PEIRCE, ACTION AND SEMANTICS

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1. *Introduction*

The problems of meaning continue to be central in contemporary philosophy, be it in the analytic tradition, or be it in the phenomenological tradition and its offspring. In epistemology, in methodology, again and again one is inevitably confronted by semantics.

For example : consider the latest offshoot of methodology : theory change (the diachronic dimension of methodology, as it is called by Moravcsik). The central aspect of this topic today is the problem of cumulativity in science. Rescher's view (to appear) on this is — I believe — rather optimistic, in so far as he feels that this issue has finally been settled. On the contrary (it seems to me) a rather strong discussion is still going on between for instance Kuhn, Sneed and Stegmüller.

And what is remarkable is that in this discussion the problem of the translatability of a paradigm into the succeeding paradigm is central. Again one focuses on the problem of meaning (Kuhn, Stegmuller, Sneed, Vandamme).

Not only in philosophy, but also in other sciences the problem of meaning is currently very relevant. This is clearly true for linguistics, microbiology, genetics, certain branches of economics, artificial intelligence, psychology, etc.

Also striking is the fact that there is presently a strong tendency to relate the problems of meaning to pragmatics. More and more the opinion is growing that an elaborated semantics necessarily presupposes a minimal pragmatics, much as the development of thinking on a certain level presupposes language and vice versa.

Taking into account Peirce's pioneering work on the pragmatic dimension, it is worthwhile to compare the Peircian analysis to some modern approaches.

2. *Peirce and meaning.*

Peirce's pragmatic rule is stated as follows :

"Consider what effects, that might conceivably have practical bearing, we conceive the object of our conception to have, then our conception of these effects is the whole of our conception of the object." (Peirce 1960, 5.402).

Taking into account the examples of application of this rule (Peirce 1960, 5.403-5.410), we can safely quote Moore's comment on Peirce (Moore, E.C. 1961, p. 69) :

"The pragmatic maxim tells us that the meaning of a term consists in the pragmatical considerations which would be true of any object to which we would apply the term".

This formulation — rightly — expresses the importance of potentiality or at least of subjunctive conditionality in Peirce's approach to pragmaticism. The following quotations of Peirce illustrate the correctness of this interpretation.

"... and there is no distinction of meaning so far as to consist in anything but a *possible* difference of practice". (Peirce, 1960, 5.399).

"Pragmaticism makes thinking to consist in the living inferential metaboly of symbols whose purport lies in conditional general resolution to act." (Peirce, 1960, 5.402).

Here we clearly see that the meaning may not be identified with actions, nor with conditional action, but rather with conditional resolutions to act.
    Nevertheless Moore's identification of the set of conditional resolutions to act with a set of propositions, each of them representing an idea of a relation which holds between an idea of volition and an idea of perception (Moore 1961, p. 51) seems to me a dangerous interpretation of Peirce.
    If his interpretation is right, we get the danger of infinite regress. How can we determine the meaning of the propositions in the set, or how can we differentiate them from each other this in case a proposition is identified with meaning).

3. *Some proposed modifications*

However, in this article we do not wish to pursue further this problem nor the problem of the pragmatic meaning of potentiality and conditionality (This has been discussed rather extensively in Moore 1961 and Apostel 1974).

We would like to treat another problem. Since the rise and the successes of structuralism, the view has repeatedly been brought forward that the value and the function of any element are dependent on the structure of which it is a part. This structure can be the peculiar situation, linguistically or non-linguistically determined, in which the element or term is used, or it can be the general language system.

So, we could suppose that the conditional resolutions to act will also be dependent on the structure in which the terms are introduced. But, then, how can we avoid the impossibility of translating or comparing the meaning of the same term in a different setting, if the meaning is identified with the set A of conditional resolutions to act ?

Or is it better to look at the set A not as the meaning of a term y, but rather as the data on the basis of which a hypothesis on the meaning of a term y can be made : the meaning of a term then is a hypothesis which explains the uses of a term y (L. Antal 1964, 1968; Vandamme 1972).

It is obvious that in this last case, several sets A_1, A_2, ... A_n of dispositions to act, of a term y, dependent on the several settings the term is used in, can be explained by the same meaning of the term. This has also as a consequence that a change in structure, e.g. scientific theory, does not necessarily change the meaning of the terms present.

Another approach to the relation of meaning and action — we believe — could be made without seeking the link between these on an interiorised level of "conditional resolutions to act" or "dispositions".

This can be done as follows. Terms are used. Combinations of them are made. These combinations can be observed. Let us call the set of observed combinations in which a term x is used, the set B. How is it possible to systematize the set of combinations B in which this term x appears ?

