

MODELS OF THE SIGN

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 (ibid., 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 contemporary models of what constitutes a sign are those of the Swiss linguist Ferdinand de Saussure and the American philosopher Charles Sanders Peirce. These will be discussed in turn.

THE SAUSSUREAN MODEL

Saussure's model of the sign is in the dyadic tradition. Prior advocates of dyadic models, in which the two parts of a sign consist of a 'sign vehicle' and its meaning, included Augustine (397), Albertus Magnus and the Scholastics (13th century), Hobbes (1640) and Locke (1690) (see Nöth 1990, 88). Focusing on *linguistic* signs (such as words), Saussure defined a sign as being composed of a 'signifier' (*signifiant*) and a 'signified' (*signifié*) (see Figure 1.1). Contemporary commentators tend to describe the signifier as the form that the sign takes and the signified as the concept to which it refers. Saussure makes the distinction in these terms:

A linguistic sign is not a link between a thing and a name, but between a concept [*signified*] and a sound pattern [*signifier*]. 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)

For Saussure, both the signifier (the 'sound pattern') and the signified (the concept) were purely 'psychological' (*ibid.*, 12, 14–15, 66).

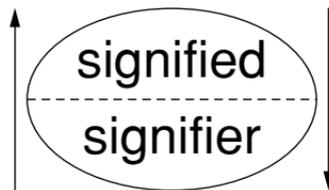


FIGURE 1.1 Saussure's model of the sign

Source: Based on Saussure 1967, 158

Both were non-material *form* rather than *substance*. Figure 1.2 may help to clarify this aspect of Saussure's own model. Nowadays, while the basic 'Saussurean' model is commonly adopted, it tends to be a more materialistic model than that of 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, smelled or tasted – as with Roman Jakobson's *signans*, which he described as the external and perceptible part of the sign (Jakobson 1963b, 111; 1984b, 98).

Within the Saussurean model, the *sign* is the whole that results from the association of the signifier with the signified (ibid., 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 broken 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

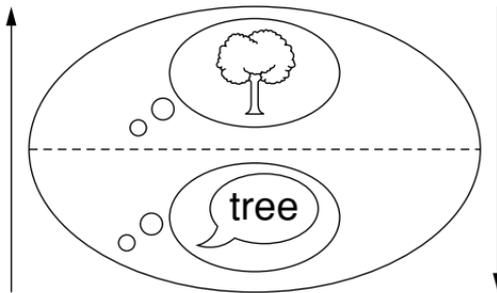


FIGURE 1.2 Concept and sound pattern

(*ibid.*, 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 push-button 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.

Saussure focused on the linguistic sign and he ‘phonocentrically’ privileged the spoken word. As we have noted, he referred specifically to the signifier as a ‘sound pattern’ (*image acoustique*). He saw writing as a separate, secondary, dependent but comparable sign-system (*ibid.*, 15, 24–5, 117). 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 or, as Derrida puts it, for Saussure writing is ‘a sign of a sign’ (Derrida 1967a, 43). Most subsequent theorists who have adopted Saussure’s model tend to refer to the form of linguistic signs as either spoken or written (e.g. Jakobson 1970, 455–6 and 1984b, 98). We will return later to the issue of the post-Saussurean ‘rematerialization’ of the sign.

As for the *signified*, Umberto Eco notes that it is somewhere between ‘a mental image, a concept and a psychological reality’ (Eco 1976, 14–15). Most commentators who adopt Saussure’s model still treat the signified 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 – somewhat ironically for one who defined semiotics as ‘a science *which studies the role of signs as part of social life*’ (Saussure 1983, 15). His *signified* is not to be identified directly with such 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 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). 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 (*ibid.*, 117). Several reasons could be offered for this. For instance, if linguistic signs drew attention to their materiality this would hinder their communicative transparency. 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.

TWO SIDES OF A PAGE

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). They were 'intimately linked' in the mind 'by an associative link' – 'each triggers the other' (*ibid.*, 66). Saussure presented these elements as wholly interdependent, neither pre-existing the other. 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 suggest 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. Common sense 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.

THE RELATIONAL SYSTEM

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). No sign makes sense on its own but

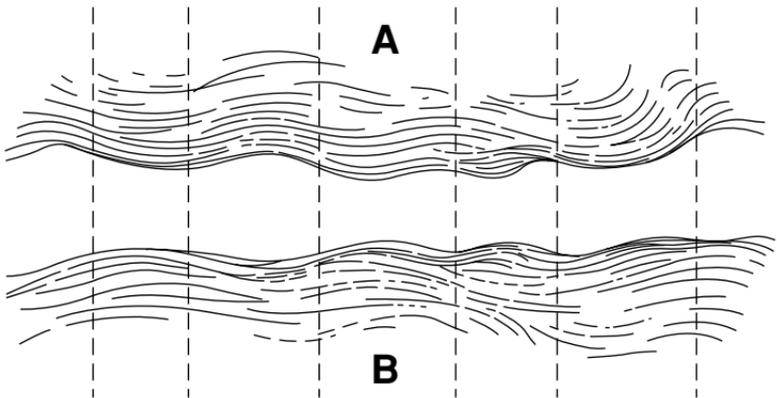


FIGURE 1.3 Planes of thought and sound

Source: Based on Saussure 1967, 156

only in relation to other signs. Both signifier and signified are purely relational entities (ibid., 118). 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 Saussure’s argument is that its meaning depends on its relation to other words within the system (such as ‘bush’).

