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Charles Sanders Peirce's Evolutionary Developmental Teleology

1. Introduction

Allow me first, before we enter into a discussion of Charles Sander Peirce, which is the foci of this essay, to delineate the particular operational context in which I reside. I am writing from and working within a context that is partially indebted to process theology. As such, the following essay does not defend the God of classical theism; that is, the omniscient, omnipotent, immutable God defended, for example, by Thomas Aquinas in the *Summa theologiae*. In some very real sense, this essay may only make sense in the context of process theology as appropriated by some forward-looking theologians, such as Thomas Jay Oord. For example, I make the contention that primordial chaos only makes sense in a process theology that denies of God the concept of *creatio ex nihilo*, and instead asserts the co-eternality of the material universe and God. My overall inclination toward process theology will also become clear in that I describe the mediation of the Holy Spirit on and in the universe in ways that resemble the “persuasive power” of God as described by Alfred North Whitehead.

Nevertheless, having given these provisos, Charles Sanders Peirce was a novel thinker, in terms of both originality and in application. One area of his originality was his evolutionary developmental teleology. Another area of originality is his novel conceptioning of evolutionary causation, which is founded upon his foundational and fundamental three categories of Firstness, Secondness, and Thirdness. In what follows, I will argue the notion of a “developmental teleology” is applicable to Peirce’s idea of teleology in general. Seen as such, final causes evolve, and they are not static. This contention means that teleology emerged out of the increasing complexification of life on earth, and continues to be general, not specific in its derivation.

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Moreover, in Peirce's agapasm, as explicated in part one of this essay, God gives himself away in acts of uncontrolling love without any conditions as to the potential response(s) to that love, as well as to what response(s) may fulfill that uncontrolling love. Rather, it is merely a completely reckless and overflowing display. Seen as such, the many and varied manifestations of complexity that macroevolution has given rise to are to be seen as a fulfillment of the teleological goals of God. Theistically-inclined patrons of all stripes should find Peirce's thinking on teleology and causation to be amenable to their worldview, influenced as it is by a strong conception of the love of God, particularly that which is uncontrolling (cf. Tom Oord). Indeed, Oord's posit of God's uncontrolling love is potent in application to the presence of randomness and chance in the natural environment. I find that notion to be consonant with my view of a God who lures creation to higher levels of complexity through the processes of biological evolution, a contention which also should be welcomed by theistically-inclined patrons.

Charles Sanders Peirce's evolutionary philosophy was not bounded by classical determinism, as he stressed its illogicality. He notes, "We must therefore suppose an element of absolute chance, sporting, spontaneity, originality, freedom, in nature"¹. In what follows, I will explicate three models of evolution as presented by Peirce. His threefold description of evolution, comprised of tychism, anancasm and agapism, provides a plausible account of evolution that is in some sense explainable by reference to teleology, which would be a major development for theology and science in the twenty-first century. Moreover, I will explain how Peirce, by virtue of his developmental teleology, brought a unique understanding of reality to philosophy. Furthermore, I will dialogue with Peirce, drawing from him a developmental teleological view, which will then be applied to a modern rendition of teleology that may be palatable for the evolutionary sciences. An "evolutionary developmental teleology", based upon the implicit arguments found within Peirce's seminal writings, will be proposed, whereby the telos of evolution is seen to be, broadly, increased complexity, a telos of which is ever growing and incessantly indeterminate.

According to Clatterbaugh, three major transitions occur during the years 1671-1739, of the modern causation debate regarding the nature of causation. First, the notion of causation is simplified. Second, the notion of causation is secularized. Third, the concern of the causation debate is changed from the metaphysical problem of causation to the attempt to identify true causal connections². At the beginning of the debate regarding causation in the seven-

¹ Ch. S. Peirce, "One, Two, Three: Kantian Categories", in: *The Essential Peirce: Selected Philosophical Writings*, vol. 1: (1867-1893), eds. Peirce Edition Project (Bloomington: Indiana University Press, 1992), 243.

² K. Clatterbaugh, *The Causation Debate in Modern Philosophy, 1671-1739* (London: Routledge, 1999), 12.

teenth century, there were four types of causes: material, efficient, formal, and final³. The discussion regarding causation culminates, according to Wang, with David Hume, who reduces the Aristotelian four causes to efficient causation only; causation and determinism thereafter became virtually equivalent⁴. Final causation, though being constantly neglected and forgotten since the beginning of modernity, I contend, remains the hidden foundation of all causal explanations and thus of mechanism itself. In order for this hidden foundation to come to light, we need first have a closer look at the inherent unity of four kinds of causes and the constant conjunction of efficient causation and final causation⁵.

