

# Peirce's garden of forking metaphors

**Aleksandar Feodorov**

Institute for Literature at the Bulgarian Academy of Sciences  
52 Shipchenski Prohod Blvd., bl. 17, Sofia, 1113  
Bulgaria  
e-mail: a.n.feodorov@gmail.com

**Abstract.** The philosophic system of the founder of pragmatism Charles Sanders Peirce is rarely grasped from the point of view of its metaphoric usage. However, some of his most original yet often misunderstood and contested ideas such as those of '*matter as effete mind*' and '*the play of musement*' are metaphoric representations. In the present paper I am offering a new way to discuss the role of metaphors in Peirce's philosophy by taking a twofold approach to the problem. On the one hand, metaphor itself becomes an object of inquiry. I touch upon the appearances of metaphoric thinking at the level of his classes of signs and metaphor's relation to abductive inference. I trace those appearances in the process of their becoming from the spontaneity of Firstness towards the actuality of Secondness via the generalizing effects of Thirdness. Then I propose a flexible graphic model of metaphor that is parallel to Peirce's inherent evolutionism. This model is seen as a "gentle" methodological tool for deriving meaning. To illustrate its applicability I include a playful nod to the literary works of Jorge Luis Borges to show how hard logical thought and aesthetic beauty complement each other.

**Keywords:** Peirce; metaphor; effete mind; play of musement; abduction; Borges

## Some general remarks

As the title of this attempt to tackle the problem of metaphor suggests, it is a Peircean one with a playful nod to the literary works of Jorge Luis Borges. However, a few general remarks regarding the background of the inquiry are necessary to better explain the ideas discussed. My research approach rests on the notion that knowledge and thinking are outgrowths of the instinctive ability of biological organisms to (re)present and signify reality. This ability is seen as an evolutionary adaptation that ensures survival in the dynamics of the environment. The idea has

its roots at least since Galileo's concept of '*il lume naturale*', famously adopted by Peirce in his late writings in parallel to his conception of abductive inference as an instinct to guess, not too rarely correctly, the inner workings of reality. More recently, in his distinctively biosemiotic approach, Thomas Sebeok reasoned on the similarities between signs used by infants and the rudimentary signs animal species use to model their environment and to communicate with each other. He concluded that those underdeveloped instants of semiosis in human consciousness might persist and "become very sophisticated indeed in the adult life of exceptionally gifted individuals [with the] abilities to model intricate auditory or visual compositions in their heads in anticipation of transcribing them onto paper or canvas" (Sebeok 1999: 127). This "skill" of conceptualization of the non-verbal has an essential role in art as well as in science. Moreover, by the emergence of a "syntax" that unites non-verbal and verbal signs into complex systems capable of self-correction, human semiosis becomes a way to model immediate reality as well as an instrument to recreate and change it by means of imagining multiple *possible worlds*, which is "the most creative modelling that nature has thus far evolved" (Sebeok 1999: 127).

These are the considerations based on which I argue that metaphor successfully "navigates" between spontaneity and necessity as well as that the ability to metaphorize is fundamental in the creation of *possible worlds*. I think of metaphor as the element of thought that transfers meaning between different logical universes, transcends the boundary between verbal and non-verbal forms of signification, and mediates between the mental and the physical. In the present paper I am offering a new way to discuss the role of metaphors in Peirce's philosophy by taking a twofold approach to the problem. On the one hand, metaphor itself becomes an object of inquiry. I will touch upon the appearances of metaphoric thinking at the level of his classes of signs and metaphor's relation to abductive inference. Those appearances are to be traced in the process of their becoming from the spontaneity of Firstness towards the actuality of Secondness via the generalizing effects of Thirdness. By proving the validity of this path, I will propose a flexible model of metaphor that is parallel to Peirce's inherent evolutionism. My next step would be to apply this model as a "gentle" methodological tool for deriving meaning. If the model proves successful, it may become applicable in yet different areas of research such as literature and philosophy. To test my theoretical results in practice I will playfully apply their heuristic potential upon literary works by Jorge Luis Borges. The surprising outcomes show how hard logical thought and aesthetic beauty complement each other.

## Metaphor – true or false

All attempts to reconstruct the history of metaphor lead back to the works of Aristotle, since he proposed one of the earliest scientific definitions of the concept in his *Poetics*. For him, a metaphor is a “carrying over of a word belonging to something else, from genus to species, from species to genus, from species to species, or by analogy” (Aristotle 2006: 52 [1457b]). For Aristotle, the creation of verbal metaphors is based on analogy, or the process of finding out similarities, whereas the kind of ‘carrying over’ of meaning (from genus to species, from species to genus or from species to species) is simply an additional element of differentiation. Aristotle approached metaphor in linguistic terms; however, he was also aware of the metaphoric elements at the level of thought: “[T]o use metaphors well is to have insight to what is alike” (Aristotle 2006: 56 [1459a]). Is it possible to suggest that metaphor begets mental effects before it is embodied in words? Possibly such considerations pushed Aristotle’s disciple Demetrius of Phalerum (c. 350 – c. 280 BC) to discriminate between figures of speech and figures of thought in his *On Style* [*Περὶ ἑρμηνείας*]<sup>1</sup>. And although the Aristotelean classification of tropes was reworked in the coming centuries, almost nothing essentially new was added. The most basic change, at least according to Juri Lotman, was in the isolation of three “genera” of tropes that encompass all other “species”: metaphor, metonymy and synecdoche.

Neo-rhetoric operates basically with three concepts: metaphor – the semantic substitution of a ‘sem’ according to principles of similarity or likeness; metonymy – a substitution according to the principle of contiguity, association, causality (different authors emphasize different types of connection); synecdoche, which some authors regard as the primary figure and others as a particular example of metonymy – a substitution on the basis of participation, inclusiveness, partiality or the substitution of plurality by singleness. (Lotman 2000: 40)

This development of neo-rhetoric coincides historically with one of the most persistent philosophical “quarrels” in Western thought: namely that concerning the truthfulness of figures of speech. Does metaphor cloud judgement, leading thought to falsehood, or, on the contrary, does it make our thoughts clear and allow the accumulation of new meaning and knowledge? It proves almost impossible not to find controversies as regards metaphor in the works of the great philosophers. The dichotomy ‘true – false’ is a good starting point for the present inquiry, because it leads to the epistemological dimensions of metaphor suggested at the beginning.

---

<sup>1</sup> Disputes about the authorship of *On Style* are still not conclusively resolved: the work that came down to us under the name of Demetrius might have been written by an unknown disciple of his, who lived in the 2nd century AD.

The works of classic Anglo-Saxon philosophers with a taste for empiricism serve as a good example of those against metaphor. In “Dry truth and real knowledge: Epistemologies of metaphor and metaphors of epistemology”, the leading contemporary pragmatist Susan Haack focuses on the “hostile” approach of Locke, Hobbes and J. S. Mill to metaphors. Near the end of Chapter 10 (“Of the abuse of words”) of Book III in *An Essay Concerning Human Understanding* John Locke argues that figurative meanings have no place in the quest for truth:

Since wit and fancy finds 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. (Locke 1825: 372–373)

We find similar hostility in Hobbes' *Leviathan*, when he argues that using words with different sense than the commonly accepted one is an abuse of language and that words used thus cannot serve as basis for logical inference: “[T]herefore such names can never be true grounds of any ratiocination. No more can metaphors, and tropes [figures] of speech: but these are less dangerous, because they profess their inconstancy; which the other do not” (Hobbes 1998: 27). Mill continues this line of thought in his *System of Logic: Ratiocinative and Inductive* where he argues that metaphor causes confusion. Unlike regular confusion inherent to words with more than one meaning, metaphor combines different meanings derived from one another. This specific metaphoric confusion is dangerous because it might easily lead the mind into falsehood and ambiguity: “[O]ne of the commonest forms of fallacious reasoning arising from ambiguity, is that of arguing from a metaphorical expression as if it were literal” (Mill 1889: 29). Locke, Hobbes and Mill share the opinion that using metaphors in science and philosophy should be avoided.