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 signified. Later, Louis Hjelmslev referred to the ‘expression plane’ and the ‘content plane’ (Hjelmslev 1961, 59). Saussure himself referred to *sound* and *thought* as two distinct but correlated planes (see Figure 1.3). ‘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, 110–11). The arbitrary division of the two continua into signs is suggested by the dotted lines while 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. While Saussure is careful not to refer directly to reality, the American literary theorist 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, 32–3)

What Saussure refers to as the ‘value’ of a sign depends on its relations with other signs within the system (see Figure 1.4). A sign has no ‘absolute’ value independent of this context (Saussure 1983, 80).

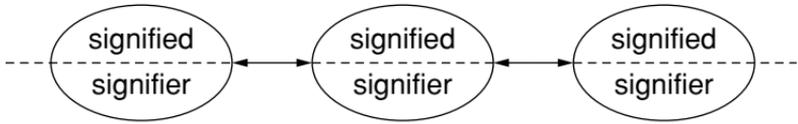


FIGURE 1.4 The relations between signs

Source: Based on Saussure 1967, 159

Saussure uses an analogy with the game of chess, noting that the value of each piece depends on its position on the chessboard (ibid., 88). The sign is more than the sum of its parts. While *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 (ibid., 112–13).

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)

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'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' (ibid., 119). It has been noted that '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.

Saussure emphasized in particular negative, oppositional differences between signs. He 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; *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 that person a range of different objects which all happened to be red – we would probably do better to single out a red object from a set 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 (ibid., 118). 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' (ibid., 119).

ARBITRARINESS

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 (ibid., 67, 78) – more specifically the arbitrariness of the link between the signifier and the signified (ibid., 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 (ibid., 67) – arbitrariness was identified later by Charles Hockett as a key 'design feature' of language (Hockett 1958). 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 of a word and the concept to which it refers (Saussure 1983, 67, 68–9, 76, 111, 117). 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 himself avoids directly relating the principle of arbitrariness to the relationship between language and an external world, but subsequent commentators often do. Indeed, lurking behind the purely conceptual 'signified' one can often detect Saussure's allusion to real-world referents, as when he notes that 'the street and the train are real enough. Their physical existence is essential to our understanding of what they are' (ibid., 107). 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

suiting 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’ (ibid., 76); ‘the process which selects one particular sound-sequence to correspond to one particular idea is completely arbitrary’ (ibid., 111).

This principle of the arbitrariness of the linguistic sign was not an original conception. In Plato’s dialogue *Cratylus* this issue is debated. Although Cratylus defends the notion of a natural relationship between words and what they represent, Hermogenes declares that ‘no one is able to persuade me that the correctness of names is determined by anything besides convention and agreement . . . No name belongs to a particular thing by nature’ (Plato 1998, 2). While Socrates rejects the absolute arbitrariness of language proposed by Hermogenes, he does acknowledge that convention plays a part in determining meaning. In his work *On Interpretation*, Aristotle went further, asserting that there can be no natural connection between the sound of any language and the things signified. ‘By a noun [or name] we mean a sound significant by convention . . . the limitation “by convention” was introduced because nothing is by nature a noun or name – it is only so when it becomes a symbol’ (Aristotle 2004, 2). The issue even enters into everyday discourse via Shakespeare: ‘That which we call a rose by any other name would smell as sweet’. The notion of the arbitrariness of language was thus not new; indeed, Roman Jakobson notes that Saussure ‘borrowed and expanded’ it from the Yale linguist Dwight Whitney (1827–94) – to whose influence Saussure did allude (Jakobson 1966, 410; Saussure 1983, 18, 26, 110). Nevertheless, the emphasis which Saussure gave to arbitrariness can be seen as highly controversial in the context of a theory which bracketed the referent.

Saussure illustrated the principle of arbitrariness at the lexical level – in relation to individual words as signs. He did not, for instance, argue that syntax is arbitrary. However, the arbitrariness principle can be applied not only to the individual 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? Common sense 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’ (ibid., 114–15). 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’ (Passmore 1985, 24). 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 and Ellis 1977, 6, 13, 17, 67). Note that while 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 establishes 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*, Charles Ogden and Ivor Richards criticized Saussure for ‘neglecting entirely the things for which signs stand’ (Ogden and Richards 1923, 8). Later critics have lamented his model’s detachment from social context (Gardiner 1992, 11). 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 Chapter 2.

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. Jakobson 1963a, 59, and 1966). 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 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’ (ibid., 131). 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’ (ibid., 73). The principle of arbitrariness does not mean that the form of a word is accidental or random, of course. While 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)

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’ (e.g. Tagg 1988, 167). The *relative* conventionality of relationships between signified and signifier is a point to which we will return shortly.

