

SWEDENBORG'S PHILOSOPHY PROJECT— RECONCILING REASON AND FAITH*

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God is what is. (Daniel J. Hogan, September 1998)

For nothing exists but from causes and causes of causes and consequently from the First Cause, that is to say from the Infinite. In this respect God is all in all . . . (Swedenborg 1965, 136)

What is more omnipresent than the Deity—in him we live, and are and move—and yet what is more remote from the sphere of understanding? (Swedenborg n.d., 2:202)

I once heard from heaven the voice of someone saying: that if a spark of life in man were his own, and not of God in him, there would be no heaven nor anything that exists there; whence also there would be no church on earth and consequently no life eternal. (Swedenborg 1947, § 11:7)

INTRODUCTION: FOCUS ON HIS PHILOSOPHY 1734–1745

Emanuel Swedenborg was engaged with questions of natural philosophy for almost thirty years. He was motivated by a love of understanding both how things work and why—to what purpose or end. He was always pursuing nature's secrets, in order to reveal them, so that they might be of use. As he wrote in *The Principia*, "The sign that we desire to be wise, is the wish to know the causes of things, as well as to investigate the secret and unknown things of nature" (Swedenborg 1912, 2). His first small work in the realm of natural philosophy was entitled "Small Vibrations" and was written as a proof that our "Vital Essence consists for the Most Part of Small Vibrations or Tremulations." It was published in his journal, *Daedalus*

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Hyperboreus 6 (April–June 1717), 10–14. His second was a work on *Chemistry and Physics* published anonymously in Amsterdam in 1721. In it he was exploring “Principles of Natural Things” in which he developed a view that everything in nature could be explained with the aid of mathematics. In opposition to Newton’s concept of matter as “solid, massy, hard impenetrable, moveable particles,” he saw matter “as dependent of forms and motions, . . . consequently that matter does not consist of simple homogeneous particles or atoms, but is highly compounded” (Swedenborg 1976, xxii & xxviii–xxix). Once he was settled into his work at the Board of Mines in 1724, he returned to the development of a philosophy that would “penetrate into the causes of things” (Swedenborg 1912, 16).

This chapter is going to examine what will be called Swedenborg’s philosophical project which includes four works: the first is *The Principia*, published in 1734; the second is *The Infinite: The Final Cause of Creation* which also included an essay on *The Mechanism of the Operation of the Soul and Body*, also published in 1734; the third is *The Dynamics of the Soul’s Domain*, published in 1740–1741; and the fourth and final work is *The Soul’s Domain*, published in 1744–1745.

With regard to Swedenborg’s focus on ends or *telos*, it is clear that these works form a whole: they move from an examination of the process of creation starting from the first cause and the creation of the natural world, to an exploration of the existence of the Infinite, and then to the final cause of creation, which Swedenborg discovered is humanity itself.

With regard to his focus on means, he developed principles or doctrines whereby nature could be analyzed. In *The Principia* he offers three methods: experience, geometry, and rationality. In his subsequent works on the soul, he adds an additional six: forms, orders and degrees, series and society, influx, correspondences and representations, and modifications.

For Swedenborg the first cause created the material physical universe, and he wondered whether that universe was also the final cause of creation. Thus, he asked, is there anything about the nature of the human that differentiates it from nature or the first of creation? If not, then the explanation of matter also explains humanity. Upon much reflection and a discussion of the nexus, which will be presented later in this chapter, he determined that humanity has the capacity to acknowledge the infinite

God. This ability was the key. This led Swedenborg to then explore the relationship between the soul and body in which he hoped to demonstrate “the immortality of the soul to the very senses” (Swedenborg 1965, 230).

Swedenborg attempted this demonstration in both *The Dynamics of the Soul's Domain*, and *The Soul's Domain*. At the end of both these endeavors, he finds himself only on, what he called, the threshold of the immaterial soul. He asserts that he stood there by means of the analytical method, the means of natural philosophy; however, it is clear that he quickly developed first principles while engaged in his analysis, and thus, he has been accused of creating his system a priori.¹ He could go no farther, because the soul's domain was a kingdom of ends (thus, not amenable merely to analysis). Aware of this, he does attempt in *The Soul's Domain* to explore that world mediately through the mirror of the body, using what he called the “Doctrine of Correspondences”; but again, even in his *Rational Psychology* which he never published, he faced boundaries and limits that his methods simply could not overcome. Thus, he abandoned his project.

To examine Swedenborg's natural philosophy requires an exploration of the whole project, what it entailed at each stage, what the problems were, and how he attempted to resolve them. This requires an understanding of his methods as well as his ends. Thus, the first part of this chapter will begin by examining *The Principia* and ends with *The Soul's Domain*. Once that is accomplished, it will be useful to compare his project with that of his predecessors—Descartes, Spinoza, Leibniz, and Wolff. What, if anything, did he borrow from them, and in what way is it possible to distinguish his project from theirs? Clearly, their projects are better known today than his. And, it would appear that Spinoza's monism has been “rediscovered,” and seems to speak to the current cultural and philosophical interest in “naturalism.”²

¹ See discussion in the Introduction to *The Principia* by Isaiah Tansley. On page xxxii Tansley refers to a comment by Professor G. F. Fitzgerald that ‘Swedenborg based his system on a priori principles!’ Tansley finds this ironic because Fitzgerald himself in a Helmholtz Memorial Lecture, stated: “What is the inner aspect of motion? In the only place we can hope to answer that question, in our brains, the inner aspect of motion is *thought*. Is it not reasonable to hold with the great and good Bishop Berkley that thought underlies all motion.”

² In the process of writing this chapter two excursions emerged: A comparative analysis of Swedenborg's concept of the Infinite to other philosophers, ancient and modern, and an exploration of his notes in *A Philosopher's Notebook*, edited by Alfred Acton, 1931, in which his use of ideas from the four philosophers in this study is examined and analyzed.

Before moving to an examination of the particulars of Swedenborg's philosophy, however, it would be useful to state his own framework of philosophical investigation. It should be stated that he saw himself as a Christian philosopher. As he wrote in *The Infinite*:

But to call the cause, origin, and effects of anything in the subtler or grosser field of nature, which exists mediately through other finite things, immediately divine, would be tantamount to finiting God, or making Him similar to a finite being; and consequently to denying His infinity; or to forming a gross, natural and idolatrous idea of the infinite Deity; which is permitted to no one; least of all to Christian philosophers" (Swedenborg 1965, 136–37).

Swedenborg in all the works to be discussed makes his disdain for "naturalism" apparent. He does this by affirming the importance of acknowledging the existence of a Creator, and by a general criticism of both the naturalist and naturalism. In affirmation of the existence of the Creator, Swedenborg wrote: ". . . No one can become a complete and truly learned philosopher without the utmost devotion to the Supreme Being," because "true philosophy and contempt for the Deity are two opposites" (Swedenborg 1912, 35). With regard to naturalists, he called them children, as they play with the idea that nature is the fountain of everything.

Thus, while he was desirous of using experience, geometry, and rationality to explore nature, as he stated in *The Principia* (terms which will be defined below), he was keenly aware that these tools were co-terminus with nature, and thus could not gain the philosopher access to the Infinite except to point to its existence. He stated that "the Infinite cannot be found in nature, because that which is the least in nature is still natural and finite—the Infinite being as nothing in proportion" (Swedenborg, 1965, 19).

However, he could and did use these tools to point to the limits of nature by asking about the existence of or origin of the finite. He suggests that logically there are four possible answers; (1) from itself; (2) by accident; (3) from nothing; (4) or from the infinite. Swedenborg critiques the first three possible causes, and then determines that the finite can come

from no other "ground than a cause involving an infinitely intelligent Being" (Swedenborg 1965, 19).

Affirming the existence of the Infinite, Swedenborg shifted his attention to exploring how, wherefore, and then, ultimately, why the finite exists. These answers again were discovered, in part, by means of analytical methods, and the many observations he made concerning nature. Because of the intimate connection of humanity with the final cause of creation, however, Swedenborg engaged in teleological arguments as well. Today, philosophical discussions rarely use *telos* to make an argument. However, one can only wonder about the pursuit of a scientifically intelligible understanding of the material world, and/or the sense of purpose present in our individual lives, if there is no intelligibility or purpose in the very stuff or essence of the created world. While this is an important question, we must wait to address it (if we can), after we have explored Swedenborg's project itself. Thus, we will turn to an examination of his four works, each in turn, as we unfold his project.

SWEDENBORG'S PHILOSOPHICAL PROJECT

The Principia

Principia Rerum Naturalium sive Novorum Tentatminum Phaenomina Mundi Elementaris Philosphiice Explicandi or *Basic Principles of Nature or of New Attempts to Explain Philosophically the Phenomena of the Natural World*

The Principia was the first volume of a three volume work that also include a volume on *De Ferro (On Iron)*, and one on *De Cupro et Orichalco (On Copper and Brass)*. Iron and copper were the most abundant metals in Sweden, and were, during Swedenborg's lifetime, the most significant source of wealth for the kingdom. It is not surprising that Swedenborg would begin his examination of the earth's metal with those that were most precious in Sweden. At the beginning of this project he had every intention of returning to an examination of additional metals. As late as 1743, when asking for leave to publish *The Soul's Domain*, he indicated that as soon as it was published, he would return once again to exploring the mineral kingdom (Acton 1948, 499). In fact, he had in draft essays on silver, vitriol, sulfur, and salt that he had written earlier.

His volumes on *Iron*, and *Copper and Brass* were well received by both the scientific community and mining practitioners. *De Ferro* was translated into French not long after he published it; and it was considered an important contribution to both metallurgy and mining. It was translated into Swedish and published in Sweden in 1923.³ Reviewers, however, were somewhat puzzled over *The Principia*. It was seen by one reviewer as an attempt to address, through mechanics, issues unresolved by both Descartes and Newton, which nonetheless, does not mention the name of any philosopher, their systems, or their reasoning.⁴

The Principia was dedicated to His Serene Highness Prince Ludwig Rudolph of Brunswick and Lunenburg, who had graciously hosted Swedenborg on several occasions during his trips abroad to deepen his understanding of the principles involved in mining. This choice, too, was appropriate, given the importance of this work for metallurgy. The work was organized in three parts. Part I focused on the philosophical method and his theory regarding the creation of the finite world; Part II concentrated on the causes and mechanism of magnetism, illustrated by the experiments of Musschenbroek; Part III discusses the cosmos and the diversity of worlds and ends with an essay on Paradise and the earth's first humans. The inclusion of this last chapter was not an after thought, but, as suggested earlier, was an essential element of his *Principia*.

Swedenborg's philosophical method as outlined in *The Principia*

The first chapter of *The Principia* is titled: "The Means Leading to True Philosophy and The True Philosopher." In this chapter Swedenborg discusses the tools that philosophers have at their disposal to pursue natural philosophy. He also spells out the limits of these tools and that of the philosophical enterprise itself.

When Emanuel Swedenborg penned the first chapter of *The Principia* on "The Means of True Philosophy and The True Philosopher" he was

³ It is interesting to note that it was an important reference work for a book on the *Forsmark och vallonjärnet* written in 1987, Forsmarks Kraftgrupp AB. Extensive quotes from Swedenborg's work *Om Järnet* (1923) are used to describe various aspects of the smelting process.

⁴ Review in the *Deutsche Acta Eruditorum* in July of 1734 see Williams-Hogan, 1985, 153. In the review, the author does mention that Swedenborg refers to the work of Christian Wolff, which he does in an appendix to *The Principia* on page 366.

writing a guide for himself as well as for his potential readers. What qualities and tools did he and others need to have in order to pursue natural philosophy in the eighteenth century?

He makes it quite clear that the enterprise of philosophizing had, in fact, undergone tremendous changes since what he called humanity's "state of integrity" (Swedenborg 1912, 38). Human beings in that early age were endowed with the tools necessary to be "complete philosophers." These endowments resulted in their ability "to venerate the Deity—the Origin of all things—that Being who is all in all" (Ibid.). As Swedenborg stated, "without the utmost devotion to the Supreme Being, no one can be a complete and learned philosopher" (Ibid.).

