

Panel title: The genetic argument for cognoscibility from aduction and its relation to ontology: hard facts, chance, and God in Peirce's metaphysics

Speakers:

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General abstract: The main topic of the panel is to discuss how epistemology and ontology articulate in Peirce's philosophy, from a naturalistic account of the genesis of knowledge. The first presentation will discuss Peirce's theory of abduction and critical common-sensism; the second will discuss Peirce's thesis on the co-naturality between mind and reality in the light of his phenomenological categories; the third one will discuss Peirce's concept of absolute chance as real possibility; and the fourth will discuss the importance of Peirce's semiotic of symbols for his conception of God as cognizable.

Peirce always defended a metaphysical realism opposed to nominalist tendencies in philosophy. Defending the idea that only the real can fix our beliefs, for its irreducible character of being *alter* for human consciousness, Peirce came to the hypothesis of the co-naturality between mind and reality as the ground for the idea that whatever is possible to exist is cognizable in semiotic terms, that is, can be translated into signs. The co-naturality between mind and matter is at the core of Peirce's defence of chance as real, as an indeterminate pure potentiality that reacts as an existing phenomenon in nature.

Now, Peirce explains this co-naturality in evolutionary terms: human mind is like an instinct we evolutionarily developed through ages, as if we were "building a cantilever bridge" of inferences, as he says in the essay about the neglected argument for the reality of God, that we continuously test in experience, aiming to reach a clearer comprehension of reality and of ourselves. From the most basic and empirical to the most abstract and metaphysical – up to the point of devising a *symbolic* conception of God – retroduction is a form of reasoning we developed – it is just the same a result from the evolution of the species as any other (as the muscles that move our hands and thumbs, for instance). All human knowledge, therefore, comes from, expands from and enhances with a basis upon natural instincts.

This idea is very important for Peirce's theory of abduction, or retroduction, as he sometimes says. According to him, retroduction is the only form of reasoning furnishing an explanatory hypothesis for surprising experiential facts, similar in form to a fallacy of affirming the consequent. This means that from observed (unpredicted) facts, we *retroduce* in search for an explanatory hypothesis of what might have caused those facts. This form of reasoning, of course, has no safety at all, it is highly fallible, but is the only one that can give us an explanation of *why* what happens, happens the way it does. As he

himself says, it's the only way to find an explanation, for deduction and induction, by their very logical natures, only establish the necessary consequences of an already known setup and search for confirmatory facts, respectively. No amplification of the realm of knowledge is obtained by them.

The relevance of this panel for Conference is in the emphasis it poses on the naturalistic and metaphysical aspects of Peirce's philosophy without separating them. trying to avoid reductionist "analytical" readings of Peirce, stressing both his theory of knowledge and scientific method and his most abstract and difficult ideas with equal weight.

Abstract for paper 1: Peirce's naturalism: the continuity of instinct and rationality and the heuristic power of abduction

Speaker: Cassiano Terra Rodrigues

Peirce's argument for abduction as the only inferential form with a heuristic power to make us capable of discovering something new is widely known and has been discussed from several perspectives. But it is unusual to see presentations of his theory of abduction in connection with his theory of instincts and his critical common-sensism. The aim of this presentation is only to lay down the initial terms for such a connection.

For Peirce, common-sense beliefs are beyond conscious criticism. Being acquired along the evolutionary process of human species, they become uncritically indubitable, merely because we don't think they can be criticized - they are undoubted, but not *absolutely* indubitable. They are practical beliefs, considered acritical and undoubted because, in concrete specific situations, they form the basis for our disposition to act in a certain way – we hear them from our antecessors, they are the epitome of the iterated collective experience of generations, and as such are not questioned.

In this sense, our actions, according to the collective moral code, are based on the result of iterated experiences that become to be like deep sentiments, reliable instincts that show how to act in such and such circumstances: we feel we should act in a certain way that has proved to be effective, but that is no warrant to the success of the action, for there is nothing to prove apodictically its effectiveness. We learn from experience, but experience doesn't ground necessity for the future, as we all know. Peirce defends these beliefs are *like* instincts, that is, they are of an instinctive nature, for we take them as rules for actions, foundations established in human evolution, automatic warrants for our conduct because, in our evolutive history, they became reliable in vital situations. And this means they can be trusted because they proved to be correct by *experiment*. We learn inductively from past experience and guess what a future good conduct could be.

