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# 2

## CHARLES SANDERS PEIRCE'S CONCEPT OF THE SIGN

FLOYD MERRELL

### HOW SIGNS HAPPEN

In its simplest form, the Peircean **sign** has been defined as something that relates to something else for someone in some respect or capacity. Now at this point I'm afraid that's about as clear as mud. So obviously, my first task is to spell out the gist of this definition insofar as I am capable in a few brief pages.

**Peirce's** sign sports three components (Figure 2.1). What usually goes for a sign in everyday talk Peirce called a **representamen**. He did so in order to distinguish the representamen from the other two sign components, that, as we shall note, can become signs in their own right. The representamen is something that enters into relation *with* its **object**, the second component of the sign. I will allude to Peirce's object as the 'semiotic object', for it is that to which the sign relates. The semiotic object can never be identical to the 'real' object, since according to Peirce our knowledge is never absolute. Our knowledge can be no more than an approximation to the 'real' world exactly as it is, or better, is becoming. Hence, in a manner of putting it, the 'semiotically real object' we smell, taste, touch, hear, and see is never identical to the 'really real object'. We simply can't know the world just as it is becoming: our minds are too limited and it is too subtle and complex. Consequently, since this 'real object' cannot be completely known once and for all, it can never be more than 'semiotically real' for its interpreters. The third component of the sign is the **interpretant**. It is, roughly speaking and sufficient for our purpose, close to what we would usually take as the sign's meaning. The interpretant relates to and mediates between the representamen and the semiotic object in such a way as to bring about an interrelation between them at the same time and in the same way that it brings itself into interrelation *with* them.

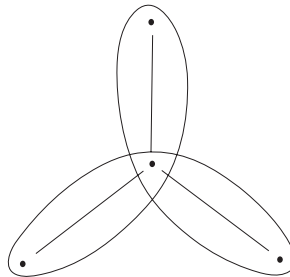


Figure 2.1 The Peircean sign

What I mean by mediation is that a sign component acts as an *intermediary* between the two other sign components. In this act of mediation, most prevalent in the interpretant, the sign component becomes involved with its two companions in such a manner that all three enter into interrelated interdependency. A fully-fledged sign must have a representamen, a semiotic object, and an interpretant, and each of these sign components must enjoy the company of the other two. If not, there is no sign. Sit down to the dinner table and you usually have at the very least a knife, a fork, and a spoon before you. You cut into your steak with the knife, take your soup with the spoon, and dig into your veggies with the fork. All three are necessary to make up your eating utensils. Take any of them away and you either have to drink your soup, pick up your steak with your fork and take bites out of it, or nudge your string beans onto your spoon with your finger.

That is, in your culture, unless you are eating on the run or at a picnic or some such thing, you usually expect three tools for gobbling down your daily fat and cholesterol: knife, fork, and spoon. The spoon gets you started. The knife spreads some butter on a roll. The fork impales a baby carrot. Three different operations? Not really. At the same time, they are all part of one operation: dining. In light of my rather trite culinary metaphors, with respect to the sign, we experience the representamen. It directs our attention to the semiotic object. Then we get some sort of meaning, the interpretant, as a result of the representamen's interrelation with the semiotic object and their own interrelation with the sign's meaning.

As I mentioned above in a somewhat mysterious way, each of the three sign components can become any of the other two components, depending upon the circumstances. For example, a representamen can be a caricature of Winston Churchill found in a history textbook. The semiotic object can be Churchill at Yalta, Russia, in 1945, when he was seated with F. D. Roosevelt and Josef Stalin. The interpretant of the sign consists of the relation between the caricature and the actual figure caught up in an earth-shaking historical event. This event aids us in drawing meaning (the interpretant) from the sign with respect to: our knowledge of World War II, the defeat of the Third Reich, the rise of Russia's international political stock as a result of its role in the war, Stalin's power move, Roosevelt's bad health that rendered him less diplomatically effective than he might otherwise have been, and Churchill's astute, occasionally prophetic, views. All this emerges from a solitary caricature. But that is not all. Subsequently, the semiotic object, Churchill as a physical specimen of humankind, can become a representamen whose own semiotic object is his scowl in the photograph at Yalta. The interpretant, a mediative interrelationship between the man and his facial expression, becomes stubborn pride and dogged persistence in the effort to defeat what Churchill conceived as terribly destructive forces. Or perhaps the original interpretant, Churchill at Yalta, can become a representamen. In such case the Yalta Conference itself can become the semiotic object, and the interpretant has to do with the outcome of the meeting between the three world leaders. Notice that each sign began with a representamen. The representamen interrelated with its semiotic object. Then the semiotic object became a representamen in its own right. Still

later, the interpretant became a representamen that subsequently took on its own semiotic object and interpretant.