What separated the eighteenth century from the "state of integrity" that existed in the infancy of humanity was the fact that in his day many aspiring philosophers were, in Swedenborg's words, "mere children who ascribe to nature the origin of all things, to the exclusion of the Infinite, or who confound the Infinite and nature together; when yet the latter is only an effect, or thing caused, the Infinite being its Generator and cause" (Ibid., 39).

In human beings living in the first age "the connection of ends and means was continuous" (Ibid., 43). Swedenborg observed that in his day the natural connection between ends and means was severed or broken (Ibid., 45). In this current state:

... we see that nothing can be fully known without the use of means; that nothing can penetrate to the ultimate active principle, or to the soul, except by means of continual experiments, by the assistance of geometry, and the faculty of reasoning acquired from both . . . (Ibid., 44)

This is so, because lusts and sensual pleasures almost fill the whole person, inhibiting the control of reason, leaving the individual almost incapable of acting apart from his or her emotions and thus, incapable of consulting their rational faculty (Swedenborg, 1912, 45).

Swedenborg further stated, "it is no wonder that at this day the faculty of reason is only acquired by the use of means, and that it is not possible to arrive by reasoning at the most subtle substance or principles without the

aid of analytical rules similar to those of geometry to be taught us by a master” (Ibid., 46).

In the eighteenth century therefore, education in and the cultivation of the means conducive to true philosophy were absolutely essential, if one were even to stand on the threshold of true philosophy. These means will be discussed presently. However, for Swedenborg, standing on the threshold was not enough because the means by themselves grant knowledge, but not wisdom. The pursuit of wisdom was the key characteristic of the true philosopher. As Swedenborg wrote: “the desire to be wise is the wish to know the causes of things as well as to investigate the secret and unknown things of nature” (Ibid., 2). Wisdom comes from a “veneration for and love of the Deity” (Ibid., 48). Veneration, love, and worship of the Deity are the goals and constitute wisdom itself. For Swedenborg, all the delights found in the contemplation of the world and exploring its endless secrets lead in the end to the love and worship of the infinite God.

Philosophy or natural philosophy for Swedenborg was the discipline through which knowledge of the operations of the natural world are gained. Philosophy can penetrate any part of the world that is governed by the laws of geometry, the facts or elements of which are learned through experience, and the order of which can be unlocked by reason. These three, “experience, geometry, and the power of reasoning” are the means of philosophy (Ibid., 2).

Experience

Experience is defined as the means of acquiring knowledge of everything in the world that is learned through the senses. Through the senses, the budding philosopher absorbs data about the mineral, vegetable, and animal kingdoms, and Swedenborg adds the elemental kingdom. These things act, according to Swedenborg, a posteriori. Swedenborg is quick to point out that experience is amassed through the ages so that the philosophers of the eighteenth century could draw on a vast storehouse of human experience and experiments to understand the operations of any aspect of nature.

He also makes it quite clear that science has added immeasurably to human experience over the years, and thus the investigators of his day are

in a position to explore “the secret and invisible things of nature” as never before (Ibid., 4). Experience, though a necessary means for the natural philosopher, is simply not enough; and it does not follow that those with the most experience are therefore also most wise. Experience provides knowledge, but not wisdom.

As Swedenborg notes: “He who has knowledge, and is merely skilled in experiment, has taken only the first step toward wisdom; for he knows only what is posterior, and is ignorant of what is prior” (Ibid., 14).⁵ Wisdom comes from “penetrating into causes and principles, . . . or from reason and *a priori*” (Ibid., 15). Only the addition of reason permits someone to argue about present circumstances and draw conclusions through a chain of inferences (Ibid.).

Geometry

This leads Swedenborg to discuss the second means leading to wisdom, namely, geometry and rational philosophy. He wrote: “It is through them that the secrets of invisible nature may be unlocked and revealed” (Ibid., 16).⁶ What geometry and rational philosophy provide in the pursuit of wisdom is an ability to order experience. That is by means of comparison and analysis to see the rules governing experience, and then by means of analogy (and this is the key) “to elicit some third or fourth thing which was unknown before” (Ibid.). Here it is of interest to note that Swedenborg couples geometry and rational philosophy, and later discusses rational philosophy independently.

What geometry is and what it contributes to rationality requires explanation. First, what is geometry? Geometry is the science that describes the

⁵ It should be noted that Swedenborg was of the opinion that “at this day they are reputed the wisest who have the greatest experience; by making a display of it they are immediately regarded as persons of acute judgment and refined perception; and the more so if they have eloquence . . .” (Swedenborg, 1912, 14).

⁶ It would be useful to point out Swedenborg’s emphasis on discovering the secrets of nature. In this essay, he mentions the importance of this over twelve different times. He uses such words as secret, hidden, invisible, labyrinth, and occult among others. I would like to connect this to an earlier discussion of Swedenborg’s interest in revealing secrets during his stay with craftsmen in London, his public discussion of secret mining and smelting practices, what will be his search to reveal the soul to the very senses, and finally his first theological work, *Secrets of Heaven*. It would appear that being a revelator of the hidden dimension of both the natural and spiritual was a central characteristic of Swedenborg from his youth.

motion and figure of the elementary nature of our world. Our world is mechanical and is composed of figure, space, and motion—the very attributes of geometry. Swedenborg maintains, therefore, that geometry “accompanies the world from its first origin, or first boundary to its last and therefore is inseparable from it . . .” (Ibid., 17). This principle he asserted is always true. He goes on to say that even if countless worlds existed, nonetheless those worlds, too, would depend on mechanical principles, and a similar principle of geometry would attend them all (Ibid.).

These mechanical worlds are identified by motion and limits. In this world the same is true of the smallest natural entity and the largest. This is true whether the human eye can see the phenomena or not. It is true of immense celestial bodies to the cells of plants and animals. As Swedenborg, wrote: “when geometry is considered, it will be found to be always like itself” (Ibid., 20). The principles of geometry operate in a finite and bounded world, but not in one that is neither finite nor limited.

Having established these principles Swedenborg turns to a discussion of contiguity and connection. These concepts are vital to Swedenborg’s understanding of the created world and its maintenance in each of the world’s kingdom, mineral, vegetable, and animal or more precisely, the anatomical world. As he argued:

Every operation takes place by contiguity. Without a perpetual connection between the end and the means, there would be no elementary nature, and no vegetable and animal natures thence originating. The connection between ends and means forms the very life and essence of nature. For nothing can originate from itself; it must originate from some other thing; hence there must be a certain contiguity and connection in the existence of natural things; that is all things, in regard to their existence, must follow one another in successive order. (Ibid., 22)

Swedenborg, aware of the importance of this concept provides ample illustrations from the mineral, vegetable, and animal kingdoms.

Contiguity is vital to Swedenborg’s understanding of the world, because without it, quite simply, the world would be devoid of causes, and would thus fail (Swedenborg, 1912, 24). He concludes, “In short, no reason can be assigned for any phenomenon, unless we admit of contiguity or

connection; for no phenomenon can exist, except in something contiguous;" thus, "the mechanical world depends upon contiguity and connection" (Ibid., 25). Again, Swedenborg illustrates his view with examples from the world of music and harmony, spider webs, the construction of dams by beavers, nests by birds, and the honeycomb by bees.

Having demonstrated the importance of mechanical and geometrical science for understanding the finite natural world, Swedenborg states that "it does not, therefore, follow that all things in this world are subject to the government of geometry. For there are innumerable things that are not mechanical, nor even geometrical" (Ibid., 27).

The infinite and the limits of geometry

Thus, it is to the Infinite that Swedenborg turned. This is not only important for what follows in *The Principia*, but also for his broader project, aspects of which are raised in this chapter. Swedenborg writes that "the Infinite is beyond and above the sphere of geometry, being regarded by it as its origin and first beginning" (Ibid.). Not only is the Infinite the source of the finite, but Swedenborg, claims "the finite recognizes that its origin is in the Infinite. Without the Infinite the finite could neither arise nor subsequently subsist; and to this every finite refers itself, even geometry" (Ibid.).

Swedenborg goes further than just claiming that the Infinite alone is beyond the scope of geometry and mechanics to comprehend. He points to both the principle of intelligence and the soul in both brutes and human beings, which though natural in design, have not yet been grasped geometrically. He is certain that though these things are orderly and subject to laws, the laws themselves may not be mechanical or geometrical (Ibid., 28-29).

Swedenborg, identifies two additional spheres of human life that apparently are not subject to the laws of geometry: one is providence, and the other is love. Providence belongs to the Infinite, but unfolds as a series of consequences that flow from cause to cause in the natural world producing a particular end. We can see from experience and a posteriori that a series of incidents are connected; but it does not seem possible to know the nature of this connection a priori. Neither human providence nor geom-

etry can explain what has unfolded. That love has consequences and effects in the world there is not doubt. When conjoined with animal intelligence, “It produces everything which can conduce to the preservation and perpetuation of its kind” (Ibid., 30). According to Swedenborg, the ancients cited love as the source of the universe. Swedenborg suggests that these are but a few examples of perhaps infinite things that do not conform to the laws of mechanics. This implies that there are many qualities of the soul that are quite removed from mechanical explanation. This leads Swedenborg to conclude that geometry and mechanics may not be the means whereby ignorance may be removed (Ibid.).

Thus, concluding that the soul’s intelligence is not mechanical, Swedenborg raises the question concerning the non-mechanical quality in the soul; and coming back to the question posed earlier about the nature of rationality, what is its essential nature? Swedenborg begins by stating what it is not: It is not knowing many things learned through the sense, or experience; it is not knowing the figures and spaces in which motion terminates, or geometry. In addition, it is not knowing proportions between figures and spaces, and the other rules and the proportions of motion, by which the world produces the effects of nature, or mechanical science, and natural philosophy. But the rational principle consists in:

knowing how, and at the same time being able to arrange into such order and connection the reasons known from the world, so as to view their analogy; yet this presupposes an active principle, or a certain force, impelling into motion all those things which inhere in a similarly orderly manner in its organs; that is it presupposes a soul. The rational active principle derived from this, consists in knowing how, and being able to actually elicit from analogy a third or fourth truth previously unknown. (Ibid., 31)

Again, it is important to see that the soul emerges as a key element in Swedenborg’s preface to his cosmology, as well as a key factor in his larger philosophical project.

Reasoning

Experience provides knowledge of the mechanical and organic worlds, geometry orders them, and rationality comparatively sifts and assesses them for the sake of ends or uses. This statement is a summary of Swedenborg's view of the respective means available to one who would philosophize. Without the faculty of reasoning, the end cannot be achieved. As Swedenborg writes: "in a word, the possession of the means without the faculty of arriving at the end, does not make a philosopher" (Ibid., 32).

Swedenborg observes that the ability to reason is not available to everyone, either through lack of endowment (diseases and defects) or through educational disadvantage. While those who lack the necessary endowment may not be able to develop the capacity to reason, the disadvantaged may develop their reason through cultivation, exercise, and education. Assuming cultivation, maturity can also play a role.

Swedenborg assures himself and the reader that reason is not just valuable to assess the causes of things clearly visible in the world, but it can be used in the investigation of the most secret things of nature which are remote and incapable of being perceived by the senses, such as the elements which are the subject of *The Principia*. Even though what is sought is remote from view, the hidden actions of nature stir phenomena that operate according to laws, that allow them to be observed as "in a mirror;" thus, providing the philosopher with an image that can be assessed with the help of experiments and geometry. Using Swedenborg's language, nature sports before us half naked or with her face half unveiled, providing the hunter with glimpses of her, here and there (Ibid., 34–35). If these are sufficient, and "the proper means are [called] to our assistance, we shall probably arrive at true causes and knowledge of things occult" (Ibid., 35). He makes it clear, however, that that the principles formed must agree with both experiment and the test of geometry. If this is done, then what is discovered may be called true, and the product legitimate (Ibid.). Swedenborg leaves it to the reader to decide, if his *Principia* fits this description.

Who then is the true philosopher? According to Swedenborg, it is someone:

who, by the means treated of above, is enabled to arrive at the real causes and knowledge of those things in the mechanical world which are invisible and remote from the senses; and who is afterwards capable of reasoning *a priori*, or from first principles or causes, concerning the world and its phenomena; . . . and who can thus, as from a central point, take a survey of the whole mundane system and of its mechanical and physical laws. (Ibid.)