2. Peirce's Depiction of Evolutionary Causation and Final Causation, as well as His Three Forms of Evolution

2.1. Peirce's Depiction of Aristotelian Causation

Peirce interprets the inter-dependence of efficient and final causation in this way:

“Final causation without efficient causation is helpless: mere calling for parts is what a Hotspur, or any man, may do; but they will not come without efficient causation. Efficient causation without final causation, however, is worse than helpless, by far; it is mere chaos; and chaos is not even so much as chaos, without final causation: it is blank nothing”⁶.

At the same time, Peirce compares the relationship between efficient and final causation to that between the sheriff and the court. Final causation cannot be imagined without efficient causation just as “the court cannot be imagined without a sheriff”. On the other hand, “an efficient cause, detached from a final cause in the form of law, would not even possess efficiency”⁷. In an unpublished manuscript, Peirce fiercely criticizes the neglect of final causation in the modern era, stating “the non-recognition of final causation... has been and still is productive of more philosophical error and nonsense than any or every other source of error or nonsense. If there is any goddess of nonsense, this must be her haunt” (MS 478, ca. 1903).

³ Ibidem, 15.

⁴ H. Wang, “Rethinking the Validity and Significance of Final Causation”, *Transactions of the Charles S. Peirce Society* 41, no. 3(2005): 615.

⁵ More detailed and insightful discussion of the complementary relation between efficient and final cause can be found in T.L. Short, “Peirce's Concept of Final Causation”, *Transactions of the Charles S Peirce Society* 17, no. 3(1981): 376-79, and in M. Hulswit, “Teleology: A Peircean Critique of Ernst Mayr's Theory”, *Transactions of the Charles S Peirce Society* 32, no. 2(1996): 188-91.

⁶ Ch. S. Peirce, *The Essential Peirce: Selected Philosophical Writings*, vol. 2: (1893-1913), ed. Peirce Edition Project (Bloomington: Indiana University Press, 1998), 124.

⁷ Ibidem, 121.

2.2. Peirce's Three Forms of Evolution

For Peirce, there are three cosmological principles: tychism (or chance)⁸, agapism (or love)⁹, and synechism (or continuity)¹⁰. Peirce's objective idealism involves a developmental teleology (a position between nominalism and realism), a view wherein final causes are not future certainties, but present possibilities that may be attained in the future. Hence there is no fixed end of the world; rather, all things are marked by continual growth and change.

Regarding his conception of evolution, Peirce writes, "Three modes of evolution have thus been brought before us: evolution by fortuitous variation, evolution by mechanical necessity, and evolution by creative love. We may term them tychastic evolution, or tychasm, anacastic evolution, or anacasm, and agapastic evolution, or agapasm"¹¹. The first kind of evolutionary theory discussed is represented by the Darwinian view, which views evolution proceeding "heedlessly" by discontinuities (or chance variations) appearing with no reason whatsoever¹². Chance—for the tychistic-type of evolution—is not associated with any particular "direction".

The second type of evolution discussed within Peirce's essay entitled "Evolutionary Love", is anacasticism, which Peirce characterizes as deterministic. He writes, "diametrically opposed to evolution by chance are those theories which attribute all progress to an inward necessary principle, or other form of necessity"¹³. The necessity herein referred to is mechanical in nature. This anacasticism is deterministic; indeed, whether internal or external, the necessity works so that evolution proceeds through a succession of events from which they cannot deviate. Nothing is due to chance¹⁴.

The third type of evolution written of in "Evolutionary Love" affirms the presence of a form of love that plays a role in development. *Agape*—which Peirce calls the operative principle of "evolutionary love"—is inherently open to variations and deviations to the laws and agencies of laws. This third type of evolution—also known as agapism—incorporates the other two types of evolution described within "Evolutionary Love". Agapasm is a form of evolution, then, that incorporates chance and necessity, but is not reducible to either, or merely the sum of the two together; it is a synthesis of these aspects with "something else", which I take as being a reference to, presumably, *telos*¹⁵. For

⁸ Ch. S. Peirce, *The Collected Papers of Charles Sanders Peirce*, eds. Ch. Hartshorne, P. Weiss (Cambridge: Harvard University Press, 1936), 6.102.

⁹ *Ibidem*, 6.287.

¹⁰ *Ibidem*, 6.173.

¹¹ *Ibidem*, 6.302.

¹² *Ibidem*, 6.287-297.

¹³ *Ibidem*, 6.298.