This means that common-sense beliefs can be adopted as starting points, and abandoned later on, if experience so demands – and is this not what the scientist does? For Peirce, the very logic of scientific advance proves that "man's mind must have been attuned to the truth of things in order to discover what he has discovered". This is the only plausible hypothesis to explain the advancement of modern science "for the reason that unless man have a natural bent in accordance with nature's, he has no chance of understanding nature, at all." [EP 1: 274]. This is what according to him Galileo Galilei meant with *il lume naturale*: a natural ability of human mind to guess correctly. For Peirce, human beings, like all other animals, developed instincts to the conservation of the species. Human rationality, defined as the instinctive capability of guessing rightly, was developed in the same evolutionary way as well. Now, according to our reading, *abduction* is the logical form of such a guessing. The

process of abduction is the one whereby we seek to understand new facts creating general conceptions based upon what we already know. In other words, abduction the creation of an explanatory hypothesis for a unforeseen and new fact. As Peirce himself says, it is “the process of forming an explanatory hypothesis”, “the only logical operation which introduces any new idea; for induction does nothing but determine a value, and deduction merely evolves the necessary consequences of a pure hypothesis” [HL 230].

Abstract for paper 2: Charles S. Peirce’s ontological epistemology and the co-naturality between thought and world

Speaker: Marcelo S. Madeira

This communication seeks to clarify how Charles S. Peirce deals with the problem of cognizable/incognizable duality under the perspective of an ontological epistemology, that is, an epistemology in close relation of mutual support with the author’s ontology. We seek, therefore, to consider the interaction between Peirce’s epistemology and ontology, which, in first place, is not a relation of hierarchical preeminence of ontology over epistemology.

This communication will be divided in two parts. In the first one, based on a certain epistemic-ontological approach to the cognizable/incognizable duality, we will discuss how phenomena are classified by the phenomenological categories, focusing on their aspects that fall under Secondness, stressing their independence regarding human mind. The option for a beginning with Secondness doesn’t mean to overlook the other phenomenological categories, but because the second category is characterized in the form of a direct immediate experience that is restricted by its occurrence in a specific time and space. This restricted phenomenal appearance forces consciousness to discriminate it, as Peirce says: “We expected one thing, or passively took it for granted, and had the image of it in our minds, but experience forces that idea into the background, and compels us to think quite differently.” (CP 1.324). From this the inquiry that leads to the other categories emerges. In this way, this independent character of the phenomenon as to human consciousness will constitute the underpinning for Peirce’s definition of reality. In other words, the real will fundamentally be the *alter* for consciousness, at the same time that it also bears the predicates of generality and co-naturality with human mind. Isn’t it possible to argue that such an independent real object not reducible to our contents of consciousness is utterly incognizable to the human mind?

The second part aims to clarify how Peirce would answer to this line of questioning, seeking to refute the opinion that what is outside of consciousness is utterly incognizable. In order to do so, Peirce has to answer how the conception of the real object does not need to be grounded in human mind. Thus, from Peirce’s conception of the cognizable, the discussion approaches the problem of incognizability, how this problem is dealt with in Peirce’s epistemology, and what would his answer be to a possible adversary. Besides, we aim at showing that the independence of the object from consciousness is a fundamental piece for Peirce’s ontology, and that the very conception of something incognizable is for him completely void and meaningless. Peirce holds that everything that *appears* is a possible object for knowledge, since we pursue inquiry with proper methods, highlighting in this way the harmony with Kant’s conception of *possible experience*. The underpinnings of Peirce’s thought will be analyzed here, specially the supporting ideas of his metaphysical realism, hoping thus to achieve a clearer insight into the semiotic interactivity between the domain of knowledge and the structure of reality. This will show how distant a Peircean account of knowledge is from certain nominalist strains that prevail in philosophy, since modernity till nowadays.

