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Charles S. Peirce on the Continuity of Thought

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Bachelor Thesis

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Declaration

I declare that I have created the thesis by myself, except where due reference is made in the text. The thesis was not used to obtain any other degree or diploma.

Abstract

The present thesis explores C.S. Peirce's conception of continuity of thought in two respects: first, in relation to Peirce's categories of experience, and second, in light of his temporal synechism. Peirce's concept of thought is a response to the atomistic concept of experience. Instead, Peirce suggests that our experience or thought is a process of becoming rather than something instantaneous. This thesis shows that the metaphysical principle so central to Peirce's philosophy, synechism, is the driving force behind his claim that reality and consciousness both exhibits the character of contiguity. The term 'thought' employed in the thesis thus corresponds to Peirce's idea that all reality is continuous and our perception of it is too – that is, thought is a process in a continuum, comprising of immediate feeling to mediated perception.

Keywords: synechism, pragmatism, process philosophy, continuity of experience, temporal consciousness

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*Who looks upon a river in a meditative hour, and is not reminded of the flux. of all things?
Throw a stone into the stream, and the circles that propagate. themselves are the beautiful
type of all influence*

- Ralph Waldo Emerson, Nature

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Introduction

1.1 Interpretative Orientation of The Subject

The American philosopher Charles Sanders Peirce (1839- 1914) is famously known as a founder of the philosophical tradition of pragmatism. While throughout his career Peirce engaged in different philosophical domains including pragmatism, semeiotics, logic, phenomenology (later called phaneroscopy), and synechism; it is questionable whether it is proper to identify which component of Peirce's philosophy overall has priority over the others. Yet as Hausman says, Peirce saw philosophy by an order in which some parts build on other parts,¹ being influenced by systematic thinkers who thought to explain the world in terms of an architectonic structure - primarily the philosophy of Kant but also that of Hegel and Aristotle. Whether Peirce sought to make the architectonic system the core tenet of his philosophy or whether his systematic leanings were an occasional mood is definitely a task which would require an extensive hermeneutical interpretation of Peirce's scattered writings, certainly he never provided a cohesive account for an architectonic.

Nonetheless, I would like to suggest that at the heart of his systematic leanings lie the doctrine of continuity that he called *synechism*: "the doctrine that states that all that exists is continuous."² Peirce employs the term synechism to define his doctrine of continuity by using the "the English form of the Greek synechismós, from synechés, continuous."³ As a metaphysical realist of a unique kind, Peirce believed that the principle of continuity permeates all reality. What then is continuity? Throughout his life Peirce developed many definitions of continuity. Most generally, "continuity is fluidity, the merging of parts into parts". However because synechism is so central to his philosophy, one can find so many definitions of it across Peirce's writings.

¹ Carl R. Hausman. Charles S. Peirce's Evolutionary Philosophy (New York: Cambridge University Press, 1993): 191.

² CP, 1.175.

³ CP, 7.565.

The doctrine of continuity was already anticipated in Peirce's early anti-Cartesian papers on cognition from 1868, while no doctrine of synechism is explicitly shown in those papers; they certainly presuppose a principle of continuity. In the cognition papers, the need for understanding continuity is present in the rejection of first principles and thus any form of immediate knowledge based on intuition. The seventh question in "Questions Concerning Certain Faculties Claimed For Man" addresses the point that there is no first cognition, instead, every thought is interpreted by another thought. In so doing, Peirce simultaneously asserts that ideas are affected by one another, thus meaning becomes an ongoing process in an evolutionary flow. In this way, Peirce's epistemological position is the result of his belief that reality is constantly evolving: the fact of synechism is the basis for his epistemology. This line of thought brings to Peirce the idea that cognition is a temporal process of relating to other cognitions, because by rejecting first cognitions or intuition Peirce also asserts that no thought can be contracted into an instant and exist in isolation. The question that arises is how can instances of thought be related to one another in time? Peirce answers this question in his mature philosophical undertakings that I aim to explore in the present thesis.

In this light, synechism can be regarded both as a metaphysical theory and a methodological principle. From the metaphysical perspective, synechism is founded upon the idea that the universe is infinitely continuous, leading towards what Hausman terms "developmental teleology."⁴ On the basis of synechism as a methodological principle we see Peirce's tendency to apply the ontological concept of the continuum to epistemology. In the present thesis, I focus on the epistemic side of synechism that calls for the continuity of the entirety of thinkable things; more specifically, that perception and thought in general emerge within a continuum. Thus, the interpretative orientation for the continuity of thought is here grounded in Peirce's synechism - which was developed as a reaction to nominalistic tendencies in philosophy.

On the note in the beginning of this introduction, I will give a brief answer to whether Peirce intended to create a rigid system. Nietzsche once said "the will to a system is a lack of integrity"⁵ and here in Peirce's defense, the systematic undertakings for Peirce I suggest

⁴ Hausman. Charles S. Peirce's Evolutionary, 16.

⁵ Friedrich Nietzsche, *The Twilight of the Idols* (Cambridge: Hackett Publishing Company, 1997), 9.

are not of *totality* since to Peirce the road to inquiry should always remain open and continuous, this is the heart of his concepts and application of synechism. Our knowledge is fallible and never absolute, for continuity assumes novelty.

1.2 The Purpose of the Thesis

The aim of the present thesis is to analyse Peirce's idea of continuity of thought in light of his approach to time. Peirce's concept of the continuity of thought indicates a strong rejection of atomistic conception of experience - that our experience does not consist of discrete instances, rather to a Peircean eye, experience is understood as a continuous process.⁶ This mainly to say that consciousness embraces an interval of time, for otherwise all our ideas would be isolated from each other and comparison between past and present ideas would be impossible. Thus, in Peirce's view, for discursive knowledge to exist, thoughts and consciousness must be continuous.

1.3 The Definition of Thought

I chose the term 'thought' over the problematic notion of consciousness because of its implication from continental phenomenology, that is, its frequent association as something private or subjective, and also, to do justice to Peirce's belief that our consciousness exhibits both a bodily and social dimension. This is the first reason why the term 'thought' seems more appropriate.

My account of 'thought' includes Peirce's idea that thought is a continuous process wherein one idea affects another of the past so that we can come to know the present and anticipate the future. I use the term thought interchangeably with perception and experience in the thesis to show Peirce's commitment to metaphysical realism, that what we perceive, think, or experience corresponds to the external - not as a copy but as a consequence of interpretation. Moreover, these perceptions, thoughts or experiences do not exist in the sense of a pure , unmediated datum , which to Peirce could not be an object of thought; any such direct relation between content of sense experience and mental

⁶ It is important to acknowledge that the move from atomistic to synechistic ontology was a reflection of a paradigm shift taking place in the first half of 20th century that made dualistic approaches seem unsatisfactory with new scientific discoveries.

representation devoid of relational patterns would undermine the principle of continuity itself. Rather, for Peirce, perception is an act of interpretation. In other words, perception is inferential and dependent upon the interposition of a third mediative element. Thus, this brings us to the point that thought in Peircean sense is a *process* in a continuum, at one end of which we have immediate feeling and at the other there is mediated perception, which he calls “perceptual judgement”. This is all to say that the term ‘thought’ will be used in the thesis to represent the idea that thought is not instantaneous, but a process of becoming that occupies a flow of time. Thought is never complete; it is always growing.

1.4 The Structure of The Thesis

The question of the continuity of thought will be discussed in two respects and in two chapters. The first chapter aims to explore Peirce’s theory of categories in relation to the Peircean concept of experience. The second critically examines the continuity of thought in relation to time. The purpose behind choosing these two seemingly different philosophical topics for the discussion of the continuity of thought is to look at the concept of continuity as related to thought on two interrelated analytical levels. The first explores the elements of experience in order to demonstrate that their interdependence shows that triadic relations are continua. The second concerns the hypothesis that for thoughts to be continuous, our consciousness must be durational.

Despite formality of character, Peirce’s categories of experience are phenomenologically or as he later stated phaneroscopically derived: he interchangeably uses both terms. The categories of experience are classes of phanerons that permeate all experience. The first chapter thus aims to demonstrate the argument that Peirce’s categories are not merely formal and prescriptive tools to explain being, but that they represent essential elements of experience. However, it is important from the outset to bear in mind that by ‘experience’ Peirce does not only mean experience as thought by individual minds but as something supra-subjective. The triadic nature of Peirce’s cenopythagorean categories shows that our experience is characterized by a relation to continuity. For this reason, the categories act as a theory of reality that characterizes our experience and provide the basis for Peirce’s concept of continuity of thought by arguing that our experience is a continuous process and that nothing is absolutely present in experience. That is to say, the categories of experience occur within the continuum of time.

If perception occurs within the temporal flow characterized by a process of change or development, the next point to consider in the thesis is the question of time, and the relation of time to thinking. Peirce urges us to reflect upon the matter of perception by stating that: “the impressions of any moment are very complicated.”⁷ What seems to be at first a fairly obvious claim is anything but: Peirce’s statement alludes to the arguments of the early cognition papers and the idea that no act of cognition can be immediate. Thus, the process from the manifold towards an intelligible representation requires time. But since every thought happens in a flow of time, the task at hand for the second chapter is to look at Peirce’s concept of temporal synechism to further explicate his argument on the continuity of thought.

Thus, Peirce’s concept of time is very important to the continuity of thought: his understanding of time is relevant to every domain of philosophy. More specifically, for the scope of the present thesis, Peirce’s concept of time is analysed as a method for his argument against intuition understood as immediate knowledge. To put it another way, that perception occupies an interval of time, which does not consist in a clear-cut sum of instants. What then is this interval of time? Perception of the immediate present is durational, but that duration is not finite since consciousness of the present in its idiosyncrasy cannot be measured. Rather, our immediate consciousness embrace an infinitesimal interval of time. The durational concept of the present will allow Peirce to place both time and thought in a continuum.