Another example. The representamen may be a cloud of smoke that suddenly appears over a cluster of silver-tipped spruce in the Rocky Mountain National Park in Colorado. A Ranger spies the sign. Immediately a semiotic object, fire, comes to mind. Then there is an interpretant that mediates and brings the representamen and semiotic object together to create the concept of a dangerous situation that demands immediate action. The Ranger calls for help, and moves in for a closer look. There's the fire! The semiotic object suddenly becomes the representamen whose semiotic object points toward the physical destruction that the flames are wreaking on the natural habitat. A quickly constructed interpretant tells the Ranger that the condition is more severe than she had originally suspected. The apparent danger, from her original interpretant, becomes a representamen that provokes a semiotic object involving a nearby campground. An interpretant involving danger comes into the picture. The thought of danger evokes yet another representamen, campers, the semiotic object for which is the combination of flames surrounding and trapping human beings. The interpretant brings on the emerging concept of victims of yet another forest fire during this hot, dry summer season. Signs become other signs, which in turn give way to more signs, and the stream flows on.

Yet another example, if I may. You are pumping iron in your basement while the TV blares out an athletic event. Then a commercial disturbs your concentration on your weights. You hear 'Coke is it!' Ah, yes. You're sweating, panting, and ready for a break. You head for the refrigerator upstairs. But wait a minute. 'Coke' is what? There was nothing actually said in the commercial about quenching your thirst. In fact, you weren't even watching the boob tube. You were only listening to it while bench pressing big pounds and grunting appropriately. So where's the bite to the sign? The bite is in that sound, 'Coke!', that you've heard hundreds of times. It is nothing more than a syllable, a simple representamen. But you have become so familiar with it, like millions of other people throughout the world, that it immediately translates you into a feel for its semiotic object, a bottle or can of the cold, brown, effervescent stuff. Your tongue suddenly feels a little drier, your body a little hotter and sweatier, your muscles a bit more weary. You come in tune with the proper interpretant, with hardly any need consciously and conscientiously to think it or say it. Soon, with a can of 'Coke' in hand and once more at the bench and contemplating your iron, your previous semiotic object has become a representamen, its own semiotic object is the contented cool feeling in your stomach and your gut, and the interpretant is that pause that relaxes. Now, your limp, slumping posture becomes yet another representamen that interrelates with your prior sweaty, exhausted, somewhat dehydrated condition as semiotic object. And the interpretant? It's the mediated interrelation, the interdependent emergence of your loose and limber condition. Relax a little more. After all, there's no sense in overdoing it. Enough pain and little gain for one day. You remain flopped on the sofa soon to become glassy-eyed before the one-eyed monster. Signs evoke and provoke more signs, which in turn bring on more signs, without end.

## A TALE OF THREE SIGNS

The most basic classes of signs in Peirce's menagerie are **icons**, **indices**, and **symbols**. An icon is a sign that interrelates with its semiotic object by virtue of some resemblance or similarity with it, such as a map and the territory it maps (a photograph of Churchill is an icon of the original item). An index is a sign that interrelates with its semiotic object through some actual or physical or imagined causal connection. A weathervane obediently moves around to point (indicate, index) the direction of the wind due to the action of the wind on the object (smoke was for the Ranger an index of fire).