Given the need for education, cultivation and the need to take such care, every step of the way, why make the attempt? Swedenborg explains: “For if we knew *a priori* the causes from which nature herself brings forth and manifests her phenomena, every one might know the objects which she has in view; every one might then give responses as from the inmost recesses and from behind the veil of nature’s temple; every philosopher would be a Themis or Apollo, that is, would know all the phenomena that could exist, and would hold the vastest sciences in a nut-shell” (Ibid., 37).

“However, . . . ;” and here Swedenborg begins his discussion of philosophizing under the conditions of integrity and under “the perverted state of man into which we are born at this day” (Ibid., 38 & 44). This, of course, is where this review of his philosophy began, in order to provide the context of his approach.

There is one additional point that should be mentioned in this chapter, because it becomes a significant feature of his broader philosophical project, and that is his mention of the “Only Begotten” in the final section of his essay. He writes: “. . . He might restore a connection with the Infinite in those who are like Him” (Ibid., 50). This point, in his next work on *The Infinite*, is central to his discussion of the final cause of creation.

Cosmology introduction

Swedenborg outlines his cosmology in two places, first in a preface to the reader and then in an appendix at the end of *The Principia*. While these summaries are essentially the same, the first statement focuses on means through which a philosophical system can be constructed. In his preface he also introduces the special vocabulary he will employ in his system. In

the first he prepares the reader for the journey; in the last, at the end of a long and somewhat arduous intellectual journey in new and unfamiliar territory, he hopes to assure the reader that it was, after all, worthwhile. Thus, he quite naturally focuses on ends. He writes:

Indulgent reader! you have now been presented with a view of the nature of my attempts; namely, a system of philosophical principles extending from the first simple to the ultimate compound, from the smallest invisible to the first visible entity, and hence to paradise on earth; a system connected throughout, as I opine, from one end to the other by intermediates. Whosoever aims at forming principles, and yet does not commence from the first and simple one and proceed in regular order to the last, cannot, so far as I am aware, perceive any just connection between them; for he who stops short in mere intermediates, does not perceive the end of the series on one side or the other, much less does he see whether these ends have relation to each other; or whether they are connected by intermediates; this was the reason which induced me to undertake the formation of a perfect system. (Swedenborg 1846, 363)

In his appendix, Swedenborg asks for no praise, and indicates that he hoped his analysis and the principles he developed are in line with the truth; but he is aware they must conform to the phenomena of nature, and that only then could there be public endorsement of them. In order to focus primary attention on the question of his system's fidelity to the truth, he chose to stand outside of the broader philosophical debate on cosmology. In making this choice, he almost certainly guaranteed a smaller, and perhaps inconsequential readership. This point will be picked up and discussed later in this chapter.

Swedenborg does make reference to one philosopher in his appendix, Christian Wolff. He does so because he needs to share not so much his indebtedness to Wolff as to indicate the similarity between Wolff's system and his own. He specifically acknowledges Wolff's *Philosophia Prima sive Ontologia* and his *Cosmologia Generalis*. The appendix ends with several quotes from Wolff which encourage philosophizing and which suggest that the liberty of doing so in no way presents any danger to religion, virtue, or the state (Ibid., 367), all useful and important in 1734.

Cosmology

In Swedenborg's attempt to understand creation he had no choice, given his philosophical principles, but to start where he did, with the first natural point created by the Infinite. He was required to start with the Infinite, or the first cause. He could not do as others did and play primarily in the realm of intermediates. Nonetheless, he was interested in explaining the origin and the unfolding of the natural world using the tools of natural philosophy. This necessitated Swedenborg's use of a priori principles in order to begin.

Swedenborg used these elements to develop an understanding of the process of creation, the focus of his *Principia*. He begins with what he calls, the first natural point, which he views as the doorway, Janus faced,

who looks two ways at once, or at both universes. On one side is the pure Infinite, . . . on the other side is the finite alone . . . By this point as by a door, we are introduced into the world; we are admitted into a kind of geometric field, where there is ample scope for the exercise of human understanding. As soon as, through the medium of this point, an entrance is found into the finite universe or the world, man instantly begins to have a knowledge of himself, to perceive that he is something . . . which could have no existence prior to the existence of the point. . . . nature begins [at this point], and the world with nature. On these grounds the point may be said to be the medium between the Infinite and the finite. (Swedenborg 1912, 59–60)

From Swedenborg's perspective it is essential that the finite was created immediately from the Infinite (Ibid., 60). This preserved the radical distinction between the Infinite and the finite that is crucial to Swedenborg's Cosmology, and more broadly to his whole philosophy. This first natural point has one limit and consists entirely of motion. Swedenborg indulges in a play of words to make a point about this motion that exists essentially without figure. He writes, "in regard to the point, that its motion is in the center when it is in the periphery, and in the periphery when it is in the center; thus that it is all center and all periphery . . ." (Ibid., 71).⁷

⁷ This in some respects appears to be described like the point and wave found in the electrons of quantum physics.

In this discussion Swedenborg has no recourse to geometry except through similitude because this point is not the first finite. He continues, "Now if we take a rational view of this metaphysical entity, we shall find it to be of such a nature as to consist of one limit; it is not properly limited; it is not finited; but it is that from which things limited and compounded are derived" (Ibid., 72).

Swedenborg confesses that what he has written in an attempt to communicate about this first natural point is hampered because, "As the point consists not of parts, it cannot so well undergo geometrical examination, explanation, investigation, dissection; we shall, therefore, proceed to the consideration of the finites and actives, in which the mechanism of the same motion will be gradually presented to view" (Ibid., 74).

Once he can discuss things existing in the finite world, Swedenborg can ask his reader to assess or judge his principles to see if they agree or disagree with experience and geometry; however, with regard to the point, "we cannot in proof of our theory adduce any experience and confirm our principles by it" (Ibid., 74). Yet, he is convince that both reason and experiment demonstrate that motion is the only means whereby anything new is produced. Thus, he lays out his approach in moving toward a presentation and analysis of the "first or simple finite."

Swedenborg has developed his philosophical principles in order to discover the truth, and he is hopeful as his presentation proceeds that these principles will indeed be shown to be true because he will be able to provide both geometrical analysis and experiments as sources for confirmation. He is hopeful because, as he states, geometry itself begins with the point (Ibid., 76).

In Part I, Swedenborg takes the reader through his system of successive finitions, until the formation of the magnetic element, and its relationship to the solar vortex. In Part II, Swedenborg provides details of the magnetic mechanism both a priori and a posteriori. To make the a posteriori case, he draws on the magnetic experiments of Musschenbroek (1692–1761). In Part III, he begins with a comparison between the Sidereal Heaven and the Magnetic Sphere, where he states that the vortical activity in our immediate galaxy bears resemblance to the the vortical activity found in a magnetic field (elliptical); and then moves to a discussion on "The Diversity of Worlds" and the formation of our solar system. He

proceeds to examine additional finites and the elements of our world which he identifies as ether, air, fire and water (which he calls, “the purely Material Finite.”).⁸ As already mentioned, he ends his cosmology with a discussion of “The Paradise formed upon our Earth, and on the First Man.”⁹

While there is much that could be said about Swedenborg cosmology, if its various parts were examined, in order to assess his system more broadly and the utility of some of his principles, there is one problematic principle worth mentioning and two concepts that should be touched on because they have borne the test of time.¹⁰ The problematic principle is the idea that the motion of the simple will be absolutely perfect, “and the only figure that has this degree of perfection is the circular; and if the figure of motion is conceived of being in space then no other can be conceived than the absolutely perfect spiral” (Swedenborg, 1912, 115). Swedenborg may have followed Descartes in this view. While he makes advances beyond Descartes corpuscular theory, he nonetheless ignores Kepler in this instance, and his view of the elliptical nature of the planetary orbits. In the end Kepler overthrew the Cartesian principle, and thus, Swedenborg, as well. Interestingly, when Swedenborg discusses magnetic spheres in relation to solar vortices, he mentions “the elliptical movement of the planets” (Swedenborg 1846, 237).

Swedenborg is now often credited with being the first to express the nebular hypothesis in his *Principia*. This is the most widely accepted model explaining the formation and development of our solar system, and is now thought to be the mechanism explaining the process of the formation of the entire universe. This hypothesis suggest that the sun itself gives birth the to planets in its solar system (Ibid., 262).

When his nebular concept is coupled with his discussion of “The Diversities of Worlds” in which he hypothesizes that the universe is most likely filled with uncountable worlds which emerged in the same manner

⁸ As many other transitional modern philosophers, Swedenborg did not abandon the four principle elements identified by the ancients.

⁹ Man, of course, is the Final cause of creation.

¹⁰ There are of course others that could be mentioned, but these three illustrate the transitional nature of his natural philosophy, as it stands on the cusp of modernity.

as our solar system, it would seem that some elements of Swedenborg's cosmology have in fact been borne out with the test of time.¹¹

Assessment

Before making an assessment of Swedenborg's approach or perhaps, as an introduction to it, it is useful to revisit Swedenborg's recognition of the limits of his philosophy. His method was constructed to explore the physical finite world composed of the elemental (his focus in *The Principia*), the mineral, the vegetable, and the animal, with regard to the body but neither the mind nor the soul. And, of course, it was not intended to grasp the Infinite.

Swedenborg's philosophy accords well with the philosophical enterprises of his day, as to means. He, like others, had little patience with scholasticism, and wished to use experience, geometry, and experiments, basically an empirical approach, in search of the truth about the natural finite world, with this caveat: that the gift of rationality permitted the philosopher to deductively seek first causes. However, he saw the true philosopher as one who venerated, loved, and worship the Deity, or that intelligent Being who was the Generator and Cause of the finite natural world. He was critical of those who saw nature as the origin of all things or who confounded the Infinite and Nature together.¹² As stated earlier, he called them "mere children."

Embedded in this first published effort of Swedenborg's philosophy are the seeds of what is to follow. Thus, it is now time to turn to his work on *The Infinite*, and then to his efforts in *The Soul's Domain*.

The Infinite: The Final Cause of Creation

Dedicated to his brother-in-law, Eric Benzelius—Swedenborg's mentor, kinsman, and friend—this small work treats of two of the most philo-

¹¹ For a mention of current relevance see Anthony j. Abruzzo, M.Phil.in the *General Science Journal*. <http://www.gsjournal.net/old/physics/abruzzo7.pdf>

¹² This may be an oblique comment or reference to Spinoza and his concept of "*Deus sive natura*."

sophically vexing topics: the Infinite, and the human soul. Nonetheless, Swedenborg believed, given the human condition, that they are, perhaps, the most necessary to be addressed. As did Descartes, who wrote in his meditations: “I have always thought that the two questions, of God and the soul, were the principal questions among those that should be demonstrated by rational philosophy rather than theology. For although it may suffice us faithful ones to believe by faith that there is a God and that the human soul does not perish with the body, certainly it does not seem possible ever to persuade those without faith to accept any religion, nor even perhaps any moral virtue, unless they can first be shown these two things by means of natural reason” (Descartes 1960, 61).

Given the importance of these subjects, in his Preface Swedenborg tells his reader that he will attempt to divest himself of “metaphysical terminology,” in order to make his philosophy accessible and straight forward. He aims to simplify his style and clothe his ideas in the guise of every day speech (Swedenborg 1965, 5).

To lessen the concern of the reader about the appropriateness of reasoning about such eminent matters, Swedenborg claims that true rationality “can never be contrary to revelation” (Ibid., 5).¹³ He assures the reader that reason is a tool of both the soul and the body, and it is, therefore, the medium of communication between them. The purpose of reason is to allow a person to perceive what things are revealed and what are created. Reason is given to human beings so that they may see that there is a God, and to know that he is to be worshipped. In addition he writes, that “the very mysteries that are above reason, cannot be contrary to reason, although reason is unable to explain their grounds” (Ibid., 6).

