $S_2$). The terms at the top ($S_1$, $S_2$) represent 'presences', whilst their companion terms ($\text{Not } S_1$ and $\text{Not } S_2$) represent 'absences'. The vertical relationships of 'implication' offer us an alternative conceptual synthesis of $S_1$ with $\text{Not } S_2$ and of $S_2$ with $\text{Not } S_1$ (e.g. of white with not-black or of black with not-white). Greimas refers to the relationships between the four positions as: *contrariety* or opposition ($S_1/S_2$); *complementarity* or implication ($S_1/\text{Not } S_2$ and $S_2/\text{Not } S_1$); and *contradiction* ($S_1/\text{Not } S_1$ and $S_2/\text{Not } S_2$). Varda Langholz Leymore offers an illustrative example of the linked terms 'beautiful' and 'ugly'. In the semiotic square the four related terms (clockwise) would be 'beautiful', 'ugly', 'not beautiful' and 'not ugly'. The initial pair is not simply a binary opposition because 'something which is not beautiful is not necessarily ugly and vice versa a thing which is not ugly is not necessarily beautiful' (*Langholz Leymore 1975*, 29). The same framework can be productively applied to many other paired terms, such as 'thin' and 'fat'.
Occupying a position within such a framework invests a sign with meanings. The semiotic square can be used to highlight 'hidden' underlying themes in a text or practice. Using a slightly adapted version of the square shown here, Fredric Jameson outlines how it might be applied to Charles Dickens' novel, *Hard Times*.

In *Hard Times* we witness the confrontation of what amount to two antagonistic intellectual systems: Mr Gradgrind's utilitarianism ('Facts! Facts!') and that world of anti-facts symbolized by Sissy Jupe and the circus, or in other words, imagination. The novel is primarily the education of the educator, the conversion of Mr Gradgrind from his inhuman system to the opposing one. It is thus a series of lessons administered to Mr Gradgrind, and we may sort these lessons into two groups and see them as the symbolic answers to two kinds of questions. It is as though the plot of the novel, seeking now to generate the terms \( \text{Not } S_1 \) and \( \text{Not } S_2 \), were little more than a series of attempts to visualize the solutions to these riddles: What happens if you negate or deny imagination? What would happen if, on the contrary, you negated facts? Little by little the products of Mr Gradgrind's system show us the various forms which the negation of the negation, which the denial of Imagination, may take: his son Tom (theft), his daughter Louisa (adultery, or at least projected adultery), his model pupil Blitzer (delation, and in general the death of the spirit). Thus the absent fourth term comes to the centre of the stage; the plot is nothing but an attempt to give it imaginative being, to work through faulty solutions and unacceptable hypotheses until an adequate embodiment has been realized in terms of the narrative material. With this discovery (Mr Gradgrind's education, Louisa's belated experience of family love),
the semantic rectangle is completed and the novel comes to an end. (Jameson 1972, 167-168)

In his foreword to an English translation of a book by Greimas, Jameson reflects on his own use of the technique. He suggests that the analyst should begin by provisionally listing all of the entities to be coordinated and that even apparently marginal entities should be on this initial list. He notes that even the order of the terms in the primary opposition is crucial: we have already seen how the first term in such pairings is typically privileged. He adds that 'the four primary terms... need to be conceived polysemically, each one carrying within it its own range of synonyms... such that... each of the four primary terms threatens to yawning open into its own fourfold system' (in Greimas 1987, xv-xvi). Jameson suggests that Not S2, the negation of the negation, 'is always the most critical position and the one that remains open or empty for the longest time, for its identification completes the process and in that sense constitutes the most creative act of the construction' (ibid., xvi). Using the earlier example of aesthetic movements and their dominant focuses, the reader might find it interesting to apply the semiotic square to these. To recap, it was suggested that realism tends to be primarily oriented towards the world, neo-classicism towards the text and romanticism towards the author. We may assign the concepts of world, text and author to three corners of the square - a fourth term is conspicuous by its absence. Jameson's caveats about the order and formulation of terms may be useful here.