This, however, is not all that they share: as Haack argues, they all demonstrate a “kind of pragmatic inconsistency between [their] official attitude to figurative language, and [their] use of it” (Haack 1994: 2). Locke often uses metaphors such

as mind as a blank sheet of paper, whereas the image of *tabula rasa*<sup>2</sup> has become a cliché describing empiricist epistemologies in opposition to the rationalists and their ideas of *a priori* knowledge. Hobbes is also “guilty” of metaphoric abuse, the most obvious being the image of the Leviathan. Even in Mill, whose works strive for logical clarity, we find metaphors at work. The example that Haack provides is from Chapter 4 (“Of propositions”), in which Mill reasons on the differences between ‘is’ as a copula in a proposition and as signifying actual existence. According to him, not grasping the difference was a cause for the “fog which rose from this narrow spot [and] diffused at an early period over the whole surface of metaphysics” (Mill 1889: 50).

This “disapproval” can be contrasted to the much warmer reception of metaphor by philosophers outside the Anglo-Saxon tradition. For example, in his *Aesthetics. Lectures on Fine Art*, Hegel conceives of metaphoric thinking as a way to connect sense and spirit, or even matter and mind. Thus, when the spiritual transfers into the material in order to enrich it, this is an instance of metaphoric thinking: “[I]f the natural and sensuous is imaged in the form of spiritual phenomena [it is] therefore [...] elevated and ennobled” (Hegel 1988: 405). In this ‘movement’ from the mental to the physical Hegel finds metaphor at its purest, because:

[...] when spirit is plunged by its inner emotion into the contemplation of cognate objects, at the same time it still wishes to free itself from their externality, because in the external it seeks itself and spiritualizes it; and now by shaping itself and its passion into something beautiful, it evinces its power to bring into representation its elevation above everything external. (Hegel 1988: 407)

For Hegel, metaphor is a means for the spirit to conquer what lies outside it. Through its metaphorical ability the intellect manages to master and manipulate its external environment, turning it into a means for its own development on the path to the absolute spirit. Hegel is by no means the only philosopher who examines metaphor positively in its cognitive aspects. We need only mention such names as Friedrich Nietzsche, Miguel de Unamuno and José Ortega y Gasset. For Nietzsche, metaphor embodies the very essence of human thinking and understanding: the collisions of metaphors and mental images represent the complex reality of human interactions most fully. For the genuine poet, “metaphor is no rhetorical figure,

<sup>2</sup> The antagonism between empiricism and rationalism is usually represented by contrasting Locke and Descartes. However, the first strong “enemy” of Cartesian epistemologies is the French philosopher and mathematician Pierre Gassend [or Petrus Gassendi] (1592–1655). He was an empiricist forerunner, whose works exercised great impact in Britain. It was Gassend who first used the phrase ‘*tabula rasa*’ to describe the human mind, long before Locke defined it as “white paper, void of all characters, without any ideas” (Locke 1825: 51).

but an image which takes the place of something else, something he can really see before him as a substitute for a concept" (Nietzsche 2007: 43). Although it remains "hidden", this understanding of metaphor is semiotic in regards to its approach to mental processes: the things of reality (*ens reale*) become objects of thought (*ens rationis*) through the mediating function of the metaphoric sign.

The idea that metaphor "sets off" the process of thought was further defended at the beginning of the previous century and Unamuno and Ortega y Gasset are two of its strongest proponents. For the former, metaphor means setting thought free from the shackles of language. What is more, he argued that the metaphoric principle encompasses thought as well as action. Unlike Locke, Hobbes and Mill, he envisioned language as an entirely metaphoric construct. Comparing this idea to Sebeok's and Lotman's semiotic theories of language as a modelling system, it is not difficult to understand Unamuno's insistence on describing science as a collection of metaphors. For him words such as 'matter', 'force' and 'memory' are metaphors: this means that the attempts of positivists to eliminate metaphors from metaphysics are doomed. He concludes that to "think in metaphors is the most natural as well as the most philosophic way of thinking. Whoever imagines that he is free from them is most entangled in their webs. Most words are metaphors compressed under the pressure of the ages" (Unamuno 1995: 125<sup>3</sup>).

The last sentence reveals the *synechistic* nature (to use Peircean terminology) of metaphor and its quality of lasting and transforming in time. This should be kept in mind, when later I focus on the different stages in metaphor's life. For the time being, though, I would like to conclude with one last reference to the works of Ortega y Gasset. The reason to choose him lies in his triadic conception of metaphor. Similarly to Aristotle, he thinks that in metaphor two realities are combined but they "annihilate" each other in order to give birth to something new (a third). Through a short detour into the field of natural science and the works of Ilya Prigogine, this metaphoric synthesis of meaning can be taken as an example of an irreversible process. Metaphor, thus, is seen as the necessary impetus that starts the evolution of meaning: once created through the connection of two elements, it carries the memory of both of them, but at the same time it is the beginning of something quite new and different. For the Spanish essayist, metaphor is not simply a characteristic feature of a particular mode of thinking, but the only mental operation which allows the intellect to pass from what is real to what is unreal, not-real or fictional.

---

<sup>3</sup> My translation via the Bulgarian, A. F.

Metaphor is probably the most fertile of man's resources, its effectiveness verging on the miraculous. All other faculties keep us enclosed within the real, within what already is. The most we can do is add or subtract things to or from others. Only metaphor aids our escape and creates among real things imaginary reefs, islands pregnant with allusion. (Ortega y Gasset 1972: 76)

Although historically distant and belonging to different philosophic schools, the ideas of Hegel, Nietzsche, Unamuno and Ortega y Gasset form the basis of contemporary research projects that focus on the cognitive aspects of metaphor, going beyond the limited conception of tropes as mere figures of speech. Let us imagine the human mind as a depository for metaphoric concepts or, similarly to Peirce, as a gallery of moving pictures, which constantly originate new meaning in dynamic interactions. The effects of this process do not manifest only at the level of language use, but can be traced in other actions of the individual. A familiar conception similar to that is George Lakoff's and Mark Johnson's theory developed in their joint work *Metaphors We Live By*. In this book, the co-authors argue that the "essence of metaphors is understanding and experiencing one kind of thing in terms of another" and that "human thought processes are largely metaphorical" (Lakoff, Johnson 1980: 5, 6). This hypothesis is fundamental in the postmodern worldview especially as regards the conceptualization of creative processes in art as well as in science. To go so far as to define thinking as a metaphoric process means to "imagine" the operations of the intellect as a constant comparison and contrast between elements that at a first glance seem completely non-cognate with each other. If this is a valid approach, then it follows that, in a certain form, figures of thought are present in every creative process. Lotman is close to this idea when he writes that:

A pair of mutually non-juxtaposable signifying elements, between which, thanks to the context they share, a relationship of adequacy is established, form a semantic trope. Tropes are not, therefore, external ornaments, something applied to a thought from the outside – they constitute the essence of creative thinking, and their function extends beyond art. They are inherent in all creativity [...]. And just as in poetry, so in science, an 'illegitimate' juxtaposition often provokes the formulation of a new law. (Lotman 2000: 37)

It seems to follow that a creative act – e.g. the introduction of an original linguistic form, a visual metaphor in art or a new concept in science – is based on analogy. And in this way a full circle ends where we began: with Aristotle. This overview of the problem of metaphor leaves aside research of great importance: I say nothing of Paul Ricoeur's *Living Metaphor* or the works of analytic philosophers such as

Max Black, Donald Davidson and John Searle. To compensate this lack I would attempt a new interpretation of the role of metaphor in Peirce's semiotics and pragmatism. This entails following metaphor's continuous transformation from Firstness to Secondness via Thirdness. And what is more, I would try to break out of the closed circle created by the habit of "seeing" metaphor and analogy as synonymous, because these are two elements of mind that create different effects.