¹³ In fact, given the nature of the Infinite and the finite, the finite individual can never discover and know the Infinite through any of the finite means at his or her disposal, including rationality; finite humans can only learn about and know the Infinite through Revelation. Thus, Revelation, in some form, is not just vital but essential for humans to have any knowledge of God at all. Revelation provides a key ingredient to any true human self-understanding. God must show himself to humanity; he must walk in the garden with us, or reveal Himself to us in other ways, because on our own, we cannot find him. His unceasing love for us, ensures us that He will provide Revelation about Himself to meet every human state, both collectively and individually, from infancy to adulthood. The Infinite nature of this love suggests that God has revealed Himself through the ages. Swedenborg, himself, only understood this as a result of his “spiritual crisis.” Prior to that, while he always acknowledged Revelation, he thought that human reason was a sufficient tool to “show the soul to the very senses.”

In this work, as in the other parts of his philosophical project, Swedenborg begins his philosophy with the philosopher. In this case, his focus is on the Infinite; in the *Principia*, his focus was creation, and in his final efforts, it is the soul. Here, the first two parts of his essay are devoted to the issues involving the nature of the philosophic mind. It is here, also, that it is possible to glimpse Swedenborg engaged in the philosophical spirit of his age and the problems associated with it. And yet, as he writes: "There cannot be a shadow of a doubt, that the human mind has an innate desire to philosophize on the unknown, and all the more if God, the soul, or human salvation are in discussion, . . . Thus as I said before, the persistency of the philosopher is natural and human" (Ibid., 20).

However, while this desire is natural and, in fact, even essential to humans and human freedom, it is a two edged sword. It can lead either to a rational acknowledgment of the need to worship God or to the denial of God and the worship of nature. As Swedenborg wrote,

. . . although there be little that the mind can perceive in the natural sphere, and infinitely little in the Divine, still our philosopher thinks that he can and ought to perceive; whenever he does not perceive, he either declares the matter to be inexplicable, or denies it altogether, or wraps it up in the darkest words, to prevent all possibility of convicting him of ignorance. So ambitious is the mind, that it endeavors to philosophize to the utterly unknown, where it fixes the boundary, not of its own knowledge merely, but of the knowledge of the whole philosophical world besides. (Ibid., 8-9)

From Swedenborg's perspective the infinite is a trap to those who make their own mind the measure of all things. They survey the whole world and, in fact, the entire universe from the greatest to the least seeking with all the finite tools at their disposal; and yet the more they search, the more intractable the quest becomes; because, in the end, they arrive at the utterly unknown and indefinable—the infinite—there they must stop because the infinite is identical with the non-finite. But often, they are not content to stop, and honestly state that they can go no farther; instead they either declare that because they cannot find the infinite with their tools it

simply does not exist or they equate it with nature itself. Swedenborg expressed this in the following way:

At last, when he sees all these impenetrable mazes, when he has had such repeated experiences of their difficulties, and has found that they all combine to form one and the same unfathomable problem, viz., this, that by all the reasons of the case, no infinite can possibly exist, because it does not exist for any rational, natural, or geometrical analysis,—after this result, he secretly concludes that the divine essence is probably not infinite, but indefinite, and the least and the greatest in all things: and as he sees the greatest too a natural and geometrical condition, or an analogue of the least in quantity space and time, he guesses that the Divine is the prime being of nature and consequently that nature and God are in a manner one and the same. And thus occasionally the philosopher may at length, by his own imperfect investigations and analyses, become a worshipper, not of God, but of nature. (Ibid., 17–18)¹⁴

Despite the possibility of this very negative outcome, Swedenborg remains sympathetic to the philosopher's problem, which he suggests is similar for angels, if one believes that they even exist. Regardless of their wisdom and perfection, even they cannot fathom the essence of infinity. Doubt is an inevitable companion of this type of reasoning. Given the truth of all of this, perhaps reasoning about the infinite ought to be rejected altogether in favor of accepting it as a matter of faith. Swedenborg has high praise for those who can, in fact, sincerely follow this path. However, he remains troubled for the countless philosophers who, almost unbidden, find themselves deep in thought about the nature of the divine. Surely here Swedenborg must be included among the ranks of such philosophers.¹⁵ For even when it may be clear that one ought not to philosophize about this or that topic, the mind nonetheless continues to reason philosophically. What is at issue, according to Swedenborg, is not the use of

¹⁴ Here we can clearly identify the *Deus sive natura* of Baruch Spinoza.

¹⁵ While, Swedenborg's mind seems to have been inexorably drawn to philosophize about the Infinite, he does attempt to set limits on how far rationality can take him in his quest. Although his final project in which he hopes to "demonstrate the immortality of the soul to the very senses" (230) is audacious and, as he subsequently learned, beyond the scope of reason.

reason per se, but rather the "mode of reasoning on the infinite by comparison with finite sphere" (Ibid., 20).

In this essay, Swedenborg does not want to abandon or give up on those with a philosophic turn of mind, because in large part it was written for them. As he writes: "we cannot possibly acquiesce in all he [the philosopher] says, or be silent before his arguments. . . . Duty requires us to discuss reasons by reason, particularly in matters and points of faith. . . ." (Ibid., 21). However, Swedenborg proposes a different question than the philosophers he is attempting to engage. While, they are focused on exploring "the infinite essence of God, and of deducing His infinity as a result," he is interested in a somewhat different question, which is, "Is there an infinite, or not" (Ibid., 22)? As he further states, "The essential question is of existence first, not of character or quality" (Ibid.).

Swedenborg proceeds to tackle this question using arguments of both a priori and a posteriori types. He begins a priori with the conclusion that reason itself has established the infinite does not exist in nature. Thus, whatever least natural exists, is either natural or similar to what is natural. As all natural things have causes, what is the cause of nature itself? The possible answers are: (1) from itself; (2) by accident; (3) from nothing; or (4) from "the infinite."

The idea, that it could be its own cause, Swedenborg writes, is "repugnant to reason" (Ibid., 24). Even though the philosopher is drawn to this solution, doubt remains, for deep down the need for cause persist; and even the notion that it might have an "accidental" cause, though attractive, flounders on reason's requirement that the quality of the cause is in the derivative or effect. If the cause is accidental, then the effect would also be accidental; but, as we see, and as science amply demonstrates, nature from the most minute particles to the universal heavens operates according to the laws of order. Order does not originate in accident, thus, accident is not a suitable cause of nature.

If the first finite was not caused by accident, but by something similar, the issue remains unresolved, because the same question still stands. Where did it come from? An additional matter arises, if we also ask, when did this happened, and why then, and not some other time? Inevitably we come back to the conclusion that primitive nature could not have existed from itself, and that it must have a cause.

The fact that primitive nature must have a cause undermines the idea that the first primitive could have come from nothing, because “actual NOTHING can furnish us with no cause: nothing comes from nothing” (Ibid., 89). Thus, it cannot account for the existence of subsequent cause/s found in nature.

We have determined that “the cause could not be finite, either in itself or in its origin; for if it were, *it* also would require a cause, to finite it. We conclude therefore again with reason, that the infinite is the cause of the finite, albeit we do not know the nature or *quale* of the infinite” (Ibid., 26).

As we attempt to understand finite nature, we keep coming back to the idea that it cannot exist without a first principle. Since this principle cannot be finite, or even indefinite, Swedenborg concludes that it is “a being that involves no quantity, no extension, and no relation to quantity or extension; no relations or proportions whatever, no likeness, i.e. no finite; in short a being identical with THE INFINITE” (Ibid., 27).

While philosophers are tempted to ask the whence of the infinite, or what caused it as well as when it originated, in essence these questions have bearing only on finite things; and because the infinite is defined only in relation to the finite, it is everything that the finite is not. Thus, while finite things have an origin and a cause, the infinite does not. Thus, “it is involved in its own cause” and because it has no cause, it also has no origin, it simply is (Ibid., 28); or as Swedenborg states, “it also is *in* the origin of itself” (Ibid., 29). This, in essence, is Swedenborg’s a priori argument. As stated at the beginning of this chapter “God is what is.”

What then is his a posteriori argument? Swedenborg assumes that the philosophers to whom he has presented his a priori arguments have concluded with him that the source of the natural is, in fact, the Infinite or God. Having taken them that far and as he says, not wishing “to disturb them in their newborn acknowledgement of infinity or God,” he now is willing to walk with them, and not credit God with things that could rightly be credited to nature. His willingness not to disturb the “worshippers of nature” rests on the fact that they “now” acknowledge nature as only the second cause of the world. Contained in their assent to that principle is an additional agreement that nature itself is not “self-active” but is only continually receptive to the activity of the first cause or Infinite.

Swedenborg suggest that by accepting these "points," it may be possible to show with even greater clarity that nature cannot be its own cause.

The starting point of this next phase of the argument is to agree that everything in both the visible and invisible worlds are derivatives of the least natural primitives, and also that they emerged successively from natural, physical, mechanical, geometrical means. The significance of this is, that contained within these natural seeds of necessity lay the power to produce the tremendous variety found in the natural world. Within those primitives lay the power to produce all things. Swedenborg is in complete agreement with his disputants about this. These principles cannot be denied either philosophically or rationally. In fact, he is pleased to be in agreement with them regarding this, because it relieves him from the task of framing all the details (which he is willing to grant) involved with the "involution of causes in the primitives" (Ibid., 33).

Thus, Swedenborg is more than willing to affirm that: "the whole world including its series, appendages, and parts, came forth in natural order, and by any necessities you please, form the same least and primary finite" (Ibid.). Clearly the first finite, like a seed, contained the "aptitude for, and a quality of, producing it, or developing itself" (Ibid.). In fact, it contained all "that one can naturally dream of or imagine" (Ibid.). The question, of course, is "Whence all this in the primitive entity" (Ibid., 34)? The answer is from the Infinite. For Swedenborg it is simply not possible to rationally conceive of any other source.

Swedenborg supplies his readers with a variety of examples from nature, to amplify the reader's sense of natural wonder in both the large and the minute. Starting with almost anything that exists we find the marvelous, and feel a sense of wonder; for example, the human body, as we explore it, and then its parts, we are amazed at what we find—complexity, order and integration. Then as we move to reflect on its first substance which in the case of the body is the ovum, we have an even greater sense of awe than when we reflected on the body itself.

As Swedenborg wrote: "What we wonder at on a great scale, in large objects, we wonder at still more as able to exist on the minutest scale, in the least of things. Admiration and astonishment are concentrated on that least sphere, wondering how it could involve the power to produce the

whole system, and such a system” (Ibid., 35)! We are drawn to reflect on the cause that is able to produce such a whole. But that is just one such marvel, and the first primitive or principle contains an indefinite number of similar things almost to infinity. How can such power lie in the primitive, that gives rise to such variety and each with such distinctness? For Swedenborg, “the closing wonder is felt when we declare that the first cause of this distinct least principle lies in the infinite” (Ibid.). It is clear that each object that we contemplate in nature, is capable of taking us on a similar journey; thus, in the end we wonder not just at the quality of the first principle, but of necessity we must seek the first cause, “that is, in the Infinite, in whom lies all that we wonder at; in whom we wonder at the Infinite only, and by no means at the natural on its own account, but in its cause” (Ibid., 36). Just as with an exquisite instrument or invention, while we marvel at the mechanism, in the end, we wonder about “the cause in the person or the inventor” (Ibid.). We wonder at the intelligence in the cause. All the more so, when we contemplate nature, we seek an “infinitely intelligent cause” (Ibid., 37). A cause that could include all the contingencies present in the primitive entity could be no other than infinite wisdom itself. Infinite wisdom produces perfect principles that are timeless. That is, in the primitive, all things present and future were intrinsically there; thus, endowing it with indefinite perfection.

As Swedenborg continues:

The circumstances of all contingencies [and indefinite perfection] in the finite sphere conspiring so marvelously to a single end, can proceed from no other ground than a cause involving an infinitely intelligent Being; whence it follows that there is a pre-eminent Being in the cause and infinite intelligence in the Being. (Ibid., 89)

Having taken his reader this far and now being able to affirm the existence of “the infinite” or the whence of things Swedenborg turned his attention to the how and wherefore of this entity that we know as the finite or nature. The question is, was nature created mediately or immediately? Swedenborg concluded that “the infinite” was the immediate cause of creation, because there could not be a middle cause between “the infinite”

and the primitive, partaking of both. Because "any finite whatever, the least or the greatest, attached to the Infinite would be equivalent to nothing; which proves that the two must be distinct" (Ibid., 93).

