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On the Metaphor in Scientific Philosophy - Peircean Comments

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Abstract

C. S. Peirce wanted philosophy to develop into a public discipline based on objective principles that can be made subject to falsification by a scientific community; a community which takes advantage of coenoscopic experience and the method of reasoning. Peirce often emphasized that the process of philosophical inquiry is creative. For example, it requires imagination to put forth hypotheses that might explain phenomena which have surprised the philosopher and caused him to wonder. And it requires imagination to create the neologisms and changes in meaning for already-known words and sentences that can expand the limits of the linguistic resources and the formation of concepts that the philosopher has inherited from his peers and predecessors. Peirce sometimes suggested that metaphor is among one of the most important ways of exercising imagination, and that there is a pervasiveness of metaphors also in philosophical language. So, according to Peirce, metaphor has a cognitive content, it can play a role in the generation of sense and new knowledge - but is metaphor therefore suited to serious, scientific, philosophical thought and discourse? In the following we will try to see if the metaphor in a Peircean perspective is likely to play a role regarding this matter.

> What is man`s proper function if it be not to embody general ideas in art creations, in utilities, and above all in theoretical cognition? Charles S. Peirce: "The Neglected Argument for the Reality of God", (1908).
>
> Science consists in actually drawing the bow upon truth with intentness in the eye, with energy in the arm. Charles S. Peirce: "Minute Logic", 1902).

Introduction

C. S. Peirce (1839-1914) was first and foremost a scientist. He held an education in chemistry from Harvard, and spent more than thirty years of his life as a researcher at the United States Coast and Geodetic Survey, which was then the center of the American scientific community (cf. Fisch 1986; Brent 1993). However, Peirce was also a philosopher. Already at a very young age, he closely studied e.g. J. C. F. Schiller's (1759-1805) "Briefe über die ästhetische Erziehung des Menschen", the "Ethics" of T. S. Jouffroys (1796-1842), not to mention I. Kant's (1724-1804) "Kritik der Reine Vernunft", a work which made an indelible impression on him[1] (cf. MS 1606, 11[2]). And throughout

his intellectual career, Peirce was also concerned with reflecting and writing about a wide range of philosophical topics. Peirce was a "philosopher of philosophy", so to speak. He considered the mainstream in contemporary philosophy as being poorly developed, though. This was largely due to the fact that philosophy for too long had been dominated by theologians;[3] or philosophy had not been pursued by men with a genuine scientific attitude (cf. CP: 1.620). As Peirce wrote in "Of the Classification of the Sciences. Second Paper. Of the Practical Sciences" (c. 1900), he thought that science should be:

> … a mode of life whose single animating purpose is to find out the real truth, which pursues this purpose by a well-considered method, founded on thorough acquaintance with such scientific results already ascertained by others as may be available, and which seeks cooperation in the hope that the truth may be found, if not by any of the actual inquirers, yet ultimately by those who come after them and who shall make use of their results. (CP: 5.54)

Thus, Peirce wanted philosophy to develop into a public discipline based on objective principles that can be made subject to verification by a scientific community; a community which takes advantage of experience and the method of reasoning (cf. Goudge 1950: 214; Apel 1995: 144; Haack 2009: 146).[4] Peirce often emphasized that the process of philosophical inquiry is creative. For example, it requires imagination to put forth hypotheses that might explain phenomena which have surprised the philosopher and caused him to wonder. And it requires imagination to create the neologisms and changes in meaning for already-known words and sentences that can expand the limits of the linguistic resources and the formation of concepts that the philosopher has inherited from his peers and predecessors. Peirce sometimes suggested that metaphor is among one of the most important ways of exercising imagination, and that there is a pervasiveness of metaphors also in philosophical language. So, according to Peirce, metaphor has a cognitive content, it can play a role in the generation of sense and new knowledge[5] - but is metaphor therefore suited to serious, scientific, philosophical thought and discourse? Below, we will try to see if the metaphor in a Peircean perspective is likely to play a role regarding this matter. Peirce never formulated a theory of metaphor, though (cf. Anderson 1984; Haley 1988; Hausmann 1996: 193; Petrilli 2006), so we have to piece together the very few comments he made concerning the trope into a coherent statement. But first we will turn our attention to the philosophical sciences and give a brief overview of the general characters which make philosophy scientific, according to Peirce.