### Mind, metaphor, matter

The approach in question looks for its foundations in Peirce's pragmatism, semiotics and evolutionism, which are all aspects of his philosophy understood as a form of objective idealism, or the idea that there is no essential difference between mind and matter, but only a difference in degree: whereas mind is more spontaneous, free and undetermined, matter is rigid, law-bound and determined. A good illustration of this doctrine is one of Peirce's enigmatic metaphors: that of *matter as effete mind*. The concept of *effete mind* is an essential part of Peirce's late system of thought, which many scholars have either ignored or tried to dismiss because it seems that it does not conform to contemporary findings in science. However, many aspects of Peirce's thought depend on that concept (including abduction), which would not make sense were it not for the real continuity of mind and matter. Here I rely on Ivan Mladenov's interpretation of the concept, who argues that material reality "should not be viewed in opposition to the thinking mind, but as its exhausted layer" (Mladenov 2011: 143). This idea denies neither the existence of a boundary between living and non-living, nor of a reality independent of the individual intellect. In Peirce's writings, the concept of 'effete mind' appears in his "The architecture of theories" (1891):

The one intelligible theory of the universe is that of objective idealism, that matter is effete mind, inveterate habits becoming physical laws. But before this can be accepted it must show itself capable of explaining the tridimensionality of space, the laws of motion, and the general characteristics of the universe, with mathematical clearness and precision; for no less should be demanded of every Philosophy. (EP 1: 293)

Peirce imagines the universe as originating from pure potentiality, or a state characterized by a complete lack of determination. From this state of less-than-chaos, the universe begins to "grow" habits, becoming more determined. However, the element of chance never entirely ceases to exercise effects. The final state towards which the universe evolves is the so-called 'crystallized mind': a state in which



chance no longer plays a role, for it is absolutely determined. This metaphoric concept is illustrated in Fig. 1.

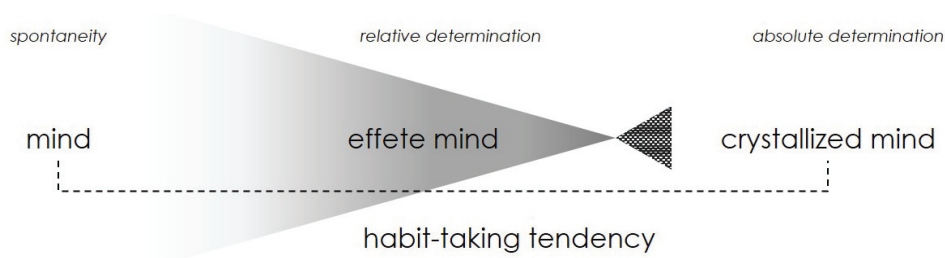


Figure 1. The evolution of mind into matter.

The metaphor of ‘*matter as effete mind*’ can serve as a methodological tool, “unlocking” new meanings in various fields of research. In this particular case, I will use it as a framework to examine the role of metaphor in Peirce’s architectonic. For this purpose, I will go back to the few definitions of metaphor Peirce proposes and their interpretations by scholars such as Floyd Merrell, Douglas Anderson and Ivan Mladenov. Their ideas will be helpful when examining metaphoric processes in relation to creative thinking. These three approaches share a triadic and dynamic understanding of metaphor in the unlimited accretion of meaning characteristic of both “hard” science and “literary” knowledge.

Every mental activity is in its essence an act of comparison: the intellect relates one object of thought (or a collection of its “elementary particles”, so to speak) to another (or its collection of such “particles”). In every conjoining of mental objects, the inherent attribute of the intellect to metaphorize can be observed. To use Lotmanian terminology, metaphor is a vehicle of novelty that causes explosive changes in the cognitive system of an individual or of an entire culture. In the continuous and unlimited semiosis, metaphor slowly loses its creative and explosive properties – under the influence of the habit-taking tendency, to switch back to Peircean terminology – accruing stable meaning. Thus, the initial spontaneity of mind is “exhausted”, replaced by *effeteness*. Seen as an artistic technique, a figure of speech or a basic cognitive operation, metaphor is a kind of sign activity operating (as if) in-between the permeable border between *ens reale* and *ens rationis*, shifting its place on the mind-matter continuum. To clear up the metaphysical fog engulfing these statements, I will extract a working conception of metaphor that is parallel to Peirce’s theories.

Peirce rarely approached the problem of metaphor directly. As Mladenov aptly stresses, he is “not known to favor the metaphorical discourse; rather the opposite seems to be true [since his] disciplined way of thinking does not prefer a wealth of metaphors” (Mladenov 2006: 1). On the contrary, Peirce always tries to make his ideas clear without relying on “poetic” language, careful not to abuse words in “the merciless way that words have to expect when they fall into literary clutches” (CP 5.414). Yet in his later writings from the 1890s till his death in 1914, Peirce’s interest in esthetics (his preferred spelling), the religious and the mystical steadily increased. A good example of such development is his idea of *the play of musement* from his enigmatic essay “On a neglected argument for the reality of God” (1908), which will be discussed later as regards the possibility of being also used as a methodological tool. Another example is his insistence that logic conceived as semeiotic (thought, Thirdness) is based on ethics (action, Secondness) and esthetics (feeling, Firstness). This hierarchical structure entails that the goal of logical reasoning arises out of a feeling of admiration and strives to actualize itself in good behaviour. Even before the beginning of the 20th century Peirce passionately argues that only feeling engenders thought and for that reason it would be absurd to deny its fundamental role in cognition.<sup>4</sup> This idea is present in his defense of sentimentalism, for example, in his article “Evolutionary love” (1893):

But what after all is sentimentalism? It is an *ism*, a doctrine, namely, the doctrine that great respect should be paid to the natural judgements of the sensible heart. This is what sentimentalism precisely is, and I entreat the reader to consider whether to condemn it is not of all blasphemies the most degrading. (EP 1: 356)

Thus, we should not approach feeling, thought and action in opposition to one another, but rather in their community and continuity. Thus, I argue – in contrast to other Peircean scholars holding the opinion that only symbols are meaning-laden – that in the vagueness and indeterminacy of pure feeling rests meaning, which a true poet can bring to light with seeming ease through provocative

<sup>4</sup> Thus, it can be argued that Peirce makes an argument for an embodied theory of mind in sharp contrast to Cartesian transcendental rationality. In other words, he anticipates the ‘affective turn’ toward embodiment in the cognitive sciences that is current nowadays. Lakoff and Johnson are two other proponents of such ideas, who connect the embodied mind exactly with the use of metaphor. The idea of a pre-linguistic “naturalized” metaphorical structure undergirding all cognition is also the topic of Frederik Stjernfelt’s recent book *Natural Propositions: The Actuality of Peirce’s Doctrine of Dicsigns*, in which he argues that metaphor is a class of Peirce’s dicsigns or naturalized propositions. For this note I am indebted to Tyler James Bennett from the University of Tartu.

metaphors. This is a gift foreign to most scientists, which Peirce acknowledges when he says that: “Bad poetry is false, I grant; but nothing is truer than true poetry. And let me tell the scientific men that the artists are much finer and more accurate observers than they are, except of the special minutiae that the scientific man is looking for” (CP 1.315).

To determine the reasons why Peirce never developed his ideas as regards metaphor might suggest fruitful directions in order to reconstruct the missing esthetic doctrine in his system of thought. However, such speculations might turn out to be a task for a whole volume, whereas the question propelling the present inquiry is not whether metaphor has a place in Peirce’s architectonic, but what its role is in the continuous transformation of the elements of mind from Firstness into Secondness via Thirdness.

In his published works, Peirce tries to define metaphor only on an occasion and a half, so to speak. The first instance comes from his reasoning on *hypoicons*.

Hypoicons may roughly [be] divided according to the mode of Firstness which they partake. Those which partake the simple qualities, or First Firstnesses, are *images*; those which represent the relations, mainly dyadic, or so regarded, of the parts of one thing by analogous relations in their own parts, are *diagrams*; those which represent the representative character of a representamen by representing a parallelism in something else, are *metaphors*. (EP 2: 274)

The second is from a manuscript posthumously published as “The ethics of terminology” (1903). Reasoning on the impossibility of attaching only one single meaning even to scientific concepts – since all symbols evolve – Peirce once again alludes to the key role of metaphors in the development of cognition.

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. Terms of the first and third origins will inevitably be applied to different conceptions; but if the conceptions are strictly analogous in their principle suggestions, this is rather helpful than otherwise, provided always that the different meanings are remote from one another, both in themselves and in the occasions of their occurrence. (EP 2: 264)

The triad *image-reminiscence-metaphor* is no more than a replica of the *image-diagram-metaphor*. An analogy such as a road map represents and generalizes a geographic area in the same way as a memory represents and generalizes a past experience: that is, by omission of minute details.

