Peirce and Semiotic – an Introduction

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I am not going to re-state what I have already said elsewhere¹, and give a formalized account of my reading of Charles S. Peirce as the founder of semiotic². What I should like to do is to devote my paper to a historical presentation of the main ideas which led Peirce to semiotic. I will be concerned, respectively, with the conceptions of categories, signs, meaning, logic and semiotic. Although my way of dealing with these conceptions will be historical, I want to insist that I do not consider Peirce as a historical monument, but as a living thought which helps us to deal with, or even sometimes solve, a lot of problems of our time. In order to understand the living Peirce, we have to insert him in the intellectual context in which he produced his philosophy. In short, his thought was formed in reaction to European philosophy. That is why Peirce is, to my mind, the symbol or, better, the emblem of American philosophy³.


² This is the proper way of writing “semiotic” as Peirce conceived it. The word “semiotic” should be pronounced, according to Peirce “sêmio’tic” (5.484). [All references to Peirce’s writings are to the Collected Papers, Harvard University Press, vol. I–VI, Hartshorne and Weiss eds, 1931–1935; vol. VII–VIII, Burks ed, 1958; with two sets of figures, the first one for the volume, the second one for the paragraph in the volume.]

³ See my Philosophie américaine, Lausanne, L’Age d’Homme, 1983.
The papers I am going to use to stress some characteristics of Peirce’s thought are proofs of what I am suggesting: 1. “On a New List of Categories” of 1867 is aimed at Aristotle and Kant; 2. “Questions Concerning Certain Faculties Claimed for Man” and “Some Consequences of Four Incapacities” of 1868 are against Descartes and Kant; 3. “How to Make Our Ideas Clear” of 1878 is anti-Cartesian; 4. In 1880, 1883 and 1885, Peirce published several papers aimed at replacing Aristotelian logic by a new logic which could fit his new theory of categories and be a genuine logic – which Aristotle’s was not – that is, a semiotic.

1 Categories

Let us start with the problem of categories. According to Aristotle, there are ten categories which are Essence or, rather, Substance, Quantity, Quality, Relation, Place, Time, Position, State, Activity, Passivity. That there is a need for categories to understand or, in other words, organize mentally the world we are living in, is a fact. And Aristotle answered that need. But what are those categories? Conceptions? Yes, certainly. Conceptions of what? Of things? Probably so, although what is classified could be the signs of things rather than the things themselves. In any case, one can see through them a grammatical model rather than an ontological model. That did not raise any problem for Aristotle nor for generations of logicians until the end of the XIXth century. Kant had no objection to that either and his own categories – if they are an improvement on Aristotle’s – are themselves grammatico-logical categories.

Here is the list of categories given by Kant in *Critique of Pure Reason*:

- Categories of quantity: Unity, Plurality, Totality;
- Categories of quality: Reality, Negation, Limitation;
- Categories of relation: Substance and accident, Causality and dependence, Community (Interaction);

They correspond to the “logical function of the understanding in judgments”. (It is the title of the section in which Kant gives his classification of judgments.)

- Quantity: Universal, Particular, Singular;
- Quality: Affirmative, Negative, Infinite;
- Relation: Categorical, Hypothetical, Disjunctive;
- Modality: Problematic, Assertoric, Apodeictic.

In both lists of categories, Aristotle’s and Kant’s, there is an unsolved problem, according to Peirce who tries to answer it in his paper of 1867: “On a New List of Categories”. Peirce agrees with Kant that

- the function of conceptions is to reduce the manifold of sensuous impressions to unity and that
- the validity of a conception consists in the impossibility of reducing the content of consciousness to unity without the introduction of it (1.545).

He also agrees with Kant that “the unity to which the understanding reduces impressions is the unity of a proposition (1.548).”

However that does not explain how we pass from being to substance. If we say *The stove is black*, the stove is the *substance*. How can we differentiate it from *blackness*? To say ‘is
black’ does not help. The stove is already a black substance. “Thus substance and being are the beginning and end of all conception. Substance is inapplicable to a predicate, and being is equally so to a subject (1.548).”

How can we solve the problem? Peirce proposes a device which was to become instrumental to his new conception of the nature of categories.