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The Philosophical Sciences and Philosophy as a Science *per se*

According to Peirce, philosophy has three grand divisions. The first division, phenomenology, contemplates what appears to consciousness in general. The second division, the normative sciences, endeavors to comprehend not "what is", but "what ought to be" (summum bonum, or the highest good); the normative sciences have three suborders, esthetics, ethics, and logic: esthetics is to establish what is admirable sui generis, while ethics and logic establish what is admirable relative to action and reasoning, respectively. Finally, the third division, metaphysics, investigates the universe of mind and matter. Peirce wrote the following in his "Lectures on Pragmatism" (1903):

> Philosophy has three grand divisions. The first is Phenomenology, which simply contemplates the Universal Phenomenon and discerns its ubiquitous elements, Firstness, Secondness, and Thirdness, together perhaps with other series of categories. The second grand division is Normative Science, which investigates the universal and necessary laws of the relation of Phenomena to Ends, that is, perhaps, to Truth, Right, and Beauty. The third grand division is Metaphysics, which endeavors to comprehend the Reality of Phenomena (CP: 5.121)

These philosophical sciences should be arranged in certain relations of presuppositions based on the level of abstraction of their objects of investigation. Peirce followed the Comtesian principle regarding the classification of the scientific field, as stated in the Monist article "Regenerated Logic" (1896):

> … the sciences may be arranged in a series with reference to the abstractness of their objects; and that each science draws regulating principles from those superior to it in abstractness, while drawing data for its inductions from the sciences inferior to it in abstractness. So far as the sciences can be arranged in such a scale, these relationships must hold good. (CP: 3.427)

The order of the sciences points to their relations of presuppositions (cf. Hookway 1985: 78):

1. Mathematics

2. Philosophy: **2.1 Phaneroscopy**

2.2 Normative sciences: 2.2.1 Aesthetics
2.2.2 Ethics
2.2.3 Logic: 2.2.3.1 Grammar
2.2.3.2 Critic
2.2.3.3 Rhetoric

2.3 Metaphysics

According to this classification, phenomenology, or phaneroscopy as Peirce named it,[6] is the most fundamental of the philosophical sciences; it is on phaneroscopy that the other philosophical sciences rest regarding conceptual presuppositions, general principles, methodology, etc. The normative sciences depend directly on phaneroscopy, whilst metaphysics has an indirect relation to phaneroscopy, but relies directly on the recognitions of the normative sciences. Conversely, regarding the cultivation of new objects for study, the normative sciences and metaphysics are both necessary to phenomenology.[7]

But in order to call the above mentioned studies scientific in the first place, certain conditions must be met, according to Peirce. Philosophy must be a positive inquiry, as he stated in "Lectures on Pragmatism" (1903): "By a positive science I mean an inquiry which seeks for positive knowledge; that is, for such knowledge as may conveniently be expressed in a categorical proposition". (CP: 5.39). Thus, the propositions of philosophy must involve a truth claim. According to Peirce, truth is on the one hand what it is, regardless of what the investigating philosopher may think or feel, and, on the other hand, truth is what an infinite community of philosophical investigators in the theoretical long run can reach an agreement on. Therefore, Peirce wrote in the article, "Some Consequences of four Incapacities" (1868): "We individually cannot reasonably hope to attain the ultimate philosophy which we pursue; we can only seek it, therefore, for the community of philosophers." (CP: 5.265). The individual philosopher cannot find truth on his own. As Peirce wrote in his article, "The Doctrine of Chances" (1878):

> It seems to me that we are driven to this, that logicality inexorably requires that our interests shall not be limited. They must not stop at our own fate, but must embrace the whole community … Logic is rooted in the social principle. (CP: 2.654)

However, it is not the agreement of the philosophical community which constitutes the truth, but truth that determines the consensus of the community, the consensus regarding what is real (cf. Potter 1996: 109-110). As Peirce stressed in the article, "Truth and falsity and Error" (1902):"There would not be any such thing as truth unless there were something which is as it is independently of how we may think it to be." (CP: 7.659).

Thus, there is truth, since there is a reality to which truth corresponds, a reality which exerts pressure on philosophical recognition (cf. Hookway 2006). Peirce wrote the following in "Grand Logic" (c. 1893):

> Experience may be defined as the sum of ideas which have been irresistibly borne in upon us, overwhelming all free-play of thought, by the tenor of our lives. The authority of experience consists in the fact that its power cannot be resisted; it is a flood against which nothing can stand. (CP: 7.437)

