

PEIRCE'S PHILOSOPHICAL PROJECT FROM CHANCE TO EVOLUTIONARY LOVE

EL PROYECTO FILOSÓFICO DE PEIRCE DESDE EL AZAR HASTA EL AMOR EVOLUTIVO

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ABSTRACT RESUMEN

This paper aims at presenting Peirce's development of his theory of tychism in relation to his conception of evolution. I claim that Peirce's evolutionary philosophy reaches a step further in the explanation of the world than do the philosophical projects that preceded it. For instance, Peirce's theory of evolution solved the problems of Aristotle's division of the world, rejects Spencer's vision of a deterministic evolution, and complements Darwin's theory of evolution based merely on chance and struggle. For this purpose, I shall show that in order to give a complete account of the uniqueness of Peirce's philosophical project it is necessary to understand his teleology in relationship to his agapasticism, which incorporates his tychism, an idea (that is, teleology) that has been neglected by some scholars, such as T. L. Short. Thus, I shall claim that only under the light of agapasticism can we understand why teleology plays the important role of unifying the cosmos and its creatures through a general ideal and the force of sympathetic feelings that are open to growth.

El presente artículo busca presentar el desarrollo de la teoría peirceana del tiquismo en relación con su concepción de la teoría evolutiva. Aquí sostengo que la filosofía evolutiva de Peirce da un paso más allá en la explicación de la constitución general del cosmos, si se la compara con los proyectos filosóficos que le preceden. Esto se puede ver, por ejemplo, en que la teoría evolutiva de Peirce logra resolver los problemas creados por la división del mundo hecha por Aristóteles, rechaza la visión determinista de la evolución propuesta por Spencer, e incluso complementa la teoría darwinista de la evolución basada meramente en el azar y la lucha de las especies. Mostraré que para dar una exposición más completa del carácter único del proyecto filosófico peirceano es necesario entender la relación de su teleología con el agapasticismo que incluye, asimismo, la teoría del azar o tiquismo, una idea (a saber, la teleología) que ha sido descuidada por algunos intérpretes de Peirce, como T. L. Short. Sostendré que solo a la luz del agapasticismo podemos entender por qué la teleología cumple un papel importante al unificar el cosmos con sus creaturas a través de un ideal común y la fuerza de sentimientos de empatía susceptibles de crecimiento.

KEY WORDS PALABRAS CLAVE

Chance (tychism), evolutionary love (agapasticism), Peirce, teleology, Theory of evolution.

Azar (tiquismo), amor evolutivo (agapasticismo), Charles S. Peirce, teleología, Teoría evolutiva.

Introduction

This article has as its main purpose to present how Peirce's philosophy evolves from his theory of chance or tychism into his theory of evolutionary love or agapasticism. At this respect I will present, in the first part of this paper, his theory of tychism from its origins, not only to have a full comprehension of it as such, but also to mark the differences between this theory and Aristotle's acknowledgment of chance in the world. Given that according to Peirce himself, Aristotle is one of the few of his predecessors that defended the existence of chance in the world and tried to give it an important role in his cosmology. Therefore, I will present the similarities between Peirce and Aristotle in their methods of inquiry and the dissimilarities in their perceptions of the general laws of the cosmos, mostly on what concerns to the role of chance in the world in its general features. It is of primary importance to ground this difference, because I consider that the uniqueness of Peirce's theory, even if he himself fails to see it, gives us a strong reason to state that his philosophy reaches a step further in the explanation of the world from the perspectives of the philosophical projects that preceded it. The last part of this first section will be endeavored to explain the development of Peirce's theory of tychism in two parts: according to his first theory of chance that originates from his studies on probabilities, and according to his second theory of chance, which, I believe, is the result of his efforts in trying to explain complexity and diversity in the world. Finally, I will suggest that in order to give a complete account of the uniqueness of Peirce's philosophical project it is necessary to understand his teleology in relationship to his agapastic theory of evolution.