¹⁴ C. R. Hausman, *Charles S. Peirce's Evolutionary Philosophy*, (Cambridge: Cambridge University Press, 1993), 174.

¹⁵ *Ibidem*, 174.

Peirce, developmental teleology prevails at all levels and all stages of evolution¹⁶.

2.3. On Chance and Final Causality

Peirce contends that spontaneity will not be overcome by some final end or *telos*¹⁷. As such, Peirce notes that the universe will always contain some irregularity in it—in essence there will always be an expression of both freshness and brute fact in the universe. Indeed, for Peirce, there must be some “absolute chance” in the universe and “at any time... an element of pure chance survives and will remain until the world becomes an absolutely perfect, rational and symmetrical system, in which mind is at last crystallized in the infinitely distant future”¹⁸. It is important to the point of this essay that Peirce notes that this will occur in the infinitely remote future, not in the near future. For Peirce, “no final cause is actual; every final cause is a general type”¹⁹. Like Aristotle, Peirce avers that final causes work with efficient causes²⁰; he argues for more than that, however, as “final causes tend to create or find the efficient causes that are necessary for their realization”²¹. Entities, whether animate or not, attempt to “actualize in their own way the same general type or possibility actualized in the fullest possible way in God... a general type is a final cause because of the goodness that would characterize any actualization of it”²². In fact, in Darwinian evolution, “random variation & tautology cooperate to produce order... [and] if a final cause is a general type, then it might be actualized in any number of different ways”²³. In this view, then, no matter what chance variation produces, God can work it into his overall *telos*.

In agreement, working from a Peircean view, Hulswit defines final causes as “general types that tend to realize themselves by determining processes of mechanical causation. Final causes are not future events, but general (physical) possibilities which may be realized in the future”²⁴. Employing Peirce’s category of tychism, Hulswit notes that chance is central to teleology, and thus teleology is creative, exhibiting an irreducible novelty²⁵; this unpredictability and

¹⁶ Ibidem, 16.

¹⁷ Ibidem, 17.

¹⁸ Peirce, *Collected Papers*, 6.33.

¹⁹ T.L. Short, “Peirce’s Concept of Final Causation”, *Transactions of the Charles S. Peirce Society* 17, no. 4(1981): 369.

²⁰ Ch. S. Peirce, *The Collected Papers of Charles Sanders Peirce*, eds. Charles Hartshorne and Paul Weiss (Cambridge: Harvard University Press, 1932), 1.220.

²¹ Ibidem, 2.149.

²² Short, “Peirce’s Concept of Final Causation”, 371.

²³ Ibidem, 372.

²⁴ M. Hulswit, “Teleology: A Peircean Critique of Ernst Mayr’s Theory”, *Transactions of the Charles S. Peirce Society* 32, no. 2(1996): 188.

²⁵ M. Hulswit, “Peirce’s Teleological Approach to Natural Classes”, *Transactions of the Charles S. Peirce Society* 33, no. 3(1997): 746.

irreducibility “is the reason why final causes cannot specify exact results”²⁶. It is for the same reasons that end states can be reached in different ways. By denying that final causes are static, unchangeable events, Peirce avoided the problems attached to classical essentialism, which beset the Aristotelian perspective on teleology in the Enlightenment—wrongly or rightly—and thereby provides a way to reintroduce final causation in a scientifically respectable manner in today’s environment.

2.4. A Highly Original View of Evolutionary Causation

This second section of part two of the essay will transition to focusing upon Peirce’s view upon evolutionary causation, and how it complements his view upon evolutionary, developmental teleology, and could, in fact, be seen as an application of his thoughts upon the former issue. Peirce contends that bodies indeed obey the laws of mechanics, but it may be that if our means of measurement were better, or if we were able to wait inconceivable ages for an exception, exceptions to any law may be found. The terms causation and causality are often used as synonyms. In *From Cause to Causation: A Peircean Perspective*, however, Hulswit makes a distinction between *causation*, or the *production* of an effect by its cause(s), and *causality*, which is defined as the *relationship* between cause and effect. Although Peirce never explicitly made this distinction, he implicitly did so by criticizing the principle of causality, and by elaborating a constructive theory of causation. In Peirce’s conception, there is a triple *interdependence* of final causation, efficient causation and chance²⁷. It was to Peirce’s merit to have stated the problem succinctly: “The great principle of causation which, we are told, it is absolutely impossible not to believe, has been one proposition at one period in history and an entirely disparate one [at] another and is still a third one for the modern physicist. The only thing about it which has stood [...] is the *name* of it”²⁸.