Conversely, nothing is more real than what is represented in a true representation. To investigate reality is to examine the empirical world, or the world of facts. In connection to this, the propositions of philosophy must rest upon experience. It was Peirce's firm belief: "that all knowledge whatever comes from observation" (CP: 1.238). In exactly the same way that a machine cannot function unless it is connected to some kind of power supply, the machinery of the mind can: "only transform knowledge, but never originate it, unless it be fed with facts of observation." (CP: 5.392). To put it shortly, Peirce agreed with his old teacher, the geologist L. Agassiz (1807-1873), that: "observation is the "ways and the means" of attaining purpose in science." (CP: 1.238). As a science, philosophy is cenoscopic. Calling philosophy cenoscopic, Peirce underlined the mode of observation of philosophy. The concept of cenoscopy was introduced by the philosopher J. Bentham (1748-1832). However, Bentham preferred to spell it coenoscopy (cf. EP II: 517). According to the editors of Collected Papers, coenoscopy is compounded by "the two Greek words, one which signifies common – things belonging to others in common – the other looking to" (CP: 1, p. 110 footnote). The domain of observation of philosophy is those elements of experience which are continuously present, i.e. those elements that daily and all the time force themselves upon us, and stare every person directly in the eyes (cf. EP II: 147) – and because of that, they can be extremely difficult to observe, as Peirce remarked in "The Idea of a Law of Nature among the Contemporaries of David Hume and among Advanced Thinkers of the Present Day," (c. 1894):

> To assume … that the observational part of philosophy, because it is not particularly laborious, is therefore easy, is a dreadful mistake, into which the student is very apt to fall, and which gives the death-blow to any possibility of his success in this study. It is, on the contrary, extremely difficult to bring our attention to elements of experience which are continually present. (CP: 1.133).

Consequently, Peirce stressed in "A Detailed Classification of the Sciences" (1902), that the most relevant observations of philosophy escape: "the untrained eye … because they permeate all our lives, just as a man who never take off his blue spectacles soon ceases to see the blue things." (CP: 1.241). Observations of what commonly appears to us are seldom noticed as we have no apparent reason to do so. Thus, these possible observations are often left in lofty indifference (cf. Greenlee 1973: 20). Not until, for example, the philosopher needs answers to his questions, or when his hypotheses are being submitted to testing, observations are being made of what resides in commonness. Hereby, what resides in commonness is endowed with a special meaning, which is related to a more or less sophisticated philosophical discourse, which again obtains status as data and, as such, no longer resides in commonness. Using a negative encirclement of philosophy, we may stress that philosophy as a coenoscopic science has nothing to do with carrying out special observations, nor has it anything to do with: "perceptions of a novel description" (EP II: 146).

But like any other science, philosophy cannot be content merely to make observations. It must provide reason on the basis of its observations, and provide acknowledgements of its arguments, i.e. it must determine whether these are true or false. Thus, philosophy must use the method of experience and reason, the method that has informed the natural or special sciences (e.g. physics, chemistry, and biology) and enabled them with great successes. Hence, philosophy is only differing from the special sciences in degree of generality, not in kind. Put in another way: the philosophical inquiry must involve a well-defined set of logical steps. In a draft to a Lowell Lecture (1903), Peirce set forth the following outline of the scientific method:

> The Deductions which we base upon the hypothesis which has resulted from Abduction produce conditional predictions concerning our future experience. That is to say, we infer by Deduction that if the hypothesis be true, any future phenomena of certain descriptions must present such and such characters. We now institute a course of quasi-experimentation in order to

> bring these predictions to the test, and thus to form our final estimate of the value of the hypothesis, and this whole proceeding I term Induction. (CP: 7.115, n.27)

Thus, abduction is the first step of the philosopher in his self-controlled reasoning, by aid of which he creates, selects and makes a possible hypothesis that can explain the phenomenon that made him wonder (cf. Reilly 1970: 30). Then he must deduce the general condition of the hypothesis, or its conceivable consequences which will occur if the hypothesis is true. Deduction does not yield anything new to knowledge, but it expresses simply and solely what already lies latently in the hypothesis. Finally, by aid of induction the philosopher must test or find out whether the predictions that are derived by deduction are true by reference to features, traits etc. of ordinary experience. The three forms of inference are, thus, three stages in the philosophical inquiry; these are closely related as its method. So in short, Peirce held that philosophy should be a "laboratory philosophy" (CP: 1.129); its motive should be scientific, and so should its method - inquiring into the truth, for the sake of truth (cf. CP: 1.44, 7. 54; Haack 1997: 242).