1.5 A note on Primary Literature

Since Peirce never finished or published a book, the task at reconstructing his philosophy on any topic that Peirce was concerned with requires an assessment of numerous of Peirce’s writings including published essays in periodicals and the mass of fragmentary manuscripts. The task at rebuilding Peirce’s ambitiously systematic philosophy requires philosophical interpretations of different areas of his philosophy in order to arrive at the whole. Thus, as students of Peirce’s thoughts, we need to embrace the difficulties that come with the scattered and obscure nature of Peirce’s writings. Murphey rightly notes that

⁷ CP, 5.223.

“Peirce’s philosophy is like a house which is being continuously rebuilt from within.”⁸

For the scattered parts require rebuilding and rearranging by his students so that they become more understandable, and consequently, a more communal and cooperative endeavour of philosophy can take place, as Peirce clearly wished it to be. Hence, Peirce’s philosophical project planted many seeds whose fertilization requires interactions with different aspects of his philosophy so as to rebuild his philosophy as a whole.

The task at reconstructing Peirce’s idea of continuity of thoughts entails a philosophical investigation of his most relevant texts, with due attention to chronological order. Nonetheless, such a philosophical inquiry cannot be simply chronologically ordered since many building blocks of his philosophy only emerged during mature stages of his thought.

For that reason, the examination of continuity of thought is extrapolated from the writings on the categories of experience and time as experienced. The first part of the thesis explores the writings of Peirce’s *Collected Writings*, Volume I, Book III on Phenomenology, as well as Volume VII Book II, with focus on Chapter IV on Consciousness. The intent is to analyse the concept of experience as continuous in relation to Peirce’s cenopythagorean categories. The second part of the thesis is explicated through Peirce’s seminal essay on synechism: *The Law of Mind from the Monist Metaphysical Series* that are to be found in Volume V, Book I on Ontology and Cosmology- with the focus on the spreading of ideas and the flow of time within a continuum. The the topic of time is nowhere treated singularly and comes in a number of disparate writings. Explanations as to why no thought is an instant are also to be found in Peirce’s 1873 manuscripts called *Time and Thought*, as well as manuscripts on *Telepathy* of 1903.

⁸ Murray G. Murphey, *The Development of Peirce’s Philosophy* (Cambridge, Massachutes: Harvard University Press, 1961), 3.

Categories of Experience

*“We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time.”*

T.S Eliot, Little Gidding

The reason Peircean categories must be employed to define continuity in thought is because of the underlying principle of continuity in Peirce’s phenomenological categories. Previously, we have seen that for Peirce there are three formal relations in order for a continuum to be. In the present subsection I will outline Peirce’s phenomenological categories to show that for a thought to emerge, a triadic relation must be in place. Furthermore, the categories are employed in order to argue that experience is not a singular occurrence, but it is rather a continuity that requires mediation and a flow of time. According to Peirce, in phenomena there are always simple qualities, dyadic relations between qualities and some significance or meaning that accompanies connection between qualities. From this it follows that there are three universal categories permeating all of experience. The universal categories of Firstness, Secondness, and Thirdness “belong to every phenomenon, one being perhaps more prominent in one aspect of that phenomenon than other but all of them belonging to every phenomenon.”⁹

2.1 Peircean Categories

The categories are designated to describe the general features of each of the classes of elements that are experienced. Peirce arrived at the three classes of experience from formal logic, thus Peirce’s observations of the categories based on ideal triadic structures are verified through experience. That is, to move from the ideal to the real, Peirce bridges this problem with phenomenology: “we find then a priori that there are three categories of

⁹ CP, 5.43.

indecomposable elements to be expected in the phaneron.”¹⁰ Thus, the universal categories of firstness, secondness, and thirdness are elements present in every possible experience. Peirce with his method of phenomenology invites us to test the universality of the categories upon phenomena with an act of imaginative attention. As Dougherty puts it, “phenomenology observes the phenomena and precinds the categories.”¹¹ The method that Peirce arrived at aims to show that everything that we experience can be reduced to three universal categories, thus anything that we experience contains elements of each category. That is to say, that neither the object of experience nor its representation is something instantaneous but contains all the three elements, which are mediated through a third. Hence, these categories are irreducible from each other. However, we can suppose one without the other by means of pre-scission, that is, attending to one category by isolating the other. The act of pre-scinding is a process of abstraction whereby the categories are distinguished from each other. This separation of elements however does not exist separately, but is only thought separately. In Peirce’s words, precision is the “act of supposing something about one element of a percept”.¹² With respect to the categories, we cannot pre-cind in all directions.:

Now the categories cannot be dissociated in imagination from each other, nor from other ideas. The category of first can be pre-cinded from second and third and second can be pre-cinded from third.¹³

The act of precision is thus of hierarchical dependence in that firstness can be pre-cinded from secondness, and secondness from thirdness. In this way, the world of thirdness cannot be imaginable without firstness and secondness. This fact implies that the elements present in experience are of relational structure, that is, they relate to one another in a continuous process occupying a flow of time. Therefore, what is suggested at the outset is that the hierarchical order of Peirce’s categories can be understood as a cognitive process in which an experience is made intelligible. In other words, thoughts are continuous rather than instantaneous.

¹⁰ CP, 1.299.

¹¹ Charles J. Dougherty. “Peirce’s Phenomenological Defense of Deduction,” *The Monist* Vol. 63, No. 3 (1980): 368.

¹² CP, 1.549.

¹³ CP, 1.353.

2.2 Firstness

That which comprises the category that Peirce designates as Firstness is that which is first phenomenologically derived. The word “first” suggests that under this category that it has no reference or relation to anything else. It is that first element of phenomena that gives its character independently of anything else, that is, independent of any perception and thought.¹⁴ “Firstness is the mode of being that which is such as it is, positively and without reference to anything else.”¹⁵ The typical ideas of firstness that Peirce often identified are qualities of feelings or mere appearances:

Among phanerons there are certain qualities of feeling, such as the color of magenta, the odor of attar, the sound of a railway whistle, the taste of quinine, the quality of the emotion upon contemplating a fine mathematical demonstration, the quality of feeling of love, etc.¹⁶

In this way, such qualities stand on their own as something distinctive and involve no analysis, comparison, or process of any kind on part of consciousness. It is a state of immediate consciousness that is for itself. An example that Peirce uses might illuminate the experience of the first element, the whistle of a train in the night precinded from its other elements, particularly, the pure quality of sound of the whistle disembodied from the object is what Peirce calls Firstness. Hence, the first is a quality that is immediate and present, a quality whose being is simple in itself, something idiosyncratic : *sui generis*.¹⁷ The idea of the first is completely separated from anything else, independent of being perceived or remembered in the sense of pure abstraction - that is, the pure abstraction is a reference to the ground of embodied quality. In the case of the whistle as distinguished from relation to anything else, the quality of the whistle sound exists in its uniqueness, without any reference to its parts. That is to say, it is independent of any other phenomena and any other character and thus prior to any relations. In Peirce's words, “it is a pure modad.”¹⁸

Let us return to the experience of the sound of the railway whistle once again, insofar as the whistle sound is precinded from other elements of the experience, the *mere* quality of

¹⁴ Hausman, Charles S. Peirce's Evolutionary Philosophy, 123.

¹⁵ CP, 8.329.

¹⁶ CP, 1.304.

¹⁷ CP, 1.425.

¹⁸ CP, 1.303.

the sound of whistle is *a feeling* for Peirce . However, by feeling he does not mean the sense of actually experiencing these feelings as that would no longer be a monadic relation, for that is something that involves the quality as an element of the experience. Hausman describes firstness as “ the momentary, wholly unrelated aura or tone that gives presence to any phenomenon.”¹⁹ The implication of Hausman’s characterization of firstness is twofold: firstness as suchness is unrelated to anything else, that is, it is a sheer quality disembodied. Firstness as a phenomenological category is one that is pre-reflexive - it is a quality that is in the present instant. Following this, the quality of feeling to Peirce is whatever of consciousness there may be immediately present. It is a simple quality of immediate consciousness,²⁰ without attention, unattached, and without any parts. In this way, they are preeminently first and self-sufficient regardless of how or what anything is.

The question that imposes itself on us is how does Peirce identify that which is immediately present without attending to the description of the thing itself ? Before answering that question, it is important to note that Peirce characterizes instances of firstness as a percept, not perception. For Peirce, perception is to be understood as “perceptual judgement”²¹, whereby we perceive by contemplation of the percepts, which essentially involves description and analysis. As previously mentioned, Firstness exists in itself outside of anything else and for that reason it cannot have any relation to logical description. For example, when I perceive a wooden chair, I make a judgement about my present perception of the wooden chair, that involves a relation between the conceptual side of the object and the percept as it appears. It is a synthesis produced by the mind outside the object of perception. The idea of first on the other hand is immediately present to consciousness before it can be cognized as an object in relation to an other.

²²Nonetheless, Peirce seems to be aware that in describing firstness in examples, a problem will initially presents itself : for in providing an example of firstness, a paradox emerges from this problem and that is when attaching a description to a quality, it no longer is a first.

[...] all that is immediately present to a man is what is in his mind in the present instant. His whole life is in the present. But when he asks what is the content of the

¹⁹ Hausman, Charles S. Peirce’s Evolutionary Philosophy, 123.

²⁰ CP, 1.307.

²¹ CP, 5.54.

²² CP, 1.357.

present instant, his question always comes too late. The present has gone by, and what remains of it is greatly metamorphosed.²³

Thus, if firstness is the state of immediate consciousness, its relation to time is of presentness and involves no flux of time, since it is a quality of suchness that appears to us in its simplicity, thus it is not affected by the past nor by the future. What appears to us in its immediacy is that which is the content of the present instant, and, for that reason, it involves no analysis by the mind. As Ibri remarks, to introduce any analytical instance in the mind is to lose the presentness of firsts, since analysis involves comparison with past experience.²⁴ In this light, firstness as a category does not account for thought which to Peirce is essentially mediated by triadic relation. As we shall see, thought requires a temporal flow, firstness as precinded from the concrete experience suggests a break in time because of its *nowness*. Rather, in Peirce's eyes, firstness is like that which is observed from an artist's eye, without judgement and preconception, and it is the source of freedom and freshness of life that does not contain the past for interpretation.

