

The Philosophy of Charles Sanders Peirce

Lecture 4: Signs

Erik Curiel[†]

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This lecture discusses Peirce (1873), Peirce (1885a), and Peirce (1894).

[†]**Author's address:** Munich Center for Mathematical Philosophy, Ludwig-Maximilians-Universität; Black Hole Initiative, Harvard University; Smithsonian Astrophysical Observatory, Radio and Geoastronomy Division; email: erik@strangebeautiful.com

1 Background: Semiotic

[I]t has never been in my power to study anything, – mathematics, ethics, metaphysics, gravitation, thermodynamics, optics, chemistry, comparative anatomy, astronomy, psychology, phonetics, economics, the history of science, whist, men and women, wine, metrology, except as a study of semiotic.

– Peirce

in a letter to Victoria, Lady Welby (1908)

What It Is

Semiotic, for Peirce, is (broadly speaking) the theory of signification, interpretation, representation, reference and meaning, all with regard to *signs*. This is for Peirce a much broader field of investigation than accounts of signification, interpretation, representation, reference and meaning (especially the last two) tend to be in contemporary philosophy and its recent history. This is because—let’s face it—for Peirce almost everything involved in human activity is a sign, not just entities specifically involved in language (and communication more broadly speaking), and the account of signification, . . . , for all signs is fundamentally the same across the board.

From hereon, to avoid tedious repetition, I shall use “signification” to refer to what I gestured at above with the list “signification, interpretation, representation, reference and meaning”. If something I say pertains more specifically to one or a proper subset of them, I shall use the relevant name or names.

Peirce postulated the trichotomy (what else?) of the study of signification that became (at the hands of Morris and Carnap) the modern fields of syntax, semantics and pragmatics, but, for Peirce, while this might be a useful way to divide the topic for sociological and practical purposes (no one, not even Peirce, can work on everything at once), in his own mind these fields were not sharply demarcated, but each deeply informed by and commingled with the others.

Perhaps his most striking, original and important ideas, both for Peirce’s own philosophy and with regard to his influence on later philosophical and linguistic work, are those about the role of humans and their cognitive (and more general psychological) processes in signification, what may in part be crudely thought of in today’s terms as *pragmatics*. Earlier thinkers had of course acknowledged that cognitive processes played a role in accounting for meaning, but that role was always viewed as fundamentally passive. For Peirce, thinking is itself a sign, and signification in general cannot be understood without taking this into account.

Historical Background

Peirce was not the first to give an account or theory of signs and their signification. His account stands out historically, however, for (at last) two reasons:

1. the account is far more complex, sophisticated and nuanced than any that had come before, to the point that one may reasonably say it constituted a new epoch in the study of such things (much as Newton’s *Principia* did in physics, albeit without the immediate impact of

Newton's work);¹

2. Peirce imbued it with a philosophical fundamentality and centrality that no previous thinker had accorded it, using it as one of the cornerstones of his philosophy, foreshadowing (and inspiring) much of 20th Century Anglo-American analytic philosophy's attendance to and use of language as the root of all philosophy (Russell, Wittgenstein, Carnap and the Logical Positivists and Empiricists, the British ordinary language philosophers, Quine's weak-ass naturalism, all of Putnam's incarnations, Lewis's possible worlds, ...), and much the same for 20th Century European post-modernism, post-structuralism, phenomenology and the Critical School (Husserl, Derrida, Foucault, Deleuze, Marion, Adorno, Habermas, Apel ...); indeed, starting with Chomsky's generative grammar, Peirce's ideas more and more have directly inspired and shaped work in the field of linguistics, considered apart from philosophy.

To get a sense of how far Peirce's thought on these matters outstripped his predecessors, consider the opening to Aristotle's *De Interpretatione* (1.1):

Words spoken are symbols or signs of affections or impressions of the mind; written words are the signs of words spoken. As writing, so also is speech not the same for all races of men. But the mental affections themselves, of which these words are primarily signs, are the same for the whole of mankind, as are also the objects of which those affections are representations or likenesses, images, copies.