But if philosophy should be able to provide its findings with reasoning and knowledge it must of course also construct its own terminology; only by making permanent delineated and well-defined concepts within, in a given area, it can become a science (cf. CP: 5.611). According to Peirce, Aristotle (c. 384 B.C.–322 B.C.), the medieval learned doctors and Kant had shown the way regarding the development of terminology; while Hegel (1770-1831) had done much damage to the maturing of philosophy. In the article, "Ethics of Terminology" (1903), Peirce stated:

> The ideal terminology will differ somewhat for different sciences. The case of philosophy is very peculiar in that it has positive need of popular words in popular senses--not as its own language (as it has too usually used those words), but as objects of its study. It thus has a peculiar need of a language distinct and detached from common speech, such a language as Aristotle, the scholastics, and Kant endeavored to supply, while Hegel endeavored to destroy it. (CP: 2.223)

Peirce was in opposition to most of his fellow philosophers- not only were they not genuine truth seekers (cf. CP: 1.57), they had not realized the importance of philosophy developing its own technical language if good, clear thinking should be made possible. With close affinity to this, again from the article "Ethics", Peirce stressed how:

> … the woof and warp of all thought and all research is symbols, and the life of thought and science is the life inherent in symbols; so that it is wrong to say that a good language is important to good thought, merely; for it is of the essence of it. (CP: 2.220)

Several times, Peirce made good language, as a necessary condition for good and precise thinking, an object of investigation. Of course, in the before mentioned "Ethics". In the "Ethics" he formulated his well-known seven rules which should be applied in relation to the concept formation of Logic. But also in an earlier manuscript (MS 951), where Peirce put forth three rules regarding the good terminology of philosophy. To keep the record straight, let us mention these three rules:

> 1. Every philosophical term must have its own name, and it is preferable that this name is not in use outside the scientific context.
>
> 2. The terminology of medieval philosophy should as far as possible be retained, since this is largely a good terminology.
>
> 3. The philosopher who discovers and introduces a new concept does not just have the right, but is also obligated, to put forth acceptable terms that can express the concept.

Peirce himself also wrote more than 16.000 definitions to the eight-volume Century Dictionary (1889-1891),[8] e.g. within the areas of metaphysics and logic; so he obtained a strong background in technical vocabulary.

Of course, one might say that the introduction of technical terms in philosophy will deprive it of its literary elegance and charm, but to this Peirce replied – although by aid of an analogy - in "Pragmatism" (1903), the following:

> … if philosophy is ever to stand in the ranks of the sciences, literary elegance must be sacrificed -- like the soldier's old brilliant uniforms -- to the stern requirements of efficiency. (CP: 5.13)

The philosophical inquiry can only be endowed with a scientific status, as Peirce stated in the Monist article, "What Pragmatism Is" (1903), if it provides:

> … a suitable technical nomenclature, whose every term has a single definite meaning universally accepted among students of the subject, and whose vocables have no such sweetness or charms as might tempt loose writers to abuse them -- which is a virtue of scientific nomenclature too little appreciated. (CP: 5.413)

Where philosophy had fallen into the hands of lawless rowers of the sea of literature it often developed into mere dilettantism; the reader was stroked the right way and the result was depravity of thought (cf. CP: 5.396). No, if philosophy should be able to make a genuine progress, e.g. develop into a science, not only should it be performed with a genuine truth-seeking spirit, it should also involve a language which — ideally considered — is constructed by terms that are semantically stable or have precise meanings.

The Metaphor in Scientific Philosophy, its function regarding thinking and language

With the above in mind, one might assume that Peirce could not find a place for metaphor in the thinking and language of philosophy; that he would see metaphor unsuited to the demands of clear and distinct cognition? Like e.g. the prominent members of modern rationality defending a "classical view" on metaphor., T. Hobbes (1588-1679) argued that metaphor simply and solely is an abuse of speech; according to him, metaphor (as well as every other rhetorical figure) misleads cognition, because its conclusions are absurd. And in *Leviathan* the philosopher wrote the following:

> To conclude, the light of human minds is perspicuous words, but by exact definitions first snuffed, and purged from ambiguity; reason is the pace; increase of science, the way; and the benefit of mankind, the end. And, on the contrary, metaphors, and senseless and ambiguous words, are like ignes fatui; and reasoning upon them is wandering amongst innumerable absurdities; and their end, contention and sedition, or contempt. ([1651]1960: 39-40)

Hobbes believed that language must be cleansed of metaphors. In the seeking of truth metaphor is not to be admitted; it cannot be a true ground of any ratiocination. So only by using nothing but unambiguous, literal language knowledge can be gained and communicated properly.

Peirce did not formulate a theory regarding the metaphor, but he did put forth some interesting remarks about the trope, which may be able to give us a clue about his view on this matter.

In an untitled and undated manuscript, Peirce noted whereof a central feature of the skilled philosophical thinker consists. In him, Peirce found: "…a sort of intellectual music in his soul by which he recognizes and creates symmetries, parallels and other relationships of form" (MS: 620). Of particular interest in the quote is that Peirce also pointed to the creation of semeiotic relationships of the type of parallelism. This is important, since a metaphor — as partaking of the category of Firstness[9] and, hence, being a sign of the hypo-iconic type — is based on a relation of parallelism. We recall that Peirce's (somewhat cryptic) definition of the metaphor from the article "Syllabus of Certain Topics of Logic" (c. 1903) is as follows: "…those which represent the representative character of a representamen by representing a parallelism in something else, are metaphors." (CP: 2.227).

