SEMIOTICS FOR BEGINNERS



SIGNS

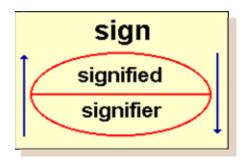
We seem as a species to be driven by a *desire to make meanings*: above all, we are surely *Homo significans* - meaning-makers. . Distinctively, we make meanings through our creation and interpretation of 'signs'. Indeed, according to Peirce, 'we think only in signs' (Peirce, 1931-58. 2.302) Signs take 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**.

Ferdinand de Saussure

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'.

To understand how this relationship works, think of it like this,

Imagine that you are walking up to a shop door, on the door is a sign that says,

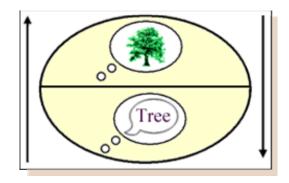


If we take a linguistic example, the word 'Open' (when it is invested with meaning by someone who encounters it on a shop doorway) is a *sign* consisting of:

- 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). A *sign* is a recognizable combination of a *signifier* with a particular *signified*. The same signifier (the word 'open') could stand for a

different signified (and thus be a different sign) if it were on a pushbutton inside a lift ('push to open door'). Similarly, many signifiers could stand for the concept 'open' (for instance, on top of a packing carton, a small outline of a box with an open flap for 'open this end') again, with each unique pairing constituting a different sign.



Nowadays, whilst the basic 'Saussurean' model is commonly adopted, it tends to be a more materialistic model than the one used by Saussure himself. The *signifier* is now commonly interpreted as the *material (or physical) form* of the sign - it is something which can be seen, heard, touched, smelt or tasted. For Saussure, both the **signifier** and the **signified** were purely 'psychological'. Both were *form* rather than *substance*:

"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 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.

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. (Draw a model for this in your VAPD)

(Later on we will deal with 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': i.e., it excludes 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; (what does this mean, explain in your VAPD). 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'. 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. Furthermore, being immaterial, language is an extraordinarily economical medium and words are always ready-to-hand.

• (What do you understand this last paragraph to mean?)

Here are some further points to note about Saussure's model.

- Saussure noted that his choice of the terms *signifier* and *signified* helped to indicate 'the distinction which separates each from the other'.
- Saussure stressed that sound and thought (or the signifier and the signified) were as inseparable as the two sides of a piece of paper. They were 'intimately linked' in the mind 'by an associative link' 'each triggers the other'
- 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.
- Saussure argued that signs only make sense as part of a formal, generalized and abstract system.
- For Saussure, **signs** refer primarily to each other. Within the language system, 'everything depends on relations. No sign makes sense on its own but only in relation to other signs. Both signifier and signified are **purely relational entities**. 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. (Cite three examples of this).
- 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 uses an analogy with the game of chess, noting that the value of each piece depends on its position on the chessboard. 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.

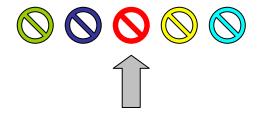
E.g., if we take the letter **B** and add to it the letter **O** and to that add the letter **A** and to it add the letter **T** we end up with a sign that is the product of the relationship of the four individual signs from within the system of signs we call the alphabet.

Thus $\mathbf{B} + \mathbf{O} + \mathbf{A} + \mathbf{T} = \mathbf{BOAT} =$

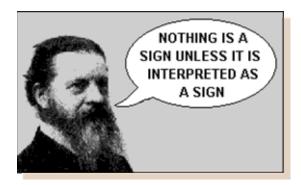


Saussure emphasized in particular *negative*, oppositional differences between signs, and the key relationships in structuralist analysis are binary oppositions (such as *nature/culture*, *life/death*). Saussure argued that 'concepts... are defined not positively, in terms of their content, but *negatively* by contrast with other items in the same system. What characterizes each most exactly is *being whatever the* others are not'. 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.





Charles Sanders Peirce



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:

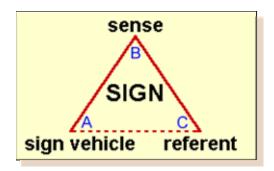
- The **Representamen**: the form which the sign takes (not necessarily material);
- An **Interpretant**: *not* an interpreter but rather the sense made of the sign;
- An **Object**: to which the sign refers.

'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'.

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).....

(Draw a model for this in your VAPD)



- **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'

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 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.

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;

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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'

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, 68,74)

Further points for consideration,

- 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.
- 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'
- A symbol is 'a conventional sign, or one depending upon habit (acquired or inborn)'. All words, sentences, books and other conventional signs are symbols' (tokens).
- 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'. He adds elsewhere that 'a *symbol*... fulfils 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.