Consider also Augustine as interpreted by Wittgenstein (*Philosophical Investigations*, ¶1):

When they (my elders) named some object, and accordingly moved towards something, I saw this and I grasped that the thing was called by the sound they uttered when they meant to point it out. Their intention was shewn by their bodily movements, as it were the natural language of all peoples: the expression of the face, the play of the eyes, the movement of other parts of the body, and the tone of voice which expresses our state of mind in seeking, having, rejecting, or avoiding something. Thus, as I heard words repeatedly used in their proper places in various sentences, I gradually learnt to understand what objects they signified; and after I had trained my mouth to form these signs, I used them to express my own desires.

(Augustine, *Confessions*, 1.8) These words, it seems to me, give us a particular picture of the essence of human language. It is this: the individual words in language name objects—sentences are combinations of such names. — In this picture of language we find the roots of the following idea: Every word has a meaning. This meaning is correlated with the word. It is the object for which the word stands.

Pay particular attention to the role the mind plays in Augustine's recounting: it is the passive receptacle of meaning, and in particular plays no mediating role in the relationship between words

1. Ferdinand de Saussure developed his theory of "semiology" around the same time as Peirce, and that had a similar richness and complexity that set it apart from previous accounts. To the best of my knowledge, however, neither was aware of, or at least influenced by to any substantive degree, the other.

and their objects. It is not an exaggeration to say that essentially all subsequent thought on language and meaning adhered to this picture, up to the 19th Century.

Development of Peirce's Thought

Broadly and crudely speaking, divides into 3 periods:

1. early (1860s-1870s), with all the central ideas and themes already in place, but not greatly elaborated;
2. middle (1880s up to about 1903), much more elaborate and sophisticated, one might almost say complete, with a clean internal coherence;
3. late (1904 and later), a speculative and sprawling attempt to completely overhaul his earlier thought, never put into a final coherent form.

We will focus on the early and middle periods in this lecture, treating them more or less as continuous with each other, not sharply distinguishing them. (We will treat his later views in Lectures 12–14, covering the 1903 Harvard Lectures on Pragmatism.)

Nagging Question

Given Peirce's views on meaning, that (crudely speaking) it comes from or just is the *habituated* role linguistic symbols play in oft successful human activity (or something like that), why does he create awkward neologisms for every single one of his important technical concepts? Is he trying to emphasize that his concepts are so novel as to never have played a role, in any (even if only inchoate form) in human activity before? Surely not. Is he attempting to force the generation of a new habituated use, both to guard against misunderstanding that would come from conflation of meaning with previous habituations, and to ensure that circumstances conduce as much as possible to the reader's (or auditor's) being forced to Think (in the technical sense of Peirce 1894) critically and deeply about Peirce's conceptions? If not, what then?

2 Trichotomous Nature of Mental Activity

The following is based on Peirce (1894). Before starting, however, we should pause to reflect on the question: why did Peirce feel it necessary to begin the address of the titular question with an analysis of the nature and classification of mental processes? Perhaps because: for Peirce there are no mental processes without signs, and no signs without mental processes.

Before beginning, we must (as always) ask: what is the ground and justification for this classification? What is his methodology?

The classification of mental processes:

Feeling a fundamental oneness (p. 4):

... a state of mind in which something is present, without compulsion and without reason.... [W]hen we are awake, something is present to the mind, and what is present, without reference to any compulsion or reason, is feeling.

1. how can we have knowledge of such a mental process?

Reaction a fundamental twoness (pp. 4–5):

This sense of acting and of being acted upon, which is our sense of the reality of things,—both of outward things and of ourselves,—may be called the sense of Reaction. It does not reside in any one Feeling; it comes upon the breaking of one feeling by another feeling. It essentially involves two things acting upon one another.

1. think of Descartes’s opening to his *Passions of the Soul*: “That what is passion in regard of the subject, is always action in some other respect.” (Hey, not *everything* the dude said is total crap.)

Thinking a fundamental threeness (p. 5):

[The agent] is aware of learning, or of going through a process by which a phenomenon is found to be governed by a rule, or has a general knowable way of behaving. He finds that one action is the means, or middle, for bringing about another result. . . . [T]here is a sense of government by a general rule. . . . [I]n government there is a third thing which is a means to an end.