Turning to other contexts, in relation to children's toys Dan Fleming offers an accessible application of the semiotic square (Fleming 1996, 147ff). Gilles Marion has used the Greimasian square to suggest four purposes in communicating through clothing: wanting to be seen; not wanting to be seen; wanting not to be seen; and not wanting not to be seen (cited in draft publication by David Mick). Most recently, Jean-Marie Floch has used the grid to illustrate an interesting exploration of the 'consumption values' represented by Habitat and IKEA furniture (Floch 2000, 116-144). However, the Greimasian analysis of texts in terms of the semiotic square has been criticized as easily
leading to reductionist and programmatic decodings. Worse still, some theorists seem to use the square as little more than an objective-looking framework which gives the appearance of coherence and grand theory to loose argument and highly subjective opinions.

Critics of structuralist analysis note that binary oppositions need not only to be related to one another and interpreted, but also to be contextualised in terms of the social systems which give rise to texts (Buxton 1990, 12). Those who use this structuralist approach sometimes claim to be analysing the 'latent meaning' in a text: what it is 'really' about. Unfortunately, such approaches typically understate the subjectivity of the interpreter's framework. Illuminating as they may sometimes be, any inexplicit oppositions which are identified are in the mind of the interpreter rather than contained within the text itself (Culler 1975; Adams 1989, 139). Yet another objection is that 'the question of whether categories like sacred/profane and happiness/misery are psychologically real in any meaningful sense is not posed and the internal logic of structuralism would suggest it need not be posed' (Young 1990, 184).

**Denotation, Connotation and Myth**

Beyond its 'literal' meaning (its denotation), a particular word may have connotations: for instance, sexual connotations. 'Is there any such thing as a single entendre?' quipped the comic actor Kenneth Williams (we all know that 'a thing is a phallic symbol if it's longer than it's wide', as the singer Melanie put it). In semiotics, denotation and connotation are terms describing the relationship between the signifier and its signified, and an analytic distinction is made between two types of signifieds: a denotative signified and a connotative signified. Meaning includes both denotation and connotation.

'Denotation' tends to be described as the definitional, 'literal', 'obvious' or 'commonsense' meaning of a sign. In
the case of linguistic signs, the denotative meaning is what the dictionary attempts to provide. For the art historian Erwin Panofsky, the denotation of a representational visual image is what all viewers from any culture and at any time would recognize the image as depicting (Panofsky 1970a, 51-3). Even such a definition raises issues - all viewers? One suspects that this excludes very young children and those regarded as insane, for instance. But if it really means 'culturally well-adjusted' then it is already culture-specific, which takes us into the territory of connotation. The term 'connotation' is used to refer to the socio-cultural and 'personal' associations (ideological, emotional etc.) of the sign. These are typically related to the interpreter's class, age, gender, ethnicity and so on. Signs are more 'polysemic' - more open to interpretation - in their connotations than their denotations. Denotation is sometimes regarded as a digital code and connotation as an analogue code (Wilden 1987, 224).