Peirce as an Aristotelian disciple

Peirce fails to see the uniqueness of his project due to the fact that he considers his work as a successor of Aristotle's evolutionary philosophy (Cf. *Collected* 6.36, 6.604). However, even if he can claim to be his successor in some sense, he cannot rightly claim that Aristotle holds an evolutionary philosophy. From my point of view, Peirce wants to make his own interpretation of Aristotle that fits into his own philosophy. This is so, first of all, because he really admires Aristotle's method and systematic philosophy that provides an explanation for every field of reality, and second because he seems to have some kind of fear of originality; although, he replies to Carus, who accuses him of eagerness for originality, that "to look an inch before one's nose involves originality" (547) (*Ibid.* 6.604).

Consequently, Peirce claims that in order to erect a philosophical edifice we have to proceed in the same way that Aristotle has done it. We must neither search for the nicest accuracy at every step, nor seek to destroy everything at the minimum hint of mistake, but to “lay the foundations deep and massive.” Otherwise, he states, philosophy becomes unintelligible and unfamiliar for the majority of the human beings (Cf. *Essential* 1.246).

On this particular point, it is true that Peirce and Aristotle follow the same path. It is well known that Aristotle starts his researches presenting the different perspectives of the tradition that precedes him. First, he states the problem, then he tries to explain every known outlook about it and, finally, he either recognizes their accomplishments or criticizes their failures in order to build his own theory.¹ For this reason, if we say that they share the same spirit in this respect, when Peirce states that “originality is the last of recommendations for fundamental conceptions” (*Essential* 1.255), he is not suggesting that originality must be neglected, but that originality must be derived from our knowledge of what has been said about the subject.

Nonetheless, what started due to Peirce's admiration for Aristotle is developed later as a profound conviction in his article *Evolutionary Love*, in which he states that, “If it could be shown directly that there is such an entity as the ‘spirit of an age’ or of a people, and that mere individual intelligence will not account for all the phenomena, this would be proof enough of agapasticism and of synechism” (Ibid. 1.369). In other words, Peirce states that every individual act of creativity emerges from culture and, in this sense, that culture works as a continuum necessary for individual spontaneity. Even if we bring something new as a product of our free creativity, we must also say that we all are children of our age. Thus, what seemed to be a nice method, maybe because of its respect towards other points of view and its nearness to the ordinary men, now is claimed to be the right way to follow in order to develop knowledge.

Chance and teleology according to Aristotle

Now, I want to explain why I think that Peirce is mistaken when he states that Aristotle has an evolutionary philosophy. First of all, according to Aristotle's *Metaphysics*, forms (*morphai*) are already settled in the world.

¹ For a very interesting reconstruction of this methodology in Aristotle, Cf. Martha Craven Nussbaum (chapter 8).

Therefore, from a determinate form only the same form can originate (from a monkey another monkey, etc.) (Cf. Aristotle, *Metaphysics*). Accordingly, the *entelechy* or final aim of a seed cannot change; a certain kind of seed will give us always the same kind of tree. Second, the only kind of change that he conceives is the change from potency to act, which is caused by the imperfection of the sublunar world, and this kind of change is not essentially creative. I will try to clarify this last claim in showing Aristotle's understanding of chance and teleology.

According to Aristotle, chance, spontaneity and teleology are proper facts of the sublunar world. In the second book of the *Physics*, he establishes chance as a fact of nature for which there is no reason and no reason can be given. On the other hand, in the first and second books of *On the Heavens*, he states that the circular and eternal movement of the supralunar world is perfect; whereas teleological and straight line movements, "which have a limit and a goal," (Cf. Aristotle, *Heavens*) are imperfect. As a result, the most general explanation of teleological movement that we might find in Aristotle is that it is caused by the sublunar world's imperfection; an imperfection that moves towards what is perfect and eternal, i.e. the unmoved mover (Cf. *Metaphysics* Book XII).

Peirce, on the contrary, acknowledges chance and teleology as real causes of the world about which there cannot be given any particular account valid for individuals, but a general one following the laws of probabilities. Next, I will analyze Peirce's theory of chance.

Peirce's theory of tychism

According to Peirce's cosmology, "three elements are present in the world, first, chance; second, law; and third, habit taking" (*Essential* 1.277). These three elements of the world represent Peirce's three categories, where firstness is what he names as the doctrine of tychism in his later essay *The Law of Mind*, secondness, his version of mechanical laws, and thirdness the world's tendency of habit taking or Peirce's teleology, which is systematized in *Evolutionary Love*.