Although Swedenborg is clear that the Infinite and the finite are distinct, and that there is no ratio between them, nonetheless, from his perspective, the mind still seeks some connection between the two. He wrote:

Because the one is the cause, the other the causate; and if the one depends on the other in the way of causate and cause, there must be a nexus between them, or a principle derived from the cause in the causate,—a principle to which the causate owes everything. (Ibid.)

That principle affects both the existence and the essence of the finite because without it the finite could neither exist or subsist in actuality. Using this line of reasoning, Swedenborg concludes that there is a "nexus" and that it is "infinite" but like the Infinite itself the quality of the nexus is unknown.

Establishing the existence of the nexus is crucial to Swedenborg's argument because without it, there appears to be no reason or purpose of creation. Swedenborg writes: "If there were really no nexus, there would be no *wherefore*, or end in the case. The end stands related to the beginning; the last cause to the first; but such relationship would be impossible if there were no nexus, the mutual relationship of ends consists wholly in the nexus, whatever that may be" (Ibid., 95).

Although reason cannot ever discern the quality of the nexus, it can conclude that there must be a nexus between the first and final cause. In addition, because the first or efficient cause is Infinite, so the final cause must also be Infinite. The final cause cannot be for the finite because then all the effects would likewise be finite, and then the reason for creation would also be finite, and this would be contrary to the Infinite nature of the efficient cause. Swedenborg continues:

The whole sphere of the finite, or the universal world, must of course be referable to its own prime, beginning therein and terminating therein. Therefore the final or impelling cause cannot be in the means, but only in

the end itself; nor can it terminate in the finite sphere, but only in the Infinite. (Ibid., 95–96)

Clearly the finite or created world has within it a first cause and a last effect, or phrased differently, it consists of a natural series which contain natural ends, causes, and effects; however, Swedenborg in pursuing the question of the end or wherefore of creation was seeking to understand “the end for which these natural boundaries [themselves] were created” (Ibid., 98). These boundaries begin in the first entity that was produced by the first cause or by “the Infinite” and in this way “natural things become means to the infinite end” (Ibid.). Although such “an Infinite” cause ultimately cannot be found in the natural, still it must become connected or linked to the same cause by natural means. “Hence all things tend to enable natural means to conspire to that end, and as man is a means to it, so he too enters into communion with the same end . . .” (Ibid., 98–99).

Human beings are the last effect or means through which the final cause of creation can be realized, the smallest natural seed being the first. For, according to Swedenborg, “the final cause cannot be obtained but by ends, [thus] it follows that it cannot be obtained but by a peculiar subject which has ends; that is to say, by the finite, or by the world considered as finite” (Ibid., 104). If the final cause, can only be realized by ends and boundaries, there must be a first and a last. With regards to our planet, Earth, Swedenborg states that human beings, in fact, constitute the last effect through which the end contemplated by the Infinite may be realized.

According to Swedenborg, what differentiates the first natural effect or end from the last is that the first effect or end is mechanical or passive, while the last must be active. That is, it must be:

something that tends to contribute to the end of creation . . . and so in the ultimate mechanical or material effect of the world, there must a power and a principle which if not active and causative, is at least admmissive or receptive and by which the machine is enabled to acknowledge and to contemplate God. There must, therefore, be something that can comprehend the end, that can acknowledge the end, and acknowledge also, in fullness of faith, that the end is infinite. Without such a power and

endowment, an ultimate effect embodying the divine intention is inconceivable. (Ibid., 109)

Thus, it is necessary to ask, what is it about the human being that allows for the realization of “the Infinite” end, or what is it about the human that is either divine or receptive of the divine? According to Swedenborg, it is neither the sensual, which humans share with animals, nor the rational, which allows for the cooperation between the body and the soul, nor the soul itself for all these in themselves are finite, and they can only look to finite ends or produce finite effects. Eliminating these possibilities where then is the divine end in human beings? For Swedenborg, the divine end is realized in the human ability to acknowledge the existence of God. Human beings do this even though through reason, they are ignorant of His nature; despite this, men can and do acknowledge His existence. And they do this without the any sense of doubt. This brings an additional

privilege that by undoubting faith, he is sensible in love, or delight resulting from love, of a peculiar connection with the Infinite. But where he doubts, he does not acknowledge, and the divine is not in him. All divine worship proceeds from this fountain of faith and love. Thus the true divinity in man, who is the ultimate effect in which the divine dwells, is none other than the acknowledgment of the existence and Infinity of God, and a sense of delight in the love of God. (Ibid., 111–112)

This is thus the solution to the problem, and although reason alone cannot achieve this end of itself, all of our human faculties taken together can conspire to accomplish this goal.

With this realization that humans are the medium or means whereby the final cause is effected, Swedenborg takes leave of his argument concerning the final cause of creation and he turns his attention toward understanding the medium itself in the companion piece of his small volume: “The Mechanism of the Intercourse between the Soul and the Body.” This work is a forerunner of Swedenborg’s remaining philosophical works. As he stated:

For if there be simply a geometrical ground, of the most perfect kind, however, in the soul; if there be simply a mechanical ground, and this also equally perfect, we may then have hope of at last arriving at of a knowledge of it . . . But we may attain to knowledge on the subject, provided we assume the actuality of the soul . . . is a something most perfectly mechanical and geometrical. (Ibid., 229)

If this be granted, then it could be possible to use the tools of experience concerning the anatomy of the human body

. . . to arrive at some conclusion respecting the true geometry and mechanism of this most perfect entity. And if it pleases God to accord me life and leisure, it is my intention to show in detail at what stage of the inquiry I have myself arrived . . . The main end of these labors will be to demonstrate the immortality of the soul to the very senses. (Ibid., 230)

In both these essays in this small volume it is possible to witness Swedenborg's deepening affection and love of God. The love that inspired the *Principia* appears to be a love of God the Creator—the maker of an ordered universe. Whereas, a new love seems to emerge in *The Infinite*, which is focused on God the Redeemer, as well as the Creator.

God the Redeemer is a God of love, as well as a God of rationality and order. Perhaps it was Swedenborg's realization of the limits of reason that led him to seek God the Redeemer. While reason can discern the existence of the infinite Creator, it is not able to discover the qualities of God. Reason can discover that there must be a nexus between the Creator and His creation, but it cannot demonstrate that the medium of conjunction with the Infinite is, in fact, love. Thus, in these philosophical essays, Swedenborg emphasizes that all of our human faculties—our sensual, our rational, and our freedom and our capacity to love—serve in the realization of the final cause of creation, each in its own way.

In a similar vein, while Swedenborg was pondering the existence of the nexus, which reason suggests must exist, he turned to consider what insight might be gained through consulting revelation in this matter. To his mind, revelation confirmed what reason had surmised, that a nexus does exist, and furthermore, it can show what the qualities of the nexus

are. He discovers in the person of Jesus Christ an actual embodiment of the essential qualities required of the nexus.¹⁶

At this juncture, it is important to be pointed out that Swedenborg did not introduce revelation into his rational argument because he felt that his argument was weak, or that it was in need of mystical infallible support; rather he turned to revelation to learn what reason could not discover—namely a picture of the qualities of the nexus.

Thus, what is seen for the first time in this work is Swedenborg drawing together truths from rationality and revelation for the sake of human understanding and human faith. Revelation as he used it in the work was not a “stop gap” for reason, but was an independent and necessary source of truth. It supplied what the tool of reason, by definition, is unqualified and unsuited to do. Nonetheless, it is required for a human understanding of the Infinite and a relationship with it. For as he concluded this effort, he states that, “Among the skillful interpreters of the divine law, they again are happier who still have the faculty to engraft reason upon revelation and to make use of both as a means to a knowledge of things conducive to faith” (*Ibid.*, 232). This, Swedenborg felt, was the task of the Christian philosopher. And it was to the achievement of this end that his mind was increasingly directed. To lead humanity to faith through reason, such was the focus of his subsequent philosophical works.

Assessment

How does one assess Swedenborg's work on the Infinite without in some way contextualizing it, that is, seeing, in effect, how it is either similar or different from the views and discussions of others on this topic? I have chosen the work of A.W. Moore on *The Infinite* (2001) to assist me in that task. The first part of his book reviews the history of the infinite in Western thought. Upon reflection, what I found surprising was how

¹⁶ The human capacity to recognize, acknowledge, and finally worship the Infinite contains both the first and final cause of the Infinite. Over time humanity lost this ability to such a degree that the incarnation of the Infinite was necessary, and the Divine assumed the human and in this way “preserved the nexus of the Infinite and the finite by fulfilling in the human the purpose of the Divine” from Lewis Hite Introduction to 1908 *The Infinite* . . . Swedenborg, [1965], xii). Today humanity can partake of the final end of creation through the worship of the Lord Jesus Christ.

relatively late in the story of humanity the concept of infinity emerged to capture the sensibilities and imagination of people.¹⁷ It may be true that I am really noticing the relatively late emergence of philosophy itself, as a human activity, and not simply reflections on the infinite. Nonetheless, it is interesting that this pursuit requires, at a minimum, some sort of social stability and a value of individual self-consciousness, and its contribution to the pursuit of wisdom and the understanding of reality.

Comparative preliminaries¹⁸

According to Moore, we are indebted to Anaximander (610–546 BC) for identifying *To apeiron*, the boundless or the infinite, as the origin or all things, as well as their source of sustenance, and the place to which all will return. This is expressed in the small surviving fragment of his writing that has come down to us:

Into that from which things take their rise they pass away once more, as is ordained; for they make reparation and satisfaction to one another for the injustice according to the ordering of time (Russell 1945, 27).

Anaximander was from Miletus, and was taught by Thales (624–c.546 BC). Thales had proposed that the origin of all was water.¹⁹ Anaximander believed that water could not contain its opposite, and thus could not be the source of all. For him, the infinite, the imperishable, was viewed as the metaphysical underlying substance, and was, thus, conceived of as divine. The world of human experience, he viewed as “*peras*” or limited and, it was one of opposition, conflict, and injustice. In the end or in time, all would return and be one (atone) in “*To apeiron*.” His focus, was on what we would call the metaphysical infinite—the source and destiny of all that is.

¹⁷ The human in some form has existed on earth for 2.5 million years, modern humans for 200,000. Egyptian civilization stretched back to 4,000 BC in its earliest form, Judaism, starting with Abram emerged 1900 BC, The Mycenaean date from about 1600 BC and the Greeks with their alphabet around 800 BC.

¹⁸ This discussion draws on Moore’s presentation in his chapter One, pages 17-26.

¹⁹ Water corresponds to “truth” in the system of correspondences that Swedenborg revealed in his theological writings.

For Anaximander conceptualizing the boundless or the infinite provided a rational foundation for understanding reality—not so, for Pythagoras (c. 570 BC) and the Pythagoreans. They viewed the infinite as spatial—a dark chaotic void beyond the visible heavens. Thus, it was contrasted to the orderly, harmonious, and beautiful structured patterns of the physical world. Because it was limitless, it had no end or purpose; it was, in effect, waiting to be limited, and thus, by definition to become good and useful.

Natural numbers were central to their understanding of order. While Pythagoras and his school made important strides mathematically, their hope was that all physical phenomena would be able to be accounted for by numbers as they understood them, as either natural or rational. Their own work demonstrated that it could not. And while they may not have been consciously aware of the mathematical infinite, nonetheless it showed up to trouble them. “ $\sqrt{2}$ is not a ‘rational’ number” (Moore 2001, 22).

According to Moore, while many Greek thinkers continued to reflect in such a way that they were playing with both the metaphysical and the mathematical infinite, some more one than the other, they did not fully recognize the implications of their philosophizing or speculating on the nature of reality. Melissus of Samos (5th century BC), a member of the Eleatic school is identified as the person who ventured to present a clearly metaphysical understanding of infinity, when he state The One to be infinite. It was not extended, did not have parts, and it was not mathematically infinite. Zeno (c. 490 BC), who was also a member of the Eleatic school, famous for his paradoxes of motion, certainly was working within the realm of mathematical infinity. It could be said that both conceptions of infinity were now “impinging on Greek Consciousness” (Ibid., 26).