It should be noted that, while 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’ – in Western culture ‘white’ has come to be a privileged (but typically ‘invisible’) 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 sign-system, 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, 71–2). 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’ (ibid., 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’ (ibid., 68). 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 (*ibid.*, 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. As the anthropologist Franz Boas noted, to the native speaker of a language, none of its classifications appear arbitrary (Jakobson 1943, 483).

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 which have to be learned. 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' (*ibid.*, 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 (*ibid.*, 15, 17, 68, 74). 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' (*ibid.*, 68). However, while 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).

THE PEIRCEAN MODEL

At around the same time as Saussure was formulating his model of the sign and of ‘semiology’ (and laying the foundations of structuralist methodology), across the Atlantic closely related theoretical work was also in progress as the pragmatist philosopher and logician Charles Sanders Peirce formulated his own model of the sign, of ‘semeiotic [*sic*]’ 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 (three-part) model consisting of:

1. The *representamen*: the form which the sign takes (not necessarily material, though usually interpreted as such) – called by some theorists the ‘sign vehicle’.
2. An *interpretant*: not an interpreter but rather the *sense* made of the sign.
3. An *object*: something beyond the sign to which it refers (a *referent*).

In Peirce’s own words:

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)

To qualify as a sign, all three elements are essential. The sign is a unity of what is represented (the object), how it is represented (the representamen) and how it is interpreted (the interpretant). The Peircean model is conventionally illustrated as in Figure 1.5 (e.g. Eco 1976, 59), though note that Peirce did not himself offer a visualization of it, and Floyd Merrell (who prefers to use a ‘tripod’ with

a central node) argues that the triangular form ‘evinces no genuine triadity, but merely three-way dyadity’ (Merrell 1997, 133). 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. Note here 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.

The interaction between the *representamen*, the *object* and the *interpretant* is referred to by Peirce as ‘*semeiosis*’ (ibid., 5.484; alternatively *semiosis*). A good explanation of how Peirce’s model works is offered by one of my own students, Roderick Munday:

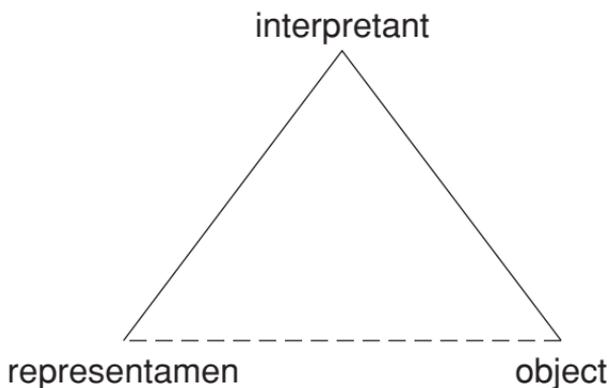


FIGURE 1.5 Peirce’s semiotic triangle

The three elements that make up a sign function like a label on an opaque box that contains an object. At first the mere fact that there is a box with a label on it suggests that it contains something, and then when we read the label we discover what that something is. The process of semiosis, or decoding the sign, is as follows. The first thing that is noticed (the *representamen*) is the box and label; this prompts the realization that something is inside the box (the *object*). This realization, as well as the knowledge of what the box contains, is provided by the *interpretant*. 'Reading the label' is actually just a metaphor for the process of decoding the sign. The important point to be aware of here is that the object of a sign is always hidden. We cannot actually open the box and inspect it directly. The reason for this is simple: if the object could be known directly, there would be no need of a sign to represent it. We only know about the object from noticing the label and the box and then 'reading the label' and forming a mental picture of the object in our mind. Therefore the hidden object of a sign is only brought to realization through the interaction of the representamen, the object and the interpretant.

(personal correspondence, 14/4/2005)

The representamen is similar in meaning to Saussure's signifier while the interpretant is roughly analogous to the signified. However, the interpretant has a quality unlike that of the signified: it is itself a sign in the mind of the interpreter (see Figure 1.6). 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). In Roman Jakobson's words, for Peirce, 'the meaning of the sign is the sign it can be translated into' (Jakobson 1952b, 566). 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* (Eco 1976, 68–9; Peirce 1931–58, 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 reinterpreted. That a signified can itself

play the role of a signifier is familiar from using a dictionary and finding oneself going beyond the original definition to look up yet another word which it employs. Peirce's emphasis on sense-making involves a rejection of the equation of 'content' and meaning; the meaning of a sign is not contained within it, but arises in its interpretation. Note that Peirce refers to an 'interpretant' (the sense made of a sign) rather than directly to an interpreter, though the interpreter's presence is implicit – which arguably applies even within Saussure's model (Thibault 1997, 184). As we have seen, Saussure also emphasized the value of a sign lying in its relation to other signs (within the relatively static structure of the sign system) but the Peircean concept (based on the highly dynamic process of interpretation) has a more radical potential which was later to be developed by poststructuralist theorists. Arising from Peirce's concept of the interpretant is the notion of *dialogical*