Thus, the metaphor seems — potentially — to have a cognition creative function to Peirce. One thing that in fact becomes clearly articulated in "The Basis of Pragmaticism in the Normative Sciences" (c. 1906), where Peirce touched upon the concept formation in philosophy, and he stressed:

> Metaphysics has been said contemptuously to be a fabric of metaphors. But not only metaphysics, but logical and phaneroscopical concepts need to be clothed in such garments. For a pure idea without metaphor or significant clothing is an onion without a peel (EP II: 392).

Thus, the metaphor is a general mechanism of cognition which is important in the philosophical sciences; it is important for concept formation and thought in philosophy. In "Short Logic" (1883), Peirce specifically advocated the following viewpoint:

> If a logician had to construct a language de novo--which he actually has almost to do--he would naturally say, I shall need prepositions to express the temporal relations of before, after, and at the same time with, I shall need prepositions to express the spatial relations of adjoining, containing, touching, of in range with, of near to, far from, of to the right of, to the left of, above, below, before, behind, and I shall need prepositions to express motions into and out of these situations. For the rest, I can manage with metaphors. (CP: 2.290, n.1)

In order to fulfil the Kantian requirement of locating objects in space, time and motion (cf. Factor 1996: 229), all that a logician needs to be able to construct a language from scratch is indexical representations in form of prepositions — and the hypoicon metaphor. To Peirce then, the metaphor is not just an added force, or a rhetorical device, to the philosophical language, but rather one of its constituent forms. Peirce also seems to emphasize this in the "Ethics", because he wrote about metaphor as a possible way in which symbols can emanate:

> The body of the symbol changes slowly, but its meaning inevitably grows, incorporates new elements and throws off old ones … Every symbol is, in its origin, either an image of the idea signified, or a reminiscence of some individual occurrence, person or thing, connected with its meaning, or is a metaphor. (CP: 2.222).

Thus, the metaphor is only one of three possible ways in which philosophical symbols can emanate - it, however, occupies a prominent place among these since, as the Peirce scholar C. Hausmann advocates for in his very lucid article, "Peirce and the interaction view of metaphor" (1996):

> It should be noted that the first and the second ways in which a symbol may originate seem to indicate that new significance does not occur. The first, imagining, and the second, reminiscing, both signify on the basis of something antecedent. The third origin of symbols, metaphor, then, must be the only way to open the possibility that a symbol can … have a new significance. (CP: 197)

It is only by virtue of the metaphor that the symbol can be endowed with new significance and meaning. None of the two other ways by which symbols can occur, i.e. by "imagining" or "reminiscing", can provide such an important effect, since both rely on what we, in reference to Hausmann, would call the always-already established significant relations.

The metaphor can be understood as a new significant connection, although not new in an absolute sense, since not only imagining and reminiscing depend upon prior ideas and memories (cf. CP: 5.265; Liszka 1996: 84), but also the metaphorical semeiosis which endows the symbol with new significance and meaning requires prior knowledge and cognition. The new concept formation made possible by the metaphor does in other words not take place in a Cartesian vacuum - which is

obviously not the same as saying that a given metaphorical meaning cannot be new and unique, as this is indeed often the case. However this may be, to Peirce the metaphor seems to be an important vehicle for semantic innovation. If we remember that the metaphor relies on a parallelism, we can say that it is able to provide the philosopher with previously undiscovered relationships of parallelism and thereby create new symbols. In connection to this: if the metaphor can be regarded as a new way of using the language, leading to new symbols, it can of course also lead to new ways of thinking, new ways for the philosopher to consider some wonder in one of the three universes of experience because, as we remember Peirce wrote in the "Ethics": "…the life of thought and science is the life inherent in symbols." (CP: 2.220).

If it is by virtue of the metaphor that new knowledge can occur, it must first and foremost have an abductive nature, since abduction, as Peirce emphasized in the "Lectures of Pragmatism" (1903): "…is the only logical operation which introduces any new idea." (CP: 5.172).