Abstract for paper 3: Reevaluating the Greek Sources of Peirce's Metaphysical Chance

Speaker: José Renato Salatiel

Unlike most philosophers and scientists in his time, for whom chance was merely the product of human ignorance, Peirce argued, especially in a series of articles from 1891 published in *The Monist*, that chance is ontological, that is, a real property of the world, regardless of our knowledge or lack thereof of it. There are two direct influences on Peirce on this subject: Aristotle's theory of *accidental causes*, and the Epicurean doctrine of *clinamen*. Both influences, nevertheless, do not exhaust the total implication of the Peircean conception. Our thesis is that Peirce's *tychism* is far more original, historically speaking, than previous commentators – like Fisch (1986) or Hacking (1990) – have acknowledged. To the Greeks, there was no such thing that did not have a cause or which could have some spontaneous causality or the absence of causes operating in the universe; or even a chance that violates, on some level, the laws of nature (understood not only as efficient causation, but also final causation). Peirce's notion of absolute chance, therefore, has a wider meaning: both Aristotle's theory of accidental causes and Epicurus' doctrine of *clinamen* do not account for the scope of the concept of absolute chance, although both are identified by Peirce himself as having had a direct influence on absolute chance. Though there are similarities, the fact is that Peirce contributed with an original understanding of chance as really active in the evolution of the universe. In a different manner, we propose that the most important contribution of the Greeks assimilated by the Peircean theory of chance is the Aristotelian concept of *real possibility* or *potency*, which led to the recognition given to their realism, through the predicate "extreme", and will establish a link between Peirce's metaphysics and pragmatism. Indeed, the potency-act relation conforms, in Peirce, to a particular-general relation, which is at the heart of his pragmatic method, where an initial, indeterminate and pure potentiality should be defined as actual, as an existing phenomenon, which is then generalized, i.e., interpreted in a theoretical web and thereby acquires other indeterminate contours (*CP* 5.412 and *CP* 5.438). For this reason, Peirce argues that pragmatism requires the reality of the three modes of being: Necessity, Actuality, and especially Potentiality (he not only assumed logical possibility as Aristotle's metaphysical potentiality). In pragmatism, the recognition of the reality of being-possible, and the metaphysical alternation between actuality and potentiality does away with Kantian transcendentalism, according to which the conditions of possibility are subjective, as well as with Humean Empiricism (and Logical Positivism), according to which reality is reduced to particular facts.

Abstract for paper 4: Some Reflections on the Ontological Aspects of the Symbol and its Relationship to the Cognoscibility of God, within the Religious Metaphysics of Charles Sanders Peirce

Speaker: Rodrigo V. de Almeida

This article aims to offer a few reflections on the ontological dimension of the symbol and its relationship with one of the possible themes of what we may call the Religious Metaphysics of Charles Sanders Peirce, namely, the cognoscibility of God. In order to achieve this goal, the article will be divided into two parts. Part one will describe, at two different moments, the emergence and development of the ontological conception of the Peircean symbol. Firstly, we shall say some words about the emergence, in the writings of the young Peirce, and therefore, in embryo, of the author's broad view about the role

played by the symbol in cognition and in the Universe as a whole. The goal of this first presentation about the symbol will draw attention to the fact that Peirce had already anticipated an ontological concept of semiotics from its earliest writings, even before consolidating his three well-known categories, so that what we find in his young writings is exactly the promotion of his ideas toward the genesis of his categories. Secondly, we shall explore the developments of the ontological notion of symbol in some passages of his late texts. The aim is to describe how the theory of categories specifies and develops the author's notion of ontological symbol, so that the symbol is defined as “[...] *an embryonic reality endowed with power of growth into the very truth, the very entelechy of reality*” [EP 2.324]. Semiotically, it is well known that the symbol contains within itself iconic and indexical elements. Likewise, taken ontologically, the symbol represents a real Thirdness, which contains within itself elements of real Firstness and Secondness. Thus, the ontological notion of symbol is an expression of the author's Evolutionary Metaphysics. This, in turn, leads directly to the second and final part of this article, which will address one aspect of Peircean Religious Metaphysics. However, this step will lack some preliminary clarification. Semiotics, which Peirce took as “only another name for Logic”, became explicitly a fundamental part of his philosophical edifice, so even if most texts on the subject did not receive full publication during his lifetime, its structural importance is something that one can easily check on the editorial compilations of his work. Something different, in principle, occurs with what we may call his Religious Metaphysics, which remains, if we restrict ourselves to the use of the term in available texts, only a suggestion that appears in the Authors' *Outline Classification of Sciences*: “Metaphysics may be divided into (i) General Metaphysics, or Ontology; (ii) Psychical, or *Religious, Metaphysics*, concerned chiefly with the questions of (1) God, (2) Freedom, (3) Immortality; and (iii) Physical Metaphysics, which discusses the real nature of Time, Space, Laws of Nature, Matter, etc.”[CP 1.192] Thus, the question arises: can we say that Peirce developed a Religious Metaphysics? It is suggested that the answer to this question is “yes”. So, what is called here the author's Religious Metaphysics consists in his frequent writings about the issues in which this branch of Science deals, directly or indirectly, and through different periods of development of his thought. From these considerations, and given the space available for this article, the second part aims to clarify some elements of the ontological role of the symbol in relation to the possibility of knowing God's reality, just as suggested in Peirce's writings.