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 1.158). He added that 'every picture (however conventional its method)' is an icon. Icons have qualities, which 'resemble' those of the objects they represent, and they 'excite analogous sensations in the mind'. Unlike the index, 'the icon has no dynamical connection with the object it represents'. 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, 61). 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'. 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'. '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.' (Peirce, 1931, 58, 2.276).



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'.....

(Peirce 1931, 58, 2.285). He refers to a 'genuine relation' between the 'sign' and the *object*, which does not depend purely on 'the interpreting mind'. The *object* is 'necessarily existent'. The index is connected to its object 'as a matter of fact'. There is 'a real connection'. There may be a 'direct physical connection'. An indexical sign is like 'a fragment torn away from the object'. Unlike an icon (the object of which may be fictional) an index stands 'unequivocally for this or that existing thing'. Whilst 'it necessarily has some quality in common' with it, the signifier is 'really affected' by the signified; there is an 'actual modification' involved. "The relationship is *not* based on 'mere resemblance',...... 'indices...

have no significant resemblance to their objects'. 'Similarity or analogy' are not what define the index. 'Anything which focuses the attention is an index. Anything which startles us is an index'. Indexical signs 'direct the attention to their objects by blind compulsion'. 'Psychologically, the action of indices depends upon association by contiguity, and not upon association by resemblance or upon intellectual operations"

Whilst a photograph is also perceived as resembling that which it depicts, Peirce noted that a photograph is not only iconic but also *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]'(Peirce, 1931,58, 2.281). So in this sense, since the photographic image is an index of the effect of light on photographic emulsion, all 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' (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'. 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 evidence. Photographic and filmic images may also be 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 *directly* representative of the people, places and events which are subjects of the news text. A far greater proportion of shots have an oblique relationship to the text; they 'stand for' the subject matter indexically or symbolically (Davis and Walton 1083b, 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'. 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, 61). 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.....

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)

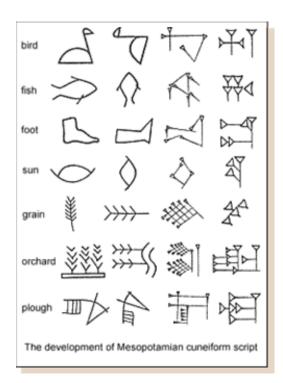
Despite his emphasis on studying 'the language-state' 'synchronically' (as if it were frozen at one moment in time) rather than 'diachronically' (studying its evolution), Saussure was well aware that the relationship between the signified and the signifier in language was subject to change over time (Saussure 1983, 74ff, 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 and Ellis 1977, 6, 8, 13). In terms of Peirce's three modes, a historical shift from one mode to another tends to occur.

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'. Whilst granting such a possibility, he nevertheless notes that 'a regular progression... may be remarked in the three orders of signs, Icon, Index, Symbol'.

Peirce posits iconicity as the original default mode of signification, declaring the icon to be 'an originalian sign', defining this as 'the most primitive, simple and original of the categories'. 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'. 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'...... However, over time, linguistic signs developed a more symbolic and conventional character. 'Symbols come into being by development out of other signs, particularly from icons'.

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' (Danesai 1999, 35). 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, 33). The anthropologist Claude Lévi-Strauss identified a similar general movement from motivation to arbitrariness within the conceptual schemes employed by particular cultures.



DIGITAL AND ANALOGICAL SIGNS

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 audioand 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).

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). 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 anology that we are often (perhaps unavoidably) its unwitting victims.

digital	vs.	analogical
arbitary	vs.	motivated
conventional	vs.	natural

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.....

..... 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-painting or Princess Diana's wedding dress).
 (Eco 1976, 178ff)

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, 211-224). 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

Further points for consideration,

- 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.
- 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' (Volishinov, 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' (ibid 10-11, cf28). For Voloshinov, all signs, including language, have 'concrete material reality' (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 (Freud 1938,319). For instance, Freud reported that the dream of a young woman engaged to be married featured flowers - including lilies-of-thevalley 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).

FURTHER STUDY.

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 & Tyrode 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.

Signifieds : plane of <i>content</i>	Substance of content: 'human content' (Metz), textual world, subject matter, genre	<i>Form of content</i> : 'semantic structure' (Baggaley & Duck), 'thematic structure' (including narrative) (Metz)
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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 pseudoreferential 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 & Leeuwen, 1996, 40-41)

Specific semiotic systems are called codes.