As Roland Barthes noted, Saussure's model of the sign focused on denotation at the expense of connotation and it was left to subsequent theorists (notably Barthes himself) to offer an account of this important dimension of meaning (Barthes 1967, 89ff). In 'The Photographic Message' (1961) and 'The Rhetoric of the Image' (1964), Barthes argued that in photography connotation can be (analytically) distinguished from denotation (Barthes 1977, 15-31, 32-51). As Fiske puts it 'denotation is what is photographed, connotation is how it is photographed' (Fiske 1982, 91). However, in photography, denotation is foregrounded at the expense of connotation. The photographic signifier seems to be virtually identical with its signified, and the photograph appears to be a 'natural sign' produced without the intervention of a code (Hall 1980, 132). Barthes initially argued that only at a level higher than the 'literal' level of denotation, could a code be identified - that of connotation (we will return to this issue when we discuss codes). By 1973 Barthes had shifted his ground on this issue. In analysing the realist literary text Barthes came to the conclusion that 'denotation is not the first meaning, but pretends to be so; under this illusion, it is ultimately no more than the last of the
connotations (the one which seems both to establish and close the reading), the superior myth by which the text pretends to return to the nature of language, to language as nature' (Barthes 1974, 9). Connotation, in short, produces the illusion of denotation, the illusion of language as transparent and of the signifier and the signified as being identical. Thus denotation is just another connotation. From such a perspective denotation can be seen as no more of a 'natural' meaning than is connotation but rather as a process of naturalization. Such a process leads to the powerful illusion that denotation is a purely literal and universal meaning which is not at all ideological, and indeed that those connotations which seem most obvious to individual interpreters are just as 'natural'. According to an Althusserian reading, when we first learn denotations, we are also being positioned within ideology by learning dominant connotations at the same time (Silverman 1983, 30).

Consequently, whilst theorists may find it analytically useful to distinguish connotation from denotation, in practice such meanings cannot be neatly separated. Most semioticians argue that no sign is purely denotative - lacking connotation. Valentin Voloshinov insisted that no strict division can be made between denotation and connotation because 'referential meaning is moulded by evaluation... meaning is always permeated with value judgement' (Voloshinov 1973, 105). There can be no neutral, objective description which is free of an evaluative element. David Mick and Laura Politi note that choosing not to differentiate denotation and connotation is allied to regarding comprehension and interpretation as similarly inseparable (Mick & Politi 1989, 85).

For most semioticians both denotation and connotation involve the use of codes. Structural semioticians who emphasise the relative arbitrariness of signifiers and social semioticians who emphasize diversity of interpretation and the importance of cultural and historical contexts are hardly likely to accept the notion of a 'literal' meaning. Denotation simply involves a broader consensus. The denotational meaning of a sign would be broadly agreed upon by members of the same culture, whereas 'nobody is ever taken to task
because their connotations are incorrect', so no inventory of the connotational meanings generated by any sign could ever be complete (Barnard 1996, 83). However, there is a danger here of stressing the 'individual subjectivity' of connotation: 'intersubjective' responses are shared to some degree by members of a culture; with any individual example only a limited range of connotations would make any sense. Connotations are not purely 'personal' meanings - they are determined by the codes to which the interpreter has access. Cultural codes provide a connotational framework since they are 'organized around key oppositions and equations', each term being 'aligned with a cluster of symbolic attributes' (Silverman 1983, 36). Certain connotations would be widely recognized within a culture. Most adults in Western cultures would know that a car can connote virility or freedom.

In the following extract from his essay 'Rhetoric of the Image', Roland Barthes demonstrates the subtlety and power of connotation in the context of advertising.

Here we have a Panzani advertisement: some packets of pasta, a tin, a sachet, some tomatoes, onions, peppers, a mushroom, all emerging from a half-open string bag, in yellows and greens on a red background. Let us try to 'skim off' the different messages it contains.

The image immediately yields a first message, whose substance is linguistic; its supports are the caption, which is marginal, and the labels, these being inserted into the natural disposition of the scene, 'en abyme'. The code from which this message has been taken is none other than that of the French language; the only knowledge required to decipher it is a knowledge of writing and of French. In fact, this message can
itself be further broken down, for the sign Panzani gives not simply the name of the firm but also, by its assonance, a additional signified, that of 'Italianicity'. The linguistic message is therefore twofold (at least in this particular image): denotational and connotational. Since, however, we have here only a single typical sign, namely that of articulated (written) language, it will be counted as one message.