1. why does Thinking necessarily involve a rule, and what is a “rule” in this context?
2. I think: individual, peculiar relations in a mental process are mere Reactions; what is apt for *governance*, *i.e.*, acting *in a certain way*, requires a universal to embody “the certain way”, and thus the presence of a third thing (Feeling as token of the rule type) *qua* vehicle of representation required for “governance” in an epistemically substantive way
3. “rules” here are, at least in large part, a form of *habit*, which also has a technical sense for Peirce, being founded on *experience*, yet another technical term given content (but not clear definition) in his discussion of indices (§5)

Note the following general features of the account.

1. all three are activities, or, perhaps more accurately, processes, not states or capacities; by the time we get to Reaction, moreover, there is already a fundamental thirdness to the idea: we are involved as as patient (recipient of the Feeling), as agent (what reacts to the Feeling), *and* as process (the Reaction itself)—we are, thus, already in this mode of mental activity, a sign in his technical sense (§3 below)
2. all three of these admit continuous gradation, and that in 2 ways (pp. 4–5):

Except in a half-waking hour, nobody really is in a state of feel- ing, pure and simple. But whenever we are awake, something is present to the mind. . . . ¶ As the most rudimentary sense of Reaction involves two states of Feeling, so it will be found that the most rudimentary Thought involves three states of Feeling.

- a. continuity of division into types:

- i. there are clear cases when there are 2 versus when there are 3 Feelings (Reaction versus Thinking), but more generally there is a continuous “flow” between them, the principle of individuation not being always clear
 - ii. think of the following (real life!) example: I am walking down the sidewalk reading “What Is a Sign?”, engrossed in it; seemingly without clearly distinguished conscious volition (but also seemingly not entirely without conscious volition) I step over the end of a scooter sticking into the sidewalk—Reaction or Thinking? it has elements of both, and can go either way
 - iii. the boundary between Feeling and Reaction is similarly vague and nebulous, or only roughly determined, with intermediate cases sharing features of each; an example: one stands in the hot shower enjoying the pure sensation of liquid warmth, one’s mind otherwise empty; slowly, without one’s awareness, the temperature of the water rises, until it gradually introduces discomfort leading eventually to one’s stepping out of the stream; somewhere along the way, Feeling passed over into Reaction, but where exactly?
- b. continuity in the richness and character of the contents of each:
- i. in the most rudimentary case of a Feeling itself, it is the content of the half-awake, half-asleep state
 - ii. in the most rudimentary case of Thinking, the third component, which is a rule, is also a Feeling; clearly, this must be cognitively richer and more structured than the content of the half-awake case
- c. in less rudimentary cases of Thinking (and also Reaction), the third component (the rule) will, presumably, not be a simple Feeling, but will itself be a case of Thinking, that is, a sign: so signs will be involved in the construction and interpretation of other cognitive signs—it’s signs all the way down, youngster
3. the conclusion of this introductory section (end of §1) is suggestively self-referential (p. 5):

As we advance into the subject, these ideas, which seem hazy at our first glimpse of them, will come to stand out more and more distinctly; and their great importance will also force itself upon our minds.

To follow Peirce on this path is necessarily to Think (learning), and so we may come to understand the subject better by observing how we come to understand it—again, the circularity or regress of signification, but a virtuous not a vicious one.

3 Trichotomous Nature of Signs

Peirce (1873):

A sign is an object which stands for another to some mind. . . In the first place like any other thing it must have qualities which belong to it whether it be regarded as a sign or not. . . [,] its material quality. In the next place a sign must have some real connection with the thing it signifies so that when the object is present or is so as the sign signifies

it to be, the sign shall so signify it and otherwise not...[,] their pure demonstrative application... In the 3rd place it is necessary for a sign to be a sign that it should be regarded as a sign for it is only a sign to that mind which so considers and if it is not a sign to any mind it is not a sign at all. It must be known to the mind first in its material qualities but also in its pure demonstrative application. That mind must conceive it to be connected with its object so that it is possible to reason from the sign to the thing.

Peirce (1885a):

A sign is in a conjoint relation to the thing denoted and to the mind.