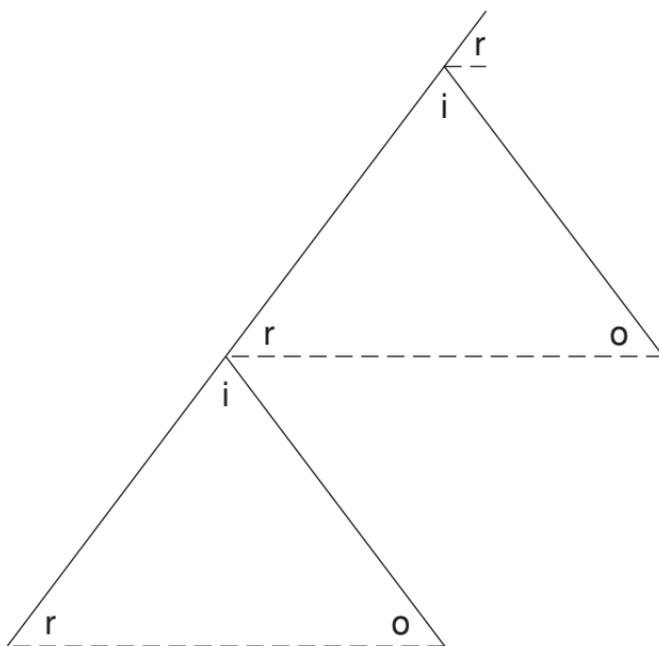


FIGURE 1.6 Peirce's successive interpretants

thought which was absent from Saussure's model. 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 (1981). One important aspect of this is its characterization even of internal reflection as fundamentally social. Some writers have experienced revision as a process of arguing with themselves – as I did when I revised this text (Chandler 1995, 53).

Variants of Peirce's triad are often presented as '*the semiotic triangle*' – as if there were only one version. In fact, prior to Peirce, a triadic model of the sign was employed by Plato (c.400 BC), Aristotle (c.350 BC), the Stoics (c.250 BC), Boethius (c.500), Francis Bacon (1605) and Gottfried Wilhelm von Leibniz (c.1700). Triadic models were also adopted by Edmund Husserl (1900), Charles K. Ogden and Ivor A. Richards (1923) and Charles W. Morris (1938).

The most obvious difference between the Saussurean and Peircean model is of course that (being triadic rather than dyadic) Peirce's model of the sign features a third term – an *object* (or referent) beyond the sign itself. As we have seen, Saussure's *signified* is not an external referent but an abstract mental representation. Although Peirce's *object* is not confined to physical things and (like Saussure's *signified*) it can include abstract concepts and fictional entities, the Peircean model explicitly allocates a place for materiality and for reality outside the sign system which Saussure's model did not directly feature (though Peirce was not a naïve realist, and he argued that all experience is mediated by signs). For Peirce the object was not just 'another variety of "interpretant"' (Bruss 1978, 96), but was crucial to the meaning of the sign: 'meaning' within his model includes both 'reference' and (conceptual) 'sense' (or more broadly, representation and interpretation). Furthermore, Peircean semioticians argue that the triadic basis of this model enables it to operate as a more general model of the sign than a dyadic model can (ibid., 86). Nevertheless, the inclusion of a referent does not make a triadic model inherently less problematic than a dyadic one. John Lyons notes that 'there is considerable disagreement about the details of the triadic analysis even among those who accept that all three components . . . must be taken into account' (Lyons 1977, 99).

It is important in this particular account of semiotics to note how one of the foremost post-Saussurean structuralists reacted to the Peircean model of the sign, since his inflection of structuralism had important consequences for the evolution of the European semiotic tradition. Prior to his discovery of Peirce's work, Roman Jakobson, a consistent exponent of binary structures in language, had clearly adopted the Saussurean sign – despite his critique of Saussure's analytical priorities: 'The constitutive mark of any sign in general or of any linguistic sign in particular is its *twofold* character: every linguistic unit is bipartite and involves both aspects – one sensible (i.e., perceptible) and the other intelligible, or in other words, both the "signifier" and the "signified"' – his preferred terms (adopted from St Augustine) usually being *signans* (signifier) and *signatum* (signified). Jakobson added that the linguistic sign involved 'the indissoluble dualism of . . . *sound* and *meaning*' (Jakobson 1949a, 50; cf. 1949b, 396). 'Meaning' can be a slippery term in this context, since it can refer either to sense (accommodated in both the Saussurean and Peircean models) or reference (accounted for directly only in Peirce's model), but Jakobson's signified at this stage seems much the same as Saussure's. Jakobson's increasing emphasis on the importance of *meaning* represented a reaction against the attempt of 'reductionist linguists' in the USA (American structuralists and early transformational grammarians) 'to analyze linguistic structure without reference to meaning' whereas he insisted that 'everything in language is endowed with a certain significative and transmissive value' (Jakobson 1972, 42). After his encounter with Peirce's work in the early 1950s, Jakobson became and remained a key adopter and promoter of Peircean ideas, yet in 1958 he still accepted that the signified/*signatum* 'belonged to' linguistics and the referent/*designatum* to philosophy (Jakobson 1973, 320). Even when he came to emphasize the importance of *context* in the interpretation of signs he did not directly incorporate a 'referent' into his model of the sign, referring to the term as 'somewhat ambivalent' (Jakobson 1960, 353). By 1972 he had granted the referent (in the form of contextual and situational meaning) a more explicit status within linguistics (Jakobson 1973, 320), but his model of the sign still remained formally dyadic.