How is firstness something that is experienced but at the same time has no relation to any parts? By posing this question, we enter into the metaphysical sphere of the category of firstness. Ontologically speaking, firsts are potentialities that exist prior to any physical manifestation of the qualities themselves. Firstness presents itself as a category of possibility, since there can be nothing unless there is a first possibility of something. "A quality is a mere abstract potentiality."²⁵ That is to say that the quality of hardness exists prior to anything being hard in the world. In this way, firstness is for Peirce an abstraction that is to be concretely realized in actuality through relations acting upon each other as will be indicated in the case of secondness. According to Hausman, instances of the category of Firstness are conditions of properties that are indeterminate waiting to be determinate²⁶. Put differently, they are possibilities to be actualized:

Firstness is the mode of being which consists in its subject's being positively such as it is regardless of aught else. That can only be a possibility. For as long as things do not act upon one another there is no sense or meaning in saying that they have any being, unless it be that they are such in themselves that they may

²³ CP, 1.310.

²⁴ Ivo Assad Ibri, *Kosmos Noetos: The Metaphysical Architecture of Charles S. Peirce* (Berlin: Springer Philosophical Series), 8.

²⁵ CP, 1.422.

²⁶ Hausman, *Peirce's Evolutionary Philosophy*, 125.

perhaps come into relation with others. The mode of being a redness, before anything in the universe was yet red, was nevertheless a positive qualitative possibility. And redness in itself, even if it be embodied, is something positive and *sui generis*.²⁷

In Peircean terms, this potentiality is to be understood as a “pure may-be”²⁸, not an actuality. The metaphysical implication of this negative possibility as such is that it does not have any being since it is only a potentiality. Mayorga characterizes this metaphysical status of firstness as “kind of half-way between nothingness and existence.”²⁹ The reason being is that firstness has the capacity to become something actual; but is non-existent because of its one relational character: it is just itself. This points towards the trajectory of Peirce’s argument on the continuity of thought where the metaphysical appears to be the explanatory hypothesis for the phenomenological.³⁰ Peirce, as a methodological realist, looks at what the world is like to understand why it appears as it does. Although this work is not so much concerned with Peirce’s cosmology, it needs to be recognized that Peirce regards reality as a process that consists in relations among events. Reality to Peirce has an evolutionary character, which is a process of becoming. The same applies to thought, in Peirce’s view, thought is temporally spread and requires mediation in order to *become* intelligible. Thus, we can conceive of firstness as part of the process in which thought is mediated, it is the breath from which the world emerges, the part of the process which is not rational that functions in continuity with the experience as a unity.

Another way Peirce defined Firstness is through its “irrational character”. He regards firstness as irrational because as already mentioned, it is strictly a sensation that is felt and not thought of. In this regard, the point of contrast here is one between concept and sense quality. A concept Murphey notes is “eminently a rational sort of entity; a feeling is eminently irrational.”³¹ The actual occurrence of seeing and recognising blue reflected in water is no longer a case of pure Firstness; that is, it no longer appears within the present instant, but as a concept designated from colour theory that is a product of mediation . Peirce often provides examples of colour to illustrate the directness and immediacy of

²⁷ CP, 125.

²⁸ This is to emphasize that firstness is of one-dimensional character, not an actual occurrence.

²⁹ Rosa Maria Perez - Teran Mayorga, *From Realism to “Realicism” : The Metaphysics of Charles Sanders Peirce* (Plymouth: Lexington Books, 2007), 117.

³⁰ The word hypothesis used here is to stress Peirce’s doctrine of fallibilism that rejects metaphysical absolute and that we cannot obtain absolute certainty about knowledge.

³¹ Murphey, *The Development of Peirce’s Philosophy*, 308.

firstness, which seems to serve well for his argument; however, it seems that these colour examples carry too much explanatory weight oftentimes. The colour blue as firstness is merely a sensation or appearance - that is, it is not a concept of blue as an abstract entity predictable of many things in the world. In this way, a concept requires a reflective reference from common association that involves contiguity between three relata. Another way to put this is that firstness does not render phenomena intelligible, as for Peirce, intelligibility requires mediation through a triadic relation that is continuous. Peirce tells us to “ go out under the blue dome of heaven and look at what is present...[as with an] artist’s eye. ”³² With an artist’s eye means attending to the immediate quality independent of description and classification.

The reality of firstness is one that is an irreducible part of the relation that mediates between the object represented and presented as it is. In order to explicate why thought is continuous, Peirce’s classification of universal experience can be understood as the division of consciousness. Firstness is a state of feeling that is part of the continuous process of consciousness that is before cognizance. It is that state of consciousness of mere feeling: an experience of presence in which thought was not made intelligible yet by mediation. Thus, firstness has the temporal connotation of being instantaneous. However, as was previously mentioned, firstness can only be understood by means of prescinding, which cannot exist without a second. By this argument, a second as well cannot exist without the first. The firstness becomes actualized in seconds or one can think of it as the way in which feelings flow in a continuous stream until they become actualized in secondness. Thought is continuous in that way that it is different from what it was in the last moment. The instances of firstness become actualized when they enter habits of interaction.

2.3 Secondness

The next phenomenological category Peirce designates simply as Secondness; seconds as elements of phenomena exist by virtue of their relation and dependence on something else. For Peirce, “ the second is that which is what it is by force of something to which it is

³² CP, 5.44.

secon.”³³ That is to say, secondness is an awareness of the other, hence this relation requires for one thing to relate to another thing. As Hausman puts it, secondness is regarded as the category of aspects or phenomena that make them manifest the dependency of all things to one another.³⁴ However, this dependency is one of dyadic character, independent of any other, third thing.

Where are instances of secondness to be found in the world ? According to Peirce, instances of secondness are present in causal relations. Peirce here follows the idea of traditional metaphysics, following Aristotle, and explains the category of secondness in terms of causation. For a condition of causality requires that one thing acts upon another, that is, two relations are present in a phenomenon. In Peirce’s words, “ the idea of second is predominant in the ideas of causation and statical force.”³⁵ Contrary to Firstness, this experience involves a quality of feeling that *relates* to something else than itself. It is a mode of phenomena by which Firstness as a possibility has a link to the world. In Peirce’s example of the train whistle, the sound of the whistle interrupts my train of thought, and hence the state of silence that was present. This experience of intrusion upon stillness of the night consists of two relations: the sound of the railway whistle derailing my stream of thought thereby forcing itself on my attention. As such, we can directly perceive that the course of things is not subject to our will as a result of the bundle of interactions surrounding us. As Peirce writes

We are continually bumping up against hard fact. 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.³⁶

Thus, two things are in interaction within the process of the event that comprises a dyadic relation. However, it is important to note that secondness as a mode of being is prescinded from any description in which we can describe what kinds of things relate to each other, as it does not presuppose any cognized properties.³⁷ While secondness involves attention due to the forcefulness of the event; it is not a reflection - that is, one does not reflect upon the past event by apprehending its meaning. It is a direct, unmediated experience that involves

³³ CP, 1.356.

³⁴ Hausman, *Peirce’s Evolutionary Philosophy*, 128.

³⁵ CP, 1.325.

³⁶ CP, 1.324.

³⁷ Hausman, *Peirce’s Evolutionary Philosophy*, 128.

an element of firstness that becomes actualized within the interaction of the dynamic process. Secondness enters into our experience as that aspect of the phenomenon of alterity. It is our awareness of the other.

Peirce's theory of secondness as a universal category is designated to the world of Newtonian physics of his time, whereby physical actions are set in motion by other physical actions. With this contextual framework we see another aspect of Peirce's concept of secondness, that of "brute force" - that impinging itself on the other. We encounter brute force as an element of struggle or resistance in experience. "The second category that I find, the next simplest feature common to all that comes before the mind, is the element of struggle."³⁸ Secondness as brute force manifests itself in experience as a reaction between two elements that are interdependent. For something to exist, something else besides possibility must exist for a reaction to happen. The following alludes to Peirce's metaphysical realism and his belief that there is an extenernal world of knowable objects independent from our perception of it. For this reason, Peirce associates secondness with "brute fact" as it belongs in the realm of facticity and existence. The way we encounter reactions that force themselves upon us is the same way we encounter facts in the world. Peirce illustrated this fact as a door forced open against our resistance:

Actuality is something brute. I instance putting your shoulder against a door and trying to force it open against an unseen, silent, and unknown , resistance. We have a two-sided consciousness of effort and resistance, which seems to me to come tolerably near to a pure sense of actuality.³⁹

The experience with the world of exteriority brings about the consciousness of duality in which we are aware of ourselves and the existence of the external world, but at the same time the realization of the other is the relation in which self-awareness emerges. As was said, it is the brute intrusions within our experiences that are encountered as facts or existence of something. Facility to Peirce is a matter of externality of which we have a direct perception; it appears here and now, then and there. Secondness as a category of facticity implies a mode of being "of actual fact"⁴⁰. In what sense is it actual? The actuality of the event lies in its relation to other existents that appear in happening here and

³⁸ CP, 1.322.

³⁹ CP, 1.24.

⁴⁰ Hausman, *Peirce's Evolutionary Philosophy*, 129.

now. “Actuality is something brute”⁴¹, for it is existence that reacts with other things. Thus, the brute intrusion of secondness to Peirce guarantees the externality of the object we perceive.

How does this brute actuality show itself in experience? Let us look back at Peirce’s example of the whistle intruding on my train of thought. The condition prior to the surprise, which is the element of struggle of the whistle, was silence. Here stillness as such is an idea of firstness; that is, a quality of feeling that exists as an element of the actual. As Short puts it, “for, in itself, a quality remains a possibility even when actualized.”⁴² Dewey also gives a concise explanation of this, in secondness, the qualities of firstness are actualized under conditions of interaction with something.⁴³ Thus, it follows that the whistle sound in its precinded form is an instance of the category of firstness; but the whole experience that consists in a dynamic relation between the train whistle and stillness becomes an actualized experience. That is to say, two relations are connected for an actual occurrence to happen. Nonetheless, we can differentiate between the elements of this experience only upon reflection, the event as such is a continuous process and never completely isolated. Here the underlying principle of contiguity is at force whereby two relations are brought into oneness by a causal relation. Thus, Peirce held that “sense experience, prior to analysis, is itself continuous, but not recognized to be continuous except in analysis.”⁴⁴ Secondness therefore does not account for intelligibility because of its dyadic nature.