This confusion is at least partly due to the complex evolution of the concept of cause. The modern concept of cause is the result of the interplay between the Aristotelian-Scholastic conception—according to which causes are *active initiators of a change*, and the modern scientific conception—according to which causes are the *inactive nodes in a law-like implication chain*. Although the Aristotelian-Scholastic conception of cause has remained an aspect of our common-sense idea of “cause”, the modern scientific view is without question the most predominant in philosophical discourse. According to the latter view, causation means some sort of *law-like relation* between cause and effect, rather than the *production* of an effect by its cause. Peirce’s conception

²⁶ Hulswit, “Teleology”, 195.

²⁷ M. Hulswit, *From Cause to Causation: A Peircean Perspective* (New York: Springer, 2002), 44-45.

²⁸ Ch. S. Peirce, *Reasoning and the Logic of Things: The Cambridge Conferences Lectures of 1898*, ed. K. L. Ketner (Cambridge: Harvard University Press, 1993), 197.

of causation, however, is different, according to which each act of causation involves a *teleological*, an *efficient* and a *chance* component.

In his 1902 CE essay “On Science and Natural Classes”, Peirce developed an original view of causation that each act of it involves an efficient component, a final component, and a chance component²⁹. The efficient aspect of causation is that each event is produced by a previous event (the efficient cause), whereas the teleological aspect is that each event is part of a chain of events with a definite tendency. The chance component is that each event has some aspect that is determined neither by the efficient nor by the final cause.

According to Peirce, final causes are *general* types that tend to realize themselves by *determining* processes of efficient causation. Final causes are basically habits: they direct processes toward an end state. The habits of nature (which we refer to as the laws of nature) are final causes because they display tendencies toward an end state. Moreover, these habits are not static entities because they may evolve in the course of time. Peirce called the possible evolution of final causes “developmental teleology”³⁰. Thus, final causes are not future events, but general possibilities, for the end state of the process to which the act of causation belongs can be reached in different ways. It is therefore a mistake to contend that a *telos* is referent to a future state of affairs influencing the present state of affairs. In fact, Peirce says this much in writing:

“(…) we must understand by final causation that mode of bringing facts about according to which a general description of result is made to come about, quite irrespective of any compulsion for it to come about in this or that particular way; although the means may be adapted to the end. The general result may be brought about at one time in one way, and at another time in another way. Final causation does not determine in what particular way it is to be brought about, but only that the result shall have a certain general character”³¹.

The idea that efficient causation can only be understood within the context of final causation is central to Peirce’s conception of causation. According to him, “efficient causation [...] is a compulsion determined by the particular condition of things, and is a compulsion acting to make that situation begin to change in a perfectly determinate way; and what the general character of the result may be in no way concerns the efficient causation”³². The efficient cause functions as a means for the attainment of the end. Thus, “final causality cannot be imagined without efficient causality”³³.

²⁹ Peirce, *The Essential Peirce*, vol. 2, 115.

³⁰ Peirce, “The Law of Mind”, in: *The Essential Peirce*, vol. 1, 331.

³¹ Ch. S. Peirce, *The Collected Papers of Charles Sanders Peirce*, eds. Ch. Hartshorne, P. Weiss (Cambridge: Belknap Press, 1932), 1.211.

³² Ch. S. Peirce, *The Collected Papers of Charles Sanders Peirce*, “On Science and Natural Classes”, eds. Ch. Hartshorne, P. Weiss (Cambridge: Belknap Press, 1933). 2.120.

³³ Peirce, *Collected Papers*, 1.213.

Moreover, according to Peirce, every event is characterized not only by an aspect of final causation and an aspect of efficient causation, but also by an aspect of *objective chance*. Each natural process involves an aspect of objective chance at every stage of the process, which *cannot* be reduced to efficient or final causation. Above, I explained that Peirce's conception of causation is characterized by a triple *interdependence* of final causation, efficient causation, and chance. Keeping in mind that we earlier distinguished two mutually incompatible conceptions of cause—the Aristotelian-Scholastic conception and the modern scientific conception—I conclude that Peirce's conception of causation forms an ingenious middle way between these two conceptions. On the one hand, Peircean causes are the active initiators of a change (rather than the inactive nodes in a law-like implication chain). On the other hand, however, the action of a *cause* is essentially a case of the operation of a law, and in fact directly implies a law.

2.5. An Explication of Peirce's Three Categories

This section begins by highlighting the three original, yet fundamental categories as outlined by Peirce. Peirce's entire system of thought, it could be said, rests upon his notion of three fundamental categories, which he called Firstness, Secondness, and Thirdness³⁴. He derived these categories by two independent methods, one deductive and the other phenomenological. He summarized the categories as follows: "The First is that whose being is simply in itself, not referring to anything nor lying behind anything. The Second is that which is what it is by force of something to which it is second. The Third is that which is what it is owing to things between which it mediates and which it brings into relation to each other"³⁵.