Nevertheless, he had come to equate the signified with Peirce's 'immediate interpretant' (Jakobson 1966, 409), and on one occasion he referred to there being 'two sets of *interpretants* . . . to interpret the sign – one [referring] to the code, and the other to the context' (Jakobson 1956, 75), despite Peirce's note that the interpretant *excluded* 'its context or circumstances of utterance' (Peirce 1931–58, 5.473). Clearly Jakobson sought to incorporate into the dyadic model the special quality of Peirce's interpretant, referring to the signified as the 'translatable' (or interpretable) part of the sign (e.g. Jakobson 1958, 261, 1963b, 111 and 1966, 408). Thus a major semiotician felt able to accommodate reference (indirectly) without abandoning a dyadic model. Indeed, he insisted that 'in spite of . . . attempts' to revise the 'necessarily twofold structure' of the sign or its constituent parts (the signifier/*signans* and the signified/*signatum*), 'this more than bimillenary model remains the soundest and safest base for the newly developing and expanding semiotic research' (Jakobson 1968, 699) – though there is some irony in the model he cites being that of the Stoics, who despite having prefigured the Saussurean distinction between signifier and signified, did so as part of a triadic rather than dyadic model (Eco 1984, 29–33). One Peircean scholar comments that: 'At base, Jakobson's semiotics is still more Saussurean than Peircean, committed to the diacritical nature of each aspect and every instance of the sign' (Bruss 1978, 93). Jakobson was a key propagator of Peircean concepts in the European semiotic tradition (Umberto Eco being the other), and although his structuralism was in many ways markedly different from that of Saussure, his stance on the sign model enabled European semiotics to absorb Peircean influences without a fundamental transformation of the dyadic model.

RELATIVITY

Whereas Saussure emphasized the arbitrary nature of the (linguistic) sign, most post-Saussurean semioticians stress that signs differ in how arbitrary/conventional (or by contrast 'transparent') they are. The relatively arbitrary 'symbolism' of the medium of verbal language reflects only one form of relationship between signifiers

and their signifieds. In particular, a common-sense distinction between ‘conventional signs’ (the names we give to people and things) and ‘natural signs’ (pictures resembling what they depict) dates back to ancient Greece (Plato’s *Cratylus*). St Augustine later distinguished ‘natural signs’ (*signa naturalia*) from conventional signs (*signa data*) on a different basis. For him, natural signs were those which were interpreted as signs by virtue of an immediate link to what they signified – even though no conscious intention had created them as such (he instanced smoke indicating fire and footprints indicating that an animal had passed by) (*On Christian Doctrine*, Book II, Chapter 1). Both of these types of ‘natural’ signs (respectively iconic and indexical) as well as ‘conventional’ (symbolic) signs feature in Charles Peirce’s influential tripartite classification.

While Saussure did not offer a typology of signs, Peirce offered several (Peirce 1931–58, 1.291, 2.243). What he himself regarded as ‘the most fundamental’ division of signs (first outlined in 1867) has been very widely cited in subsequent semiotic studies (*ibid.*, 2.275). Although it is often referred to as a classification of distinct ‘types of signs’, it is more usefully interpreted in terms of differing ‘modes of relationship’ between sign vehicles and what is signified (Hawkes 1977, 129). In Peircean terms they are relationships between a representamen and its object or its interpretant, but for the purpose of continuity I have continued to employ the Saussurean terms *signifier* and *signified* (cf. Jakobson 1966). Here then are the three modes:

1. **Symbol/symbolic:** a mode in which the signifier does *not* resemble the signified but which is fundamentally *arbitrary* or purely *conventional* – so that this relationship must be agreed upon and learned: e.g. language in general (plus specific languages, alphabetical letters, punctuation marks, words, phrases and sentences), numbers, morse code, traffic lights, national flags.
2. **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.

3. **Index/indexical:** a mode in which the signifier is *not arbitrary* but is *directly connected* in some way (physically or causally) to the signified (regardless of intention) – 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, catch-phrases).

These three modes arose within (and because of) Peirce’s triadic model of the sign, and from a Peircean perspective it is reductive to transform a triadic relation into a dyadic one (Bruss 1978). However, our focus here is on how Peirce has been adopted and adapted within the European structuralist tradition. The widespread use of these Peircean distinctions in texts which are otherwise primarily within that tradition may suggest either the potential for (indirect) referentiality in dyadic models or merely slippage between ‘sense’ and ‘reference’ in defining the ‘meaning’ of the sign. Certainly, as soon as we adopt the Peircean concepts of iconicity and indexicality we need to remind ourselves that we are no longer ‘bracketing the referent’ and are acknowledging not only a systemic frame of reference but also some kind of referential context beyond the sign-system itself. Iconicity is based on (at least perceived) ‘resemblance’ and indexicality is based on (at least perceived) ‘direct connection’. In other words, adopting such concepts means that – even if we are not embracing a wholly Peircean approach – we have moved beyond the formal bounds of the original Saussurean framework (as in Roman Jakobson’s version of structuralism).

The three forms of relationship between signifier and signified 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). *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 (Hodge and Kress 1988, 26–7). 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.