Let us first take a close look at the device. There are, Peirce says, three kinds of distinctions: discrimination, dissociation and precision. Discrimination is a mental distinction, which depends on the meaning given to the terms to be distinguished. Dissociation, although also mental, is, so to speak, a quasi-physical distinction, because it rests on something, which is less conventional, something which is rather imposed on our minds by the laws of association of ideas. Precision or pre-scission from the Latin praec-scindere is “the act of supposing (whether with consciousness of fiction or not) something about one element of a percept, upon which the thought dwells, without paying any regard to other elements (1.549 note 1).”

Peirce applies the above distinctions to red and blue, color and space. One can discriminate red from blue, space from color, color from space, but not red from color. One can dissociate red from blue, but not space from color, nor color from space, nor red from color. One can prescind red from blue, space from color, but not color from space, nor red from color. To understand the last process, one has to bear in mind that it is not a “reciprocal process” (1.549); it implies “a conception of gradation” (1.546). Here lies the origin of what I call the principle of the hierarchy of Peirce’s three categories. Let us consider, instead of red or blue, color and space, the relations of A, B and C in that order. If, through precision, we take A without B and C, we can prescind A from B and C; if we take A and B without C, we can prescind A and B from C, but not B from A; if we take A, B and C, we cannot prescind C from B and A, nor B from A.

Peirce’s problem in reading Kant was that there was no way of passing from being to substance. Thanks to precision, Peirce has now got hold of the solution. Not only can being and substance be differentiated, but they can be united through three gradated steps which are the three intermediate conceptions or categories of 1867, and which will later become the three phenomenological or phaneroscopical categories, respectively called Firstness, Secondness and Thirdness.

Let us remark that Peirce’s categories were not intended to replace Aristotle’s and Kant’s categories. Although all of them will enter one or the other of the three Peircean categories, they will be no longer a way of uniting conceptions from outside, they will become the unifying categories, not of thought alone, but of and in the universe.

In 1867, the three intermediate categories are first quality, second relation, third representation.

1. Quality. The first intermediate conception is quality or what Peirce called, at the time, reference to a ground. In the proposition “The stove is black’, blackness is the quality or ground, not the ‘black’ of this stove, but ‘blackness’ as “a pure species or abstraction [precision] and its application to this stove is entirely hypothetical. Reference to a ground cannot be prescinded from being, but being can be prescinded from it (1.551).”

2. Relation. However, if we can assert the proposition ‘The stove is black’, it is because we know that this stove is black and not white or red. “We can know a quality only by means of its contrast with or similarity to another (1.552).” The occasion of the introduction of the conception of reference to a ground is therefore the reference to a correlate. “Reference to a correlate cannot be prescinded from reference to
a ground, but reference to a ground may be prescinded from reference to a correlate (1.552).”

3. Representation. “The occasion of reference to a correlate is obviously by comparison (ibid.).” For instance, Peirce says,

suppose we look up the word *homme* in a French dictionary; we shall find opposite to it the word *man* which, so placed, represents *homme* as representing the same two-legged creature which *man* itself represents (ibid.).

And the same thing implies to every comparison: “Every comparison requires […] a mediating representation which represents the relate to be a representation of the same correlate which the mediating representation itself represents (ibid.).”

Such a mediating representation, Peirce calls an Interpretant, because it fulfills the office of an interpreter, who says that a foreigner says the same thing which he himself says (ibid.). Every reference to a correlate, then, conjoins to the substance the conception of a reference to an Interpretant (ibid.).

And this is the third conception required to pass from being to substance. “Reference to an interpretant cannot be prescinded from reference to a correlate”, (ibid.”), but reference to a correlate can be prescinded from reference to an Interpretant (1.553). The five conceptions thus obtained […], Peirce concludes, may be termed categories. That is

**Being**

– Quality (reference to a ground)
– Relation (reference to a correlate)
– Representation (reference to an Interpretant)

**Substance**

The three intermediate conceptions may be termed accidents (1.555).

The intermediate conceptions are properly speaking the new categories, which will be named, as we have already said, Firstness, Secondness and Thirdness. And the reason for thus naming them is in the idea of precision, which is at the root of the hierarchy of categories.