Format: individual presentations, 20 minutes each, and 30 minutes for a final debate with audience.

Presentation: The main topic of the panel is to discuss how epistemology and ontology articulate in Peirce's philosophy, from a naturalistic account of the genesis of knowledge. The first presentation will discuss Peirce's theory of abduction and critical commonsensism; the second will discuss Peirce's thesis on the co-naturality between mind and reality in the light of his phenomenological categories; and the third one will discuss the importance of Peirce's semiotic of symbols for his conception of God as cognizable.

Since early in his career, Peirce defended a metaphysical realism opposed to nominalist tendencies in philosophy. In his famous article "How to make our ideas clear", he defended the idea that only the real can fix our beliefs, for its irreducible character of being *alter* for human consciousness. In spite of this, the real is cognizable and Peirce's "pragmatism" relies deeply in his defense of the possibility of such a knowledge. The co-naturality between mind and reality is the central thesis supporting the idea that whatever is possible to exist is cognizable in semiotic terms, that is, can be translated into signs.

Now, Peirce explains this co-naturality in evolutionary terms: human mind is like an instinct, we evolutionarily developed it through ages, as if we were "building a cantilever bridge" of inferences, as he says in the essay about the neglected argument for the reality of God, that we continuously test in experience, aiming to reach a clearer comprehension of reality and of ourselves. So, from our most basic reasonings about the world surrounding us - what we should do in order to survive, what is the more effective course of action, what the other being in front of me could be thinking, what can I expect from this or that situation -, we reach the highest conceptions of science and morality by abstractions constructed through centuries of human life on Earth. All human knowledge, therefore, comes from, expands from and enhances with a basis upon natural instincts.

This idea is very important for Peirce's theory of abduction. According to him, abduction is the only form of reasoning that furnishes an explanatory hypothesis for surprising experiential facts. By abduction, or retroduction, Peirce means a kind of

reasoning with the form of a fallacy of affirming the consequent. This means that from observed (unpredicted) facts, we *abduct* or *retroduce* in search for an explanatory hypothesis of what might have caused those facts. This form of reasoning, of course, has no safety at all, it is highly fallible, but is the only form that can give us an explanation of *why* what happens, happens the way it does. As he himself says, it's the only way to find an explanation, for deduction and induction, by their very logical natures, only establish the necessary consequences of an already known setup and search for confirmatory facts, respectively. No amplification of the realm of knowledge is obtained by them.

It's only by abduction, therefore, that we can achieve new knowledge, from the most basic and empirical to the most abstract and metaphysical – up to the point of devising a *symbolic* conception of God as the conjunction of the three realms of experience described by the phenomenological categories. Abduction, then, is a form of reasoning we developed – it is just the same a result from the evolution of the species as any other (as the muscles that move our hands and thumbs, for instance).

The relevance of this panel for Congress is in the emphasis it poses on the naturalistic and metaphysical aspects of Peirce's philosophy without separating them. Besides, it is a panel for discussing deep metaphysical issues Peirce himself considered the most important of his thought. Thus, the panel has the merit of avoiding reductionist “analytical” readings of Peirce, stressing both his theory of knowledge and scientific method and his most abstract and difficult ideas with equal weight. Each of the contributed presentations deal with one aspect of the questions: the first, with Peirce's naturalism in relation to his theory of abduction; the second, with Peirce's general framework for metaphysical realism; the third, with Peirce's symbolic conception of God as conceivable.