Putting aside the linguistic message, we are left with the pure image (even if the labels are part of it, anecdotally). This image straightaway provides a series of discontinuous signs. First (the order is unimportant as these signs are not linear), the idea that what we have in the scene represented is a return from the market. A signified which itself implies two euphoric values: that of the freshness of the products and that of the essentially domestic preparation for which they are destined. Its signifier is the half-open bag which lets the provisions spill out over the table, 'unpacked'. To read this first sign requires only a knowledge which is in some sort implanted as part of the habits of a very widespread culture where 'shopping around for oneself' is opposed to the hasty stocking up (preserves, refrigerators) of a more 'mechanical' civilization. A second sign is more or less equally evident; its signifier is the bringing together of the tomato, the pepper and the tricoloured hues (yellow, green, red) of the poster; its signified is Italy, or rather Italianity. This sign stands in a relation of redundancy with the connoted sign of the linguistic message (the Italian assonance of the name Panzani) and the knowledge it draws upon is already more particular; it is a specifically 'French' knowledge (an Italian would barely perceive the connotation of the name, no more probably than he would the Italianicity of tomato and pepper), based on a familiarity with certain tourist stereotypes. Continuing to explore the image (which is not to say that it is not entirely clear at the first glance), there is no difficulty in discovering at least two other signs: in the first, the serried collection of different objects transmits the idea of a total culinary service, on the one hand as though Panzani furnished everything necessary for a carefully balanced dish and on the other as though the concentrate in the tin were equivalent to the natural produce surrounding it; in the other sign, the composition of the image, evoking the memory of innumerable
alimentary paintings, sends us to an aesthetic signified: the 'nature morte' or, as it is better expressed in other languages, the 'still life'; the knowledge on which this sign depends is heavily cultural.

(Barthes 1977, 33)

Barthes adopted from Louis Hjelmslev the notion that there are different orders of signification (Barthes 1957; Hjelmslev 1961, 114ff). The first order of signification is that of denotation: at this level there is a sign consisting of a signifier and a signified. Connotation is a second-order of signification which uses the denotative sign (signifier and signified) as its signifier and attaches to it an additional signified. In this framework connotation is a sign which derives from the signifier of a denotative sign (so denotation leads to a chain of connotations). This tends to suggest that denotation is an underlying and primary meaning - a notion which many other commentators have challenged. Barthes himself later gave priority to connotation, and in 1971 noted that it was no longer easy to separate the signifier from the signified, the ideological from the 'literal' (Barthes 1977, 166). In passing, we may note that this formulation underlines the point that 'what is a signifier or a signified depends entirely on the level at which the analysis operates: a signified on one level can become a signifier on another level' (Willemen 1994, 105). This is the mechanism by which signs may seem to signify one thing but are loaded with multiple meanings.

Changing the form of the signifier while keeping the same signified can generate different connotations. Changes of style or tone may involve different connotations, such as when using different typefaces for exactly the same text, or changing from sharp focus to soft focus when taking a photograph. The choice of words often involves connotations, as in references to 'strikes' vs. 'disputes', 'union
demands' vs. 'management offers', and so on. Tropes such as metaphor generate connotations.

Connotation is not a purely paradigmatic dimension, as Saussure's characterization of the paradigmatic dimension as 'associative' might suggest. Whilst absent signifiers with which it is associated are clearly a key factor in generating connotations, so too are syntagmatic associations. The connotations of a signifier relate in part to the other signifiers with which it occurs within a particular text. However, referring to connotation entirely in terms of paradigms and syntagms confines us to the language system, and yet connotation is very much a question of how language is used. A purely structuralist account also limits us to a synchronic perspective and yet both connotations and denotations are subject not only to socio-cultural variability but also to historical factors: they change over time. Signs referring to disempowered groups (such as 'woman') can be seen as having had far more negative denotations as well as negative connotations than they do now because of their framing within dominant and authoritative codes of their time - including even supposedly 'objective' scientific codes. Fiske warns that 'it is often easy to read connotative values as denotive facts' (Fiske 1982, 92). Just as dangerously seductive, however, is the tendency to accept denotation as the 'literal', 'self-evident' 'truth'. Semiotic analysis can help us to counter such habits of mind.