Since no one of the categories can be prescinded from those above it, the list of supposable objects which they afford is

**What is**

Quale (that which refers to a ground)
Relate (that which refers to ground and correlate)
Representamen (that which refers to ground, correlate and Interpretant)

*It*” (1.557).

The categories are described as *ordinal* and not cardinal: a Quale which is the object of Quality, a First, refers to one thing, its ground; A Relate, which is the object of Relation, a Second, refers to two things, its ground and its correlate; a Representamen, which is the object of Representation, a Third, refers to three things, its ground, its correlate and its Interpretant.

This is the first expression of Peirce’s phenomenology or phaneroscopy. Later on, a First, although still a “quality” or “First” is the only element “upon which the thought dwells without paying any regard to” its relation with something and to its representation, it is prescinded from everything and therefore can only be possible – the object of which is a
monad; a Second, although still a “relation” will be defined, not as a “mental relation” or relation rationis from which it can be prescinded, but as an existential or de facto, hic et nunc relation, – the object of which is a dyad; a Third, although still a “representation”, will be more expressly characterized for what it is: the expression of the law of unification of the three “conceptions”, – the object of which is a triad.

The same paper “On a New List of Categories” of 1867, contains also a schematic theory of signs, which cannot yet be called semiotic, because it lacks the triadic logic of its phenomenology. There are, Peirce says, three kinds of representations:

1. Likenesses (later termed icons);
2. Indices or signs;
3. Symbols or general signs (1.558).

Let us note that, properly speaking, only the relations of signs with their objects are given here – the divisions of signs as they are in themselves and as they are according to their interpretants, are missing. Moreover and more essentially, the trichotomization of the relations of signs with their objects does not depart from the dualistic conception of Aristotle’s and Kant’s logic: the third distinction in the sense of discrimination (symbols) is the second generalized.

2 Signs versus Intuition

The second series of papers I want to mention (“Questions Concerning Certain Faculties Claimed for Man” and “Some Consequences of Four Incapacities”), is of 1868. It is a very important series for our purpose. Peirce states against Descartes and Kant that “we have no power of Introspection, but all knowledge of the internal world is derived by hypothetical reasoning from our knowledge of external facts”; that “we have no power of Intuition, but every cognition is determined logically by previous cognitions”; that “we have no power of thinking without signs”; and, especially against Kant, that “we have no conception of the absolutely incognizable” (5.265).

I do not want to elaborate. Suffice it to say that we have here the reason why Peirce’s semiotic is not a semantics. Meaning is not something that signs produce. It is obtained in another way “by collateral experience”, although it can be communicated only by signs.

3 Action: Belief and Meaning

Between 1868 and 1878, Peirce travelled in Europe for the U.S. Coast and Geodetic Survey. At that time, he no longer seemed to be interested in semiotic. The most important papers he published at the end of this period are apparently not concerned with semiotic. They are “The Fixation of Belief” (1877) and “How to Make Our Ideas Clear” (1878). The second one was written directly in French by Peirce on his journey to Europe in 1877. They are both anti-Cartesian. They are the founding papers of pragmatism, namely pragmaticism as a theory of inquiry and pragmatism as a theory of meaning (not truth, as James thought it was).

According to Descartes, we have to start with a methodological doubt. Peirce replies that we have to start with doubt only when there is something to doubt about and if and only if the doubt is genuine. This is not new. Peirce had already said in the second article of 1868:
We cannot begin with complete doubt. We must begin with all the prejudices which we actually have when we enter upon the study of philosophy. These prejudices are not to be dispelled by a maxim. […] and no one who follows the Cartesian method will ever be satisfied until he has formally recovered all those beliefs which in form he has given up. […] Let us not pretend to doubt in philosophy what we do not doubt in our hearts (5.265).

Doubt is then, Peirce says in 1877, “an uneasy and dissatisfied state from which we struggle to free ourselves and pass into the state of belief” (5.372). Of course, not James’ will to belief, but the right to belief of the scientific inquirer.

And what is this belief? “It is”, Peirce says, “the demi-cadence which closes a musical phrase in the symphony of our intellectual life.” It does not only appease “the irritation of doubt”, it also involves “the establishment in our nature of a rule of action, or, say for short, a habit. But, since belief is a rule for action, the application of which involves further doubt and further thought, at the same time that it is a stopping-place, it is also a new starting-place for thought” (5.397). It is a good enough description of what Peirce will later call a semiosis.