Although Peirce has contributed nothing more in terms of definitions of metaphor, these two short passages are the beginning for any research on his *possible* philosophy of metaphor. An example is Douglas Anderson's article "Peirce on metaphor". This text is undoubtedly one of the strongest in-depth analyses of Peirce's conception of metaphor, but it is one that, in my opinion, makes certain mistakes. Based on those two quotes, Anderson claims that there are two manifestations of metaphor in Peirce's semiotics: creative and conventional (Anderson 1984: 455). He also argues that metaphor and analogy are not synonymous as it is considered in the Aristotelean lineage: "[I]n the growth of thought analogies are effective primarily for science and metaphors primarily (not exclusively) for art" (Anderson 1984: 455). This dichotomy is seen by Anderson as the reason for Peirce's lack of a more complete treatment of metaphor: after all, he was primarily a scientist. Defending this last proposition would be difficult, but that should not stop us from a detailed reconstruction of Anderson's treatment of Peirce's metaphor.

What is the difference between analogy (diagram or memory) and metaphor? If we focus on the first of the citations, we can define metaphor as a kind of iconic sign, which belongs to third-order Firstness or First Thirdness. It would be even more accurate to say that metaphor is a hypoiconic sign, i.e. an embodiment of pure potentiality. Analogy, on the other hand, is only a sort of an underdeveloped metaphor, in which similarities are of a simpler sort. There are only three elements in every analogy: two objects of comparison and the form they both share. Peirce's works offer an abundance of examples we can use to illustrate this, such as the example of the road map as a general analogue to the geographic area which it represents. In the latter case we have the map, the area and their shared form. But in metaphor, according to Anderson, the sign process seems to include more elements:

In a metaphor, however, there seem to be four things: the two relata and the different quality sets of each. When Peirce holds metaphors to be thirds, he suggests the presence of a third thing which ties together the quality sets of the relata. But he does not tell us what this third thing is. Unfortunately, there is not enough to go on in this one instance; it is suggestive but not conclusive. (Anderson 1984: 455)

Although the third in question is only suggested, it is not difficult to see the likeness between this hypothesis as regards metaphor and the poetic understanding of the triadic nature of metaphor in Ortega y Gasset. Anderson's interpretation leads to another consequence in relation to his other claim: the division of metaphors

into creative and conventional. The thing that makes an iconic sign significant is its material characteristics, which belong to it even if its object is fictional. What are, then, the material characteristics of metaphor? For Anderson, they cannot be anything else but a kind of Firstness such as a pure feeling or a pure iconic sign, perceived by the intellect and thus engendering a metaphor. In this case the iconicity of metaphor consists in creating something third that is a combination of two elements.

Thus, the ground of a metaphor is an “isosensism” between a metaphor and its icon which is created by its author. Moreover, what resemblance obtains between the constituents of a metaphor is created in the articulation of the metaphor. Unlike analogical isomorphisms, metaphorical resemblances are not traceable to antecedent links [...]. Therefore, a metaphor, like an image or an analogy, is what it represents – but not because of an antecedent identity or similarity, not as a reminiscence, but in virtue of a similarity which it creates. (Anderson 1984: 459)

The similarity between a metaphorical sign and its object is not a similarity of form (this being the *modus operandi* of analogy), but lies in a newly created similarity in feeling, which they both “carry” (Anderson’s *isosensism*).

This understanding of the creative force of metaphor is a manifestation of Firstness. Thus, there exists a certain overlap in meaning between creative metaphor and abduction. In the dynamic interaction of the intellect with reality a *possible* effect is caused, or rather merely suggested. In the same way as abductions do not provide a high degree of logical certainty but are, at least according to Peirce, the only way to reach new knowledge, the newly born metaphor ‘carries’ the intellect from the immediate reality into a *multitude of possible worlds*. In this case we can infer that Anderson’s claim as regards the reasons why Peirce omitted a fuller treatment of metaphor is somewhat hasty. The rhetorical situation in which a meaningful parallelism is born is equally necessary both in science and in art (and even in everyday experience, we might add). In addition to that, we should stress that Peirce’s iconic signs are neither true nor false: therefore, the empiricists’ considerations as regards the use of metaphorical discourse in science are invalid at least on the level of Anderson’s creative metaphor.

Once “materialized” by the intellect, metaphor begins its own life. Its duration depends on its “adaptiveness” to the changing conditions of its environment. In a universe directed by three evolutionary principles – chance (tychasm-Firstness), habit-taking tendency (agapasm-Thirdness) and necessity (anancasm-Secondness) – metaphors could appear in a flash and disappear. But as chance begets order, creative metaphors have the potential to accrue stable meaning and transform into symbols. I term this process *the symbolization of metaphor* and

it is an instance of Thirdness. Going back to Anderson's terminology, this is the element of semiosis which he calls conventional metaphor. In order to make his claim about creative metaphor as an agent of change and a trigger for the evolution of meaning, Anderson delves into Peirce's unpublished manuscripts.

Creative metaphors, then, as firsts, as originative symbols, are vague. As potential firsts of conventionalized symbols, they "play in knowledge a part iconized by that played in evolution according to the Darwinian theory, by fortuitous variations in reproduction" (MS 599, pp. 42–43). But how is their inherent vagueness couched? We must recall that we are talking about symbols whose iconicity is emphasized; thus, some indexicality and symbolicity remains. (Anderson 1984: 463)

In the unlimited semiosis of the universe and under the influence of the habit-taking tendency inherent in all phenomena, metaphor grows and transforms into a symbol by accruing new meaning and by discarding old. This process, mainly made possible through repetition, is analogous to that of learning by correcting our mistakes according to the suggestions experience has provided us with. If this process is teleological, what is its goal? By raising this question, I am trying to show the most significant lapse in Anderson's inquiry. In it the transformation of Firstness to Secondness via Thirdness remains incomplete. In order to "correct" this defect and to show the relative final goal in the growth of metaphor, I will examine two more attempts that will help me develop a model of metaphor compatible with Peirce's architectonic.

In Merrell's article "Creating: Algorithmic, organicist, or emergent metaphorical process?" we find another in-depth attempt to conceptualize the creative force of metaphor in terms of Peirce's philosophy. Merrell problematizes the linguistic approaches to the nature of metaphor and offers a general theory which conceives of all creative processes in the universe as metaphoric. For Merrell metaphor is a result of the interaction of other, less developed signs, which operate on the level of sense-experience, i.e. on the level of the physical. Not only do these signs precede words, they are also a *sine qua non* for their existence.

In this vein, I would ask that you consider the creative process as emerging from metaphoricity at the heart of which lies hypoiconicity. This involves a creative process beginning with feeling, sentiment, and emotion (Peirce's Firstness), which, after passing through sensation and the experience of imagined or physical world particulars (Secondness), might eventually find their way to explicitness through ideas, thoughts, and concepts incorporated in words (Thirdness). (Merrell 2006: 120)

Merrell goes back to the Peircean differentiation of the different types of hypoicons (images, diagrams-analogies and metaphors) in order to show the role of metaphor in the gradually increasing symbolization of semiosis. In this way, he approaches images as an example of pure iconicity, diagrams as a gradual transformation of iconicity into indexicality, and metaphors as a becoming aimed at a final synthesis of iconicity and indexicality into symbolicity. Although his approach is extremely well argued for, providing various detours ranging from theories of physics to artistic examples, I propose a different perspective than Merrell's. He seems to envision the passage between Peirce's categories from Firstness via Secondness to Thirdness, whereas I insist that Peirce's Third is rather a mediating element between a First and a Second. In logic conceived as semeiotic we might designate the element of Thirdness with terms such as *mediation*, *representamen*, *sign* or *interpretant*;<sup>5</sup> in Peirce's evolutionary cosmology it is called *agapasm*, or the force of sympathy and habit-taking that creates the order of *anancasm* out of the chaos of *tychasm*; and in his objective idealism Thirdness is seen in the *synechistic* doctrine of the continuity (Third) between mind (First) and matter (Second). As the habit-taking tendency is that element in the universe under whose influence mind becomes more determined and turns "effete", I consider the symbolization of metaphor as a stage of creative metaphor's acquiring of habits, turning into... Into what, indeed? Into a norm, a cliché, an "exhausted" meaning, temporarily "frozen" semiosis. To delve into this problem, I will mention only one other approach to the problem of metaphor in Peirce's philosophy.