A symbol is somewhat more complicated. The series of signs in the above paragraph highlights with a symbol, 'Coke', a sign whose interpretation is a matter of *social convention*. One of the best qualifications of Peirce's symbol is a linguistic sign whose interrelation with its semiotic object is *conventional*. This is to say that there is no necessary natural link (as with the index) or a link due to some resemblance or similarity (as with the icon) between the representamen and the semiotic object. The phonetic sounds or the inscribed letters 'Coke' have no necessary connection to the actual item. The sounds are in the beginning in some form or other *arbitrary*. They could have been virtually any other sounds or marks on paper. For instance, we could all get together and agree that 'Coke' should be replaced by 'Schlarch'. If over time whenever we said or heard or wrote or read 'Schlarch' we thought about that familiar soft drink, we would have our own little social convention regarding a symbol and its semiotic object and interpretant. We wouldn't communicate much with anyone outside our group. But that's OK. When amongst ourselves we would get along fine. Our conventional symbolic sign would serve our purposes quite well. We are now obviously *motivated* by the sign, 'Schlarch'. We are motivated by it because in our little **speech community** we have experienced, we experience, and in the future we expect we will experience, the 'pause that relaxes' as 'Schlarch'. This new sign has become an increasingly entrenched part of our collective, conventional semiotic activities. The interrelations within the sign between representamen, semiotic object, and interpretant are now much more than merely arbitrary.

So we have icon, index, and symbol. Peirce's basic triad: 'One, Two, Three'. 'One' is preceded by 'Zero', that 'emptiness' from whence the sign emerged. And 'One, Two, Three' are potentially followed by 'more', 'many more', up to 'Infinity', since 'Coke' or any other sign can be – and probably will be in the case of 'Coke' – repeated virtually without end. 'Zero, One, Two, Three, . . . Infinity'. It has a certain ring to it, doesn't it? This apparently simple counting game calls for a consideration of Peirce's categories.

## THE CATEGORIES

Engendering and processing signs and making them meaningful are more than merely getting information out of them or making sense of them. It is a matter of



an intricate interplay between what Peirce called **firstness**, **secondness**, and **thirdness**. Firstness, secondness, and thirdness make up Peirce's categories by means of which **semiosis** – the process of signs becoming signs – is qualified and cognized by way of **semiotics** – the process of rendering signs meaningful. Peirce developed the categories in order to account for the feeling, sensation, experience and conceptualization of signs. Since sign processing, from feeling to conceptualization, is just that, process, signs can have no determinable and self-ordained closure. The categories in this manner might be considered tendencies rather than forms, conditions of becoming rather than static signs attached to things. Or, commensurate with physicist Werner Heisenberg's (1958) concept of the quantum world, the categories are *possibilities* and *potentialities* more than *actual* essences. As possibilities, firstness inheres; as actualities, secondness emerges, and as potentialities for future signs becoming signs, thirdness comes into the picture. These categories make up Peirce's fundamental triad of relations as follows:

- 1 Firstness: what there is such as it is, without reference or relation to anything else.
- 2 Secondness: what there is such as it is, in relation to something else, but without relation to any third entity.
- 3 Thirdness: what there is such as it is, insofar as it is capable of bringing a second entity into relation with a first one and it into relation with each of them.

'One, Two, Three'. It seems as simple as that. But from simplicity, complexity emerges. If we include 'Zero' and 'Infinity' along with 'One, Two, Three', then you can see why. Nevertheless, in schematic form, to all appearances the categories are quite straightforward. Firstness is *quality*, secondness is *effect*, and thirdness is *product in the process of its becoming*. Firstness is possibility (*a might be*), secondness is actuality (*what happens to be* at the moment), and thirdness is potentiality, probability or necessity (*what would be, could be, or should be*, given a certain set of conditions).<sup>1</sup>

In art, firstness might be a two-dimensional rectangular patch of color on a Picasso canvas. Secondness in such case would be that patch's interactive interrelations to other rectangular, triangular and irregular patches in the painting. Thirdness would be the viewer's putting them all together into an imaginary three-dimensional image as if seen from the front, from the back, from the right side, from the left side, from above, and from below, all in simultaneity. In poetry, firstness is a few lines as marks on paper in terms of their 'possibility' for some reading somewhere and somewhen by some poetry lover. Secondness is their actual reading and their interrelation with the reader's present mindset and memories of the past and readings of many other lines of poetry. Thirdness is the reader's interaction with the poetic lines in such a manner that meaning emerges for her at that particular moment. In everyday life, firstness is a double arch of bright yellowness in the distance. Secondness is the interrelation established by

some hungry observer between the curved, elongated yellowness and a colorful building underneath it. Thirdness is recognition of that familiar establishment as McDonald's.