The origin of Peirce's cosmology can be tracked from his studies about probabilities, for instance, his articles "The Order of Nature" and "The Probability of Induction," in which he shows that habits can be caused by chance. (Cf. Peirce, "The Probability", "The Order"). This shows us

that Peirce's first interests were related to the doctrine of chance and the possibility to develop laws from it. As he puts it,

I make use of chance chiefly to make room for a principle of generalization, or tendency to form habits, which I hold has produced all regularities. The mechanical philosopher leaves the whole specification of the world utterly unaccounted for, which is pretty nearly as bad as to boldly (baldly) attribute it to chance. I attribute it altogether to chance, it is true, but to chance in the form of a spontaneity which is to some degree regular. (*Essential* 1. 310)

However, it is not clear that Peirce acknowledged the difference between habit taking or the tendency to order and the laws or habits from the very beginning. From my point of view, it is not until "A Guess at the Riddle" (1887-1888) that this difference becomes clear and it is in "Evolutionary Love" where Peirce openly proposes his agapastic teleology.

At the beginning, Peirce's studies on evolution (which implies a unified conception of teleology) and chance seem to follow different routes or, at least, they do not seem to be directly related. Nonetheless, I do not think that this is due to the fact that Peirce was not convinced that the theory of evolution was the way to explain the main features of the world. On the contrary, I believe that he is following the same method he suggests to Carus for the conciliation of religion and science in his "Reply to the Necessitarians," according to which each discipline must be studied separately "and refuse to compromise with alien and secondary purposes" and then, when time is ripe reconciliation between them will come naturally as an "unmixed good" (345) (*Cf. Peirce, Collected* 6.603).²

In sum, Peirce developed his analyses about chance and evolution separately until he found them ripe enough to put them together through his teleological theory of agapasm developed in "Evolutionary Love." Let me then give my account of the development of these theories starting from chance to agapasm.

First theory of chance. From chance to law

Peirce's theory of chance has two versions. The first one comes from his studies on probabilities and the second one occurs in trying to explain

² For a different perspective *Cf. Fisch.*

the cause of variety in the world. In the first version of chance, he deals with the problem of how order or law originates from chance. In order to make this clear, he uses many kinds of examples; one of the most recurrent ones is the example of the cards. In “The Guess at the Riddle” this example illustrates the way in which a cell acts in order to remove a source of irritation from chance to habit. Peirce’s account follows:

Take a good many cards of four suits, say a pack of fifty-two, though fewer will do. The four suits are supposed to represent four modes in which a cell may react. Let one suit, say spades, represent that mode of reaction which removes the source of irritation and brings the activity to an end. In order readily to find a card of any suit as wanted, you had better lay all the cards down face up and distribute into four packets, each containing the cards of one suit only. Now take two spades, two diamonds, two clubs, and two hearts, to represent the original disposition of the nerve-cell, which is supposed to be equally likely to react in any of the four ways. You turn these eight cards face down and shuffle them with extreme thoroughness. Then turn up cards from the top of this pack, one by one until a spade is reached. This process represents the reaction of the cell. Take up the cards just dealt off, and add to the pack held in the hand one card of each of those suits that have just been turned up (for habit) and remove from the pack one card of each suit not turned up (for forgetfulness). Shuffle, and go through with this operation thirteen times or until the spades are exhausted. It will then generally be found that you hold nothing but spades in your hand. (*Collected* 1.391)

It is important to notice that from this first theory that goes from chance to habit, we can only have a deterministic law.³ For this reason, at the end of the game we can only have spades in our hands. According to this example, the law that originates from chance becomes more and more strong and precise as time goes by. Consequently, in this case, habits become so fixed that they give no room for further formation of habits, i.e., it leaves no room for growth. Peirce himself acknowledges to have believed in a mechanical theory of evolution very probably inspired by the result of these studies, but to have found it insufficient, as expressed in his “Reply to the Necessitarians:”

³ It has to be noted that no prior and *particular* aim is necessary to originate law from chaos.