Abstract for paper 1: Peirce's naturalism: the continuity of instinct and rationality and the heuristic power of abduction

Peirce's argument for abduction as the only inferential form with a heuristic power to make us capable of discovering something new is widely known and has been discussed from several perspectives. But it is unusual to see presentations of his theory of abduction in connection with his theory of instincts and his critical common-sensism. The aim of this presentation is only to lay down the initial terms for such a connection.

For Peirce, common-sense beliefs are beyond conscious criticism. Being acquired along the evolutionary process of human species, they become uncritically indubitable, merely because we don't think they can be criticized - they are undoubted, but not *absolutely* indubitable. They are practical beliefs, considered acritical and undoubted because, in concrete specific situations, they form the basis for our disposition to act in a certain way – we heir them from our antecessors, they are the epitome of the iterated collective experience of generations, and as such are not questioned.

In this sense, our actions, according to the collective moral code, are based on the result of iterated experiences that become to be like deep sentiments, reliable instincts that show how to act in such and such circumstances: we feel we should act in a certain way that has proved to be effective, but that is no warrant to the success of the action, for there is nothing to prove apodictically its effectiveness. We learn from experience, but experience doesn't ground necessity for the future, as we all know. Peirce defends these beliefs are *like* instincts, that is, they are of an instinctive nature, for we take them as rules for actions, foundations established in human evolution, automatic warrants for our conduct because, in our evolutive history, they became reliable in vital situations. And this means they can be trusted because they proved to be correct by *experiment*. We learn inductively from past experience and guess what a future good conduct could be.

This means that common-sense beliefs can be adopted as starting points, and abandoned later on, if experience so demands – and is this not what the scientist does? For Peirce, the very logic of scientific advance proves that “man’s mind must have been attuned to the truth of things in order to discover what he has discovered”. This is the only plausible hypothesis to explain the advancement of modern science “for the reason that unless man have a natural bent in accordance with nature’s, he has no chance of understanding nature, at all.” [EP 1: 274]. This is what according to him Galileo Galilei meant with *il lume naturale*: a natural ability of human mind to guess correctly. For Peirce, human beings, like all other animals, developed instincts to the conservation of the species. Human rationality, defined as the instinctive capability of guessing rightly, was developed in the same evolutionary way as well. Now, according to our reading, *abduction* is the logical form of such a guessing. The process of abduction is the one whereby we seek to understand new facts creating general conceptions based upon what we already know. In other words, abduction the creation of an explanatory hypothesis for a unforeseen and new fact. As Peirce himself says, it is “the process of forming an explanatory hypothesis”, “the only logical operation which introduces any new idea; for induction does nothing but determine a value, and deduction merely evolves the necessary consequences of a pure hypothesis” [HL 230].

Key-words: Critical common-sense; instinct; belief; abduction; rationality.

Abstract for paper 2: Charles S. Peirce’s ontological epistemology and the co-naturality between thought and world

This communication seeks to clarify how Charles S. Peirce deals with the problem of cognizable/incognizable duality under the perspective of an ontological epistemology, that is, an epistemology in close relation of mutual support with the author’s ontology. We

seek, therefore, to consider the interaction between Peirce's epistemology and ontology, which, in first place, is not a relation of hierarchical preeminence of ontology over epistemology.

This communication will be divided in two parts. In the first one, based on a certain epistemic-ontological approach to the cognizable/incognizable duality, we will discuss how phenomena are classified by the phenomenological categories, focusing on their aspects that fall under Secondness, stressing their independence regarding human mind. The option for a beginning with Secondness doesn't mean to overlook the other phenomenological categories, but because the second category is characterized in the form of a direct immediate experience that is restricted by its occurrence in a specific time and space. This restricted phenomenal appearance forces consciousness to discriminate it, as Peirce says: "We expected one thing, or passively took it for granted, and had the image of it in our minds, but experience forces that idea into the background, and compels us to think quite differently." (CP 1.324). From this the inquiry that leads to the other categories emerges. In this way, this independent character of the phenomenon as to human consciousness will constitute the underpinning for Peirce's definition of reality. In other words, the real will fundamentally be the *alter* for consciousness, at the same time that it also bears the predicates of generality and co-naturality with human mind. Isn't it possible to argue that such an independent real object not reducible to our contents of consciousness is utterly incognizable to the human mind?