However, like all schematic categorizations, this one is somewhat deceptive. In reality, firstness, in and of itself, is not an *actual* concrete quality (like, for example, a mere sensation of the color and form of an apple that we might be looking at at this moment). It is nothing more than a possibility, a pure abstraction – abstracted, separated from everything else – as something enjoying its own self-presence and nothing more: it cannot (yet) be *present* to some conscious semiotic animal *as* such-and-such. It is an entity without defined or definable parts, without antecedents or subsequents. It simply *is what it is* as pure possibility.

*What* is perceived belongs to the category of secondness. It is a matter of something actualized in the manner of *this* happening *here, now, for* some contemplator of the sign. As such it is a particularity, a singularity. It is what we had before us as firstness, such as for example, a vague 'red' patch without there (yet) existing any consciousness of it or its identification as such-and-such. Now, a manifestation of secondness, it has been *set apart from* the self-conscious contemplator, willing and ready to be *seen as*, say, an apple. However, at this point it is not (yet) an 'apple', that is, it is not a word-sign identifying the thing in question and bringing with it a ponderous mass of cultural baggage regarding 'apples' (the particular class of apples of which the one before us is an example, what in general apples are for, their role in the development of North American culture, in folk lore, in fairy tales, health lore, and so on). At the first stage of secondness, the apple is hardly more than the possibility of a physical entity, a 'brute fact', as Peirce was wont to put it. It is one more thing of the furniture of the self's physical world. It is **otherness** in the most primitive sense. If firstness is what *is as it is* in the purest sense of possibility, secondness is pure negation insofar as it is *other*, something other than that firstness.

Thirdness can be tentatively qualified as that which brings about mediation between two other happenings in such a manner that they interrelate with each other in the same way they interrelate with the third happening as a result of its mediary role. This mediation creates a set of interrelations the combination of which is like firstness, secondness, and thirdness twisted into a Borromean knot (recall Figure 2.1). The knot clasps the categories together by means of a central 'node' in such a way that they become interrelatedly, interdependently conjoined by the virtual 'emptiness' of the 'node.' Due to the mediary role of thirdness, each of the categories can intermittently play the role of any of the other categories. Yet at a given space-time juncture, one of the three will be a first, one a second, and one a third. This *semiotic interdependence* would not have been possible without thirdness, for without it, there is just one damn thing and its other, an other damn thing and that which preceded it. As Lawrence Welk says in his oldie show, 'A one, a two, . . .' and then the band comes to life – well, almost. Without the third element, the band, there would be no music. Just as the numbers are preceded by 'Zero', 'silence', 'emptiness', so also, once begun, the band must go on, potentially to

‘Infinity’ – or at least until the music stops. Without thirdness, without the music, there is no semiosis and no life.

To summarize, firstness is *possibility* (a *might be*), secondness is *actuality* (what *is*), and thirdness is *potentiality*, *probability*, or *necessity* (what *could be*, *would be*, or *should be*, given a certain set of conditions). Firstness, in and of itself, is not an identified concrete quality of something (like, for example, the raw feeling of some body of water we might happen to glance at). It is nothing more than a possibility, a pure abstraction – abstracted, separated from everything else – as something enjoying its own self-presence and nothing more: it cannot (yet) be present to some conscious semiotic observer as such-and-such. It is an entity without defined or definable parts, without antecedents or subsequents. As such it is the bare beginning of something from ‘emptiness,’ of something from the possibility of everything; it is at once everything and nothing, it simply *is*, as possibility.

Now, I must concede that I have oversimplified Peirce’s concept of the sign inordinately. However, what needed to be written has been written, I would hope. At least it has become evident that, since in the Peircean tradition virtually anything can be a sign, the definition of a sign must indeed be of the most general sort. It is not simply a matter of the question ‘What *is* a sign?’ but ‘What *is it like to be* a sign?’ and ‘What does a sign *do*?’ Signs are not special kinds of things, but rather, anything can be a sign if it manifests sign functions. The Peircean sign is often taken as something that *stands for* something *to* someone *in* some respect or capacity. However, with respect to the mind-set of our contemporary milieu, I must express my displeasure with the concept of a sign’s ‘standing for’ (as well as ‘referring to’, ‘corresponding to’, and ‘representing’) something. More properly, a representamen, when at its best, interrelatedly and interdependently emerges with all other signs. At the same time, it interrelates and participates with something (its respective semiotic object). And, in light of the above definition, the representamen and its semiotic object are mediated by a third term, the interpretant. As a result of such mediation, the sign takes on value, **meaning**, and importance as a representamen doing its thing along with its neighbors within the vast river of semiosis – the process of signs becoming other signs. The sign also interdependently interrelates and participates with some interpreter, who is in the act of processing the sign. What is of utmost importance, all three sign components, representamen, semiotic object, and interpretant, can become themselves, signs – that is, representamens.