For a long time, I myself strove to make chance that diversity in the universe which laws leave room for, instead of a violation of law, or lawlessness. That was truly believing in chance that was not absolute. It was recognizing that chance does play a part in the real world, apart from what we may know or be ignorant of. But it was a transitional belief which I have passed through. (544)⁴

As we can see, one of the main issues that pushed Peirce to a different perspective about the teleology of the world was the problem of the diversity and complexity generated by the tendency of evolution and its relation to chance as an operative force. For Peirce, the mechanistic version of evolution did not give a satisfactory account of this tendency in nature. Thus, in order to build a fruitful relationship between chance and law, teleology became necessary, and, in order to give a place to diversity and complexity, a conception of chance as a cause always operative in the world became necessary as well, this last form of chance is what Peirce also names "spontaneity." In fact, only from real spontaneity are evolution and change possible.

Second theory of chance. From tychism to agapasm

The idea of introducing teleology in order to make a bridge between law and chance also changed Peirce's idea of evolution. Before "Design and Chance" (1884), Peirce's idea of evolution was totally consistent with his first version of chance, according to which chance produces habit and law. At that time, he explains the process of evolution as follows:

⁴ The next sentence of this quote says "while Dr. Carus seems not to have reached it." Paul Carus was the editor of the *Monist*, the journal in which Peirce published many of his philosophical articles, most of them related with his theory of tychism. The article "The Theory of Necessity Examined", published in *the Monist* 2 (1892) unleashed a vivid discussion between Carus and Peirce about the subject. This quote comes from Peirce's reply to Carus to his "Mr. Charles S. Peirce's Onslaught on the Doctrine of Necessity." In this quote, Peirce accuses Carus of defending that nature acts according to a blind mechanistic law. However, the first version of Peirce's theory of chance, is the version that some of the new necessitarians defend nowadays, such as Victor Coscolluela in his article "Peirce on Tychism and Determinism." He argues that Peirce's argument, according to which determinism must be false since it is incompatible with growth or increasing complexity in the world and it cannot account for the evolution of the variety that the world contains, "is not *itself* sufficient to establish tychism" (Coscolluela 750). For him, determinism and some sort of degenerate chance can give a sufficient and coherent account of evolution, although he never explains how. Consequently, we might say that at least Peirce's opponents after Carus' time *underwent* some kind of evolution in their arguments from blind mechanism to some sort of pseudo-evolutionary one.

For every kind of an organism, system, form, or compound, there is an absolute limit to a wakening process. It ends in destruction; there is no limit to strength. The result is that chance in its action tends to destroy the weak & increase the average strength of the objects remaining. Systems of compounds which have bad habits are quickly destroyed, those which have no habits follow the same course; only those which have good habits tend to survive. (*Essential* 1. 223)

Nevertheless, as I said above, he realizes that chance and law are not enough to explain the diversity in the world and, therefore, that the idea of the survival of the fittest is insufficient to explain the process of evolution. This is precisely the complaint that Peirce raises against the Darwinian theory of evolution in "Evolutionary Love," after he has declared himself to be a Darwinian in his former articles. As a result, he proposes a teleological theory of evolution in which "the Universe is a vast representamen, a great symbol of God's⁵ purpose, working out its conclusions in living realities" (Ibid. 2. 193) by ways of agapastic love.

Teleology and evolution according to agapasticism

According to Peirce, there are three kinds of theories of evolution, tychasticism, anancastism and agapasticism. The first one represents evolution by fortitious variations, the second one evolution by mechanical necessity, and the third one evolution by creative love (Cf. *Essential* 1. 362). The first theory is the Darwinian⁶ perspective of evolution, the second one is the theory defended by the majority of the necessitarians in Peirce's time, such as Paul Carus and Spencer, and the third one is the theory defended by Peirce. In order to reach a better understanding of Peirce's theory of agapasticism, first, let me explain in more detail the relationship between teleology and evolution.

In his article "Peirce's Concept of Final Causation," T.L. Short (1981) shows us the privileged status that the theory of teleology has for the Peircean project. In fact, the very theory of the three categories establishes

⁵ In "The Seven Systems of Metaphysics," Peirce stated about God that "I do not approve of mixing up Religion and Philosophy; but as a purely philosophical hypothesis, that has the advantage of been supported by analogy. Yet I cannot clearly see that beyond that support to the imagination it is on any particular scientific service" (*Essential* 2. 185). Therefore, it must be clear that God, as a hypothesis, has an explanatory purpose that is real in the form of an ideal.