According to Peirce, interpretation of a phaneron requires a triadic relation. Although attention is present in the reaction of consciousness between ego and non-ego (which non-ego may be an object of direct consciousness)⁴⁵; however, direct consciousness for Peirce is only an awareness of the other then and there, not as a general concept that contains significance and meaning. His argument accounts for consciousness in the sense of consciousness of interruption that is not perceptual judgement that belongs to the order of interpretation, that only emerges through inner reflection of direct perception. In light of Peircean phenomenology, secondness is then a class of experience that calls for attention,

⁴¹ CP, 1.24.

⁴² T.L. Short, *Peirce’s Theory of Signs* (New York: Cambridge University Press, 2017), 78.

⁴³ John Dewey, “Peirce’s theory of quality”, *Journal of Philosophy* 32, no. 26. (1935): 703.

⁴⁴ Short, *Peirce’s Theory of Signs*, 28.

⁴⁵ CP, 1.352.

because it forces itself upon our attention. Secondness is that aspect of experience that brings about an event, it is the reaction of our minds to something there (firstness). It is the intrusion of something unexpected that allows the ego to become aware of itself. Peirce explains: “We become aware of ourselves in becoming aware of the not self”⁴⁶.

The second category of experience thus shows that there is a succession in experience that is not composed of isolated moments - but a continuous relation of a lapse of time which presents to us. Since a second is impossible without a first, because a real relation cannot exist without a quality or feeling that comprise that relation all together. Here we can observe that in Peirce’s eyes thought is not understood as something discrete, it is part of a continuum that comprises between the absolute first and absolute last. And that relation requires mediation, which brings us to the third category of Thirdness.

2. 4 Thirdness

The mediating element or the third element in the class of experience is the category of Thirdness. Instances of thirdness are to be found in the domain of experience that is intelligible, rational, and meaningful. And for an experience to be made intelligible, a triadic relation is necessary. The point essential to the present thesis is that thought itself can only occur where there is meaning or mediation in which a third connects a first and a second: “Category the Third is the Idea of that which is such as it is a being a Third, or Medium, between a Second and its First.”⁴⁷ In this way, we make sense of experience in that the force of experience imposes itself on us in making us reflect on them. For the sake of clarity, I will use the same example that I have been using throughout this chapter : the experience of the train whistle interrupting my stream of thought will become intelligible in the sense that I recognize *what it was* that disrupted the silence of the night. The concept of mediation under the third category is explicit in the sense that the third mediates between two things - the second and the first within the second. Here we can see, as Murphey emphasizes, that the categories constitute the fundamental concepts of connection involved in representation itself.⁴⁸ For we have to be reminded that Peirce’s categories are not three different types of experiences but logical categories that apply to experience as a whole. A concrete instance of experience must exhibit all three - that is, the

⁴⁶ CP, 1.324.

⁴⁷ CP, 5.66.

⁴⁸ Murphey, *The Development of Peirce’s Philosophy*, 106.

first while being a potentiality by itself cannot be separated from other instances. The way we speak about firsts is only after analysis, in a prescinded form. The continuity of relation in existence becomes such that there cannot be an existence for something to exist first, and that something is the first. Thus, thirdness connects the two together by reflecting on the instances. To put in another way, instances of thirdness are a cognitive representation of an experience. Sonesson emphasizes the continuity of experience in terms of categories in the following way, Firstness can be understood as “that which is appearing, bringing about an event, catching the attention that starts the chain of Secondness, in which we live. Thus, Thirdness may stand for reflection.”⁴⁹ In Peircean terms, thirdness is the interpreter that looks back towards past instances for reference in order to interpret the experience as meaningful.

The interpreter is in a sense a mental sign that we impose on the object of perception during the interpretative process. In this way, thirdness is synonymous to representation. However, the question is how does intelligibility arise or how does thirdness as the category of intelligibility mediate meaning between first and second? That is to say, how does thought emerge? For Peirce, the experience of mediating between two things can be thought as the experience of synthesis in consciousness. Peirce describes third as synthetic consciousness in this way:

It seems, then, that the categories of consciousness are: first, feeling, the consciousness which can be included with an instant of time, passive consciousness of quality, without recognition or analysis; second, consciousness of an interruption into the field of consciousness, sense of resistance, of an external fact, of another something; third, synthetic consciousness, binding time together, sense of learning, thought.⁵⁰

Thus, thirdness translates to synthetic consciousness as a sense of learning, that is, thought is apprehended as a process of mediation - for cognition, in Peirce's view, only emerges within a span of time and cannot be contracted into an instant.⁵¹ I will return to the relationship between time and thought in the next chapter. For the present chapter, it suffices to say that the experience of synthesis as a sense of learning carries with it a sense

⁴⁹ Göran Sonesson, “Elements of Peircean phenomenology: From categories to signs by way of grounds”, *Semiotica*, no. 228. (2019): 267.

⁵⁰ CP, 1.377.

⁵¹ CP, 1.381.

of the flow of time. The presupposition of a flow of time indicates that the experience of continuity likewise falls under the category of thirdness. In this regard, thirdness as a mediating relation, mediates between the lived past and future. Thus, thought as a mediating process cannot be separated from the past and intentionality of the future.

As I have stated earlier, the percept that does not involve analysis is perfectly *explicit*; that is, it is definite and is not mediated. The argument that Peirce makes is that “we know nothing of the percept otherwise than by testimony of perceptual judgement...the moment we fix our minds upon it and think the least thing about, it is the perceptual judgement that tells us what we so “perceive”⁵². In this way, the percept simply happens in its definitiveness, while a perceptual judgment represents that something has happened - it is an interpretation or conceptualization of the perceived object . This process involves mediation or thirdness wherein one thing is represented to another by a third. Thus, thirdness as an element of experience is a representation that requires a flow of time and synthesis on part of consciousness that connects particulars into generals for a representation to be meaningful. Since it takes time for perceptual judgement to infer what we just directly experienced, we will have to look into our memory of the past in order to infer the significance of the experience. Namely, to arrive at representation, a continuous process is required whereby thirdness mediates between instances of firsts and seconds. Percept as an explicit aspect of experience contains only elements of firstness and secondness⁵³ - for instance, when we perceive a yellow chair in itself. Nevertheless, in the judgement that “this chair appears yellow”. The judgement so to speak is not the sensation involved in the percept in its immediacy, as it appears *sur generis* but a habit of interpretation because it is a general. How do we bridge the gap between percept and perceptual judgement? Peirce resolves this gap with time.

The mind has a tendency towards generalization, that is, an analysis of perception consists of comparison of past experiences that leads to general conceptions. A generalization is understood to be a number of phenomena that fall under a concept, making it, therefore, more general. This aspect of thirdness that Peirce employs can be understood as Aristotle’s conception of what has more frequently called universals: *being-*

⁵² CP, 7.643.

⁵³ For Peirce, it seems that perceptual judgement is a matter of introspection that is inferential, and hence not accessible in the presentness of firstness and secondness.

predicated-of-many.⁵⁴ This argument explicitly points toward Peirce's idea of thirdness as a sense of learning, for concepts are cognitive results of habits of interaction in the world, as opposed to being a priori derived. For with time, there will be a synthesis of previous percepts that will create a general.

To make this matter more clear, a concept will emerge as a result of generalization of past experiences. But we have to bear in mind that such generalizations of past experiences are not just mind dependent -- generals exist in the world before we perceive them. Peirce argues, "if there was no generality or regularity in the universe, there would be nothing for thought to grasp and recognize."⁵⁵ For thought is possible because there is a pattern of regularity in experience, and since representation cannot be a pure datum or copy of an impression, for it must have reference to the world. Thus, representation as thirdness is a relational pattern between the sensuous recognition and conceptual representation.

These claims mentioned above must however be understood in relation to Peirce's pragmatism. As concepts, these generals are a consequence of the doctrine of habit. According to Peirce, a meaning of an idea does not reside in the particular instances, but extends to all possibilities that could result from the idea's consequence. More specifically, the word fire will be representative to all instances of fire real or imagined, since the word fire is a symbol that is a general and in that way representative of all instances of fire, real or unreal. That is, as Short remarks, general terms such as red are not only predictable of actual instances but covers a continuum of possible variations.⁵⁶ The colour red then is understood as something intelligible, not a percept of immediate consciousness. It is a consciousness of process that embraces a period of time, for otherwise we could not generalize ideas by means of comparison, from past and present ideas.

The third category definitely seems like the most difficult category to grasp - it is not help that Peirce associates so many definitions with it. At this point, one might object that Peirce in arguing that thirdness is the category of mediation might commit the fallacy of equivocation. The category of thirdness seems to not have a firm root in the phenomenological universe unlike the category of firstness and secondness, since the idea

⁵⁴ CP, 4.42.

⁵⁵ CP, 5.43.

⁵⁶ Short, *Peirce's Theory of Signs*, 99.

of thirdness extend to the idea of mediation, generality, regularity, and continuity. At first, one could say that Peirce is engaging in an arbitrary descriptions that are somewhat circular. While it is true that Peirce's philosophical writing more than often lacks precision and as a result the categorical descriptions are somewhat loose. However, these circular definitions could be interpreted as having explanatory significance to his overall architectonic system that he spent his life trying to establish throughout his life. Thirdness was developed by Peirce more in terms of force, which reflects his failed attempt at finding a simpler account of experience - that is, one that would explain the dynamic nature of experience through a dyadic scheme. Rather than looking at the definition of thirdness as vague due to Peirce's scatter writings, thirdness as continuity accounts for Peirce's continuity as a methodical principle to explain continuity as a form of generality. Thus, in order to recognize an experience as general, there has to be a continuity of ideas. As Peirce says: "continuity is relational generality"⁵⁷. More to the present point about the continuity of thought is that thirdness is that *middle* which mediates.