In light of our ‘Coke’ example, human communities unfortunately place undue priority on the symbolic mode. The human tendency is to ‘linguicize’ (symbolize) all signs. This tendency has become endemic in our increasingly wordy cultures. Yet, in the affairs of everyday life, all three sign types, icons, indices, and symbols, never cease to make their presence known. For example, a McDonald’s franchise can be the semiotic object of a sign consisting of a billboard with a replica (icon) of the Golden Arches for a carload of hungry stomachs. Or the Golden Arches can be the (indexical) representamen that brings on its semiotic object, the colorful

building that invariably finds itself next to familiar arches. In both cases the meaning or value (interpretant) attributed to the class of all McDonald's establishments interrelates with the physical structure of a particular McDonald's feeding trough. Then the car rounds a curve in the highway, and: There are the Golden Arches! Which brings on the boisterous evocation, 'Chow time!' (symbol). In another possible scenario, the word 'McDonald's', accompanied by its conventional meaning and value, can be the representamen for that which the passengers of a fast-moving vehicle are in search. Then the physical structure makes its appearance as the semiotic object actualized, and both are mediated by the interpretant to give the sign value and meaning. Finally, car securely parked, passengers pour out, licking their chops. They enter. The aromas, the din, the employees barking orders, money out of one set of hands and into another one, a walk past munching mouths, the feel of unrelenting plastic seats, the bland taste. All are signs. Most of them are basically pre-symbolic icons and indices. We live in a world of icons and indices more than a world of words (symbols).

Signs can also become other signs and in the process take on radically distinct meanings, depending upon the set of experiences and the expectations of the signs' interpreters. A rock is just a nuisance when in the back yard of your neighbor who has taken up gardening as a pastime. He transfers it from one place to another, often threatening to get rid of it or bury it a few feet under. The rock (representamen) is a sign, whose semiotic object (this rock here, which disturbs otherwise pleasant gardening experiences) interrelates with a sense of frustration, given the sign's negative value and meaning (its interpretant). The sign would be better off in somebody else's back yard as far as he is concerned. One day while you are chatting with him across the fence, you spy the rock. But, . . . what's that? Why it is no rock at all. It is a fossil! You reveal your discovery to your neighbor friend, and are met with 'Yeah? Well get it off my hands if you like. I'm tired of looking at it.' His 'rock' (representamen<sub>1</sub>), with a negative interpretant, became another sign, your 'fossil' (representamen<sub>2</sub>), the 'rock' that has now taken on a positive interpretant. The sign became, was transformed into, another sign. In the process the semiotic object became something entirely different than what it was, and the interpretant became something radically distinct as well.

Comparable sign transformations occur daily. They are commonplace in all walks of life. They even occur in that most rigorous of disciplines, physics. The ancient Greek, Democritus, believed atoms to be solid, impenetrable spheres. This concept is entirely incompatible with the notion of 'clouds'. However, in the twentieth century, physicist Erwin Schrödinger convinced the scientific community that 'atoms' have nothing to do with 'solid, impenetrable spheres' at all. Rather, they are more like 'clouds', or so to speak, 'wave packets'. Democritus's atoms became Schrödinger's atoms. The two atoms are well nigh incompatible with each other, though the same word, 'atoms', prevailed. Moreover, in both cases a metaphor inhered. Why a metaphor? Because metaphors have a habit of saying what a thing *is* by saying what it *is not*. Thus they are among the most efficient agents of sign change. 'Men are beasts' is true. Well, at least 'men' are 'beasts'

as far as the woman making the statement and other women and perhaps even a few men are concerned. Yet 'men' are not 'beasts', according to the customary classification of the word 'beasts'. The sign 'beasts' becomes what it was not, 'men', and at the same time 'men' become what they ordinarily are not, 'beasts'.