Peirce (1894):

There are three kinds of interest we may take in a thing. First, we may have a primary interest in it for itself. Second, we may have a secondary interest in it, on account of its reactions with other things. Third, we may have a mediatory interest in it, in so far as it conveys to a mind an idea about a thing. In so far as it does this, it is a sign, or representation.

4 Trichotomy of Signs

icon, likeness associated with “Quality” (Peirce 1992) or “Feeling” (Peirce 1894)²

1. Peirce (1885a):

I call a sign which stands for something merely because it resembles it, an icon. Icons are so completely substituted for their objects as hardly to be distinguished from them.

2. Peirce (1894)

Firstly, there are likenesses, or icons; which serve to convey ideas of the things they represent simply by imitating them.³

2.

You can indicate anything you see.

– John Lennon

“Dig a Pony”

3. Monty Python’s “Life of Brian”:

ARTHUR: He has given us a sign!

SHOE FOLLOWER: He has given us... His shoe!

ARTHUR: The shoe is the sign. Let us follow His example!

SPIKE: What?

ARTHUR: Let us, like Him, hold up one shoe and let the other be upon our foot, for this is His sign, that all who follow Him shall do likewise.

SHOE FOLLOWER: No, no, no. The shoe is... a sign that we must gather shoes together in abundance!

index associated with “Relation” (Peirce 1992) or “Reaction” (Peirce 1894)⁴

1. Peirce (1885a):

Supposing, then, the relation of the sign to its object does not lie in a mental association, there must be a direct dual relation of the sign to its object independent of the mind using the sign. . . . [T]he sign signifies its object solely by virtue of being really connected with it. Of this nature are all natural signs and physical symptoms. I call such a sign an index, a pointing finger being the type of the class. ¶ The index asserts nothing, it only says “There!”

2. Peirce (1894)

Secondly, there are indications, or indices; which show something about things, on account of their being physically connected with them. Such is a guidepost, which points down the road to be taken, or a relative pronoun, which is placed just after the name of the thing intended to be denoted, or a vocative exclamation, as “Hi! there,” which acts upon the nerves of the person addressed and forces his attention.⁵

symbol associated with “Representation” (Peirce 1992) or “Thinking” (Peirce 1894) (in Peirce 1885a he calls them ‘tokens’, but that is non-standard for him, peculiar to the context of that essay; ‘token’ has a standard technical, more limited sense for him, explained in §5 below)⁶

1. Peirce (1885a):

. . . the sign is related to its object only in consequence of a mental association, and depends upon a habit. Such signs are always abstract and general, because habits are general rules to which the organism has become subjected. They are, for the most part, conventional or arbitrary. They include all general words, the main body of speech, and any mode of conveying a judgment. For the sake of brevity I will call them tokens.

2. Peirce (1894)

4.

You can imitate everyone you know.
– John Lennon
“Dig a Pony”

5. Monty Python’s “Life of Brian”:

SHOE FOLLOWER: Give us a sign!
ARTHUR: He has given us a sign! He has brought us to this place!
BRIAN: I didn’t bring you here! You just followed me!
SHOE FOLLOWER: Oh, it’s still a good sign by any standard.

6.

You can syndicate any boat you row.
– John Lennon
“Dig a Pony”

Thirdly, there are symbols, or general signs, which have become associated with their meanings by usage. Such are most words, and phrases, and speeches, and books, and libraries.⁷

The modes of acting as a sign, and their uses and roles, based on Peirce (1894).

icon or likeness

1. what does “resemblance” mean here? is it a brute fact? does it always itself require further analysis (at least in the context of semiotic, *i.e.*, in the analysis of the way it serves as a sign)?