*Plato*²⁰

Plato (428-247 BC), recognized as one of the world’s most brilliant philosophers, was able to integrate past ideas into his own framework and provide fresh approaches to many problems, but particularly the meta-

²⁰ This section draws on Moore’s presentation in Chapter One pages 26-33 and from Gabriela Carone 2005).

physical infinite. He did not, however, use his mind to grapple with the vexing problems of the mathematical infinite.

Like other Greek thinkers before him, Plato, too, wanted to resolve the existence of opposites. As Plato worked with the concepts of *to apeiron* and *peras*, the boundless and what is limited or bound, he began to see them in relationship. *To apeiron* set the range of possibilities and *peras* then determined which of the possibilities was to be realized. *Peras* could, for example, harmonize opposites. Right values were necessary in order to control or direct the impact of *peras* on *to apeiron*.

The whole of the universe is ordered giving evidence of *peras* on *to apeiron*. According to Gabriela Carone in her work *Plato's Cosmology and its Ethical Dimension* (2005), Plato discusses *peras* in his work *Philibus*. She quotes him as stating that: it is through the imposition of *peras* upon *apeiron* that "all fine things in our realm" have come into being, such as the seasons (Carone 2005, 89). This points to *peras* as an explanatory factor of the goodness of the cosmos. "We do not live in a universe of chaos (which would be the case if *apeiron* prevailed), but one of order, and this order is at least partly due to *peras*. The universe then, is a mixture of *peras* and *apeiron* where the former prevails over the latter" (Ibid.).

An important question arises, however, which is: what is the relationship between *peras* and the Forms. While Carone informs us that for some scholars, *peras* is just another name of the Forms, others, whom she identifies as revisionists, find it impossible that *peras* could stand for transcendent Forms. She finds the first position difficult to sustain because in *Philibus*, *peras* is mixed with the boundless, and in the *Timaeus*, the Form "neither receives anything else into itself from anywhere else nor itself goes into anything else anywhere" (Ibid., 90). In addition in the end of *Philibus*, Forms are called "utterly unmixed" (Ibid.). Forms in both the *Timaeus* and *Philibus* are ungenerated. In fact, they are opposite to things that are created. *Peras*, on the other hand, is introduced or imposed on the unlimited, whereas Forms are stable, unmixed, and immutable. Forms, in their identity and eternity, ensure stability. In doing so they provide the intelligibility and stability provided by *peras*. While *peras* limits and binds, its ability to do so ultimately rests on Forms, "through the efficient agency of some intelligent cause" (Ibid., 91).

The world of Forms in Plato's understanding was the real world, while the observable, sensible world was one of appearances. The real world was transcendent, and the location and origin of everything good. The ideas or Ideals of the real world were archetypes of what is found imperfectly imitated in the sensible world. The Ideals were immutable and eternal, nonetheless it would seem that action and activities of the sensible world, in some way, participated in the transcendent Ideal. For example, acts of justice in human world participated in the Idea of Justice. The sensible world was the realm of opinion, while the real world contained true knowledge. Again, insofar as we understand the idea of justice, we participate in the real world.

Because the real world was supremely good, there was a unity of ideas there. According to Moore, this means that "there was a measure of the metaphysically infinite in reality" (Ibid., 28). While Plato saw the real world as eternal and immortal, for him that meant it was timeless, not necessarily infinite in the sense of there was an "infinite" good or true. This would seem to place *to apeiron* in the world of appearances, apart from what Moore calls Plato's idiosyncratic use of the term. This fits with Carone's view that Plato's universe was a mixture of *peras* and *apeiron*.

This might indicate that Plato acknowledged the mathematical infinite. That is doubtful, however, because he did not accept the idea that the world was spatially infinite. He, like Parmenides, believed that the world was spherical. Nonetheless he did see infinite diversity in the world, perhaps creating a paradox with the concept of unity in which the world of appearance participates. Would infinite variety create the same issues? To a certain extent these questions are moot, because his deep interest in what is ultimately real did not encourage him to pursue the difficult issues that involve the mathematical infinite (Ibid., 29).

*Aristotle*²¹

Aristotle (384–322 BC), student of Plato, changed the conversation about the infinite. While he accepted, like those who preceded him, that it referred to something basic or fundamental from which other things are

²¹ This section draws on Moore's presentation in Chapter Two, pages 34-44.

derived, he did not view it as either immaterial or transcendent. A common thread among his predecessors was that the infinite was eternal, ungenerable, and indestructible. There was less clarity, however, about whether it was a substance in its own right or a property belonging to other substances or entities. By Aristotle's time the idea that there was one primordial substance had been replaced by the idea that there were a multiplicity of them—perhaps an infinite number. He believed that the only way one could make sense of it was to view it in spatio-temporal terms.²²

For Aristotle, the question was: was there anything in the natural world that was, in fact, infinite.²³ While earlier conceptions of the infinite focused on it being unbounded or unlimited, Aristotle seized on it being fundamentally untraversable. But in what sense? He did not intend to focus on things that would make no sense to traverse, but he was interested in what was practically impossible to traverse because it goes on forever. Moore identifies Aristotle as a naturalist, who was essentially interested in the mathematical infinite.

Despite the fact that Aristotle identifies the infinite with the physical or natural untraversable, he was at pains to argue against its existence. He argued against Anaximander, that the infinite is a substance in its own right. If it was a substance it would have parts, and those parts would have to be infinite—an idea that he felt was patently illogical. He also argued against the atomists, that it could be a property of plurality.

Aristotle explored the infinitely small and the infinitely big, and in the end he concluded that no-thing could be infinite. But that did not satisfy

²² It is interesting to note that when wishing to understand Aristotle's view of the infinite in an internet search, one is referred to his work on *Physics* (and that is the one work that Moore references, apart from Aristotle's Complete Works). However, if one wants to know about his view of God, one is referred to his *Metaphysics*, or *De Anima*, and *De Coelo*. In his work *Metaphysics*, Aristotle discusses unmoved movers. The source of all movement is the Prime Mover. It is substance, and is itself, unmoved. It is an intelligent being with everlasting life, and Aristotle refers to this Prime Mover, as God. "The Prime Mover causes the movement of other things, not as a efficient cause, but as a final cause. That is, it is the purpose, end or *telos* of the movement (http://www.scandalon.co.uk/philosophy/aristotle_prime_mover.htm). While this discussion is somewhat outside the discussion of the infinite, as portrayed by Aristotle, it is relevant to ideas that Swedenborg took from Aristotle and form part of his own understanding of the Infinite.

²³ For Swedenborg, the question did not just concern the natural world, but was even broader; he asked, Is there an infinite or not?

him. The infinite not only still intrigued him, but he was drawn to exploring arguments that favored the existence of the infinite.

There were three arguments that caught Aristotle's attention, in particular, and encouraged him to seek a solution to them. As Moore states them, they were:

1. Time seems infinite by addition and division;
2. Matter seems infinitely divisible, and did not have any indivisible constituents;
3. It seemed a priori truth enshrined in mathematics that not only the sequence of natural numbers was infinite but that space itself was infinite (Ibid., 38).²⁴

Aristotle's solution to these issues was the idea that "there is no objection to something being infinite *provided that its infinitude is not there 'all at once'*" (Ibid., 38). Thus one could say that "The infinite exists potentially but not actually" (Ibid.). According to Moore, this is clearly Aristotle's greatest contribution to the continuing conversation about the infinite.

Aristotle was able to refute the existence of the spatially infinite empirically and he let those arguments stand. When confronted with the necessity of accepting the infinite on other grounds, what he did was to accept the potential infinite. To him, it was the actual infinite or the metaphysical infinite seem incoherent or untenable. To Aristotle the infinite was the untraversable endlessness; thus, to him any conception of the infinite wholly or totally present was incomprehensible.

Thus, it can be claimed that Aristotle was the first to truly embrace the reality of the mathematical infinite, and he framed the conversation for almost all future discussions about it. One difficulty remained however, and that was with the identity of the untraversable with the infinite. His conception works for the future, but what about the past, that has, in fact, been traversed? It worked for Aristotle, because he believed that time and motion had never begun. However, this conception was a stumbling block for others to fully accept his views.

²⁴ Aristotle was able to demonstrate that time and space were infinite by division, and given the fact that there was no end to counting, conceiving the infinite number of natural numbers was satisfactory.

*Plotinus*²⁵

Plotinus (205–270 CE) is the first significant philosopher to be considered in the post-Christian era. While he was not a Christian himself, his Neoplatonism provided a spiritually compatible philosophical framework for the Church. There may even have been something about the emergence of Christianity that provided a renewed openness to considerations of an utterly transcendent realm, and the acceptance of a sharp division between the appearance and reality to which Aristotle had been so hostile. Plotinus equated the world of the transcendent and the real or the metaphysically infinite with concepts such as: The One, The Good, and God. Plotinus made it clear that the infinite was self-sufficient, perfect, omnipotent, autonomous, complete and quite beyond our finite experience and comprehension. Nonetheless, he attempted to find words that would adequately convey the otherness of the infinite. Moore relates that Plotinus made “one of the first explicit identifications of the infinite with God” (Ibid., 46). As a result of the impact of Plotinus, the infinite lost the negative connotation associated with it held by the Greeks, and, in fact, became quite positive.

Even though Plotinus was an extremely strong proponent of the metaphysical infinite, nonetheless, he incorporated some Aristotelian ideas of the mathematical infinite into his conception of the sensible world. He denied the idea of an infinite number, but he accepted that there was an infinitude of time which identified a tending toward perpetual futurity.²⁶

*St. Augustine*²⁷

St. Augustine (354–430 CE) was the Church father who first attempted to integrate Neoplatonism and Christianity. He, like Plotinus, discounted a naturalistic approach to defining the infinite; thus, he recognized an

²⁵ This section draws on Moore’s presentation in Chapter Three, pages 45–46.

²⁶ From a Swedenborgian perspective perhaps what is at issue are two different realities associated with the infinite: one which distinguishes between The Infinite and the Finite (a Metaphysical distinction), and one that recognizes infinity within the created world, a world that mirrors the infinite Creator, but which can “to infinity” never equal it. It is therefore untraversable and mathematically infinite.

²⁷ This section draws on Moore’s presentation in Chapter Three, pages 46–47.

infinite that was more than potential. However, because of the radical divide between the Infinite and the finite, we could not have direct empirical, observational experience of it. God's infinitude was transcendent. The fact that God created the world indicated that it was bounded by his knowledge, but in a way we cannot understand. Augustine, in agreement with Plotinus, accepted the idea that time was infinite but with the important caveat that it was never wholly present. The future did not exist in the present. If it did, then the potential infinite would merge with the actual. This notion had bearing on the concept of God's eternity, which must therefore be viewed as outside of space and time.

Despite his heavy indebtedness to Neoplatonism, Augustine, like other religious and Christian thinkers could not completely ignore Aristotle. There were two problems in particular: 1) If there were no actual infinity in the natural world, in what way could God, in fact, be omnipotent? 2) If the world was infinitely old, as Aristotle believed, given the Christian belief in the immortality of souls, would there be an infinite accumulation of souls, or an actual infinity of souls?

The first problem raised the question of God's ability to create an actual infinity? If he cannot, is He, therefore, not all powerful? The resolution of this question was not addressed by Moore in his review, and therefore, perhaps not by the Church fathers. However, it would seem that metaphysically, the Infinite must be One and indivisible. The finite world, the created world from the moment or act of creation, however, is a world of time, space, and matter that moves toward the infinite but can never reach it.

The second problem was tackled by the early Christian church and, for the most part, it disappeared by accepting the traditional biblical understanding that the world was created and not infinitely old.²⁸

*St. Thomas Aquinas*²⁹

St. Thomas Aquinas (c. 1224–1274 CE) was a Christian philosopher that had enormous influence on the thought of the Christian Church. He

²⁸ This view conforms to modern science and the idea of "the Big Bang."