Even effects can do an about-face and become causes, and vice versa, depending upon incessantly shifting perspectives. Cause–effect sequences appear largely indexical. The wind 'causes' a weathervane to point in the direction of its blowing; the rising temperature 'causes' the mercury column in a thermometer to rise. If we were children or poets we could conceive of a mercury rise 'causing' the temperature to go up. Smoke is ordinarily not considered the 'cause' of fire. But if a smoker falls asleep in bed and the mattress catches fire, it could be said that the 'smoke' was the 'cause' of the fire. The 'cause' of a plane crash might have been attributed to the weather. Then evidence showed that the pilot had too much to drink, and the 'cause' becomes the 'effect' of alcohol which in turn created the 'cause' of the accident. In exceedingly more complex situations, cause and effect are not as clear-cut. Does poverty 'cause' teen pregnancies or do teen pregnancies 'cause' conditions that contribute to poverty? An answer can't be pinpointed. Consequently, arguments can be presented in favor of both factors as whether 'cause' or 'effect', depending on the viewpoint.

These sign *transformations* are the product of what I will call sign *translations*. Iconically speaking, Democritus's 'atoms' become Schrödinger's 'atoms', or indexically speaking, a 'cause' becomes an 'effect'. These translations are chiefly the result of the ways and means of language use, of symbols. Icons bring two compatible signs together into what is conceived as essentially one sign. Indices link signs together in what appears to be as natural a process as can be. Symbols, in contrast, are at their best when breaking signs up and putting them into pigeon-holes. Thus we have 'good' and 'evil', 'true' and 'false', 'men' and 'women', 'right' and 'left', 'black' and 'white', and all such discriminations. Thus signs, symbolic signs, can be authors of radical translations: Democritean 'atoms' to Schrödingerian 'atoms', 'teen pregnancy' as 'cause' to 'effect', and so on.

Translations can require as radical a switch as Spanish writer Miguel de Cervantes's Sancho Panza taking a windmill to be just another windmill, while his lord, the venerable Don Quixote, sees a giant or a dragon lumbering toward him. They are as unruly as Bill Clinton considered by one citizen as 'our president and a damn good one, whose private life is his own and none of my business', while for another citizen, he 'is an embarrassment to our country and should be impeached'. But actually, why can't virtually any and all combinations of words and images and things change radically over time? Such radical change becomes evident when one takes into account that 'atoms' have been (1) solid impenetrable spheres; (2) spheres with hooks on them so as to hold onto other spheres and make molecules; (3) like a plum pudding; (4) like the solar system; (5) largely vacuous; (6) like a hazy cloud; (7) the source of over 200 subatomic particles; and (8) virtually nothing at all? – each of these eight views have actually been attached to 'atoms' at one period or another in the history of science. Which is more bizarre,

the delirious outpouring of Don Quixote, or the utterance 'An atom is a hazy cloud' reaching the ears of Democritus of old or chemist John Dalton in the early part of the nineteenth century? What is a moose for one party may by some quirk of the imagination be a salamander for another one: a goose taken as a gander is much too tame for this game.

In this light, I would rephrase the customary Peircean definition of the sign as: *anything that interdependently interrelates with its interpretant in such a manner that that interpretant interdependently interrelates with its semiotic object in the same way that the semiotic object interdependently interrelates with it, such correlations serving to engender another sign from the interpretant, and subsequently the process is re-iterated.* Now that was another mouthful. Yet it's basically the way of all signs, I would submit, with stress on the notions of interdependency, correlations, interrelatedness, and above all participation. I have taken my cue once again from Peirce, according to whom a sign is something by means of which we know something we did not previously know.

### THE THREE SIGN TYPES SCHEMATIZED

Now, everything I have written in this section suggests that a sign can be in varying degrees iconic, indexical, and symbolic, all at the same time. A sign's evincing one sign type does not preclude its manifesting some other sign type as well. There are no all-or-nothing categories with respect to signs. As one sign type is, another sign type can become, and what that sign was may become of the nature of the first sign that the second sign now is. Putting things into neat pigeon-holes might allow us some security, but it is a tenuous game, since signs simply cannot stand still. Their incessant dance cannot help but whisk us along the semiotic stream, in spite of our stubborn need for stability. In sum, we have Table 2.1.