The three categories of experience act as a prelude to Peirce's synechism by challenging the older notions of dualism and offering a systematic alternative that is inherently pragmatic in its origin. Insofar as perception is the acquiring of information about the world we live in, that perception is mediated through the category of thirdness as a form of continuous inquiry. Ibri points out that in thought as thirdness is configured the experience of mediation between a first and a second, and which is extensive in time insofar as it is general and maintains a link between past and future.⁵⁸ It is essential to Peirce's philosophy that with thirdness thought becomes intelligible, indeed, it is only possible through triadic thought. Our experience can be intelligible where a third connects a first and a second. One of the difficulties in looking at the continuous stream of thought in terms of Peirce's argument is that by explaining the differences between them, it seems that they are separable. At the same time, the function of the categories is to ultimately reduce the manifold to unity, and hence they are called "universal categories" that belong to every phenomenon. In this way, Peirce sought to create a thirdness for the purpose of generalization since the element of thirdness scrutinizes direct appearances into generalizations.

⁵⁷ CP, 6.190.

⁵⁸ Ibri, *Kosmos Noetos: The Metaphysical Architecture of Charles S. Peirce*, 13.

For Peirce, thirdness is to be identified with continuity, whereby the third interprets the instances of first and second. Thirdness is the relation to second through a third. What this implies for the continuity of thought is that experience is not composed from singular occurrences that follow another. There is an experience of the flow of time, which regulates the experience - that is, when we experience thirdness, we experience some order of phenomena through progressive actions of meditation.

Time and Thought

The past gnaws on things, and leaves on them that mark of its tooth.

-Henri Bergson, *Creative Evolution*

In order to prove that thought is continuous, Peirce argues that the flow of time characterizes our cognitive process in such a way that it enlightens the relations between phenomena. That is, the elements of experience are governed by the law of continuity. As was said, thirdness is the category of continuity and as such it mediates elements in experience in order to make them intelligible. Thus, it becomes clear how the role of time is important in Peirce's understanding of reality, and, subsequently, in his account of perception. As thought is mediated or interpreted, it requires time to happen. To say that thought simply requires time sounds like a truism; however, for Peirce this analysis of time is a methodological tool in his argument against nominalism, which has the following implications. First, by saying that thinking requires a flow of time, Peirce rejects the notion that we come to know things by means of intuition, and thereby he also dismisses the idea of immediate knowledge. Thus, the fact that experience is continuous and requires interpretation is manifested by time. However, the principle of continuity that permeates the categories of experience that shows itself in time is not, as Luisi points out, a simple mechanistic such as one expressed in the relation between previous and subsequent,⁵⁹ but as previously indicated for Peirce continuity is rather something that contains no definitive parts. In what way does this definition of continuity relate to Peirce's understanding of time in relation to perception?

3.1 The Concept of Continuity in Peirce

Throughout Peirce's writings we can find several definitions of continuity that he with time either revised or dismissed. The limitation of this thesis does not allow for detailed descriptions of Peirce's definitions of continuity. As the principle pertains to different areas of his thought, what Peirce means by continuity can be deduced from many aspects of his philosophy. As was mentioned, Peirce repeatedly said that synechism was the driving force behind everything that is, from physical reality to the law of mind. Thus, in interpreting

⁵⁹ Maria Luisi, "Space and Time in the correspondence between Charles Peirce and Victoria Welby", *Semiotica*, no.196 (2013): 210.

continuity, one need not strictly look for a definition to arrive at the definition. Nonetheless, Peirce's understanding of Kant's definition of continuity is important in any analysis of Peirce's theory of time. Time will be used as a methodological tool by Peirce to serve as a paradigm for all other continua.

Peirce meant with Kantianity the idea of continuity as posed by Kant, where space and time can be infinitely divided. To call Peirce's definition of continuity as Kantian might be somewhat misleading, as Peirce in fact rejected Kant's definition of continuity - that is, of infinite divisibility. However, in the writings of 1903, Peirce went back to revising Kant's definition of continuity and sought to rectify his previous misunderstanding of Kant by stating that "Kant's real definition implies that a continuous line contains no points."⁶⁰ Thus, it seems that infinite divisibility to Peirce is not itself enough to make a series continuous. Peirce's reasoning behind this claim is that a point is not divisible into parts of the same kind; in fact, a point is not divisible at all. And for Peirce, true continuum contains no parts. This is what he accepts to be the common sense idea of continuity. In Peirce's words, "continuity is the relation of the parts of an unbroken space and time."⁶¹ The crucial point here in reference to the continuity of thought, which will be discussed in the second part of the present section is that a continuum is continuous, unbroken and contains no definite parts.

Peirce argues for the primacy of indefiniteness, which to him marks the underlying principle of continuity, as a point on the line would interrupt continuity. Individuality of points emerges once the continuity is broken:

a line, for example, contains no points until the continuity is broken by marking the points. In accordance with this, it seems necessary to say that a continuum, where it is continuous and unbroken, contains no definite parts; that its parts are created in the act of defining them and the precise definition of them breaks the continuity.⁶²

Thus, for Peirce infinite divisibility does not constitute continuity, for continuity is something dealing with interrelations and not division. Peirce used an example to convey this distinction, he imagines that by "breaking grains of sand more and more will only

⁶⁰ CP, 6.168.

⁶¹ Ibid.

⁶² Ibid.

make the sand more broken and will not weld the grains into unbroken continuity.”⁶³

Peirce’s examples mentioned above serves as an interesting metaphor for the welding of ideas in Chapter II. Ideas weld together with the stream of continuity; they do not consist of discrete moments.

Peirce’s reinterpretation of Kant’s common-sense idea of continuity can be seen in light of existents because existents always exist in relation to an other. The following aligns with Peirce’s doctrine of synechism, which is “the doctrine that all that exists is continuous.”⁶⁴ Here we can see that although Peirce adopts a mathematical concept of continuity, to him the principle of continuity is inherent in both nature and consciousness. Synechism is a metaphysical doctrine, whereby the universe exists as a continuous whole of all its parts. All parts are connected and non remain discrete according to this doctrine. Existents exist in relation to their connectedness and relationality. For this reason, the relation of the parts is part of the continuum and the parts of existents cannot be distinguished from their relation. The relatedness or unbrokenness of parts is an indispensable feature of continuity. This will later allude to Peirce’s idea that as with time and space, a flow of thoughts is unbroken.

The question to pose at the present moment is what kind of relation defines the true continuum for Peirce? “A true continuum is something whose possibilities of determination no multitude of individuals can exhaust”⁶⁵. According to this view, a dyadic relation containing two points A and B would be points of discontinuity, since continuity to Peirce is the absence of ultimate parts. Peirce suggests that a triadic relation in which A is related to B by C, will result in a continuous, “self-returning line with no discontinuity.”⁶⁶ This point was evident in Peirce’s metaphysics, whereby the category of Thirdness is the category of mediation between Firstness and Secondness.

3.2 Infinitesimal duration

Peirce appealed to time as the most authentic continuous phenomenon. Thus, if time constitutes the primary structure of our experience, then our perceptual experience itself exhibits continuity.

⁶³ Ibid.

⁶⁴ CP, 1.172.

⁶⁵ CP, 6.188.

⁶⁶ Ibid.

That experience exhibits continuity was brought to light in the previous discussion on the three elements of experience, now the task at hand is to frame a possible answer as to how the immediate present is immediately connected with time. In order to do that, the rejection of the atomistic concept of time follows with his principle of synechism. Peirce's rejection of the atomistic conception of time not only pertains to the continuity of ideas as an experienced feature of consciousness, but also argues that time is real - that is, the temporal continuity is general and objective. Peirce regards time as "true continuity" in the sense that it is not a sum of instants, and by an instant Peirce means points in time. Here we must recall to mind Peirce's definition of a true continuum: a continuum is something continuous and unbroken and that which contains no definable parts. The important implication from Peirce's understanding of a continuum as something continuous and unbroken is that the flow of time cannot be composed of singular and isolated instants, since a point in time would break the continuity. As such, an instant presupposes a point of location that is merely as it is virtuous in our stream of experience. Instead, time, as experienced, does not comprise a set of ultimate parts or instants, but rather is seen as episodes of immediate consciousness embracing infinitesimal intervals of time.⁶⁷ So, what does Peirce mean by infinitesimal interval of time?

I will not elaborate greatly on this mathematical definition, since that is beyond the scope of the present thesis. My aim here is only to show how Peirce employs this mathematical conception to argue for the continuity of perception. "An infinitesimal is simply a positive quality which is less than any specifiable quality"⁶⁸. Peirce's conception of infinitesimals does not allow for division, to do so would counter his whole notion of continuity. Thus, it cannot be theoretically or practically measured. Nonetheless, we should not be quick in asserting that Peirce's concept of time is derived from logic and mathematics, and thereby, having no place in phenomenological time. While his discussion of time is formal in character, derived from logic and mathematics; we should not forget that Peirce is a pragmatist, and thus considers the practical effects of such a conception, that is, he looks for a fruitful application of such a hypothesis. Mathematics in this case is only an entrance point to his philosophical conception of time. Peirce is aware that time as a true continuum is only described hypothetically in mathematics: time is "not quite perfectly

⁶⁷ André de Tienne, "Flow of Time and Flow of Signs: The Basis for Peirce's Cosmosemiotics", *American Journal of Semiotics*, no. 31 (2015): 35.

⁶⁸ Kelly A. Parker, *The Continuity of Peirce's Thought* (Nashville: Vanderbilt University Press, 1998), 92.

continuous and uniform in its flow.”⁶⁹ For time is also a zone for brute reaction that happens within instances of Secondness that interrupts the temporal continuum to a degree.

Nevertheless, the importance of the mathematical meaning of infinitesimals for phenomenological time is that infinitesimals cannot be captured through means of measurement, and this will allow Peirce to argue that the passing moment or the present is not a point of time or instant, but rather a process of becoming, to borrow Whitehead’s notion.⁷⁰ That is to say, our immediate consciousness of the present is not to be thought of as a discrete event but a process of welding, whereby ideas that are infinitesimally brief merge into each other, creating a confluence of thought.