The second anti-Cartesian attack concerned the “clarity and distinctness” of ideas. As they cannot be self-evident, according to Peirce, we must find another way of distinguishing an idea which is clear from an idea which appears clear. The rule of action applies here again perfectly.

To develop [the] meaning [of an idea], we have, therefore, simply to determine what habits it produces, for what a thing means is simply what habits it involves. […] there is no distinction of meaning so fine as to consist in anything but a possible difference of practice (5.400).

Hence the pragmatic maxim: “Consider what effects, that might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object” (5.402).

From now on, the method of putting an idea to a test (a public test) to “know” “clearly and distinctly” what it means will be the rule in all fields of science from physics (from the experimental method of which the pragmatic maxim is the philosophical corollary) to linguistics.

Dewey, Mead, Bridgman, Wittgenstein are among the philosophers who followed the Peircean lead and advocated the pragmatic rule. John Dewey: “Let us […] follow the pragmatic rule, and in order to discover the meaning of the idea ask for its consequences” (Reconstruction in Philosophy, 1920; enlarged ed., 1948, p. 163). George H. Mead: “The meaning of a chair is sitting down in it, the meaning of the hammer is to drive a nail” (Mind, Self and Society, 1934, p. 104). Percy W. Bridgman: “The true meaning of a term, is to be found by observing what a man does with it, not by what he says about it” (The Logic of Modern Science, 1927, p. 3). Ludwig Wittgenstein: “If a sign is useless, it is meaningless. That is the point of Occam’s maxim [and Peirce’s]. (If everything behaves as if a sign had meaning, then he does have meaning)” (Tractatus logico-philosophicus, 3.328). “The meaning of a word is its use in the language” (Philosophical Investigations, § 43).

4 A new logic for semiotic

One reason why Peirce stopped writing on his theory of signs, was that he was not satisfied with the logic (Aristotelian and Kantian) he had at his disposal. As I have already pointed out, Peirce thought right from the beginning that three kinds of signs were necessary: similarities,
indices, symbols, but symbols were only generalized indices, and the theory did not differ from the classical theories of signs; its logic was a dualistic one: things on one side, ideas on the other.

From 1880 to the end of the century, Peirce worked on a new logic which was to become his “logic of relatives” where up to three terms could be related. At the same time, he built a new propositional logic, including the Philonian function and a new logic of terms for which he invented, with O. Mitchell, the quantifiers. With the new logical tools he had designed for himself, Peirce was then ready at the end of the century to work at his new theory of signs, which he called “semiotic”.

Why “semiotic”? I should like to conclude the present introduction by answering this question and another one: Why does Peirce say that semiotic is the “quasi-necessary, or formal, doctrine of signs?” (2.227) In other words, what is semiotic?

If it is true that Peirce says that semiotic is the “quasi-necessary, or formal, doctrine of signs”, he does not give to “formal” the meaning we give to the word to-day, in spite of the fact that he was, as I have just said, a pioneer in formal logic. Here is what Peirce wrote in 1898:

After trying to solve the puzzle [of a larger system of conceptions than Kant’s list of categories] in a direct speculative, a physical, and a psychological manner, I finally concluded the only way was to attack it as Kant has done from the side of formal logic (1.563).

Of course, Kant’s logic is formal like Aristotle’s, but not in the sense of “algebraic logic” or “logistic”. It is formal because Kant and Aristotle were concerned with the “forms” of reasoning. Thus, is semiotic a theory of signs or a theory of reasoning? My answer is that it is both, but firstly a theory of reasoning and secondly a theory of signs.

It is a theory of reasoning. Peirce says that semiotic is “the doctrine of the essential nature and fundamental varieties of possible Semiosis” (5.488). Peirce borrowed the word from Philodemus, whose theory was that a “semiosis” is a type of reasoning, an “inference from signs” which involves, as Peirce describes it, “a cooperation of three subjects, such as a sign, its object, and its interpretant, this tri-relative influence not being in any way resolvable into actions between pairs” (5.484). But semiotic is also a theory of signs because the three “subjects” of any Semiosis can be formally analysed as signs, be it only because a semiosis is an inferential process triggered off by a sign.

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