Expanding on his category of Firstness, Peirce emphasized that because its nature is to be independent in origin from anything else, it can never be adequately grasped or described:

"The idea of the absolutely First must be entirely separated from all conception of or reference to anything else; for what involves a second is itself a second to that second. The First must therefore be present and immediate, so as not to be second to a representation. It must be fresh and new, for if old it is second to its former state. It must be initiative, original, spontaneous, and free; otherwise it is second to a determining cause. It is also something vivid and conscious; so only it avoids being the object of some sensation. It precedes all synthesis and all differentiation: it has no unity and no parts. It cannot be articulately thought: assert it, and it has already lost its characteristic of innocence; for assertion always implies a denial of something else. Stop to think of it, and it has flown!"³⁶

³⁴ Peirce, *The Essential Peirce*, 2.272-73.

³⁵ *Ibidem*, 1.246.

³⁶ *Ibidem*, 2.248.

So then, once we conceive of any phenomenon that manifests something of the nature of otherness, we meet the category of Secondness:

“The Second is precisely that which cannot be without the first. It meets us in such facts as Another, Relation, Compulsion, Effect, Dependence, Independence, Negation, Occurrence, Reality, Result. A thing cannot be other, negative, or independent, without a first to or of which it shall be other, negative, or independent... We find secondness in occurrence, because an occurrence is something whose existence consists in our knocking up against it... The idea of second must be reckoned an easy one to comprehend. That of first is so tender that you cannot touch it without spoiling it; but that of second is eminently hard and tangible. It is very familiar too; it is forced upon us daily: it is the main lesson of life”³⁷.

Finally, Thirdness is the category that introduces the possibility of mediation, which cannot arise from either Firstness or Secondness alone:

“First and Second, Agent and Patient, Yes and No, are categories which enable us roughly to describe the facts of experience, and they satisfy the mind for a very long time. But at last they are found inadequate, and the Third is the conception which is then called for. The Third is that which bridges over the chasm between absolute first and last, and brings them into relationship”³⁸.

Whereas the category of Firstness is characterized by an “airy-nothingness” and Secondness is characterized by the “Brute Actuality of things and facts”, Thirdness “comprises everything whose being consists in active power to establish connections between different objects”³⁹. In this view, Thirdness is the source of meaning and intelligibility in the universe⁴⁰. Peirce speculated that the order (Secondness) and intelligibility (Thirdness) of the universe evolved from a primordial condition of indeterminate chaos (Firstness):

“In the beginning,—infinitely remote,—there was a chaos of unpersonalised feeling, which being without connection or regularity would properly be without existence. This feeling, sporting here and there in pure arbitrariness, would have started the germ of a generalising tendency... Thus, the tendency to habit would be started; and from this with the other principles of evolution all the regularities of the universe would be evolved”⁴¹.

Peirce developed his system of three categories into a highly original evolutionary cosmology. In fact, he proposed that there are three possible modes of evolutionary change, which parallels his three categories. The first mode of

³⁷ Ibidem, 1.248-49.

³⁸ Ibidem, 1.249.

³⁹ Ibidem, 2.435.

⁴⁰ R. S. Corrington, *An Introduction to C. S. Peirce: Philosopher, Semiotician and Ecstatic Naturalist* (Lanham, MD: Rowman and Littlefield, 1993), 135.

⁴¹ Peirce, *The Essential Peirce*, 1.297.

evolutionary change is ‘tychastic’ evolution, which he regarded as the basic form of Darwin’s theory. He wrote, “Natural selection, as conceived by Darwin, is a mode of evolution in which the only positive agent of change in the whole passage from moner to man is fortuitous variation”⁴². Evolution by strict chance is a manifestation of Peirce’s category of Firstness, because Firstness is the category in which a lack of determination by other events or entities is the chief characteristic. Peirce, ultimately, found Darwin’s scheme—considered alone—unsatisfactory⁴³.

The second possible mode of evolution—“anancastic” evolution—is that which is constrained completely by necessity, constraint, and determination by something other than itself. In contradistinction to this view, and in support of Peirce’s own position, many current positions regarding (macro-)evolutionary theory argue that the process of evolution reflects a balance of chance and necessity⁴⁴. In Peircean terms, they argue for a balance between Firstness and Secondness. However, Peirce rejected the idea that such a balance—by itself—offers an adequate explanation of the world as we know it, proffering instead that a complete explanation of evolution requires the category of Thirdness beyond the categories of chance (Firstness) and necessity (Secondness)⁴⁵.