Whilst the dominant methodologies in semiotic analysis are qualitative, semiotics is not incompatible with the use of quantitative techniques. In 1957 the psychologist Charles Osgood published a book on The Measurement of Meaning together with some of his colleagues (Osgood et al. 1957). In it these communication researchers outlined a technique called the semantic differential for the systematic mapping of connotations (or 'affective meanings'). The technique involves a pencil-and-paper test in which people are asked to give their impressionistic responses to a particular object, state or event by indicating specific positions in relation to at least nine pairs of bipolar adjectives on a scale of one to seven. The aim is to locate a concept in 'semantic space' in three dimensions: evaluation (e.g. good/bad); potency (e.g.
strong/weak); and activity (e.g. active/passive). The method has proved useful in studying attitudes and emotional reactions. It has been used, for instance, to make comparisons between different cultural groups. Whilst the technique has been used fairly widely in social science, it has not often been used by semioticians (including the self-styled 'scientist of connotations', Roland Barthes), although binary oppositions have routinely provided theoretical building-blocks for structuralist semioticians.

Related to connotation is what Roland Barthes refers to as *myth*. We usually associate myths with classical fables about the exploits of gods and heroes. But for Barthes myths were the dominant ideologies of our time. In a departure from Hjelmslev's model Barthes argues that the orders of signification called denotation and connotation combine to produce ideology - which has been described (though not by Barthes) as a *third order of signification* (Fiske & Hartley 1978, 43; O'Sullivan et al. 1994, 287). In a very famous example from his essay 'Myth Today' (in Mythologies), Barthes illustrates this concept of *myth*:

I am at the barber's, and a copy of *Paris-Match* is offered to me. On the cover, a young Negro* in a French uniform is saluting, with his eyes uplifted, probably fixed on a fold of the tricolour. All this is the meaning of the picture. But, whether naively or not, I see very well what it signifies to me: that France is a great Empire, that all her sons, without any colour discrimination, faithfully serve under her flag, and that there is no better answer to the detractors of an alleged colonialism than the zeal shown by this Negro* in serving his so-called oppressors. I am therefore again faced with a greater semiological system: there is a signifier, itself already formed with a previous system (*a black soldier is giving the French salute*); there is a signified (it is here a purposeful mixture of Frenchness and militariness); finally, there is a presence of the signified through the signifier... In myth (and this is the chief peculiarity of the latter), the signifier is already formed by the signs of the language... Myth has in fact a double function: it points out and it notifies, it makes us understand
something and it imposes it on us...

One must put the biography of the Negro* in parentheses if one wants to free the picture, and prepare it to receive its signified... The form does not suppress the meaning, it only impoverishes it, it puts it at a distance... It is this constant game of hide-and-seek between the meaning and the form which defines myth. The form of myth is not a symbol: the Negro* who salutes is not the symbol of the French Empire: he has too much presence, he appears as a rich, fully experienced, spontaneous, innocent, indisputable image. But at the same time this presence is tamed, put at a distance, made almost transparent; it recedes a little, it becomes the accomplice of a concept which comes to it fully armed, French imperialism...

Myth is... defined by its intention... much more than by its literal sense... In spite of this, its intention is somehow frozen, purified, eternalized, made absent by this literal sense (The French Empire? It's just a fact: look at this good Negro* who salutes like one of our own boys). This constituent ambiguity... has two consequences for the signification, which henceforth appears both like a notification and like a statement of fact... French imperialism condemns the saluting Negro* to be nothing more than an instrumental signifier, the Negro* suddenly hails me in the name of French imperialism; but at the same moment the Negro's* salute thickens, becomes vitrified, freezes into an eternal reference meant to establish French imperialism...