Is it not possible to differentiate in the set B the subsets which appear in certain peculiar situations ' If so, how to characterize the situations ? Is it not very fruitful and rather natural to characterize and differentiate the situations in terms of the actions or phases of

actions occurring in them ? Certainly, this supposes a minimal theory of action[1].

The introduction of the pragmatically determined situations (one can also call them 'frames' or 'registers' can be justified on the basis of some of Peirce's considerations as well. Peirce formulates the problem of definition as the question of how the listener can have the experiences which define the definiendum. Peirce answers on this :

> "The best approach would be to prescribe for him a certain action, such that if he accomplished it, he would then be confronted with the required experience" (Moore 1961, pp. 35-36).

But here again the action needed to get the required experience will be dependent on the situation, the frame one is in. Therefore, again the determination of relevant frames is a prerequisite.

Once we have defined the several situations, or more technically, the frames or registers in which a certain term is used, then we can define the meaning of a term in the language of Peirce, as the set of conditional resolutions to act, relative to each such situation. Or taking into account the above comment, the meaning can be defined as the hypothesis explaining the existence of the several subsets of B in the several situations.

But it can also be done without falling back on the psychological notion of dispositions. The meaning of a term x can then be defined in a more nominalistic approach by the sets of interrelations appearing in each situation; or as the hypothesis which explains the presence in each situation of the particular set of combinations. As far as the first solution is concerned, Eco (to appear) beautifully explained with his analysis of the notion of "interpretant", that Peirce was aware of this possibility and at a certain moment favored this solution. His quotation of Peirce in this context is illustrative :

> "meaning in its primary acceptation, is the translation of a sign into another system of signs" (4.127).

It is this last approach (meaning as a hypothesis explaining the particular set of combinations), we feel, which gives us more insight into current work in descriptive semantics and lexicology (Tartaglia, 1972, Vandamme 1975).

As has already been said, what is required in this approach, in which "actualized actions" get a more important role in the theory

of meaning, is the construction of a minimal theory of actions. As argued in other papers (Vandamme 1976), such a minimal theory of action, to be adequate to its task here, must be able to determine implicitly or explicitly the following notions :

identity of actions
difference between actions
inclusion of one action into another
interconnection between actions.

Here also we believe that there are at least two possible approaches : one which treats action as a primitive and another which treats an action as a set of states of affairs. In other words, an implicit and an explicit approach are possible.

Conclusion

To conclude, we would like to state that, taking into account the current development of interest in meaning and the importance of pragmatics in many of these approaches, we believe that Peirce's ideas are still stimulating and relevant. Certainly, the last word has not been said about the solution of the problems pointed to by Peirce. One could argue that the solutions proposed by Peirce can be adapted in two ways, and so be brought closer to present-day studies in descriptive semantics. One way is by making the actualized actions play a more important role : That of defining situations. The second way is as follows : sets of combinations of terms can be substituted for sets of dispositions[2].

Making both these adaptations in one's theory of language and communication seems very promising for a better approach (for description, explanation and usage) to the several semantic functions and therefore to "meaning" and "semantics" (Vandamme 1976a, 1976b, 1977).

For how we can better approach "meaning" or "semantics" than through the study of its function ?

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NOTES

[1] This is true however on a meta-level. For what is necessary is that one is be able to classify the sign data depending on the situations they belong to. Signs symbolizing these situations, or symbolizing their defining action features are, strictly speaking, superfluous. These actions are only used in order to classify. They guide overt action. In principle however they must not be symbolized. Of course at a certain level of development, the meta-theoretical systematisation of the guiding principles are useful and even necessary.

[2] However, this is not as radical a departure from Peirce's thought as it might seem, for not only are the dispositions always described in terms of peculiar types of combinations of terms, they even seem to be identified with them (f.i. Moore 1961, p. 52, Eco).
In practice however these seems to be some difference in the sense that in the disposition approach not every actual realised sequence of signs (in which the term x is included) will be considered a member of the set of propositions describing the disposition of the term x, and therefore not as a determination of the meaning of x.
So the point I am trying to make is rather akin to Eco's proposal. I also argue that the notion of a "semantic primitive" is an artifact. The meaning of a sign has to be explained in terms of its relation to other signs : its interpretants. However, where I differ explicitly from Eco's approach, is regarding the place where action comes in. For Eco, the action is the place where the "haecceitas" stops the game of semantics (p. 15, Eco 1976). I argue that action determines the subset of interpretants, which are relevant in a certain situation for the meaning of a term. In other words, action doesn't stop semantics — rather, it directs it.

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