In *Conceptualizing Metaphors: On Charles Peirce's Marginalia*, Mladenov proposes to approach the problem from a different angle than Anderson and Merrell. Instead of turning metaphor into an object of inquiry, he develops the idea of using metaphors as methodological tools in order to show how by "conceptualizing metaphors" we are capable of bringing to new life underdeveloped or forgotten philosophical ideas. This approach does not see metaphor as an object

<sup>5</sup> It should be pointed out that Peirce's interpretant might be seen not as a mediating element, but as a result of mediation. There are at least two arguments against such conception. On the one hand, etymologically it derives from the Latin '*interpres*', which means 'interpreter', 'translator', 'mediator' or 'middleman'. On the other hand, the interpretant is an interpreting sign that can mediate between the object and a more developed interpretant in unlimited semiosis. According to Peirce, in a syllogism the premises indicate the conclusion. However, the conclusion can itself become a premise in another syllogism that produces yet another conclusion. As Peirce wrote, "*representamen*, or sign, is anything which stands, in any respect, at once in a relation of correspondence to a correlate, called its *object*, and to another correlate, its *interpretant*, which is a possible representamen determined by the first and referring to the same object. The idea of a representamen thus essentially involves the idea of an endless series" (MS 1147, c. 1901–1902).

of study in itself, but is based on the claim that “metaphoric discourse is the only way of representing, producing and doubling meaning” (Mladenov 2006: viii). For Mladenov, a metaphor is, in its most general sense, a distant comparison. In its “nucleus” lies underdeveloped meaning, which can be conceptualized in a new way, thus engendering unknown conceptions, beliefs and theories. The method is based on Peirce’s semiotics, according to which any “sign contains traces of its creation, i.e. it represents an outcome of something that resembles the device of metaphor” (Mladenov 2006: 159). In relation to such a process of conceptualization we can mention Mladenov’s interpretation, adopted also in the present article, of Peirce’s idea of *matter as effete mind*, which acquires new meaning applied in the field of epistemology. Thus, knowledge is seen as a layer of *effeteness*, under which meaning is compressed and deposited through habit-taking tendency. This deposited meaning exercises its influence not only on the level of the individual but can provide a multitude of mental clichés and norms of behaviour for entire societies. By showing two aspects of metaphor – that Anderson calls the creative and the conventional – I tried to clarify Unamuno’s claim about metaphors compressed by time. But it is mainly through Mladenov’s idea about the meaning of *effeteness* that I am able to reach the final stage of metaphor’s transformations. The last step needed is to trace this transformation of metaphor into a norm, i.e. its transformation from spontaneity to the rigidity of law-bound behaviour, the “exhaustion” of mind into matter.

At the level of Firstness metaphor is vague: it consists of a limited number of potentialities for deriving different combinations of mental elements and images, which are capable of creating meaning. The immediate object of metaphor is thus indeterminate and the modus of existence of its dynamic object remains at the level of abstraction. It follows that the interpretant of this possible metaphor, as an effect of the relation object-sign, also remains potential, or in Peirce nomenclature – an Eidoseme. Peirce used that term (or alternatively Idoseme) on several occasions between 1905 and 1907. The term has been employed by Vinicius Romanini to designate what he calls a degenerated index:

This sign has a double nature, being Firstness and Secondness at the same time. Although it is materially linked to the object that it represents, the Idoseme also represents immediately the Form of this same object. In 1909, Peirce called Idoseme the “iconic Index” and gave the photography as an example. Being a luminous kind of printing carried out by photons coming directly from the photographed object, the photograph has an indexical character. However, it also brings the Form of its object to the interpretant, therefore having an iconic character too. Peirce gives us a visual example, but the Idoseme enters through every perceptive organ and is certainly the first brick of our cognitive building.



The Idoseme has the property of showing directly its signification, interpreted as incorporated in its own object. (Romanini 2006: 94–95)<sup>6</sup>

Similarly, I am using the term Eidoseme to designate the *dynamic interpretant* (a sort of Secondness) in its mode of being on the level of Firstness. On other occasions Peirce calls this mode of the dynamic interpretant *sympathetic* or *poetic*. In short, it is the interpretant that engenders feeling, which takes shape in reaction or in opposition to its surroundings.

This is the beginning of the thinking process, which will later actualize itself in other, more developed thoughts or in concrete actions. In the continuum of semiosis and under the influence of habit, in the numerous repetitions and metamorphoses of metaphor, it starts to become symbolized, i.e. it acquires generality. And thus, its *immediate* and *dynamic objects* also acquire generality, which unites the characteristics of whole classes of merely conceivable or actual objects. The interpretant of that symbolized metaphor starts to acquire and also generate habits in the intellect (*Logoseme* or *imperative* – engendering a habit), “compressing” in itself whole argumentative or syllogistic chains. The result of this process is an “exhaustion” of meaning, which turns into a norm. This is the final realization of Secondness, the embodiment of metaphor into a hypoiconic sign, into the matter of mind. To describe the interpretant of such a sign, Peirce used terms such as *Ergoseme*, *percussive* or *stimulating* – i.e. engendering action. Although such a claim seems to be too abstract, I envision a process as real as anything can be: namely, the actualization of the vagueness of Firstness through the mediating role of Thirdness into the brutal existentiality of Secondness. In this process metaphor acquires being: a literary text, a painting, a dance movement, a scientific hypothesis or a utility of some kind, are realized as an instance of one general norm. In this stage of metaphor’s development, its *immediate object* refers to a singular event, a person, a thing, or a memory of a forgotten mental object. Following Peirce’s sign classifications, in this case the *dynamic object* is concrete, because of all potentialities only one is selected. The effect of this relation is a sort of “unconditional” interpretant, in which thought is actualized into a concrete action.

---

<sup>6</sup> Or, to cite Peirce himself: “That is to say that it directly exhibits its signification, or Dynamic Interpretant (But Qu[estion]: is it the dynamic interpretant, or rather the “signification” or interpretant as embodied in the Real Object)” (MS 277, 1907).

## The evolution of metaphor

In line with Peirce's idea of unlimited semiosis, where every interpretant becomes another sign, creating a new interpretant, thus establishing increasingly stable interpretative chains, and with his idea of evolution in which the more spontaneous mind becomes the more law-bound matter (or 'effete mind') through habit-taking tendencies, I depict the evolution of metaphor in Fig. 2. The final stage, however, is only relatively final: what I call the 'metaphor-norm' can be brought back to life and always remains capable of introducing new interpretations. And when in this "exhausted" symbol elements of metaphoricity are dominant, it can be applied to different concepts and engender new meaning.

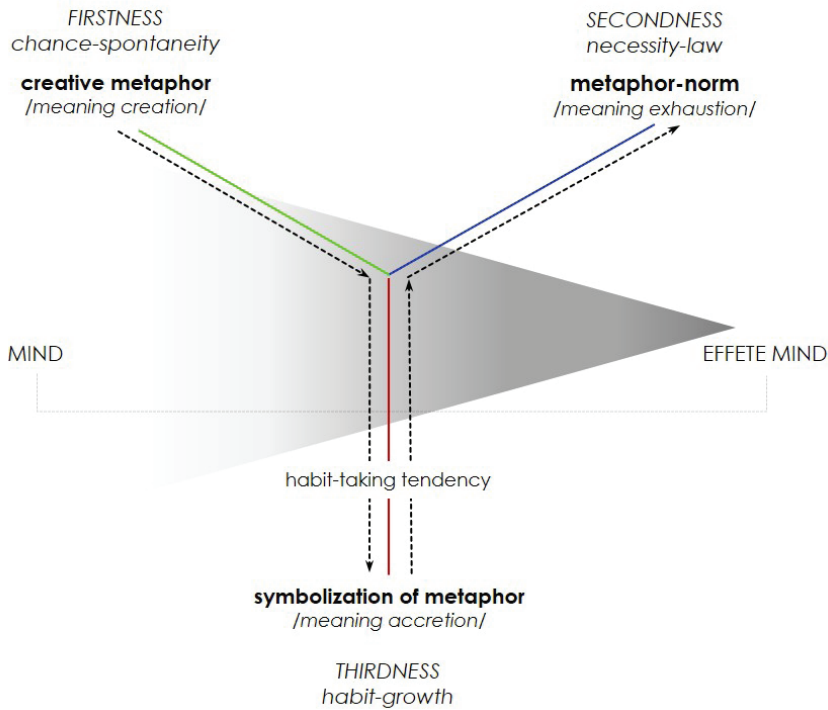


Figure 2. The triadic evolution of metaphor.