2. the examples (photographs for people, donkeys for zebras) suggest that all icons are always (or for the most part?) also indices—if that is correct, then it seems that resemblance cannot be a brute fact; indeed, it seems as though it must consist, at least in part, of a *mental* association, as those that are not so associated are purely indices

3. there are at least three kinds of cognition icons can be involved in:

abduction (or logical reasoning more generally), as in the role the icon plays in the reasoning about zebras based on donkeys (no one ever said the reasoning had to be *good*)

normative judgment the contemplation of the artist of her design, in ascertaining whether the result will be “beautiful and satisfactory”

grasping and suggesting in mathematics (*e.g.*), we grasp an important aspect of “the state of things” by looking at two displays of “the same thing”, in virtue of the resemblance between the displays

more generally, then, it seems that signs are fundamental to and always involved in reasoning and, conversely, anything involved in reasoning in the relevant sense is a sign

4. it is useful to compare the discussion at the end of §4, on intercommunication, to Wittgenstein’s treatment of primitive language games in the early sections of *Philosophical Investigations*; does Peirce grasp (even if only implicitly or inchoately) the Wittgensteinian point that icons (and indices, as we’ll see) require the presence of a rich contextual background in order for them to play their signficatory roles?
5. his remark at the end of §4, that some Egyptian hieroglyphs are neither nouns nor verbs but only “pictorial ideas” is, I suspect, a direct (albeit implicit) reference to and confutation of the opening passage of *De Interpretatione* (quoted above)
6. the opening of §5 gives one of the most important aspects of icons: they “can never convey the slightest information” (!)
 - a. what does “information” mean in this context?
 - b. look to this (p. 8):

7. Monty Python’s “Life of Brian”:

YOUTH: [in response to those who would interpret the shoe as an icon] No, no! It is a sign that, like Him, we must think not of the things of the body, but of the face and head!

... it is not experience, but the capacity for experience, which they show is requisite for a likeness; and this is requisite, not in order that the likeness should be interpreted, but in order that it should at all be presented to the sense.

- c. I suggest: they are signs only in virtue of their “likeness” to their object; but use as an icon does not inform us of that likeness, but rather presupposes it; to recognize the likeness is to acquire information, but that is information *about* the icon, not *conveyed by* the icon

index

1. there is no mental association between the pointer and what is pointed out, none at all?
2. in what sense is the “relation of the sign to its object independent of the mind using the sign” a *direct dual* relation? a two-fold relation between sign and object in the sense that we may analyze the relation as consisting itself of a relation in two different ways (“2 separate arrows pointing from sign to object, each meaning something different”)? or dual in the sense that it points in two different ways, from sign to object, and from object back to sign?
3. the sign is “really connected” with its object: the pointed finger determines a physical line of sight to its object; thus, I suspect: there is no fixed mental association between the sign as type and the object as type (as there is between, say, the word ‘apple’ and apples)—a pointed finger can point promiscuously at anything—but there is mental intervention, as it were, that takes (I think ‘interprets’ would be too strong, involve too much cognition) as a sign the indicator as physical object by grasping the real connection

5 Type and Token

Something like: an ontological distinction between a universal of some kind and its concrete instances.

token something like: the material ground of a sign

type something like: that in virtue of which the sign signifies, most generally a rule of usage or a habit, but, in some sense, represented (!)—given to us—by particular kinds of tokens, “names” of signs (*e.g.*, the numeral ‘3’)

An example: envisage a chalkboard with the numeral ‘3’ written three times in a row; each relevantly shaped, more or less continuous trail of chalk dust on the board is a token of the type “numeral ‘3’”

6 The Connection between Sign and Thing

According to Peirce (1873):

- 1.

7 Representation as Part of the World

Peirce (1894): “[A]ll reasoning is an interpretation of signs of some kind.”

1. one wants to say that the world is independent of our representations of it—and yet our representations are part of the world, so as our representations change, so does the world
2. so in a straightforward sense the world cannot be independent of our representations of it
3. one must give an account of “independent” that accommodates this fact (and I have yet to see a satisfactory and cogent account that does so), because our representations shape, indeed are *part of*, our interactions with the world, the causal nexus that constitutes part (or one aspect) of our knowledge of the world
4. this is part of why Peirce thought that consciousness—and not least self-consciousness—is itself a semiotic system

8 Invitation to a Short Essay

As usual, I invite you to write me a short discussion (no more than 2 pages, *i.e.*, no more than 1000 words) on any issue discussed in any of this week’s three readings. You can raise further questions, propose answers or interpretations, or whatever seems of most interest to you. If you get it to me by the start of next lecture (24. May), then I will return it to you with my comments the following week.

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