⁶ It is important to notice that although Peirce's directs his critique to Darwin, the notion of the "survival of the fittest" is not original from Darwin but from Herbert Spencer.

that all processes in the world can and must be explained according to a general theory of relations and therefore, states the scholar, according to a teleological process. In this sense, we should say that the Peircean philosophy is a teleological one.

At the beginning of his article, Short complains about the fact that neither the uniqueness nor the central role of this concept of final causation have been sufficiently recognized, and even though he gives us an accurate account of its central role, from my point of view, he fails in giving a complete account of its uniqueness in neglecting the role that love plays at the center of the theory.

The definitions given by Peirce for love in the "Evolutionary Love" are, most of them, pretty complex. Therefore, instead of analyzing them one by one, I propose to use the following synthesized version inspired by Helmut Pope's article "Love's Power and the Causality of Mind": Love in the sense of agape, is a unifying force caused by the sympathetic attraction exerted by people, things or ideas i.e. by the cosmos in general (Cf. Pape, 60).

But a question remains: why call this kind of attraction an agapastic one? Three types of love can be established: Filial love, among siblings and persons in general under the form of friendship; erotic love, between beloved and lover; and agapastic love between men and god. This does not mean that Peirce is trying to found some kind of religion in the sense of an institution of worship. We have to remember that the idea of god is for him a hypothesis. Therefore, we must think of it as a general idea that gives place to possibilities and change. As a result, the cosmos is related to god and performs its evolution in the same way as we humans are related to our idea of happiness and perform particular actions as means to achieve it.

The *general* aim of evolution tends to order, but in its eternal connivance with chance it looks for its aim through diversity and creativity. Therefore, no *particular* goal can be attributed to it, because it can also undergo changes as time goes by. In the same way, human beings are said to aim at an idea of happiness, and it is also true for this idea that no particular features can be established, because it would imply the impossibility of ethical growth. Let us think, for instance, of the relationship that we might build with our ideal of happiness.

When I was eleven years old I wanted to be an archeologist, as Indiana Jones. Then, in my seventeenth birthday, I faced the issue of choosing my major at the university. My father gave me an article on archeology trying to encourage my decision; unfortunately, I found it terribly boring and technical. Consequently, I switched towards philosophy in looking to understand different perspectives about ethical issues, which, now that I think of it, did not promise me any more fun than those articles on archeology. In sum, I can say that my goals have been changing since then, according to what the life has offered me, and my own growing tendencies. Nonetheless, I also think that some of those ideas inspired by Indiana Jones, such as the eagerness to know different cultures and ways of thinking, accompany and will accompany my further development and my future goals. The general ideal of evolution and the general ideal of happiness are ideas, and ideas are living feelings in constant and continuous growing through chance, habits, and love.

Peirce describes this process in “the Law of Mind.” According to him, ideas tend to spread gaining generality and become welded with other ideas. He also says that this relation is performed not completely by chance; nonetheless he does not clarify in this article what he exactly means by that. However, in the “Evolutionary Love” he goes further and shows us that these ideas are welded by some sort of feeling of sympathy following some kind of purpose. Therefore, he states at the end of the article that, although ether was well known before discovering its medicinal properties, the only reason that we can give to explain why it took so long time to put it in serious use is that “the motive to do so was not strong enough” (*Essential* 1. 371).

In conclusion, we can see that the cosmos in general shares a teleological and evolutionary way of being and that the only difference among its creatures lies in their capacities to take advantage of its uniformities. “The actual world,” Peirce claims: “is almost a chance-medley to the mind of a polyp. The interest which the uniformities of Nature have for an animal measures his place in the scale of intelligence” (*Ibid.* 1.176).

With this account of the evolution of Peirce’s theory of tychism I hope to have shown the way in which he builds a unifying theory of the cosmos that goes from his analyses on probabilities to a teleological theory of evolution. Furthermore, I expect to have clarified the uniqueness of the theory of teleology in its relation with agapasticism. From my point of view, Peirce’s theory of teleology must be understood under the

light of his theory of evolutionary love, because only in this manner can we understand why teleology plays the important role of unifying the cosmos and its creatures through a general ideal and the force of sympathetic feelings that are open to growth.

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