Although I speak of 'metaphor-norm' as an instance of Secondness, I would like to stress that by 'norm' I understand something like a horizon, which the intellect aims to reach: "[W]e see it, progress is oriented in relation to it, but it could never

be reached” (Mladenov 2011: 37). Norm is a concept of generality and the only way to “know” it is through the effects that it develops and actualizes. The embodied metaphor, on the other hand, dwells within the logical universe of actuality as an object, singular event or a memory. Thus, a difference should be made between the ‘metaphor-norm’ as an example of ‘effete mind’ and the ‘norm-horizon’ as an example of ‘crystallized mind’. In Peirce’s semiotics, the latter can be related to his concept of the *Ultimate Interpretant*, which is an attempt to imagine the limit of the unlimited semiosis. Paradoxically as it sounds, this limit should be considered not merely as an ultimate end point, but as a gate towards an evolution of semiosis, which might develop a set of completely new laws. Would the stage of the evolution of the universe, in which semiosis “freezes”, be succeeded by a new Big Bang, or by... an implosion? Unlike the crystallized ‘horizon norm’, the ‘metaphor-norm’ is not completely dead, not entirely determined, but still preserves the potential for further development. The thrust it requires in order to be brought back to life is a matter of individual consciousness in what Peirce calls *the play of musement*. The act of individual creativity is the *sine qua non* of the compressed meaning of the ‘metaphor-norm’ to dissolve in a creative vagueness, in which the intellect can create a new likeness. Thus, new knowledge and meaning, extracted from the layer of *effeteness* of the ‘metaphor-norm’ thanks to an individual creative act, once again begin to grow and symbolize. Through repetition, new meaning becomes more general and universally recognizable, only to reach new degree of *effeteness*.

In this process of accruing meaning metaphor is a phenomenon that transcends boundaries and mediates between the logical universes of Firstness, Secondness and Thirdness. Every symbol (Thirdness) is brought to life by a pure icon (Firstness) and carries the memory (Secondness) of its own metaphoric past. Thus, we can conceive of thinking itself, of language, of scientific as well as of literary discourse, as metaphoric in their very essence. In the process of unlimited semiosis every effect of mind has been or can become a metaphor once again, introducing an impulse of renewal necessary for further evolution. This process cannot be explained mechanistically, because it is – like time – irreversible and it combines in itself elements of spontaneity and chance with elements of necessity and coercion. What characterizes this process is an increase of diversity and growing complexity of the effects developed. We can argue that the development of metaphor is somewhat circular because one and the same impulse “gives” it freedom, yet brings it into harmony. What saves it from the traps of *petitio principia*, lies in the unpredictability of the creative act. Every new metaphor, like every good abduction, ignites a process of self-becoming in which it turns into something different than itself and what is more – into something different than what it initially “strove for”. In this process of following and simultaneously deviating from

norms, many alternative meanings fall out and metaphor realizes only some of its inherent potentialities. But it is through such “deviations from the plane of the ordinary, that reason feels its way, if at all, in its search for the true,” in the words of Edgar Allen Poe’s brilliant detective Auguste Dupin (Poe 1845: 133).

### **The diaphanous mystery of the labyrinth of symbols**

The words of Dupin are not the only example of a relation between philosophic and literary metaphors, which have the heuristic potential to “unlock” the process of accruing meaning. We can uncover another striking overlap of literature and philosophy in the works of the Chinese monk and poet Ts’ui Pen. He was a governor of the province of Yunan, but left his office to live in isolation, dedicated to his goals of writing a novel and constructing a labyrinth encompassing past, present and future. For years historians thought of Pen’s work as incomplete due to his premature death by the hand of a foreigner. His labyrinth was never discovered and the novel he had been writing consisted of many contradictory drafts: e.g. the protagonist dies in one chapter, but is alive in the next. It was not until the 20th century that the sinologist Dr. Stephen Albert managed to solve the diaphanous mystery of Pen’s legacy. Albert remembers that two circumstances played a key role in solving the mystery. On the one hand, it was the improbability of the story that Pen wanted to build a truly infinite labyrinth. And on the other hand, there was a letter he discovered, in which Pen wrote “I leave to several futures (not to all) my garden of forking paths”. The confusedness of the story and the lack of evidence for the existence of a physical labyrinth suggested to Albert that the novel itself was the infinite labyrinth, a labyrinth of symbols. How can a novel be infinite, though?

Our imagination can suggest a cyclical volume, comparable to a closed circle. For a long time, Albert conceived of a hereditary work, passed on from father to son, in which every successive author adds a new story or changes the previous one. But the true answer suggested itself when Albert discovered the letter and realized that the phrase “to some futures (not to all)” entails a forking not in space, but in time: Pen’s garden of forking paths was the seemingly chaotic novel. Whereas in most literary works we are used to following a protagonist who chooses only one option, in Pen’s avant-garde experiment the protagonist would choose all. In this way the literary character becomes a creator of multiple futures, each different from the other, capable to further multiply and fork. Could we approach Pen’s novel as a beautiful metaphor for Peirce’s concept of unlimited semiosis? In sign processes meaning constantly grows, transforms and creates new meaning and new paths for thought to fork. As Peirce conceives the universe as abiding by

the law of evolution, Pen conceptualizes it through his metaphor of the garden of forking paths. Albert argues that Pen never believed in Newton's conception of time as homogeneous and absolute, but rather in an infinite strings of times, increasing and forking web of times that divert, converge, and move in parallel.

There are indeed many similarities between Pen and Peirce, but they also differ in important respects. Firstly, Pen was a monk and an astrologist with a taste for the esoteric, whereas Peirce was a scientist and a philosopher, dedicated to empirical verification. And, secondly, Pen was not a historical figure, but a character from Jorge Luis Borges' short story "The garden of forking paths"<sup>7</sup>. Borges considered both philosophy and metaphysics to be branches of literature and, thus, of imaginative creation. For that reason I would like to give one more example of Peirce's philosophy and Borges' literature complementing each other from the story "The Library of Babel". In it, Borges likens the universe to a library and reasons on the connection between the potential and the actual. This metaphysic parable is "soaked" in pragmatistic concepts and it can be interpreted as a metaphoric representation of the action of signs. The text ends with a note on the infinity of the universe and the hope for the existence of order in it:

I hereby state that it is not illogical to think that the world is infinite. Those who believe it to have limits hypothesize that in some remote place or places the corridors and staircases and hexagons may, inconceivably, end – which is absurd. And yet those who picture the world as unlimited forget that the number of possible books is not. I will be bold enough to suggest this solution to the ancient problem: The Library is unlimited but periodic. If an eternal traveler should journey in any direction, he would find after untold centuries that the same volumes are repeated in the same disorder – which, repeated, becomes order: the Order. My solitude is cheered by that elegant hope. (Borges 2008: 2641)

With these two examples, I would like to suggest that philosophy, literature and science, through the power of metaphor, have much in common. As parts of the unlimited semiosis of the thinking universe, they play a homeostatic role in the evolution of knowledge by providing 'exhausted' meanings, deposited in 'metaphors-norms', which provide stable interpretative paths. Yet, these paths are forking for the reason that meaning is in a process of perpetual renewal. In the peripheral regions of literature, where it meets other sign systems such as philosophy, the low degree of determinacy allows spontaneous engendering of

---

<sup>7</sup> If Pen was inspired by a real person, that would probably be Borges' mentor, the writer Macedonio Fernández (1874–1952), who was (in)famous for his inability to finish writing a book for no single solution to the story ever interested him as much as the problem he was examining, making his only "finished" work to have had 59 different endings.

creative metaphors. Similarly to the Darwinian fortuitous variations, they give the necessary impulse for changes in the “nucleus” of either literature or philosophy in our case. And like the evolutionary theory of Peirce, the development of metaphor is hyperbolic: in its constant transformations it passes from one state in the past to a different one in the future. While in the past of Firstness it is an example of vagueness and chaos, “the nothingness of which consists in the total absence of regularity”, through the action of habit and Thirdness it gradually acquires *effeteness* and transforms into Secondness “the nothingness of which consists in the complete triumph of law and absence of all spontaneity” (CP 8.317). If we wished to stay true to the pragmatistic philosophy of Peirce, we should add: this could be the case in the infinitely distant future, when the vibrations of the strings of interpretation in the process of accruing meaning would gradually fade away.