In *The Law of Mind*, it becomes clear that Peirce developed his theory of time in order to explain time as experienced. The reality of time as Peirce conceived it is not ideal but real.⁷¹ Here Peirce aims to show that perceptual experience is a continuous flow of time wherein the small neighbouring parts are immediately connected in such a way that relations of difference do not strictly apply.⁷² Following Peirce’s conception of time, ideas are not to be seen as distinct and separate from each other; far from being discontinuous, they embrace an infinitesimal interval that Peirce terms “infinitesimal duration”. This infinitesimal duration represents “a field of immediate present”, and thus, Peirce, by proposing that the field of immediate present occupies a period of infinitesimal duration, thereby refuses the idea that consciousness is instantaneous. Instead, the field of our immediate present consists of a continuum of ideas, which are knit together in a temporal flow that is infinitesimally brief. An idea of the present as durational is a zone for the becoming of thought where the actual and possible can mingle. In so doing, Helm assumes that Peirce seems to hold the view that the present has no independent existence⁷³; however, such an interpretation suggests that the present exists outside of any temporality. Rather, to bring this matter into a contextual reading, that is, in light of Peirce’s synechism: the present is part of the continuum of which is time, and for that reason, is not devoid of temporality. Instead, the present for Peirce is extended or stretched out, which I

⁶⁹ CP, 1.412.

⁷⁰ For Whitehead being is a dynamic occurrence of becoming. The dynamic nature of reality parallels Peirce’s synechistic reality - Alfred N. Whitehead, *Process and Reality*, (Gifford Lectures 1927–28), New York: Macmillan. Corrected edition, David Ray Griffin & Donald W. Sherburne (eds.), New York: The Free Press, 1985.

⁷¹ CP, 5.458; 6.96. - This is how Peirce argues for objective possibility in universe.

⁷² Parker, *The Continuity of Peirce’s Thought*, 110.

⁷³ Bertrand P. Helm, “The Nature and Modes of Time” *The Monist* Vol. 63, No.3 (1980): 378-381.

suggest is at the core of the argument that our thoughts are continuous, a thought cannot be seized in the immediate present. ⁷⁴ This as well sheds light on the nature of the categories, where all the three categories are contained within the present since the present is extended and overlaps with instances of the past for mediation. Put briefly, the present is not to be understood in the classical sense of the term which precludes any temporal stretch like past and future. For that reason, the present is not for Peirce instantaneous but infinitesimally brief.

An infinitesimal interval of time that is immediately perceived is “spread out” in three instances: beginning, middle, and end. ⁷⁵ The immediate awareness of the present as spread out implies that our ideas are not discrete and separate but continuous in their spreading out. In this way, no idea can be instantaneous at present, thought essentially occupies time, and no thought can emerge in an instant. A moment as spread out means the spreading out of the present, and thus we can perceive the present’s immediate experience as a continuous movement of change. Hence, in Peirce’s view, the flow of time is not a succession of units but a spreading out of continuities that become actual. This “spreading -out” of ideas consists of infinitely small interval; however, these instances that are spread out are not to be taken as discrete and isolated within the episode of immediate experience, for it would be impossible to set a boundary between each phase, but these instances or phanerons merge into each other; that is, the intervals continuously overlap from one into the subsequent, one idea proliferate into the next one through a continuous transition.

In an infinitesimal interval we directly perceive the temporal sequence of its beginning, middle, and end - not, of course, in the way of recognition, for recognition is only of the past, but in the way of immediate feeling. Now upon this interval follows another, whose beginning is the middle of the former. Here, we have an immediate perception of the temporal sequence of its beginning, middle, and end, or say of the second, third, and fourth instants. From these two immediate perceptions, we gain a mediate, or inferential, perception of relation of all four instants. . This mediate perception is objectively, or as itself the subject of duration, it is completely embraced in the second moment. (The reader will observe that I use the word instant to mean a point in time, and moment to mean infinitesimal duration). ⁷⁶

⁷⁴ CP, 3.243.

⁷⁵ CP, 6.111.

⁷⁶ *Ibid.*

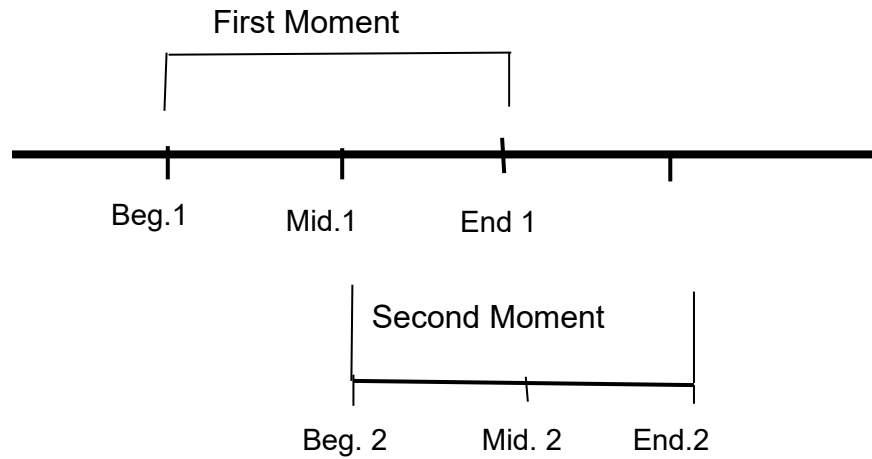


Fig. 1. The Sequence of Infinitesimal Duration as adopted by Parker

The sequence of infinitesimal cognitions requires some further clarification. As we can see from the figure, there are different phases within the perception. How are they continuous in time if they are already separated into three phases? Any visual representation of time might possibly be problematic in this case, since Peirce himself argues for a notion of the present that is *sui generis*, and for that reason, any diagram would omit the feeling of immediate consciousness. Nonetheless, we need to be reminded that here we do not see points in time, but upon following Peirce’s characterization of a true continuum, these phases or points are potentially ordered; they are not absolute, there is no absolute boundary between the two moments. Moreover, this distinction only comes upon reflection when we abstract the instances from present consciousness. Thus, these instants are only hypothetical instants which Peirce uses to describe succession of real moments.⁷⁷ The succession then is of neighbouring parts which are immediately connected and merge into each other. The implication of the idea about the neighbouring parts merging into its subsequent one is that we can be aware of the past, that the past does not vanish entirely: “the present is half past and half to come.”⁷⁸ As De Tienne explains, the ideas from the present are constantly inherited from the past.⁷⁹ My awareness of the present is constituted by the past in the sense that the past is the interpreter for the present’s inference in order to anticipate the possibility of the future. Peirce in asking “*how can a past idea*

⁷⁷ Jon Alan Schmidt, “Temporal Synechism: A Peircean Philosophy of Time”, *Axiomathes* 29 (2020): 13.

⁷⁸ CP, 6.126.

⁷⁹ De Tienne, “Flow of Time”, 7.

be present?”⁸⁰ means that the past idea has to be present through direct perception, that is, it must be *ipso facto* present. The reason behind this claim is that we immediately sense the flow of time; in other words, that there is a continuous flow of change that takes place. By this understanding, the present is conceived as a duration. The present acquires meaning from its immediate pastness. And by immediate pastness Peirce means the past that is still present. What Peirce argues for is that the immediate present is of constitutive relation; that means the present contains the immediate past as the ground for the interpretation of the present that generates possibilities for the future.

Following Peirce’s pragmatic maxim, a thought cannot be immediately present to us, but must cover a portion of past or future. If we look at his pragmatic maxim from a phenomenological perspective, we look at the past instant for meaning, while the present is the field of the interpretation, and the future is the representation of the interpretation and that which gives meaning. The reason for including future in this constitutive relations of the immediate present is that continuity involves that which is possible, the creative novelty in perception. As for experienced time, the flowing stream is not to be conceived in its traditional spatial sense as moving from past-present-future, but rather in this light, what is past and future is related by the present: present-past-future. However, while this temporal categorical distinction accounts for Peirce’s view that the present is influenced by the past through real infinitesimal steps, these dimensions are spread out.

The entire sequence will be present in the last moment, that is, it will be mediately perceived or inferred. In this way, “each interval is immediately perceived, but the relation of all parts across a sequence can only be mediately perceived as inferred ”⁸¹. The whole sequence is completely embraced in the last two thirds, that is, the mediation happens in the second moment whereby the past is continuously spreading out into the present. If we take any example of a passing moment, for instance, seeing my pen dropping. In the act of seeing the pen falling in front of my eyes, I am directly aware of the change in which I retain the representation. The flow of the whole perceptual experience will be mediately perceived at the last moment. That is to say, each moment is directly and immediately perceived in the present, but mediately perceived or inferred from the past. In this light, the perceived event consists of beginning, middle, and end that subsequently merges into immediate subsequent intervals. The mediated moment is in the last

⁸⁰ CP, 6.107.

⁸¹ De Tienne, “Flow of Time,” 6.

part of the sequence. An extended present as a duration is convincingly represented in the examples of hearing music, an example that is often used by philosophers to argue for the continuity of consciousness.⁸² The everyday example of hearing a melody is not simply a succession of different notes. A melody that we hear is spread out so that only in the last moment we can infer the sound of the melody after it has become fully actualized in its unity. The melody as such unfolds over time. The musical analogy shows that thought in general is a temporal semiotic interpretation. Thus, it is not instantaneous but spread out in the way that the last moment is of inferential nature in that it interprets the object represented. This is how Peirce puts it:

Now, let there be an indefinite succession of an indefinite succession of these inferential acts of comparative perception, and it is plain that the last moment will contain objectively the whole series. Let there be, not merely an indefinite succession, but a continuous flow of inference through a finite time, and the result will be a mediate objective consciousness of the whole time in the last moment, which will be absolutely incognizable.⁸³

In introducing the aspect of inference within the infinitesimal interval, Peirce reasserts his semiotic thesis that our knowledge is ultimately an act of interpretation or that thought is *relational*. This relation supposes the act of knowing not to be immediate as was seen in Peirce's thoughts of perception and time. The act of knowing, that is the stage when a thought comes to mediation and turns to an act of inference.