SYMBOLIC MODE

What in popular usage are called 'symbols' would be regarded by semioticians as 'signs' of some kind but many of them would not technically be classified as purely 'symbolic'. For instance, if we joke that 'a thing is a phallic symbol if it's longer than it is wide', this would allude to *resemblance*, making it at least partly *iconic* – Jakobson suggests that such examples may be best classified as 'symbolic icons' (Jakobson 1968, 702). In the Peircean sense, *symbols* are based purely on *conventional association*. Nowadays language is generally regarded as a (predominantly) symbolic sign-system, though Saussure avoided referring to linguistic signs as 'symbols' precisely because of the danger of confusion with popular usage. He noted that

symbols in the popular sense are ‘never wholly arbitrary’: 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). While 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 mind, 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). A symbol is ‘a conventional sign, or one depending upon habit (acquired or inborn)’ (*ibid.*, 2.297). Symbols are not limited to words, although ‘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* . . . fulfils its function regardless of any similarity or analogy with its object and equally regardless of any *factual* connection therewith’ (*ibid.*, 5.73). ‘A genuine symbol is a symbol that has a general meaning’ (*ibid.*, 2.293), signifying a kind of thing rather than a specific thing (*ibid.*, 2.301).

ICONIC MODE

Unfortunately, as with ‘symbolic’, the terms ‘icon’ and ‘iconic’ are used in a technical sense in semiotics which differs from its everyday meanings. In popular usage there are three key meanings which can lead to confusion with the semiotic terms:

- to be ‘iconic’ typically means that something or someone would be expected to be instantly recognized as famous by any fully fledged member of a particular culture or sub-culture;
- an ‘icon’ on the computer screen is a small image intended to signify a particular function to the user (to the semiotician these are ‘signs’ which may be variously iconic, symbolic or indexical, depending on their form and function);
- religious ‘icons’ are works of visual art representing sacred figures which may be venerated as holy images by devout believers.

In the Peircean sense, the defining feature of iconicity is merely *perceived resemblance*. Peirce declared that an iconic sign represents its object ‘mainly by its similarity’ (Peirce 1931–58, 2.276). Note that despite the name, icons are not necessarily visual. A sign is an icon ‘insofar as it is like that thing and used as a sign of it’ (ibid., 2.247). Indeed, Peirce 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; cf. 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. 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. It is not often that we mistake a representation for what it represents.

Semioticians generally maintain that there are no 'pure' icons. All artists employ stylistic conventions and these are, of course, culturally and historically variable. 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)

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. Such signs do not draw our attention to their mediation, seeming to present reality more directly than symbolic signs.

An extended critique of 'iconism' can be found in Eco (1976, 191ff). The linguist John Lyons notes that iconicity is 'always dependent upon properties of the medium in which the form is manifest' (Lyons 1977, 105). He offers the example of the onomatopoeic English word *cuckoo*, noting that it is only (perceived as) iconic in the phonic medium (speech) and not in the graphic medium (writing). While 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) (Lyons 1977, 103). We will return shortly to the importance of the materiality of the sign.

INDEXICAL MODE

Indexicality is perhaps the most unfamiliar concept, though its links with everyday uses of the word 'index' ought to be less misleading than the terms for the other two modes. Indexicality is quite closely related to the way in which the index of a book or an 'index' finger point directly to what is being referred to. Peirce offers various criteria for what constitutes an index. An index 'indicates' something: for example, 'a sundial or clock *indicates* the time of day' (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' (ibid., 2.92, 298). The *object* is 'necessarily existent' (ibid., 2.310). The index is connected to its object 'as a matter of fact' (ibid., 4.447). There is 'a real connection' (ibid., 5.75) which may be a 'direct physical connection' (ibid., 1.372, 2.281, 2.299). An indexical sign is like 'a fragment torn away from the object' (ibid., 2.231). Unlike an icon (the object of which may be fictional) an index stands 'unequivocally for this or that existing thing' (ibid., 4.531). The relationship is *not* based on 'mere resemblance' (ibid.): 'indices . . . have no significant resemblance to their objects' (ibid., 2.306). 'Similarity or analogy' are not what define the index (ibid., 2.305). 'Anything which focuses the attention is an index. Anything which startles us is an index' (ibid., 2.285; cf. 3.434). Indexical signs 'direct the attention to their objects by blind compulsion' (ibid., 2.306; cf. 2.191, 2.428). Whereas iconicity is characterized by *similarity*, indexicality is characterized by *contiguity*. 'Psychologically, the action of indices depends upon association by contiguity, and not upon association by resemblance or upon intellectual operations' (ibid.). Elizabeth Bruss notes that indexicality is 'a relationship rather than a quality. Hence the signifier need have no particular properties of its own, only a demonstrable connection to something else. The most important of these connections are spatial co-occurrence, temporal sequence, and cause and effect' (Bruss 1978, 88).