²⁹ This sections draws on Moore's presentation in Chapter Three, pages 48–49.

was responsible for bringing Aristotelianism within the ambit of Christianity. Moore claims that he is perhaps the third most influential figure in the history of Christianity, after Jesus, himself, and St. Paul. As a Christian, Aquinas was committed to the Neoplatonic metaphysical infinitude of God. He portrayed God as self-sufficient and perfect. However, he was not perfect in a mathematical sense, because that would imply that he had parts, and therefore, imperfect. Asserting God's perfection, as always, raised the question of the existence of evil in the world. Aquinas handled this objection with the response that God allowed the existence of evil as a way to bring out good.

Aquinas' view of the natural world was fundamentally Aristotelian. Creation was neither self-sufficient nor did it contain anything that was metaphysically infinite. In addition, there was no mathematical infinite to be found in nature, neither of magnitude nor multiplicity. While we might be able to know an indefinite variety of green or any other colored thing, Aquinas did not think that this conflicted with his view of the absence of the infinite in nature.

Aquinas did not have a problem with the question on the limitation of God's omnipotence in nature by indicating that demanding that God do the impossible was not actually a threat to His omnipotence. This supposed contradiction would be similar to asking God to create the uncreate as if that truly challenged His all-powerful nature.

Aquinas' response to Aristotle's claim that the world was infinitely old differed from his predecessors. He did not think that recourse to the Christian tradition of a created world was sufficient; the source of the tradition was revelation not empirical observation. It was not an appeal either to our senses or to reason. This issues was made more complex by the additional Christian belief in the immortality of the soul. While Aquinas attempted various rational explanations to overcome these issues, he used the idea of reincarnation to resolve the matter—a most Aristotelian solution.

*Nicholas of Cusa*³⁰

Despite the authority of Aquinas and a wide embrace of Aristotelianism, Nicholas of Cusa (1401–1464 CE) breathed new life into the Platonic view. In fact, he developed a robust conception of the metaphysical infinite. Moore notes a strong resemblance between his views and those of Plotinus.³¹

Nicholas characterized the infinite in various exalted ways: God, Truth, Absolute Maximum. However, he was quick to point out that any term was inadequate and false, because it was essential for us to realize that we could never grasp it in itself, nor find a fitting comparison to it. True wisdom required our absolute humility in the face of the Infinite, due to our utter ignorance.

What we are left with is “crude, partial, and confined” (Moore 2001, 55). We might seek deeper and more complete enlightenment, but we could not achieve the truth of it without becoming it. Just as a polygon inscribed in a circle would never become the circle, the finite could never be made into the infinite.

The metaphysical infinite, according to Nicholas of Cusa, was beyond all finite categories, thus where we cannot tolerate contradictions, it is perhaps possible that the infinite is both the absolute maximum and the absolute minimum. From his perspective, our finite modes of thinking made it impossible for us to either describe or define the infinite. Any attempt, as stated earlier, would lead to falsification.

Even though Nicholas of Cusa discussed these matters philosophically and rationally, it was his Christian faith that drew him to the infinite, and he was certain that faith opened us to an ineffable experience with “God.” In addition he was convinced that his own finitude made sense in face of the infinite. He believed that human beings were glimmerings of the infinite, because God was immanent as well as transcendent. The natural world from God’s perspective was finite, from ours it was without external limitation. As Nicholas of Cusa wrote: “Since the universe em-

³⁰ This section draws on Moore’s presentation in Chapter Three, pages 55–56.

³¹ The roles of these two philosophers in the unfolding of sacred history could be usefully explored from a Swedenborgian perspective.

braces all things that are not God, the universe cannot be negatively infinite, although it is boundless, and thus, privatively infinite” (Hudson 2007, 73). As Hudson, goes on to explain, “The universe is not strictly infinite because, of course, it is not God and is privatively infinite. Granted the universe has only a limited infinity, and at least an eternity in the divine being, but nevertheless these concepts herald the dawn of a new science”(Ibid., 74).³²

From Moore’s perspective the concept of the “privatively infinite” opens the door to the mathematical infinite. This property of the realm of appearances is an image of the underlying metaphysical infinite, within the world of space and time. As Hudson indicates, Nicholas of Cusa offered a Christian philosophical foundation for the development of the natural sciences.

*Rene Descartes*³³

Rene Descartes (1596–1650 CE), mathematician and philosopher, is often considered the father of modern philosophy and a proponent of rationalism. He was also a metaphysical dualist, making a distinction between the substance of the mind (*res cogitans*) and the body (*res extensa*). He then made a distinction between God, the infinite thinking substance, and finite minds/souls, or finite thinking substance. Each finite thinking substance (each particular mind or soul), and each extended substance (each particular body) is created. Descartes believed that there was only one infinite substance, but lots of finite substances; thus he was pluralistic about created substances.

Within the rationalist perspective, the infinite takes on greater reality than the stuff of sense experience. He developed a method to demonstrate that by doubting all beliefs about reality, one could rationally come to real knowledge or eternal truths. Using this method, Descartes argued that reason alone determined knowledge, and it did so without the aid of sense experience.

³² To be privatively infinite, according to Cusa, means to be of limited infinity.

³³ This section draws on Moore’s presentation in Chapter 5, pages 75–76.

Knowledge of the infinite was an essential eternal truth that reason can demonstrate to us. In fact, it was both logically and epistemologically prior to the finite. According to Moore, Descartes made bold use of this idea in one of his arguments for the existence of God. He attempted to demonstrate that since God alone was truly infinite, our knowledge of the infinite was due to the fact that he had implanted the idea in us; because of our limited finite nature, it would be vain to question it because we simply did not have the tools to do so. However, while Descartes believed that we could touch it, that is, acknowledge it by means of reason, we could not/should not speculate about its nature, either metaphysically or mathematically. Our limited finite nature made such exercises meaningless.

*Baruch Spinoza*³⁴

Baruch Spinoza (1632–677 CE) wrote a letter to his friend Ludwig Meyer on the nature of the infinite in 1663. In it, he gives an overview of his reflections on the topic, and thus, it seems a good place to begin a presentation of his views. He asserts that many have found the topic difficult, if not insoluble. However, he wrote that they had gone off on the wrong track because they failed

to distinguish between that which must be infinite by its very nature or by virtue of its definition, and that which is unlimited not by virtue of its essence but by virtue of its cause. Then again there is the failure to distinguish between that which is called infinite because it is unlimited, and that whose parts cannot be equated or explicated by any number, although we may know its maximum and minimum. Lastly there is the failure to distinguish between that which we can apprehend only by the intellect and not by imagination, and that which can also be apprehended by imagination. (Spinoza 1992, 268)

Toward the end of his letter, he wrote the following:

³⁴ This section draws on Moore's presentation in Chapter 5, pages 77–78.

From all that I have said, one can clearly see that certain things are infinite by their own nature and cannot in any way be conceived as finite, while other things are infinite by virtue of the cause in which they have their being, and when the latter are conceived in abstraction, they can be divided into parts and be regarded as finite. Lastly, there are things that are called infinite, or if you prefer, indefinite, because they cannot be accurately expressed by any number while yet being conceivable as greater or less. For it does not follow that things that cannot be accurately expressed by any number must necessarily be equal, as is evident from the given example and from many others. (Ibid., 271)

Moore's review of Spinoza captures these distinctions. He states that Spinoza, in line with Descartes, viewed God as positively infinite and could be understood by the intellectual or rational mind, but not in the imagination. Perhaps we could say that the rational mind can acknowledge the existence of the infinite, so defined, but cannot imagine its qualities—that is, how it works or operates. However, unlike Descartes' Christian dualistic framework, Spinoza was a pantheistic monist. He believed, and attempted to prove, that the infinitude that was God or *Deus sive natura* was an indivisible unified whole, the essence of which was all that existed—the all in all. The very nature of His infinitude was such that “nothing else could exist, lest it should limit Him” (Moore, 77). He could not be divided into parts, without becoming finite. The one true eternal substance was none other than *Deus sive natura*—transcendent and immanent. Without beginning and without end, everything was an expression of God. As Moore relates, “Since God's reality was over every kind, one of His attributes had to be (physical) extension, . . . bodies were not anomalies or illusions in this scheme of things, they were . . . determinate ‘modes’ by means of which God's extension was expressed” (Ibid., 77–78).

Spinoza's view of the infinite was radically metaphysical; however, his conception of extension allowed him to discuss what he called “infinitude of its own kind.” He classified both space and time in this way. That is, each dimension had no limit in its own sphere. In this way, according to Moore, Spinoza reformulated the distinction between the metaphysical and mathematical notions of the infinite. What we see is a metaphysical concept of reality that contains mathematical characteristics.

*Leibniz*³⁵

Gottfried Wilhelm Leibniz (1646–1716 CE), like the rationalists that preceded him, according to Moore, believed that the infinite could be apprehended by the intellect, but not by the imagination.³⁶ Leibniz affirmed a metaphysically absolute God, who was outside of space and time, and who had no parts and preceded all composition. The infinite that Leibniz was referring to that was commendable to human reason was the mathematical infinite.

Nachtomy in his paper on “Leibnizian Encounters with Infinity” suggests that Leibniz developed a more sophisticated view of the infinite number after reading Galileo. He writes: “Leibniz’s response to Galileo was also to change his current view regarding the infinite, culminating in a syncategorematic understanding of mathematical infinity” (Nachtomy, *op. cit.*).³⁷ While infinite quantities cannot be identified with a whole, they can be viewed as variable multiplicity that can be increased or decreased (Nachtomy, *op. cit.*).

According to Nachtomy, Leibniz had different approaches toward the absolute and actual infinity of God, and the sort of infinity that is associated with either the very large or the infinitesimally small. The infinity of God is non-quantitative, while the lowest degree of infinity applies to quantities, and therefore, is quantitative. Thus, Leibniz has one approach to metaphysical infinity and another to mathematical infinite.

However, in Moore’s discussion of Leibniz, he quotes Leibniz in a letter to Foucher in the following way:

I am so much in favor of the actual infinite, that . . . I hold that nature affects it everywhere, in order the better to mark the perfection of its author. So I believe that every part of matter is, I do not say divisible but actually divided. (Moore, 79)

³⁵ This section draws on Moore’s presentation in Chapter Five, pages 78–79.

³⁶ Ohad Nachtomy, however, asserts that Leibniz, in contrast to Pascal and Descartes, “argues that infinity is commendable to human reason. The infinite, he believes, need not be feared but rather admired as an expression of God’s essence and wisdom” http://www.gwleibniz.com/l_sna_houston/abstracts/nachtomy.pdf accessed on October 15, 2013.

³⁷ Syncategorematic is defined in the following way: when a term has meaning only in conjunction with a denotative expression or has no meaning when standing by itself. The categorematic come from Aristiole’s categories.

For Leibniz, space and time are systems of relations. He explained this to Samuel Clarke (1675–1729), a well-known disciple of Newton (1642–1727) in their now famous correspondence, in the following way:

As for my own opinion, I have said more than once, that I hold space to be something merely relative, as time is, that I hold it to be an order of coexistences, as time is an order of successions. (Third Paper, § 4: G VII.363/Alexander 25-26)

Thus, we find Leibniz not only in disagreement with Galileo, but also with Newton, who held a belief in the idea that the world is finitely big and is composed of a finite number of atoms that are indivisible.

In addition, Leibniz considered space and time to be abstractions and idealizations (McDonough, 2008, <http://plato.stanford.edu/archives/fall2008/entries/leibniz-physics/>). Moore reports this as Leibniz' belief in the unreality of space and time. Since there were no "wholes" of space and time, they did not fit the requirements to be metaphysically real. According to Moore, this notion of syncategorematic nature of space and time brings Leibniz closer to Aristotle's naturalism, and his view of the mathematical infinite.