3.3 Continuity of Inference

If a past thought is present to the mind because consciousness embraces an interval of time, it follows that the content of consciousness likewise exhibits infinitesimal intervals. That is: "the very structure of meaning is grounded in a primordial experience of time as a process"⁸⁴, as Rosenthal so well expressed. In the light of Peirce's architectonic principle, I would like to turn the discussion to the relation between continuities of time and perception in terms of Peirce's

⁸² Bergson frequently used musical analogies as a metaphor for temporality. Particularly, his idea of 'pure duration' (*durée*), a conception of time that distinguishes spatial and temporal experience and accounts for subjective time. For Bergson, similarly to Peirce saw that linear conception of time as misguided by spatial metaphors. He sought to explain subjective temporality in relation to states of consciousness: "Within myself a process of organization or interpenetration of conscious states is going on, which constitutes true duration" - Henri Bergson, *Time and Free Will: An Essay on the Immediate Data of Consciousness* (London: George Allen and Unwin, 1959): 48.

⁸³ CP, 6.111.

⁸⁴ Sandra B. Rosenthal, *Charles Peirce's Pragmatic Pluralism* (New York: State University of New York Press, 1994), 69.

universal categories. If the three categories are constitutive to the process of experiencing the world, any perception will exhibit all the three since they are irreducible to one another. As was previously discussed, as a category of mediation, thirdness synthesizes immediate experience rendering them intelligible. Thus, for perception to become intelligible, there has to be a flow of time which involves a semiotic interpretation. This is to say, Peirce's categories are not distinct phenomena but connectors of experience in the process of both being and signification.

The question is how do categories manifest themselves within an infinitesimal interval? The first instant is firstness: the percept that comes from a pure phenomenal quality which is without reference to anything else; in other words, firstness is the beginning of a moment in its immediacy and spontaneity. Peirce's theory of perception regards perception as a dynamic process or gradual state of change. The state of change then moves to the middle, that is, the point of merging or overlap between moments which is indeed the recognition of another moment, of the other, which is an instance of secondness. Secondness is the aspect of otherness in perception, and that is to say secondness implies a continuum of space as well as time since it contains a reaction with some other. The implication of the category of secondness for Peirce's temporal synechism is that he argues for an objective temporal continuity rather than one that is subjective in which space renders the experience of continuity intelligible.⁸⁵ Finally, the last moment will bring with it a mediated objective consciousness, and thought becomes intelligible when the third connects and mediates. Thus, thirdness mediates the relation of all four instants, that is, the whole sequence of the whole infinitesimal interval. And so it follows that consciousness and its content are one, they both exhibit continuity.

Peirce's cenopytagorean ontology shows that we never perceive a singular percept that corresponds to a single instant. Instead, a thought requires a flow of time in which thirdness mediates all four instances; the interpretative component is what constitutes the element of thought. And given Peirce's commitment to pragmatism, thought that is further mediated through self-reflection reflects the objective reality as far as it is known. According to Peirce, the interpretative perceptual process is what constitutes reality. Thus, we can observe that Peirce's metaphysics is dependent upon his phenomenology which is based on the three universal

⁸⁵ Vincent Colapietro, "The Tones, Tints, and Textures of Temporality: Toward a Reconstruction of Peirce's Philosophy of Time." *Rivista di Storia della Filosofia*, no.3 (2017): 444.

categories. Therefore, the way a thought becomes intelligible is dependent upon the category of thirdness which mediates the immediate in experience; in this case, both firstness and secondness is required. Peirce's categories of experience proves that for a thought to arise, there has to be a momentum in each moment that embraces an interval of time.

Another way that Peirce implies that our thoughts are mediated through time is when he makes use of the difference between perception and experience:

We perceive objects brought before us; but that which we especially experience—the kind of thing to which the word “experience” is more particularly applied—is an event. We cannot accurately be said to perceive events A whistling locomotive passes at high speed close beside me. As it passes the note of the whistle is suddenly lowered from a well-understood cause. I perceive the whistle, if you will. I have, at any rate, a sensation of it. But I cannot be said to have a sensation of the change of note. I have a sensation of the lower note. But the cognition of the change is of a more intellectual kind. That I experience rather than perceive. It is [the] special field of experience to acquaint us with events, with changes of perception. ... It is more particularly to changes and contrasts of perception that we apply the word “experience.” We experience vicissitudes, especially. We cannot experience the vicissitude without experiencing the perception which undergoes the change; but the concept of experience is broader than that of perception, and includes much that is not, strictly speaking, an object of perception. It is the compulsion, the absolute constraint upon us to think otherwise than we have been thinking that constitutes experience.⁸⁶

The categories exhibit the principle of continuity and undergo changes in state that occupy an infinitesimal interval. Conception can impose itself on experience only after a while, because the present contains its pastness. The extended present as an infinitesimal duration is a connection of time, for it connects the past and the future. The infinitesimal interval of the field of the immediate present is a conjunctive relation - a relation of inference that exhibits contiguity. We perceive immediately the state of things in its pure quality in their firstness, that being the sound of the whistle. The change in the sounds experienced as *another* is the mode of secondness, and the relation of things as mediated is when we cognize the whole event with its phases of change. Thus, the moment that we experience has an infinitesimal duration that posits the temporal sequence of beginning, middle, and end. Both perception and experience require the present to be a lapse of time so that we can acquire hypothetical reasoning. Thus, Peirce makes the point that “consciousness is not limited to a single instant

⁸⁶ CP, 1.336.

but...immediately and objectively extends over a lapse of time.”⁸⁷ And subsequently, the connection between continuity and thought showed itself through time and perception, in the way that perceptual processes are inferential.

Parker states that “the continuum of inference is change, in which what is present to the mind grows out of what was immediately and mediately past, and grows toward what will be mediately future”⁸⁸. Thus, that thought is continuous lies within the idea that perception does not merely derive from “first impressions of senses” nor from “immediate knowledge”, since, in Peirce’s view, we have no power of intuition. By claiming that thought is continuous, Peirce insists that every cognition is derived from previous cognition. The principle of continuity was already evident from his early anti-cartesian papers on cognition. In those papers, Peirce already states that no thought can occur and be meaningful in an instant. Hence, it seems that his later writings, specifically his seminal writing on synechism, was an elaboration of his early theory of cognition. To Peirce, conscious thought must emerge from a continuum. This conception of thought is clearly seen from the way Peirce’s universal categories are interdependent, consisting in three classifications present in all experience.

Of these classifications present in our experience, firstness and secondness belong to the act of perception that is immediately perceived as the precepts in the beginning of an infinitesimal interval. Thus, thought belongs to the experience of continuity whereby we infer the meaning of the immediate percepts, that is what Peirce called perceptual judgement. Put differently, that which is immediately perceived in firstness and secondness “are flow of images” that are imposed upon us just as they are. These then are translated through mediation into a perceptual judgement whereby we interpret past precepts into perceptual facts which endorse their meaning from the interpretation of the signs that belong to the beginning of the interval previously mentioned. The result of this might be a discrete proposition, but the process was a continuous one. The perceptual judgement, that is, the inferential perception follows from two temporally successive stages of firstness and secondness before it becomes mediated in thirdness. Peirce explains this inferential perception with the following example:

A man can distinguish different textures of cloth by feeling; but not immediately, for he requires to move his fingers over the cloth, which show that

⁸⁷ CP, 7.466.

⁸⁸ Parker, *The Continuity of Peirce’s Thought*, 123.

he is obliged to compare the sensations of one instant with those of another.⁸⁹

Let's suppose that we are examining a soft and rough texture of cloth, and while the differences of both textures can be felt in some sense immediately, we can infer the meaning of each by comparison with the other, which obviously requires a lapse of time. Here we can see that perception is spread across a duration: this Peirce terms "infinitesimal duration", however, it can easily be objected that in this case the act of perceptual inference does cover a finite portion of time⁹⁰. Nevertheless, the focus of Peirce's example of stroking a cloth⁹¹ still revolves around the continuity of perception, that is, as Humphrey remarks, "the duration in which the stimulus is produced."⁹² The content of consciousness then is continuous in the way that it proceeds from its previous content by means of comparison or inference: thus, by comparison between the soft and rough cloth, we gain the mediate perception of the perception as a whole. The whole perception is the experience as spread out. In this light, we can conceive of perception as an abductive inference that involves a hypothesis concerning the object represented. Thus, within the flux of percepts, a flow of time is needed to unify and synthesize the chaos of sense impressions.

It becomes clear from Peirce's concept of infinitesimal duration that the reality of time does not exhibit clear cut categories of time, that is of present, past, and future; but instead, the flux of time implies that all these dimensions are interwoven together. In Peirce's words, "the present is half past and half to come". This statement perfectly embodies Peirce's view that there exists a relation of affectability among ideas so that no moment is isolated. If every moment is overlapped by previous moments, ideas tend to have the tendency to affect each other since they rely on the previous moment for significance. Following Peirce's pragmatism, there is a semiotic continuity of ideas based upon shared experience and perception. The final instant of the sequence draws an interpretative connection between the counterparts of the previous instant. That interpretative connection which is the primary argument in the Law of Mind that ideas have the tendency of affectability and that results from the temporal continuity of sensory contents, and for Peirce, that continuity suggests

⁸⁹ CP, 5.211

⁹⁰ James' idea of "specious present" also characterizes the present as spanning some duration, however for James, the duration occupies a finite time. William James, *The principles of psychology* (New York: Dover Publications, 1950)

⁹² Justin Humphreys, "Subconscious Inference in Peirce's Epistemology of Perception", *Transactions of Charles S. Peirce Society* 55, no. 3 (2019): 337.

hypotheses about our objects of perception in the way that it has the role to anticipate the future. For the continuity of mental content makes thought continuous, that is, the continuity of present as formed by past content.