### Metaphor and the method of musement

If we accept the statement that the individual intellect, similarly to the more general concept of ‘mind’, is capable of creative acts, in which the force of metaphor to carry it over different *possible worlds* becomes evident, it seems that the consequences of the proposition must be at least described, if not fully explained. Firstly, in the philosophical doctrine of objective idealism we can conceive of the universe – so much as it is *mindful* – as a result of a metaphoric process. In the primary nebula of pure potentiality begins a process of spontaneous determination of elements and a subsequent development of “remembering” their own shared past, manifested in creating and recreating parallels between them. This process is metaphoric in its form as much as it is physical, chemical or biological in its material aspects. In the gradual evolution of the universe the aforementioned creating (and recreating) of connections plays a double role: on the one hand, it brings the “building blocks” into harmony, and on the other – it makes new combinations between them in the universe’s perpetual renewal and increasing complexity. Secondly, it is possible to imagine, for example, scientific as well as literary discourse as a play of metaphors. In literature rule-following and a tendency to deviate from the rules intertwine. Concrete norms actualize and, thus, awaken the memory of their metaphoric past, while, simultaneously, deviation occurs by the introduction of new metaphors that in turn can combine in a new “syntax”.

To cite Mladenov, “cognitive processes consist of creating connections between external objects and our consciousness through the communicative channels – perceptions, feelings, thoughts” (Mladenov 2012: 26). According to Peirce’s pragmatic maxim, reality is the aggregate of the effects of those objects, while his

semiotic doctrine is an attempt to “capture” their significance by adding the effect of interpretation. Thus, mind learns and develops by comparison and contrast with the already known, i.e. by integrating the new into the available model of reality. What is the vehicle of universal recognition and generality? The iconic signs, at least according to Peirce, are the answer. In every metaphor, regardless of its stage of development between Firstness, Secondness or Thirdness, there is something present which does not belong entirely to it, something foreign, “other”. This is the memory of its own past. For a new metaphor, whether in science, literature or philosophy, to become meaningful, this stage of a past existence needs to be brought to awareness. In this way memory is actualized, it becomes intertwined in the “body” of a pure icon in order to transform itself into a hypoicon, leading to the relative beginning of a new interpretative procedure. Thus, ‘creative metaphor’ originates a new meaning, which, however, is understandable despite its novelty. How is this possible? This new meaning is an effect of an intersection between different semiotic planes, so to speak. In literature, this is an intersection between the literary and what lies in its periphery; in science between the scientific and its own periphery. In other words, this is a contact between an already meaningful layer of norms deposited in the ‘effete mind’ of memory and the newly emerging potential meanings of metaphor. Thus, the semiosis of the ‘outside’ becomes a generator for the development of the ‘inside’. In this reaction between First and Second, between potential and actual, a Third arises – universal meaning. The awoken memory of metaphor’s past lives, of mental combinations that echo in time, is at the same time a condition for and an effect of the evolution of metaphor. To develop this line of thought further, I will approach Peirce’s metaphor of *the play of musement*.

Although Peirce introduced this concept only in 1908, the parallel between ‘thought’ and ‘play’, implicitly suggesting that spontaneity is always present in the mind, has been part of his philosophy at least since he read Friedrich Schiller’s *Letters on the Aesthetic Education of Man* (1794) in his youth. Peirce was greatly influenced by Schiller and his ideas of the three impulses driving human cognition: ‘*Stofftrieb*’ (strive for diversity), ‘*Formtrieb*’ (strive for stability) and ‘*Spieltrieb*’ (aesthetical strive, mediating the other two). In fact, *the play of musement* is another way of expressing these same ideas.

Peirce describes ‘play’ as a lively activity of mind, the goal of which is to set aside any determinate intention: a tyochastic stage of thought. In *the play of musement* there is an uncontrolled movement of mental images and spontaneity and freedom dominate. At this stage the links between the manifold of sense impressions with intelligible perceptions are not established. Thought is free and it creates multiple interpretative possibilities. They lack logical security, but offer instead

a high degree of suggestive force, allowing the intellect to deviate on the path of the unknown and unexperienced. In these initial stages of the play hypotheses are engendered that set minimal limitation to successive interpretation: thought is free to follow different paths. At this stage, the intellect is passive, because it lets itself be engulfed by the impressions.

However, thought gradually loses the initial spontaneity and acquires regularity and direction. As a result, the interpretative possibilities decrease in number and increase in concreteness. At this stage the multitude of possible interpretations is limited. What is more, concrete observations multiply and one and the same phenomenon begins to be recognized as such in its various manifestations. Then, the play transforms into a “lively give-and-take of communion between self and self” (EP 2: 436) to gain generality. The individual intellect starts to relate the multitude of sense impressions, uncovering their universal characteristics. But spontaneity is still strong, the limits of interpretation are loose and weak, for the individual is not yet in full control of her thoughts and cannot complete the task of making her internal world into a means for controlling the external reality. Thought, then, is still immediate and is present in relation to itself.

This play of mental transformation *grounds* the origination of abduction, and based on this Peirce infers that *the play of musement* is fundamental for the evolution of knowledge and meaning. In this “lively activity”, the mind creates “nuclei” of concepts that gradually transform into metaphors and hypotheses. Every effect of culture – art, applied science and technologies, theoretical cognition, etc. – is in some degree a result of such process. The only requirement for those who decide to play this game is the law of liberty. For Peirce, *the play of musement* means complete freeing of the intellect and allows every flight of thought, but this sooner or later leads to questions and thoughts about those elements of the universe which seemingly we could not possibly cognize, like the problem of God. “The hypothesis of God is a peculiar one”, writes Peirce, “in that it supposes an infinitely incomprehensible object” (EP 2: 439). And yet, through the ‘method of musement’ even the reality of God can become an object of thought – through another metaphor or a hypothesis – which exercises an effect over the *muser*, actualized in changed behaviour through a belief in something entirely hypothetical.



## The garden of future inquiry

What is *the play of musement* a metaphor of after all? On the one hand, it could be signifying a disciplined, yet creative intellect that is able to deviate from the centripetal forces of habit, in order to explore the unexplored forking paths of thought. Such intellect manages to transform the spontaneous energy of surprise into directed and controlled speculations and arguments – through metaphors and abductions – which take the form not only of words, though, but use like in a lecture “diagrams and [...] experiments” (EP 2: 437). On the other hand, Peirce’s *play of musement* is another way to conceptualize evolution. The universe itself can be imagined as playing with its “feelings” and “thoughts” and the effects of this process are discernible in its increasing complexity and diversity of the structures it creates. And, not least importantly, through *the play of musement* we can transcend the boundaries between different fields of study and inquiry to reach what is common between them, to locate where their community lies. If we accept that metaphors such as *the play of musement* and *matter as effete mind* can be used as methodological tools, we should dare to explore further their possible effects in the different disciplines in which we would apply them. To reveal the origins of a phenomenon does not mean simply gazing into the past in order to establish the static starting point of its genesis, but rather it means following it through its constant transformations. This seems to be the only way to generate hypotheses for its future behaviour and development, to turn the impossible into the possible and to gain new knowledge. My only hope is that the current inquiry has not been too far away from that goal.