One of Peirce's descriptions regarding the formal structure of the abductive inference seems precisely to support the idea that the metaphor follows this logical form (cf. Liszka 1996: 69; Ponzio 2006: 233). In a review of W. James' (1842-1910) famous work, "The Principles of Psychology" from 1880, Peirce noted the following:

> A well-recognized kind of object, M, has for its ordinary predicates P[1], P[2], P[3], etc., indistinctly recognized.
> The suggesting object, S, has these same predicates, P[1], P[2], P[3], etc.
> Hence, S is of the kind as M. (CP: 8.64)

Maybe the philosopher thought that two things are different, incompatible and at distance, but by the aid of using a metaphor he can guess abductively[10] and look for a parallelism, and see that the two things, from a certain perspective, do share a number of salient predicates: [M], represents the representative character of a representamen, an object [S], by aid of parallelism, interpretant: "Hence, S is of the same kind as M". But the philosopher must also put the pragmatic maxim into effect; he must consider the practical bearings of the effects that the metaphor under consideration might conceivably have given certain conditions. Then the philosopher will have what he conceives would be a result if the observed world of sign phenomena were of such-and-such a nature, according to what he imagines might possible be the case. In the now classic definition of the

maxim from the program article, "How to Make Our Ideas Clear" (1878), Peirce wrote the following:

> 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. (CP: 5.402)

By the pragmatic maxim the philosopher can draw meaning from the metaphorical sign; he creates a hypothetical situation by imagining what would most likely be the case. Then he puts his hypothetical signs to the test, either in the "inner world" by conducting a mental experiment, or "out there" by interacting with the objects of the signs. So the pragmatic maxim is a logical method capable of putting the philosopher and his metaphors on the road toward the possible truth and a representation of reality.

Peirce himself showed that through the discovery of parallelisms between two different universes of experience it is possible to acquire new philosophical knowledge. He studied e.g. human nature and its relation to the world by using metaphorical constructions; regarding the first mentioned, he stressed in a manuscript to the Lowell Institute Lectures (c. 1867) that man is a series of inferences, a sign, a word, a symbol:

> We have already seen that every state of consciousness [is] an inference; so that life is but a sequence of inferences or a train of thought. At any instant then man is a thought, and as thought is a species of symbol, the general answer to the question 'what is man?' is that he is a symbol. To find a more specific answer we should compare man with some other symbol. (CP: 7.583)

And in an unnamed manuscript (c. 1900), Peirce worked on the problem of consciousness and attributed a primary role to a metaphor in this semeiotical process:

> We are going to shock the physiological psychologists, for once, by attempting, not an account of a hypothesis about the brain, but a description of an image which shall correspond, point by point, to the different features of the phenomena of consciousness. Consciousness is like a bottomless lake. (CP: 7.553)

He described, interpreted, the metaphor in the following way (and we quote at length):

> Consciousness is rather like a bottomless lake in which ideas are suspended, at different depths. Percepts alone are uncovered by the medium. The meaning of this metaphor is that those which [are] deeper are discernible only by a greater effort, and controlled only by much greater effort. These ideas suspended in the medium of consciousness, or rather themselves parts of the fluid, are attracted to one another by associational habits and dispositions… An idea near the surface will attract an idea that is very deep only so slightly that the action must continue for some time before the latter is brought to a level of easy discernment. Meantime the former is sinking to dimmer consciousness. There seems to be a factor like momentum, so that the idea originally dimmer becomes more vivid than the one which brought it up. In addition, the mind has but a finite area at each level; so that the bringing of a mass of ideas up inevitably involves the carrying of other ideas down. Still another factor seems to be a certain degree of buoyancy or association with whatever idea may be vivid, which belongs to those ideas that we call purposes, by virtue of which they are particularly apt to be brought up and held up near the surface by the inflowing percepts and thus to hold up any ideas with which they may be associated. The control which we exercise over our thoughts in reasoning consists in our purpose holding certain thoughts up where they may be scrutinized. The levels of easily controlled ideas are those that are so near the surface as to be strongly affected by present purposes. The aptness of this metaphor is very apt. (5.774)

According to Peirce, there is a salient parallelism between the way the ideas of the mind interact in relation to each other and the way objects are floating in a bottomless lake, or "bottomless lake" may be a hypo-iconic representamen of "consciousness", because the representative character of this representamen, as an immediate object, is represented by aid of a parallelism.

We can e.g. put forward the following: "consciousness is a bottomless lake", in which different ideas are floating at various depths. The water of the lake consists of ideas, and this water is only renewed through the rain — the continuous bombardment of percepts which the mind is exposed to. We may remember, the first of Peirce's three cotary statements from "Pragmatism and Abduction" (1903) reads like this:

> *Nihil est in intellectu quod non prius fuerit in sensu*. I take this in a sense somewhat different from that which Aristotle

> intended. By intellectus, I understand the meaning of any representation in any kind of cognition, virtual, symbolic, or whatever it may be … As for the other term, in sensu, that I take in the sense of in a perceptual judgment, the starting point or first premiss of all critical and controlled thinking. (CP: 5.181)

If we are to investigate some ideas of the mind, we must rely on our ability to fixate these ideas so that they can be subject to further investigation; but these investigations can only take place near the surface, they can never be made in the depth of the lake. We use "Consciousness is a bottomless lake" to show that Peirce himself used metaphors in an active, self-aware and self-controlled manner in his philosophical thinking. He preferred to exemplify with "consciousness is a bottomless lake" if he had to explain and communicate concerning different traits and characteristics of consciousness, instead of making a physiological hypothesis of the brain (cf. Haley 1988).