We reach here the very principle of myth: it transforms history into nature... In the case of the soldier-Negro*... what is got rid of is certainly not French imperialism (on the contrary, since what must be actualized is its presence); it is the contingent, historical, in one word: fabricated, quality of colonialism. Myth does not deny things, on the contrary, its function is to talk about them; simply, it purifies them, it makes them innocent, it gives them a natural and eternal justification, it gives them a clarity which is not that of an explanation but that of a statement of fact. If I state the fact of French imperialism without explaining it, I am very near to finding that it is natural and goes without saying: I am reassured. In passing from history to nature, myth acts economically: it abolishes the complexity of human acts, it gives
them the simplicity of essences, it does away with all dialectics, with any going back beyond what is immediately visible, it organizes a world which is without contradictions... Things appear to mean something by themselves...

*Translator's term - not the choice of this author

(Barthes 1987)

Signs and codes are generated by myths and in turn serve to maintain them. Popular usage of the term 'myth' suggests that it refers to beliefs which are demonstrably false, but the semiotic use of the term does not necessarily suggest this. Myths can be seen as extended metaphors. Like metaphors, myths help us to make sense of our experiences within a culture (Lakoff & Johnson 1980, 185-6). They express and serve to organize shared ways of conceptualizing something within a culture. Semioticians in the Saussurean tradition treat the relationship between nature and culture as relatively arbitrary (Lévi-Strauss 1972, 90, 95). For Barthes, myths serve the ideological function of naturalization (Barthes 1977, 45-6). Their function is to naturalize the cultural - in other words, to make dominant cultural and historical values, attitudes and beliefs seem entirely 'natural', 'normal', self-evident, timeless, obvious 'common-sense' - and thus objective and 'true' reflections of 'the way things are'. Contemporary sociologists argue that social groups tend to regard as 'natural' whatever confers privilege and power upon themselves. Barthes saw myth as serving the ideological interests of the bourgeoisie. 'Bourgeois ideology... turns culture into nature,' he declares (Barthes 1974, 206). George Lakoff and Mark Johnson outline key features of the myth of objectivism which is dominant and pervasive in Western culture - a myth which allies itself with scientific truth, rationality, accuracy, fairness and impartiality and which is reflected in the discourse of science, law, government, journalism, morality, business, economics and scholarship (Lakoff & Johnson 1980, 188-9). Myths can function to hide
the ideological function of signs and codes. The power of such myths is that they 'go without saying' and so appear not to need to be deciphered, interpreted or demystified.

Differences between the three orders of signification are not clear-cut, but for descriptive and analytic purposes some theorists distinguish them along the following lines. The first (denotative) order (or level) of signification is seen as primarily representational and relatively self-contained. The second (connotative) order of signification reflects 'expressive' values which are attached to a sign. In the third (mythological or ideological) order of signification the sign reflects major culturally-variable concepts underpinning a particular worldview - such as masculinity, femininity, freedom, individualism, objectivism, Englishness and so on. Susan Hayward offers a useful example of the three orders of signification in relation to a photograph of Marilyn Monroe:

At the denotative level this is a photograph of the movie star Marilyn Monroe. At a connotative level we associate this photograph with Marilyn Monroe's star qualities of glamour, sexuality, beauty - if this is an early photograph - but also with her depression, drug-taking and untimely death if it is one of her last photographs. At a mythic level we understand this sign as activating the myth of Hollywood: the dream factory that produces glamour in the form of the stars it constructs, but also the dream machine that can crush them - all with a view to profit and expediency. (Hayward 1996, 310)

The semiotic analysis of cultural myths involves an attempt to deconstruct the ways in which codes operate within particular popular texts or genres, with the goal of revealing how certain values, attitudes and beliefs are supported whilst
others are suppressed. The task of 'denaturalizing' such cultural assumptions is problematic when the semiotician is also a product of the same culture, since membership of a culture involves 'taking for granted' many of its dominant ideas. Nevertheless, where we seek to analyse our own cultures in this way it is essential to try to be explicitly reflexive about 'our own' values.