Table 2.1 Sign types

<i>Sign type</i>	<i>Icon</i>	<i>Index</i>	<i>Symbol</i>
semiotic mode	similarity	causal or natural relation	convention
practical examples	photograph painting diagram touch of silk musical note sweet smell	smoke for fire symptom for disease thermometer for heat crash for falling log feel of fur for cat tail sour taste for lemon	word insignia Morse code logical sign algebraic sign
how to make and take them	feeling sensation	perception inference action-reaction	learning by instruction and by doing

Practical examples of icons include obvious signs: photographs, paintings, diagrams (and figures and caricatures). The smooth feeling of a piece of fabric reminds one of silk through the association of resemblance. A musical note is an auditory sign that one can sense is comparable to a note in a particular tune. The relation is tentatively established between the note overheard and a note from the repertoire of tunes one has stored in one's memory bank. A sweet smell in the chemistry laboratory reminds one of bananas or pineapple, which is appropriate for a class of compounds called esters. In each case there is a vague association by virtue of a commonality between the feeling one has now and one's memory of past feelings. But, I must emphasize, the feeling is no more than a feeling at the outset. For that reason the feeling remains vague, indefinite, relatively uncertain. No *other* of the sign, the sign's semiotic object or its interpretant, has at this point entered the scene. There has not been any determination of the class of signs to which this particular sign here and now belongs. Those signs can come a fraction of a second later, as we shall observe below.

Smoke for fire, a symptom for a disease, a thermometer for gauging the amount of heat in the atmosphere. These are all visible signs that lead one to the sign's other, whether by the shock of a pleasant to disconcerting surprise, or by acknowledgment of what was expected to be the case. A loud crash caused by a log or any other large object is auditory, the feel of an elongated furry object is identified as a cat, and the acrid taste of some yellow liquid is related to a lemon. These signs are nonvisual, yet their function is as indexical as visual signs. Then these signs can be qualified in terms of the magnitude of the fire, the type and severity of the disease, and the numerical value of the temperature. All that comes later, however. For now, we are in indices of the basic sort. Proceeding on down the semiotic stream brings on at least the rudiments of language use, of symbols.

Words, the Morse code, and logical and algebraic signs, are for the most part arbitrary in the beginning though in their practice they have become conventional and they motivate their makers and takers customarily to respond along predetermined pathways. Insignias, as well as flags, shields, banners, and labels insofar as there is no necessary connection between the sign and the physical world object, act, or event with which they interrelate, are ordinarily not set out in linear strings, as are natural and artificial language. They are most properly symbols, nonetheless. They are not made and taken in terms solely of feelings and sensations or by perception and inferential process or habitual actions and reactions. On the contrary. They must be learned by explicit instruction. This instruction is for the most part imparted through symbolic signs.

Suppose in high school you are learning to fill out a tax form. You are given verbal instructions and a booklet to read. There are still gaps: questions, vagueness, uncertainty. In order to fill in some of these gaps, you learn by observing what parents, teachers, and other role models do when they do their taxes. These examples serve fundamentally as icons. Then you try to duplicate what you have observed. The icons are extended. They merge with indices, for you have become the other of the original examples when you attempt to image that original in iconic fashion.

Thus, learning begins to take place, by virtue of icons, indices, symbols. Then by much practice, speculation, contemplation, and perhaps even meditation, you can, over time, become proficient at the semiotic activity in question.

## NOTE

- 1 For further, Almeder (1980); Hookway (1985); Merrell (1995a, 1995b); Savan (1987–88), for a consideration of Peirce's sign theory, see Sebeok (1976a, 1991b, 1994) and Sheriff (1989, 1994), for a collection of Peirce's writings, Hoopes (1991), Peirce (1992).

## FURTHER READING

- Merrell, F. (1995) *Peirce's Semiotics Now: A Primer*, Toronto: Canadian Scholars' Press.
- Merrell, F. (1997) *Peirce, Signs and Meaning*, Toronto and London: University of Toronto Press.
- Peirce, C. S. (1992) *The Essential Peirce: Selected Philosophical Writings*, vol. 1, (ed.) N. Houser and C. Kloesel, Bloomington: Indiana University Press.
- Savan, D. (1987–88) *An Introduction to C. S. Peirce's Full System of Semeiotic*, Toronto: Victoria College.
- Sebeok, T. A. (1994) *Signs: An Introduction to Semiotics*, Toronto: University of Toronto Press.