While a photograph is also perceived as resembling that which it depicts, Peirce noted that it 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; cf. 5.554). So in this sense, since the photographic image is an index of the effect of light, 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 some commentators suggest that the power of the photographic and filmic image derives from the iconic character of the medium. However, while 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 that is primarily responsible for interpreters treating them as objective records of reality. Peirce, a philosophical realist, observed that ‘a photograph . . . owing to its optical connection with its object, is evidence that that appearance corresponds to a reality’ (Peirce 1931–58, 4.447). Of the three modes, only indexicality can serve as evidence of an object’s existence. 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 exploit the indexical nature of the medium (though of course they are not purely indexical). However, in one of his essays on photographic history, John Tagg, wary of ‘the realist position’, cautions that ‘the existence of a photograph is no guarantee of a corresponding pre-photographic existent . . . The indexical nature of the photograph – the causative link between the pre-photographic referent and the sign . . . can guarantee nothing at the level of meaning.’ Even prior to digital photography, both ‘correction’ and montage were practised, but Tagg argues that *every* photograph involves ‘significant distortions’ (Tagg

1988, 1–3). This is an issue to which we will return in Chapter 5 when we discuss whether photography is ‘a message without a code’. We may nevertheless grant the unedited photograph at least potential evidentiality.

MODES NOT TYPES

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. A map is indexical in pointing to the locations of things, iconic in representing the directional relations and distances between landmarks, and symbolic in using conventional symbols (the significance of which must be learned).

As we have noted, we are dealing with symbolic, iconic and indexical modes of relationship rather than with types of signs. Thus, Jakobson observes that ‘strictly speaking, the main difference . . . is rather in the hierarchy of their properties than in the properties themselves’ (Jakobson 1963d, 335; cf. 1968, 700). Peirce was fully aware of this: for instance, we have already noted that he did not regard a portrait as a pure icon. A ‘stylized’ image might be more appropriately regarded as a ‘symbolic icon’ (Jakobson 1963d, 335). Such combined terms represent ‘transitional varieties’ (1968, 700). Peirce also 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). Jakobson points out that many deliberate indexes also have a symbolic or indexical quality, instancing traffic lights as being both indexical and symbolic and noting that even the pointing gesture is not always interpreted purely indexically in different cultural contexts (Jakobson 1968, 700–1). Nor are words always purely symbolic – they can be ‘iconic symbols’ (such as onomatopoeic words) or ‘indexical symbols’ (such as ‘that’, ‘this’, ‘here’, ‘there’) (see Jakobson 1966 on iconicity and indexicality in language).

Jakobson notes that Peirce’s three modes co-exist in a ‘relative hierarchy’ in which one mode is dominant, with dominance determined by context (Jakobson 1966, 411). 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. Signs may also shift in mode over time. For instance, a Rolls-Royce is an index of wealth because one must be wealthy to own one, but social usage has led to its becoming a conventional symbol of wealth (Culler 1975, 17).

Consistently with his advocacy of binary relations, Jakobson boldly asserts that Peirce's three modes of relations are 'actually based on two substantial dichotomies' (Jakobson 1968, 700) – an assertion which understandably irritates a Peircean scholar (Bruss 1978, 92). Combining four terms used by Peirce, Jakobson proposes a matrix of his own with *contiguity* and *similarity* on one axis and the qualities of being either 'imputed' or 'factual' on the other. Within this scheme, the index is based on 'factual contiguity', the icon on 'factual similarity' and the symbol on 'imputed contiguity' – leaving an initially empty category of 'imputed similarity' to which Jakobson assigns ostensibly non-referential signs which nevertheless generate emotional connotations – such as music and non-representational visual art (*ibid.*, 700–5).

CHANGING RELATIONS

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.). However, this was not the focus of his concern. Critics emphasize that the relation between signifier and signified is subject to dynamic change: any

'fixing' of 'the chain of signifiers' is seen as 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. 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; cf. 4.448, 4.531). Saussure's emphasis on the importance of the principle of arbitrariness reflects his prioritizing of symbolic signs while Peirce privileges 'the symbol-using mind' (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). While 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 original 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' while 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. 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 1962, 156).

DIGITAL AND ANALOGUE

A distinction is sometimes made between *digital* and *analogical* signs. Anthony Wilden, a Canadian communication theorist, declared 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). While 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 have often tended 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 – a logical extension of Claude Lévi-Strauss's argument that continuous is to discrete is as nature is to culture (Lévi-Strauss 1969, 28). The privileging of the analogical may be linked with 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, while in analogue codes ‘it is almost impossible . . . *not* to communicate’ (Wilden 1987, 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. The North American film theorist 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; cf. Wilden 1987, 138, 224). The art historian Ernst Gombrich insisted 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). Such stances are adopted in relation to images unattached to verbal texts – such commentators would acknowledge that a simple verbal caption may be sufficient to enable an image to be used in the service of an assertion. While 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.

TYPES AND TOKENS

The Italian semiotician Umberto Eco offers another distinction between sign vehicles; this relates to the concept of *tokens* and *types* which derives from Peirce (Eco 1976, 178ff.; 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), while 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. Eco notes that 'grouping manifold tokens under a single type is the way in which language . . . works' (Eco 1999, 146). Language and thought depend on categorization: without categories we would be 'slaves to the particular' (Bruner et al. 1956, 1).