According to Peirce, this metaphor was very apt; it was something by which something new can be known about consciousness. But as L. Factor (1996) stresses, it was, of course, not Peirce's intention:

> … to ceremoniously rename "consciousness" as if it were to be known by some new appellation. On the contrary … Peirce believed that there were strong similarities between the relationships of ideas in the mind and the behavior of suspended and buoyant objects. In the "consciousness is a bottomless lake" metaphor, the iconic relationship or parallelism is not presented, rather it is described. In effect, we are told that if we were in the presence of a bottomless lake and observed the movements of the objects in it, that would be an icon of ideas in consciousness. (: 231)

This insight into parallelism involves both thinking as well as a seeing for the philosopher. Thinking, as far as it causes the above mentioned new symbol formation, and seeing as far as the insight causes an understanding of the very different possibilities for combining different iconic representamens, as the parallelism suggests. This "aptness", which Peirce emphasized, regards the ability of the metaphor to make parallelisms visible and this with precision. In a Peircean perspective, the good metaphor does not lead the idea off balance or muddles cognition; it is not to be understood as an abuse of language (as e.g. Hobbes declared). Rather, the metaphor may prove to be an important vehicle through which new relations of parallelisms can be detected and

communicated; metaphor can have an instrumental value in the growth of reasoning, knowledge and communication. In short, this appears exactly to be the function with which metaphor can be endowed within philosophy.

Concluding Comments

Thus, we may answer the initially posed question negatively, did Peirce advocate for the "classical view" of metaphor — that metaphor cannot lead to the truth, or even that metaphor is an actual cause of deception and untruthfullness? No, to Peirce metaphor is a rather important semantic-cognitive mechanism that can provide new interpretations, new interpretative orientations, create new possible worlds and stimulate new experiences by abductive metaphorical associations of the unknown with the familiar — also within the philosophical sciences. In particular, metaphor can enter into the nascent phase of the philosophical imagination, it can influence the formulation of philosophical problems and the ways in which philosophical problems are conceptualized and approached, and it can play a role in the communication of philosophical ideas. Being a hypoiconic sign the metaphor is part of or derived from the category of firstness; the category of firstness is related to emotion, to freedom, spontaneity, novelty, and quality; concepts which are some of the first interpretants that arise when we address "the creative" (cf. Merrell 2006: 138). Metaphor, then, can reveal that something is possible, it can provide one kind of assurance of truth, as Peirce said concerning the hypoicon in the Monist article, "Prolegomena to an Apology or Pragmaticism" (1906):

> … there is one assurance that the Icon does afford in the highest degree. Namely, that which is displayed before the mind's gaze -- the Form of the Icon, which is also its object -- must be logically possible. (CP: 4.531)

Thanks to the dominant iconic component of metaphor it can e.g. make the philosopher aware of possibilities which he has never thought of before, possibilities which, maybe, have never been actualized; so metaphor has the capacity to further the knowledge and perception of the philosopher, and of modifying his habits of feeling, action and thought - when he puts the pragmatic maxim into effect.

Let our closing remark briefly show how a well-known representative and defender of the "classical view" of metaphor thought and argued diametrically opposite Peirce, namely John Locke (1632-

1704), who in a passage from the work, "An Essay Concerning Human Understanding" (1689) — a work which, incidentally, was one of Peirce's absolute favorites (cf. Ketner 1981: 330) — made the following attack on metaphor and figurative speech in general (and again we quote at length):

> … language is often abused by figurative speech. Since wit and fancy find easier entertainment in the world than dry truth and real knowledge, figurative speeches and allusion in language will hardly be admitted as an imperfection or abuse of it. I confess, in discourses where we seek rather pleasure and delight than information and improvement, such ornaments as are borrowed from them can scarce pass for faults. But yet if we would speak of things as they are, we must allow that all the art of rhetoric, besides order and clearness; all the artificial and figurative application of words eloquence hath invented, are for nothing else but to insinuate wrong ideas, move the passions, and thereby mislead the judgment; and so indeed are perfect cheats: and therefore, however laudable or allowable oratory may render them in harangues and popular addresses, they are certainly, in all discourses that pretend to inform or instruct, wholly to be avoided; and where truth and knowledge are concerned, cannot but be thought a great fault, either of the language or person that makes use of them. What and how various they are, will be superfluous here to take notice; the books of rhetoric which abound in the world, will instruct those who want to be informed: only I cannot but observe how little the preservation and improvement of truth and knowledge is the care and concern of mankind; since the arts of fallacy are endowed and preferred. It is evident how much men love to deceive and be deceived, since rhetoric, that powerful instrument of error and deceit, has its established professors, is publicly taught, and has always been had in great reputation: and I doubt not but it will be thought great boldness, if not brutality, in me to have said thus much against it. Eloquence, like the fair sex, has too prevailing beauties in it to suffer itself ever to be spoken against. And it is in vain to find fault with those arts of deceiving, wherein men find pleasure to be deceived. (Locke 1997: 452).