3.4 The Spreading of Ideas

Peirce's temporal synechism has shown that we can not grasp the immediate present, thus our mental content cannot be grasped in an instant. That is to say, our ideas are not simply isolated, static, and unchanging. Rather, Peirce proposes that within the principle of continuity "our ideas tend to spread continuously"⁹³. The continuous spreading of ideas is the direct feeling of a spread out consciousness. As Peirce puts it, "infinitesimally spread out consciousness is a direct feeling of its content as spread out."⁹⁴ The present moment or the idea that comes with it is not something that we can seize. In this respect, perception is not a matter of an instant, but a continuous welding of past ideas. Consciousness relates to a process in which one idea is continuously affected by past ideas. It is a causation running through consciousness by which the thought of one moment determines the thought of another.⁹⁵

The role of continuum that plays on perceptual experience is that the ideas of the past constantly affect the present and thus no encounter with any object would be of an instant. This essentially brings us to the point where the process of our knowledge is semiotic in which each previous thought addresses itself to the thought of the present. Our ideas then stand in a peculiar relation of affectibility.⁹⁶ This relation of affectability between ideas stem directly from Peirce's evolutionary understanding of the universe: *that all things flow*. Ideas flow in such a way that a present idea is affected by an idea of the past but at the same time it is already affecting the idea of the future. In Peirce's words: "feeling which has not yet emerged into immediate consciousness is already affectible and already affected."⁹⁷ Thus, time is the passage for the spreading of ideas in which their continuous spreading will weld into a general idea that to Peirce is a lived feeling. It is as many ideas were to come into unity and form a general idea. However, this uniformity is never

⁹³ CP, 6.104.

⁹⁴ CP, 6.111.

⁹⁵ CP, 7.353.

⁹⁶ CP, 6.104.

⁹⁷ CP, 6.141.

absolute, because general ideas are living realities within the continuum of the universe, therefore, having the capacity to acquire new meanings:

There being a continuous connection between the ideas, they would infallibly become associated in a living feeling, and perceiving general idea.... I think we can only hold that wherever ideas come together they tend to weld into general ideas...and these general ideas are living feelings spread out. ⁹⁸

General ideas are what make thought intelligible. In this sense, the spreading out of ideas over an infinitesimal duration is a process in which the thirdness of perceptual judgement makes thought intelligible, thus knowledge enters perception through the mediating relation. That is, a process-relational thinking requires an inference from immediate facts of our experience, that is, the relation among ideas is mediated within the extended present. As a metaphysical realist, Peirce believed that these general ideas are realities apart from their particular mental manifestations. The general idea is the result of habits of interactions between things, it unifies the sensory elements in perception. As Peirce states, “general idea is the mark of habit”. Insofar that we experience the present as meaningful, it is inasmuch a living general idea which consists of the association of past ideas. The present thought is not ‘what is’ in the sense of ‘being’, rather thought is ‘becoming’ in that it is a change affected by the past. Our lived time is an interpenetration of past ideas into the present thought.

⁹⁸ CP, 6.143.

Conclusions

To conclude: this thesis, aimed to show Peirce's conception of continuity of thought from two different perspectives of Peirce's philosophy. In this thesis I have presented and defended the proposition that both Peirce's categories of experience and his conception of time exhibit the principle of continuity, and that both of these aspects of his philosophy prove to be fruitful for the analysis of the continuity of thought, understood as the process from immediate experience to mediated understanding. Thus, the act of cognition following Peirce's philosophy is a process of becoming, which occupies a flow of time.

The first chapter suggests that in explicating Peirce's phenomenological categories, one could arrive at the analysis of the fact of thinking itself, which as argued in the thesis, is continuous, or synechistic. For Peirce, the structure of experience displays a relation of a triadic structure that corresponds to three modes of being simultaneously time to three modes of thought. These three modes of being are Firstness, Secondness, and Thirdness. These are three pervasive features of all experience - that is, firstness as a qualitative immediacy of a thing such as it is, secondness as brute interaction, and thirdness as mediation and continuity are all present in any given phenomena. As was argued, the qualities of firstness are sui generis and irrespective of anything else, their being is monadic. Secondness is of dyadic nature and represents an interaction with otherness in experience. It is that consciousness which forces our attention to the brutality of actuality. The last category of thirdness mediates experience in the way that it relates quality of feeling to the actuality of secondness.

Peirce's categories can be considered an attempt to apply the ideal triad derived from his work on formal logic so as to provide an explanatory scheme for lived experience. While it is true that the formal character of the categories goes beyond immediate experience, Peirce's application of the logical categories to phenomenology serves as a verification of

his hypothesis in that the triadic structure is verified by our experience.⁹⁹ This touches on a possible contention on the conditions of knowledge, that is, whether Peirce had idealist inclinations expressed in an apriori nature of the categories. Although the categories of experience are a philosophic abstraction of felt experience, they are the result of what is observed in experience. This follows from Peirce's spirit of fallibilism, that any hypothesis must be rooted in lived experience. Thus, the three categories of experience are the result of posteriori generalization of their characteristics. That is, they must be derived by means of phenomenology. For that reason, Peirce's triads of experience are not mere metaphysical numerology as was argued by Dougherty,¹⁰⁰ but rather Peirce's triadic analysis of experience is the ground for metaphysics itself.

From his generalization of the basic elements of our experience, Peirce arrived at the understanding that our immediate present is constituted through a triadic relation characterized by the flow of time. That is, the continuous presence of sensations in our experience renders the immediate present a process characterized by change or development. Thus, it was shown that Peirce's cenopythagorean categories can be conceived as a thought process which consists of "quality, reaction, and mediation." The third category is one of reality since it mediates the whole experience in order to make thought intelligible; that is, the third is the material of thought because it synthesizes the whole relation of experience. Mediation as a thought process cannot be uncoupled from time, and thus it is that category of continuity in which past instances are connected within the process of thinking. However, the categories are inseparable from each other, as a thirdness contains a second and a secondness contains third - and firstness does not exist on its own since the content of experience necessarily consists of a binding of all three. A first and a second is mediated by a third. The irreducibility of the categories shows that the mind's encounter with the world is not of immediate representation, since experience in the third mode of the phenomenon carries with it a flow of time, which is characteristic of a cognitive process.

Peirce's categories indeed reject the notion of atomistic perception, and introduce the concept of mediated or relational experience, which is semiotic from its very beginning.

⁹⁹ Sandra B. Rosenthal and Patrick L. Bourgeois, *Pragmatism and Phenomenology: A Philosophical Encounter* (Amsterdam: B.R Gruner, 1980), 78.

¹⁰⁰ Dougherty, "Peirce's Phenomenological Defense of Deduction," 373.

That is to say that, the cenophytagorean categories of experience infer an analysis of the continuity of reality as experienced. Thought as such can be conceived as a learning process, since for Peirce cognition is a “synthesis of learning,” experience then does not come to us as something immediate, but a consequence of learning from brute experiences and struggles that impose themselves on us. Thus, thought is a process is the cumulative flow of our experiences.

The second chapter shows the connection between perception and the flow of time. Peirce’s theory of time, namely concerned with the conception of the extended present, is used as an instrument to account for durational consciousness. By so doing, we illuminated Peirce’s reasoning as to why consciousness cannot be instantaneous, but must be a process. In that time, the conventional idea of time was that the present is merely an instant of feeling; it was presented in Peirce’s argument that a point of time is an ideal limit that we never reach in lived experience.¹⁰¹ In arguing why no thought is an instant, Peirce refers to phenomenological time as a continuous continuum, not a discrete continuum composed of discrete points. Peirce arrived at the conception of synechistic temporality from his formal definition of continuity that states that a true continuum is not composed of ultimate parts. Thought is continuous in that immediate experience cannot be grasped in an instant, but instead immediate experience includes the past in the present. Thus, the thought of an immediate present spans the duration of an infinitesimal interval. The implication of time as a continuum hence provides the structure of all other continua.

The concept of infinitesimal duration was employed by Peirce to propose that the field of immediate present “spreads out” into phases of beginning, middle, and end. The change between phases are not distinct, but they melt into one another and continuously overlap from one into the subsequent. From the first two immediate perceptions, we gain a mediate or inferential perception that mediates the experience as a whole. As was presented in chapter one to Peirce, perception is a matter of inference; that is, the process of experience is semiotic from its very beginning, the present is inferred from the objects of experience of the past. The cognitive, meditative experience requires that we attend to past ideas or precepts for interpretation to occur. The result is what Peirce called a perceptual judgement, a thought as intelligible.

¹⁰¹ MS 215 (Robin 377): Writings 3, 68-71.

In the second chapter I argued that Peirce's notion of reality and experience is better understood through his concept of temporal synechism. In Peirce's view, the continuity of time conveys the flow of feelings that shape our experience and thus allows for knowledge itself. Here the argument turns on the point that a thought does not happen in an instant, but instead it spans a moment. By 'moment' we mean an "infinitesimal duration" in which we are directly aware of change and wherein ideas are always affected by each other. An idea spreads, affects, and gives birth to another. For Peirce, no idea of one moment is the same as one of a different moment. Within a continuity, ideas to Peirce are not substantial nor static, they stand in a relation of affectability that gives rise to novelty in our experience.

Thus, the fact of synechism discussed in the present thesis in relation to Peirce's conception of time and his cenopythagorean categories expresses the idea of novelty as the backbone to mediated or inferential perception. In this, habits of interpretation provide us with generalizations of our everyday experience, and thus continuity is the dynamic driver of both order and novelty in life. These habits, these constituents of life are only known, and only are due to the continuous flow of time. And further synechistic account of perception arises out of Peirce's vision that experience is a spatial-temporal process. We as actors in this relational process are the interpreters of this causal web. Our interpretations of experience are, on one hand habitual, and thereby thoughts welded - feelings that - gradually fade become generalized and intelligible. On the other hand, if feelings are affective as Peirce's synechism states, perceptual novelty must arise - because sensations are never encountered immediately as a pure datum, but gain meaning from past experiences. Our understanding of the world undergoes constant reinterpretation precisely because all there is in the universe, including our minding of it, exhibits characteristics of time, and time exhibits a character that is radically continuous.

Note on the Citing

The citing of primary literature is indicated in the footnote, a reference to *Collected Papers of Charles Sanders Peirce*, volume I to VII ed. C. Hartshorne, P. Weiss, and A. W. Burks is marked by the abbreviation 'CP'. References stand for volume and paragraph number. Eg. CP. 1.1 refers to volume 1, paragraph 1. The form MS manuscript numbers as they appear in Richard. S Robins's *Annotated Catalogue of the Papers of Charles.S Peirce*.

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