Peirce also regarded Thirdness as the category that gives to the universe “a vital freedom which is the breath of the spirit of love”⁴⁶. Therefore, he referred to this third mode of evolution as “agapastic” evolution, building upon the Greek term *agape*, which translates into English as “love”. He commented, regarding this mode of evolution that “Everybody can see that the statement of St. John [i.e., “God is love,” 1 John 4:8] is the formula of an evolutionary philosophy, which teaches that growth only comes from love... The philosophy we draw from John’s gospel is that this is the way mind develops; and as for the cosmos, only so far as it yet is mind, and so has life, is it capable of further evolution”⁴⁷.

2.6. A Pneumatological Overlay

I would like to suggest that pneumatology could add an important element to this depiction of Peirce’s category of Thirdness. Indeed, the Spirit may be understood as manifesting the characteristics of Peircean Thirdness. According to a Christian re-reading of Genesis 1:2, the Spirit (*ruach*), while sweeping over the formless void, brings order (Secondness) to the primordial chaos (Firstness). Furthermore, in the Old Testament the Spirit, again alike unto Thirdness, is described as the source of all life (e.g., Psalm 104:29-30), with

⁴² Ibidem, 1.358.

⁴³ Ibidem, 1.357.

⁴⁴ See, e.g., D. J. Bartholomew, *God of Chance* (London: SCM Press, 1984); see also K. Ward, *God, Chance, and Necessity* (Oxford: Oneworld, 1996).

⁴⁵ Peirce, *The Essential Peirce*, 1.331.

⁴⁶ Ibidem, 1.363.

⁴⁷ Ibidem, 1.354.

regard to both human (e.g., Genesis 2:7) and nonhuman entities (e.g., Genesis 6:17; Psalm 104:25). In the New Testament, a shift occurs to the emphasis on the role of the Spirit as the source of *new* creation (e.g., Romans 8:11). Nevertheless, I contend that the Spirit, like Thirdness, brings the life-giving power of God to other entities.

In addition to the similarities between the Spirit and Thirdness as the source of life, there is a parallel in that the Spirit may be regarded as the source of openness to the future, which coheres with Peirce's notion that it is the category of Thirdness upon which freedom depends⁴⁸. Yet another aspect of this parallel is that in Peirce's concept of *agapasticism* the openness to the future is closely connected with the nature of love. In historic trinitarian theology, there is an understanding of the Spirit in terms of love, notably in Augustine's infamous identification of the Spirit as the bond of love between the Father and Son⁴⁹.

These minimal considerations demonstrate that there are significant parallels between the characteristics of the Spirit and those of Peirce's category of Thirdness. A further question is whether it is justifiable to claim that, like Thirdness, if the identifying characteristic of the Spirit is the function of mediation? Whereas neither scripture nor tradition has consistently made such an identification, I contend that such a connection is at least plausible. Some support can be found for an identification of the Spirit with the phenomenon of mediation, for example, in John's Gospel, wherein Jesus promises that the Father will give the disciples the Spirit as an "advocate" (cf. John 14:16), who will act as a mediator between Christ and the world. Moreover, in pre-Christian Greek literature, the word *paraclete*, usually translated as "advocate," can also mean "mediator"⁵⁰.

The apostle Paul uses the language of mediation when he declares that God's love has been poured into our hearts through the Holy Spirit (cf. Romans 5:5) and that the Spirit "intercedes" for the saints (cf. Romans 8:26). Saint Augustine suggested that "the Holy Spirit is a kind of inexpressible communion or fellowship of Father and Son"⁵¹. The idea that the primary characteristic of the Spirit is that of mediation is summed up well by Taylor and Wood when they call the Spirit "the Go-Between God"⁵². As I indicated above, the scriptural and traditional understanding of the Spirit has significant parallels with Peirce's category of Thirdness. I suggest further that the role of the Spirit in creation may therefore be regarded as that of mediating between God and the world,

⁴⁸ W. Pannenberg, *Systematic Theology*, vol. 2. Trans. G. W. Bromiley (Grand Rapids: Eerdmans, 1994), 97-98.

⁴⁹ Saint Augustine, *The Trinity*. In: *The Works of Saint Augustine: A Translation for the 21st Century*, ed. J. E. Rotelle, and trans. E. Hill, second ed. (New York: New City Press, 2011), 43.