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-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’, written in 1935, the literary–philosophical theorist Walter Benjamin noted that technological society is dominated by reproductions of original works – tokens of the original type (Benjamin 1992, 211–44). 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. 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.

REMATERIALIZING THE SIGN

As already indicated, Saussure saw both the signifier and the signified as non-material 'psychological' forms; language itself is 'a form, not a substance' (Saussure 1983, 111, 120). 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' (ibid., 23). Pursuing this functional approach, he notes elsewhere that the 8.25 p.m. Geneva–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' (ibid., 107). Saussure insists that this is not to say that such entities are 'abstract' since we cannot conceive of a street or train outside of their material realization (ibid.). 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' (ibid., 116). Linguistic signifiers are 'not physical in any way. They are constituted solely by differences which distinguish one such sound pattern from another' (ibid., 117). He admits at one point, with some apparent reluctance, that 'linguistic signs are, so to speak, tangible: writing can fix them in conventional images' (ibid., 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' (ibid.). 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 allude 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’. However, materiality had ‘nothing to do with its representative function’ and it did not feature in his classificatory schemes (*ibid.*, 5.287).

While 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’ (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’ (*ibid.*, 10–11; cf. 28). For Voloshinov, all signs, including language, have ‘concrete material reality’ and the physical properties of the sign matter (*ibid.*, 65). Though a structuralist theorist himself, Roman Jakobson also

rejected Saussure's notion of the immateriality of language, declaring that 'since the sound matter of language is a matter organized and formed to serve as a semiotic instrument, not only the significative function of the distinctive features but even their phonic essence is a cultural artifact' (Jakobson 1949c, 423). Furthermore, although he accepted the traditional view that 'writing . . . is – both ontologically and phylogenetically a secondary and optional acquisition' (Jakobson 1970, 455–6) and that the written word 'as a rule' functions as a signifier for the spoken word, he regarded it as not only 'the most important transposition' of speech into another medium (Jakobson 1968, 706) but also as characterized by 'autonomous properties' (Jakobson 1971d, 718). He expressed his concern that 'written language [is] often underrated by linguists' and referred the reader to Derrida's reversal of this tradition (Jakobson 1970, 455–6).

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-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). 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, while in *displacement* unconscious desire is displaced into an apparently trivial symbol (to avoid dream censorship).

Although widely criticized as idealists, 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 1967a/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 1967b, 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’ (ibid., 210). Some readers may note a degree of (characteristically postmodern) irony in such a stance being adopted by a theorist who also attacks Western materialism and whom many critics regard as an extreme idealist (despite his criticisms of idealism). Derrida’s ideas have nevertheless informed the perspectives of some theorists who have sought to ‘rematerialize’ the linguistic sign, stressing that words and texts are *things* (e.g. Coward and Ellis 1977, Silverman and Torode 1980).

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.).

Theoretical attention has thus been increasingly drawn to the material dimension of language since Voloshinov’s critique of the Saussurean stance (dating from only thirteen years after the first

edition of the *Course*) and this perspective became widely accepted from around the 1970s. More recently, studies have shown that material objects can themselves function directly as signs (more strictly, of course, as signifiers), not only in the form of 'status symbols' (such as expensive cars) but also (in the case of particular objects in their homes which individuals regard as having some special importance for them) as part of the repertoire of signs upon which people draw in developing and maintaining their sense of personal and social identity (Csikszentmihalyi and Rochberg-Halton 1981, Chalfen 1987). People attach 'symbolic values' to television sets, furniture and photograph albums which are not determined by the utilitarian functions of such mundane objects (see also Leeds-Hurwitz 1993, Chapter 6). The groundwork for such thinking had already been laid within structuralism. Lévi-Strauss had explored 'the logic of the concrete' – observing, for instance, that animals are 'good to think [with]' and that identity can be expressed through the manipulation of existing things (Lévi-Strauss 1962). Elsewhere, I have explored the notion that personal homepages on the web function as manipulable objects with which their authors can think about identity (Chandler 2006).

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). The *sign* as such may not be a material entity, but it has a material dimension – the signifier (or sign vehicle). Robert Hodge and David Tripp insist that, '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 and 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 affordances and 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 and 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.

HJELMSLEV’S FRAMEWORK

The distinction between signifier and signified has sometimes been equated to the familiar dualism of ‘form and content’ (though not by Saussure). 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). 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). He offered a framework which facilitated analytical distinctions (ibid., 47ff.). While 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* (see Table 1.7). This strategy thus avoids the dualistic reduction of the sign to form and content.

Within Hjelmslev’s framework 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 and Duck 1976, 149; Metz 1981). Whereas Saussure had insisted that language is a non-material form and not a material substance, Hjelmslev’s framework allows us to analyse texts according to their

	<i>Substance</i>	<i>Form</i>
Signifiers: plane of expression	Substance of expression: physical materials of the medium (e.g. photographs, recorded voices, printed words on paper)	Form of expression: language, formal syntactic structure, technique and style
Signified: plane of content	Substance of content: 'human content' (Metz), textual world, subject matter, genre	Form of content: 'semantic structure' (Baggaley and Duck), 'thematic structure' (including narrative) (Metz)

TABLE 1.7 Substance and form

Source: Based on Tudor 1974

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.