As for the future forking paths of inquiry that lie before us, I believe that *the play of musement* can be used as a starting point for the reconstruction of Peirce’s missing esthetic doctrine. This might be achieved, if satisfactory answers are to be found to the following questions:

- *What is the place of esthetics in the evolution of Peirce’s proposed classification of the sciences?* – This question does not imply merely a chronological overview of his proposed classificatory systems of the sciences, but rather a study of the natural evolution of his thought and the causes that led him to believe that esthetics is one of the three normative sciences together with ethics and logic.
- *What is the relation between Peirce’s esthetics and his semiotic doctrine?* – To answer this question, one has to focus on the triadic division of the normative sciences in relation to Peirce’s categories of thought known as Firstness, Secondness and Thirdness.

- *Is there anything in common between metaphors and abductions and how do they both fit in Peirce's 66 classes of signs?* – The possible hypotheses would be fundamental to the relation between scientific and artistic forms of cognizing or modelling the world.

Such a project can, or rather should, become a long-term inquiry into pragmatist esthetics that builds upon Peirce's work as well as accommodates other classic pragmatists such as William James and John Dewey. And last, but not least: it should pay close attention to contemporary developments in the rapidly developing field of biosemiotics, especially as regards the problem of the natural "origins" of esthetic experience.

## References

- Anderson, Douglas R. 1984. Peirce on metaphor. *Transactions of the Charles S. Peirce Society* 20(4): 453–468.
- Aristotle 2006. *Poetics*. (Sachs, Joe, trans.) Newburyport: Focus Publishing.
- Borges, Jorge Luis 2008. The garden of forking paths. In: Damrosch, David; Pike, David (eds.), *The Longman Anthology. World Literature – Compact Edition*. New York: Pearson Longman, 2631–2641.
- Haack, Susan 1994. Dry truth and real knowledge: epistemologies of metaphor and metaphor of epistemologies. In: Hintikka Jaako (ed.), *Aspect of Metaphor*. Dordrecht: Springer Science + Business Media, 1–22.
- Hegel, Georg Wilhelm Friedrich 1988. *Aesthetics. Lectures on Fine Art. Vol 1*. (Knox, Thomas Malcom, trans.) Oxford: Clarendon Press.
- Hobbes, Thomas 1988. *Leviathan*. (Gaskin, John Charles Addison, ed.) Oxford: Oxford University Press.
- Lakoff, George; Johnson, Mark 1980. *Metaphors We Live By*. Chicago: The University of Chicago Press.
- Locke, John 1825. *An Essay Concerning Human Understanding*. London: Thomas Davidson, Whitefriars.
- Lotman, Yuri 2000. *Universe of the Mind: A Semiotic Theory of Culture*. Bloomington: Indiana University Press.
- Merrell, Floyd 2006. Creation: Algorithmic, organicist, or emergent metaphorical process? *Semiotica* 161: 119–146.
- Mill, John Stuart 1889. *System of Logic: Ratiocinative and Inductive*. London: Longmans, Green and Co.
- Mladenov, Ivan 2006. *Conceptualizing Metaphors: On Charles Peirce's Marginalia*. London: Routledge.
- 2011. *Otklonena Literatura: Pragmatistki Prochit*. Sofiya: Paradigma. [Младенов, Иван. *Отклонена литература: Прагматистки прочит*. София: Парадигма.]

- 2012. Izvanliteraturnoto: Znak i kontseptualizatsiya. In: Mladenov, Ivan *et al.* (eds.), *Izвънлитературното/Lextralitteraire*. Sofiya: Boyan Penev & Paradigma, 23–38. [Младенов, Иван. Извънлитературното: Знак и концептуализация. In: Младенов, Иван (ed.), *Izвънлитературното/Lextralitteraire*. София: Боян Пенев и Парадигма, 23–38.]
- Nietzsche, Friedrich 2007. *The Birth of Tragedy and Other Writings*. (Geuss, Raymond; Speirs, Ronald, eds.; Speirs, Ronald, trans.) Cambridge: Cambridge University Press.
- Ortega y Gasset, José 1972. *The Dehumanization of Art and Other Essays on Art, Culture and Literature*. Princeton: Princeton University Press.
- Peirce, Charles S. 1907. *The Prescott Book*. MS 277.
- с. 1901–1902. *Definitions for Baldwin's Dictionary*. MS 1147.
- CP = Peirce, Charles S. 1931–1958. *Collected Papers of Charles Sanders Peirce*. Cambridge: Harvard University Press. [Vols. 1–6, Hartshorne, Charles; Weiss, Paul (eds.), 1931–1935; vols. 7–8, Burks, A. W. (ed.) 1958. In-text references are to CP, followed by volume and paragraph numbers.]
- EP = Peirce, Charles. S. 1992, 1998. *The Essential Peirce: Selected Philosophical Writings*. Bloomington and Indianapolis: Indiana University Press. [Vol. 1, Houser, Nathan; Kloesel, Christian J. W. (eds.), Vol. 2. The Peirce Edition Project (eds.). In-text references are to EP, followed by volume and page numbers.]
- Poe, Edgar Allen 1845. *Tales*. New York: Wiley and Putnam.
- Romanini, Anderson Vinicius 2006. *Minute Semeiotic: Speculations on the Grammar of Signs and Communication Based on the Work of C. S. Peirce*. (PhD Thesis). Sao Paulo: Sao Paulo University.
- Sebeok, Thomas 1999. *Signs: An Introduction to Semiotics*. Toronto: University of Toronto.
- Unamuno, Miguel de 1995. *Eseta, Vol. 3*. (Neykov, Todor *et al.* trans.) Sofiya: Universitetsko izdatelstvo Sveti Kliment Ohridski. [Унамуно, Мигел де 1995. *Есета, том 3*. (Нейков, Тодор *et al.* прев.) София: Университетско издателство „Св. Климент Охридски“.]

### Сад пирсовских разветвляющихся метафор

Философская система основателя прагматизма Чарльза Сандерса Пирса редко рассматривается с точки зрения использования им метафор. При этом несколько его самых оригинальных идей, часто неправильно понимаемых и оспариваемых, такие как *matter as effete mind* и *the play of musement* выражены в метафорической форме. Автор статьи предлагает новый взгляд на роль метафор в философии Пирса, рассматривая проблему с двух сторон. Во-первых, объектом исследования становится сама метафора. Прослеживается появление метафор у Пирса на уровне его классов знаков и отношения метафоры к понятию абдукции; в процессе их становления от спонтанности Первичности к действительности Вторичности через влияние обобщения Третичности. Во-вторых, предлагается гибкая графическая модель метафоры, которая является параллелью пирсовскому понятию врожденного эволюционизма. Эта модель рассматривается как “мягкий” методологический инструмент для получения значения. Чтобы иллюстрировать его применимость, включается намек на литературные работы Хорхе Луиса Борхеса, чтобы показать, как строгая логическая мысль и эстетическая красота дополняют друг друга.

### Peirce'i hargnevate metafooride aed

Pragmatismi rajaja Charles Sanders Peirce'i filosoofilist süsteemi mõistetakse harva selle metafoorikasutusest lähtuvalt. Ent mõned tema kõige algupärasematest, kuid sageli väärsti mõistetud ja vaidlustatud ideedest nagu 'materia kui aher vaim' ja 'vahetu tõetaju mäng' on metafoorsed representatsioonid. Käesolevas artiklis pakun välja uue võimaluse arutlemaks metafooride rolli üle Peirce'i filosoofias, lähenedes probleemile kaheti. Ühelt poolt saab metafoorist endast uurimisobjekt. Puudutan metafoorse mõtlemise esinemist Peirce'i märgiklasside tasandil ning metafoori suhestumist abduktiivse jäeldamisega. Jälgin neid esinemisi sedamööda, kuidas nad muutuvad esmasuse spontaansusest teisasuse tegelikkuseks läbi kolmasuse üldistava mõju. Seejärel pakun välja paindliku graafilise metafoorimudeli, mis on paralleelne Peirce'ile omase evolutsionismiga. Seda mudelit vaadeldakse kui "leebet" metodoloogilist tööriista tähenduse tuletamiseks. Et illustreerida selle rakendatavust, lisan mängulise kummarduse Jorge Luis Borgese kirjandusloomingule, näitamaks, kuidas range loogiline mõtlemine ning esteetiline ilu teineteist täiendavad.