⁵⁰ W. Bauer, F. W. Danker, *A Greek-English Lexicon of the New Testament and Other Early Christian Literature*, third ed. (Chicago: University of Chicago Press, 2001), 623.

⁵¹ Saint Augustine, *The Trinity*, 12.

⁵² J. V. Taylor, D. Wood, *The Go-Between God: The Holy Spirit and the Christian Mission* (Eugene, OR: Wipf & Stock, 2015), 22.

bringing into relationship that which would otherwise be separated. This coheres well with the scriptural witness, according to which God enters the world in the Incarnation through the mediation of the Spirit (see e.g., Matthew 1:20) and the reconciliation of the world to God is regarded as a function of the Spirit (e.g., Romans 8:1-27). According to Rahner, a symptom of the isolation of the doctrine of the Trinity from the rest of Christian theology, including the doctrine of creation, has been a recalcitrance to consider the possibility that the world may exhibit actual vestiges of the triune creator⁵³. A model of the trinitarian creation informed by Peirce's categories and evolutionary philosophy offers a new way of developing this neglected theological concept.

3. Conclusion

So what does this proceeding analysis of Peirce's thoughts upon evolutionary developmental teleology, in conjunction with a presentation of his views upon evolutionary causation, mean for modern theistically-inclined patrons? I suggest to my patient reader several things in what follows:

First, Peirce's teleology is "more than a mere purposive pursuit of a predetermined end; it is a developmental teleology"⁵⁴. Although Peirce used the term "developmental teleology" only in the discussion of the development of human personality, Hulswit points out that it is also "applicable to [his] idea of teleology in general: learning from the developmental aspect of our own human purposes, we can inductively infer that all final causes in nature are, at least in principle, subject to evolution"⁵⁵. This means that final causes are indeterminate, which may help explain the randomness that is everywhere present in our (uni-)multiverse. Thus—as a second summary point—final causes evolve, and they are not static. The developmental teleology of Peirce is characterized by the continuity of the evolutionary process, and this principle of continuity is essential for his developmental teleology and his understanding of reality⁵⁶.

Third, I maintain that a significantly revised conception of teleology must be developed, if it is to see a resurgence of widespread plausibility in today's somewhat scientifically literate populace. Indeed, as many (late-)modern theologians uniquely emphasize God's love, such a picture is conducive to a proper theology of evolution and a pertinent theodicy. Moreover, I contend—fourth—that the conception of teleology may need serious revision for it to even be maintained as a viable *theological* category. One contribution of Peirce's view is that it pictures teleology as evolving and it is to be seen as a general goal versus having a definite end-state or goal predetermined. This helps explain many of the "evolutionary dead ends" to which our fossil record attests. In

⁵³ K. Rahner, *The Trinity*, trans. J. Donceel (New York: Crossroad Herder, 1999), 13-14.

⁵⁴ Peirce, *The Essential Peirce*, 1.331.

⁵⁵ Hulswit, "Teleology", 197.

⁵⁶ Cf. Ch. S. Peirce, *The Collected Papers of Charles Sanders Peirce*, eds. Ch. Hartshorne, P. Weiss (Cambridge: Harvard University Press, 1935), 5.436.

dialogue with Peirce, I argue—fifth—that teleology emerged out of the increasing complexification of life on earth, and continues to be general, not specific. Teleology is grounded in the physical realm via the kenosis of the Spirit into the natural world, but cannot be reduced to it, as the Spirit operates within the natural world as its empowerment⁵⁷. Such a contention as this bodes well in producing a thoroughly evolutionary paradigm.

Furthermore, as a sixth point, in dialogue with Peirce's insistence on the absence of teleology in anancasm, and the inclusion of it in agapasm, I conceive of teleology as at least partially self-determining. Self-determination is, in fact, fundamental to evolutionary developmental teleology, and (late-)modern theists would want to therefore preserve it. They find a pattern for doing so with respect to how Whitehead says that everything is *self-creative*. In his *agapasm*, Peirce has a condition that is permissible of future growth, and this condition does not negate any tendency that may seem at odds with it. All of these points could and should be reviewed—and possibly appropriated—by the contemporary relationally-oriented theistic movement.

As such, the “directedness” of the condition, then, may be characterizable in terms of the God that gives of himself in act of love without any conditions of potential responses to that love, and what responses may fulfill that love; it is merely a display of completely reckless overflowing, *uncontrolling* love. Seen as such, the many and varied manifestations of complexity that macroevolution has given rise to can be seen as a fulfillment of the teleological goals of God. Such a view places import on even the most minuscule species produced by evolution—everything has worth. God's nature, as it is pictured within the theology and science conversation, is nothing short of “creative-responsive love”, which is based upon, fundamentally, an infinitely *relational* God, who is *redemptively* present in everything that happens, from beginning to end. Those points comport well with the position of Peirce, as laid out in this essay.