Here, we can see how the views of the founder of the empiricist tradition in philosophy and the father of logical empiricism, Locke, lie far from Peirce's views, as he considers figurative speech with the utmost suspicion — yet making use of rich figurative language himself.[11] The metaphor is not a trustworthy source of cognition, according to Locke; it is a misuse of language, a seduction of the reader/listener, instead of convincing with the aid of logical arguments — metaphor does not belong within the language and reasoning of philosophy. This is indeed a different view than the Peircean perspective on metaphor.

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NOTES

[1] Peirce was more influenced by Kant than any other philosopher; in "the king of modern thought" (CP: 1.369), Peirce found: "… in a high degree all seven of the mental qualifications of a philosopher: The ability to discern what is before one's consciousness. Inventive originality. Generalizing power. Subtlety. Critical severity and sense of fact. Systematic procedure. Energy, diligence, persistency, and exclusive devotion to philosophy." (CP: 1.522). But only seldom did Peirce come to the same conclusion as the Koenigsberg philosopher (cf. Feibleman 1970: 34).

[2] MS refers to Peirce`s *Microfilmed Manuscripts* (1964-1971), made available by the Department of Philosophy, Harvard University, and listed according to Robin`s catalogue (1967).

[3] Peirce proclaimed the independence of philosophy from theology; perhaps this notion was suggested to Peirce by Duns Scotus (c. 1265-1308) who contradicted that philosophy is the handmaiden of theology as maintained by Thomas Aquinas (c. 1225-1274) (cf. Feibleman 1970: 56).

[4] Since the begining of the 1880s, Peirce himself had tried to contribute to a scientific metaphysics, and in the article "The Doctrine of Necessity Examined" (1892), he concluded that he had succeeded in grounding: "… a cosmical theory, and from it had deduced a considerable number of consequences capable of being compared with experience. This comparison is now in progress, but under existing circumstances must occupy many years." (CP: 6.35).

[5] A characterization which is of cause fully in line with a spate of modern papers and monographs on metaphor (e.g. from P. Henle, M. Black, N. Goodman, M. Beardsley, D. Davidson, C. Hausmann, M. Hesse, G. Lakoff and M. Johnson, to name but a few significant scholars).

[6] The term 'phaneroscopy' refers to a description of the phaneron, which Peirce defined as: "… the collective total of all that is in any way or in any sense present to the mind, quite regardless of whether it corresponds to any real thing or not." (CP: 1.284). In order to separate his view from the phenomenology of Hegel, Peirce chose this name.

[7] For a detailed account of Peirce's classification of the sciences, see Kent (1987).

[8] The Century Dictionary was edited by William Dwight Whitney, with assistance from Benjamin Eli Smith.

[9] Peirce's doctrine of the categories is the basic framework which can cover any object of thought; the categories – comprising a short list - are three, and three only: Firstness, Secondness and Thirdness. And as Peirce wrote in one of his important "Lowell Lectures" (1903): "My view is that there are three modes of being. I hold that we can directly observe them in elements of whatever is at any time before the mind in any way. They are the being of positive qualitative possibility, the being of actual fact, and the being of law that will govern facts in the future." (CP: 1.23). Peirce proved how the categories have many subtle appearances, and he fleshed out the categories within a number of scientific disciplines where he put them to good use – e.g. within physics, biology, sociology, psychology and metaphysics.

[10] If metaphor depends on the abductive form of inference in a Peircean perspective then the metaphor can be said to be a natural feature of our consciousness' mode of operation and central to the development and function of human language-thought. Abduction depends on a certain kind of ability, a certain instinct, which has been developed during evolution (cf. Goudge 1950: 209); the human mind has been developed under strong influence of the laws penetrating the universe. This influence has caused the appearance of the abductive ability (cf. CP: 5.604).

[11] As also remarked by G. W. Leibniz (1646-1716) (cf. Nouveaux essais sur l èntendement humain ([1765] (1990)): III, 10, § 34). Paris.

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