The second part aims to clarify how Peirce would answer to this line of questioning, seeking to refute the opinion that what is outside of consciousness is utterly incognizable. In order to do so, Peirce has to answer how the conception of the real object does not need to be grounded in human mind. Thus, from Peirce's conception of the cognizable, the discussion approaches the problem of incognizability, how this problem is dealt with in Peirce's epistemology, and what would his answer be to a possible adversary.

Besides, we aim at showing that the independence of the object from consciousness is a fundamental piece for Peirce's ontology, and that the very conception of something incognizable is for him completely void and meaningless. Peirce holds that everything that *appears* is a possible object for knowledge, since we pursue inquiry with proper methods, highlighting in this way the harmony with Kant's conception of *possible experience*. The underpinnings of Peirce's thought will be analyzed here, specially the supporting ideas of his metaphysical realism, hoping thus to achieve a clearer insight into the semiotic interactivity between the domain of knowledge and the structure of reality. This will show how distant a Peircean account of knowledge is from certain nominalist strains that prevail in philosophy, since modernity till nowadays.

Keywords: Cognizable; Incognizable; Epistemology; Ontology; Realism.

Abstract for paper 3: Some Reflections on the Ontological Aspects of the Symbol and its Relationship to the Cognoscibility of God, within the Religious Metaphysics of Charles Sanders Peirce

This article aims to offer a few reflections on the ontological dimension of the symbol and its relationship with one of the possible themes of what we may call the Religious Metaphysics of Charles Sanders Peirce, namely, the cognoscibility of God.

In order to achieve this goal, the article will be divided into two parts. Part one will describe, at two different moments, the emergence and development of the ontological conception of the Peircean symbol. Firstly, we shall say some words about the emergence, in the writings of the young Peirce, and therefore, in embryo, of the author's broad view about the role played by the symbol in cognition and in the Universe as a whole. The goal

of this first presentation about the symbol will draw attention to the fact that Peirce had already anticipated an ontological concept of semiotics from its earliest writings, even before consolidating his three well-known categories, so that what we find in his young writings is exactly the promotion of his ideas toward the genesis of his categories. Secondly, we shall explore the developments of the ontological notion of symbol in some passages of his late texts. The aim is to describe how the theory of categories specifies and develops the author's notion of ontological symbol, so that the symbol is defined as “[...] *an embryonic reality endowed with power of growth into the very truth, the very entelechy of reality*” [EP 2.324]. Semiotically, it is well known that the symbol contains within itself iconic and indexical elements. Likewise, taken ontologically, the symbol represents a real Thirdness, which contains within itself elements of real Firstness and Secondness. Thus, the ontological notion of symbol is an expression of the author's Evolutionary Metaphysics.

This, in turn, leads directly to the second and final part of this article, which will address one aspect of Peircean Religious Metaphysics. However, this step will lack some preliminary clarification. Semiotics, which Peirce took as “only another name for Logic”, became explicitly a fundamental part of his philosophical edifice, so even if most texts on the subject did not receive full publication during his lifetime, its structural importance is something that one can easily check on the editorial compilations of his work. Something different, in principle, occurs with what we may call his Religious Metaphysics, which remains, if we restrict ourselves to the use of the term in available texts, only a suggestion that appears in the Authors' *Outline Classification of Sciences*: “Metaphysics may be divided into (i) General Metaphysics, or Ontology; (ii) Psychical, or *Religious, Metaphysics*, concerned chiefly with the questions of (1) God, (2) Freedom, (3) Immortality; and (iii) Physical Metaphysics, which discusses the real nature of Time, Space, Laws of Nature, Matter,

etc.”¹Thus, the question arises: can we say that Peirce developed a Religious Metaphysics? It is suggested that the answer to this question is “yes”. So, what is called here the author’s Religious Metaphysics consists in his frequent writings about the issues in which this branch of Science deals, directly or indirectly, and through different periods of development of his thought. From these considerations, and given the space available for this article, the second part aims to clarify some elements of the ontological role of the symbol in relation to the possibility of knowing God’s reality, just as suggested in the Peircean writings.

Key-words: Peirce, Metaphysics, Religious Symbol, God.

¹ CP 1.192, (our emphasis).
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