What's more, causation is a multifaceted event, comprised of previous actions which are determined, future developments which are at least projaculately

⁵⁷ This is a point that is argued for by me in B. McCall, “Kenosis of the Spirit into Creation”. *Crucible* 1, no. 1(May 2008); see also B. McCall, “Emergence and Kenosis: A Theological Synthesis”. *Zygon: Journal of Science and Religion* 45, no. 1(2010): 149-64; reference the following essay for a further delineation of this position: B. McCall, “Emergence and Kenosis: A Wesleyan Perspective”. In: *The Future of Wesleyan Theology: Essays in Honor of Laurence Wood*, ed. N. Crawford (Eugene, OR: Pickwick: 2011): 155-70. Still further, cf. my dissertation: B. McCall, “Contingency and Divine Activity: Toward A Contemporary Conception of Divine Involvement in an Evolutionary World”, which will be defended in front of the faculty of Claremont School of Theology in October, 2021. Also, perhaps, see my forthcoming volume as well: B. McCall, *The God of Chance & Purpose: Divine Involvement in a Secular Evolutionary World*, with a Foreword by J. F. Haught (Eugene, OR: Wipf & Stock, 2021), as well as the book that shall result from the above noted dissertation, which is under contract: B. McCall, *Macroevolution, Contingency, & Uncontrolling, Amorepotent Love: How God Works in the (Late-)Modern World*, with a Foreword by M. Ruse (Eugene, OR: Pickwick, 5/2022).

anticipated by a final (teleological) component, and current effects which are affected and perhaps even effected by chance events, which are comprised by Peirce in his view that each act of causation involves an upon efficient component, a final component, and a chance component. What I mean by the term “projaculately”, is that the future is in some sense present in the present tense. This mode of causality—a theological synthesis between *kenosis* and the evolutionary complexification of matter, mediated by the *uncontrolling* love of God through the creative Spirit—is potent in application to relationally-oriented theology and the contemporary theology and science discussion, and it should be incorporated into both. It is based fundamentally upon the conception of “uncontrolling love” by Thomas Jay Oord in several books in the preceding years⁵⁸.

Oord’s posit of God’s uncontrolling love is potent in application also to the presence of randomness and chance in the natural environment. I find that notion to be consonant with my view of a God who lures creation to higher levels of complexity through the processes of biological evolution. As I see it, God does not determine the outcome of random events, but God instead constrains randomness by setting broad boundaries, after which the empowered particles, systems, and organisms interact according to natural laws within the aforementioned boundaries, which produces a wide range of beautiful results. Instead of opposing God and chance, I further contend that chance was God the Spirit’s idea and that *she* uses it to ensure the variety, resilience and freedom necessary, not to mention maximal population, in order to achieve her purposes within “creation”.

* * *

Charles Sanders Peirce’s Evolutionary Developmental Teleology

Summary

With this author writing from and working in a context that is partially indebted to process theology, the following essay does not defend the God of classical theism; that is, the omniscient, omnipotent, immutable God defended by Thomas Aquinas in the *Summa theologiae*, for example. In some very real sense, this essay may only make sense in the context of process theology as appropriated by some Wesleyan theologians, such as Thomas Jay Oord. For example, I make the contention that primordial chaos only makes sense in a process theology that denies of God *creatio ex nihilo* and instead asserts the

⁵⁸ Cf. T. J. Oord, *The Nature of Love: A Theology* (Atlanta: Chalice, 2010); and Oord, *The Uncontrolling Love of God: An Open and Relational Account of Providence* (Downers Grove: IVP Academic, 2015), 1-29.

co-eternality of the material universe and God. My overall inclination toward process theology will also become clear in that I describe the mediation of the Holy Spirit on and in the universe in ways that resemble the “persuasive power” of God as described by Alfred North Whitehead. As such, Peirce’s teleology is more than a mere purposive pursuit of a predetermined end; it is a developmental teleology. Thus, final causes evolve, and they are not static. Teleology emerged out of the increasing complexification of life on earth. God gives himself away in act of uncontrolling love without any conditions regarding the potential responses to that love. The many and varied manifestations of complexity that (macro-)evolution has given rise to can be seen as a fulfillment of the teleological goals of God. The kenotic creating Spirit is present “in, with, and under” the processes of biological evolution.

Keywords: Charles Sanders Peirce, Teleology, Causation.

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