Emanuel Swedenborg's infinite: a comparative exploration

Emanuel Swedenborg's philosophical understanding of the infinite has the following characteristics:

1. It is metaphysical
2. It is dualistic
3. The infinite and the finite are radically other
4. Reason is a tool to perceive what is created and what is revealed
5. The human mind has innate desire to philosophize on the unknown
6. Reason should not be used to compare the infinite with the finite
7. First question to be asked about the infinite is one of existence not quality
8. A priori answer to the question about the existence of the infinite

9. Reason has established that the infinite does not exist in nature
10. What is the cause/first principle of nature? a) nature, b) accident, c) nothing, d) the Infinite
11. Only the infinite could be the first principle of the finite
12. The infinite is "a being that involves no quantity, no extension, and no relation to quantity or extension; no relationship or proportions whatever, no likeness, i.e. no finite"
13. The infinite has no cause, no origin, it simply is
14. A posteriori argument that the whole world emerged from the same least and primary finite
15. The first finite contained all "that one can naturally dream of or imagine."
16. The first finite contained things on the greatest scale, and on the minutest scale
17. The first finite contains such a whole, and gives rise to such variety and distinctness
18. The contemplation of nature leads us to wonder about the intelligence in the cause
19. The circumstances of all contingencies [and indefinite perfections] in the finite conspire to a single end—a pre-eminent Being in the cause and infinite intelligence in the Being
20. The finite was created immediately from the infinite, because a least or greatest finite would be equivalent to nothing; which proves that the two must be distinct
21. There is no ratio between the infinite and the finite; however, the mind seeks a nexus
22. Because one is cause and the other causate, the causate depends on the cause, thus there must be a principle derived from the cause in the causate
23. The nexus provides the wherefore or the purpose of creation, because the end stands related to the beginning as the last cause to the first
24. Because the first or efficient cause is infinite, the final cause must also be infinite
25. Therefore the final or impelling cause cannot be in the means, but only in the end itself; it cannot terminate in the finite sphere, but only in the Infinite

26. All things tend to enable natural means to conspire to that end, and as humanity is a means to it, so we too enter into communion with the same end
27. Human beings are the last effect or means through which the final cause of of creation can be realized, the smallest natural seed being the first
28. The first effect or end is mechanical, while the last must be active
29. The last must be able to comprehend and acknowledge the end of creation, and that it is infinite
30. What is it about the human beings that allow for the realization of “the Infinite end”?
31. It is not the sensual, the rational, or even the soul—all these are finite and they look to finite end and produce finite effect—it lies in the human ability to acknowledge the existence of God, the infinity of God, and a delight in the love of God
32. Reason alone cannot achieve this end, but all of our human faculties taken together [love and worship] can conspire to accomplish this end.

In this overview and assessment, nine philosophers were chosen to be examined and compared with Swedenborg. Swedenborg had a shared understanding about the infinite with some of them more than with others. He also has a focus that appears to be uniquely his own given this comparative sample. He is most closely aligned with Plotinus, Nicholas of Cusa, Plato, and Descartes and in that order.³⁸ All of them had a focus on the metaphysical infinite. They also were dualistic, although the nature of the distinctions were not always the same. It was for some, the real versus appearance, for others the metaphysical infinite and the sensible finite, and for one, the mind and the body. For the most part, they maintained

³⁸ Just as I developed the list of characteristics that identify Swedenborg’s view of the infinite, I did the same for the other philosophers in this comparative study. The list of characteristics were of different sizes, and I then searched for which characteristics on each list were similar to those of Swedenborg. I then determined what the percentage was. For example I created a list of eight characteristics concerning the infinite from my text for Plato. I noted that Swedenborg shared 4 characteristics strongly, and 1 weakly, out of a total of eight. Thus, Swedenborg shared 56% of the characteristics listed for Plato, and so forth. He shared 72% of the characteristics associated with Plotinus, 65% with Nicholas of Cusa, and 50% with Descartes.

that the transcendent world was the cause or origin of the natural world, and intelligence was found in the cause; it was also often identified with the good, the true, the One, and God. The infinite was associated with the immutable, the eternal, the timeless, and what is complete perfection. While reason could acknowledge the infinite, it was also beyond our experience and comprehension. Certainly for Plotinus and Nicholas of Cusa, the infinite was totally other, and beyond all finite categories, and for Descartes, its otherness made speculation about it meaningless. Again for Plotinus and Cusa, there was some openness about the mathematical infinite in the sensible world (a concept that is essentially outside of the Swedenborg's interest).³⁹

With regard to the infinite being immanent in the world, a view held by Cusa and one which he connects to humanity in their "glimmerings" of the infinite, we see some connection to Swedenborg's concept of the nexus, and the need to discover the final end in creation. Interestingly enough this is in fact where Swedenborg and Aristotle connect. While, Swedenborg, like Aristotle, affirmed that no-thing is infinite, he does not buy into Aristotle's naturalism and his desire to place the question of the infinite in spatio-temporal terms. Thus, Swedenborg does not really delve into his *Physics*, where Moore and others have identified Aristotle's essential teachings on the infinite. Rather, he was drawn to Aristotle's *Metaphysics*, and his discussion of the Prime Mover. For Aristotle, it is the first of all substance, and is the source of the movement of other substances, while it is itself unmoved. Aristotle further identifies it with everlasting life, and identifies it as "God." The Prime Mover is not the efficient cause of the movement of other things, that is, it does not push them, but it is the reason, purpose, end or telos of their movement (http://www.scandalon.co.uk/philosophy/aristotle_prime_mover.htm). Swedenborg, clearly, incorporates this Aristotelian concept into his discussion of the nexus and the "final cause of creation."

Thus, it is important to note that while there is not a great deal of agreement found between Aristotle and Swedenborg in the characteristics

³⁹ Swedenborg does say that: "reason has established that the infinite does not exist in nature," and that "even the least and greatest finite are as nothing in relationship to the infinite." Swedenborg does not engage in a discussion of the mathematical infinite, perhaps primarily because he views the finite as so completely other. Thus, such a discussion held no interest for him and was therefore meaningless within the framework of his focus.

of the infinite, per se; nonetheless, it is inconceivable that Swedenborg could have written his work *The Infinite* without a deep appreciation and indebtedness to the philosophy of Aristotle.⁴⁰

There is a fair amount of agreement between Swedenborg and St. Augustine, an early Christian Church father who used Neo-Platonism as a foundation for Christianity. This places him in the metaphysical camp that saw a radical divide between the infinite and the finite. He also did not endorse the idea of a naturalistic infinity. The infinitude of God was transcendent, and we could not have a direct empirical experience of infinity. It would appear that what he meant was that human beings could not sensually observe the infinite. It is not clear what status he granted Scripture or Revelation—did they provide a glimpse of the infinite or not? He did wonder if the infinite is not present in the natural world, and if so, whether that could be viewed as a limitation on God's omnipotence? Some of his concerns were not central to Swedenborg's view, thus, reducing their overall agreement, not so much due to differences, but to focus.⁴¹

Leibniz affirmed a metaphysically infinite God who was outside of time and space, and who had no parts, and who could be apprehended by the intellect but not by the imagination. Swedenborg would be in agreement with these ideas. However, since Swedenborg was not focused on the mathematical infinite, some other characteristics of the infinite important to Leibniz were not relevant to Swedenborg, even though it is possible that Swedenborg might not have disagreed with them.⁴² Nonetheless, in terms of his general philosophy or more specifically his Monadology and pre-established harmony, Swedenborg would certainly have distanced himself, but we will take this up toward the end of this chapter.

Swedenborg, like St. Thomas Aquinas, is committed to the idea of the metaphysical infinitude of God, and the lack of self-sufficiency of creation; these two principles identify the strongest areas of agreement between the

⁴⁰ In finding a percentage of agreement between Swedenborg and Aristotle, there was an agreement between them on three out of fifteen points of Aristotle's points or 20%.

⁴¹ When I first found a percentage of agreement between Swedenborg and St. Augustine, I put the level of agreement at 44%. Giving some positive weight to the areas of difference of focus, it brought the percentage of agreement to 55% or a bit higher than Descartes with Swedenborg.

⁴² The level of agreement with Leibniz was 44%, but that is because five of the characteristics deal with the mathematical infinite.

two men.⁴³ However, Aquinas, along with some of the other philosophers we have discussed, points out the self-sufficiency of God as well as His perfection, although for Aquinas it was not in a mathematical sense. It seems good to pause here and raise a question about the idea of God's self-sufficiency. What is the purpose of creation if God is self-sufficient? In addition, what is the relationship of such a God to His creation? While Swedenborg does state that God is wholly other, he portrays Him as connected and related to his creation. His conception will be examined later in a discussion of Swedenborg's unique contributions to understanding the Infinite. One of the reasons that there may be less agreement between Aquinas and Swedenborg (than between him and some of the other philosophers in this comparative assessment) is Aquinas' embrace of Aristotle, in general, and specifically in relation to the infinite.

Aquinas, it appears, did not acknowledge that creation had a beginning, and seemed to have accepted, as did Aristotle, that the world was infinitely old. At the time he wrote there was no empirical evidence to the contrary and he could not accept the scriptural or revealed account of creation precisely because it was itself not empirical. This led him to propose reincarnation in order to solve the problem in an Aristotelian manner. The inability of Aquinas to accord Scripture some sort of equivalency to sensual observation leads back to the question of a relationship between God and His creation. If humanity cannot know God because we, who are finite, cannot know the infinite, would God reveal Himself to us? Would He offer us images of how He is suited to who we are? Although in his philosophy Swedenborg views revelation as a source of human knowledge, it is a theme that he returns to in his theological writings.

Aquinas also explored the relationship between God's perfection and the existence of evil in the world. The implicit question is, how could a perfect God create an imperfect world? Aquinas argued that evil was permitted by God in order to bring out the good. While this is not a question Swedenborg tackles within his philosophy of the infinite, he addressed this issue later, and focused on the association of evil with

⁴³ Swedenborg held four characteristics of the infinite in common with Aquinas out of his eleven characteristics or 36%. However, he would strongly disagree with Aquinas on the question of reincarnation and the lower status of scriptures and revelation to empirical observation.

human freedom. Thus, he emphasized that God's providence always looks to and provides for the good.

Swedenborg's presentation of the infinite differed most radically from that of Baruch Spinoza. I found only one proposition of Spinoza's with which Swedenborg would be in agreement—the metaphysical nature of the infinite.⁴⁴ But what is metaphysical for Spinoza is *Deus sive natura*. In his view everything is an expression of God; there is no other. Thus, Spinoza's system is simultaneously monistic and pantheistic. If this were not the case, according to Spinoza, God/nature would be limited, and what is limited is not by definition infinite. According to Spinoza, the attributes of God had to be physical extension. Swedenborg, in fact, quoted a passage from Spinoza in his *A Philosopher's Notebook* (1931, 344) that involved that very idea: "God has attributes wherein, in a more eminent way, are contained all created things." As already mentioned, several times in *The Infinite*, Swedenborg makes disparaging remarks about philosophers that equate God and nature.

This review and analysis has shown that Swedenborg held many views about the infinite in common with the philosophers who preceded him, although there was a wide range of commonality, from barely any with Spinoza to a high degree of fit with Plotinus. However, Swedenborg did not just echo positions from the past; he put forward a new approach to the infinite. He rooted his position firmly in his understanding of the Infinite Christian God.

Swedenborg started with a view held by many of his predecessors, that only the infinite which is "radically other" could be the first principle of the finite. That infinite created what he called "the first finite" immediately, by producing a finite substance that contained such a whole that it could give rise almost endlessly to an incredibly varied and distinct universe both in the large and in the small. Many philosophers have remarked on the amazing variety found in the world, but Swedenborg highlights the necessity of immediate creation and the inherent richness of the first finite that was created. Swedenborg, in the company of other philosophers, indicated that contemplation of the wonder that is the cre-

⁴⁴ In finding a percentage of agreement between Swedenborg and Spinoza, there was an agreement between them on one of fourteen of Spinoza's points or 7%.

ated world both on the greatest scale and in the least reveals an immensity of indefinite perfections that point to a “pre-eminent Being in the cause and an infinite intelligence in the Being” (Swedenborg, 1908, 89). Swedenborg, however, did not stop there. Because while others saw that there is no ratio between the infinite and the finite, Swedenborg wrote that the mind seeks a nexus. Thus he turned his attention to explaining not only the need for the nexus, but how it worked. This is his unique contribution to understanding the infinite.

First he identified the infinite as the cause, and the finite as the cause. Because the cause is dependent upon the cause, he wanted to find the principle derived from the cause in the cause.⁴⁵ That principle, he wrote, is the nexus (or found in the nexus). It provides the end or purpose of creation, because the end stands in relationship to the beginning, as the last cause to the first. For Swedenborg, the infinite is the first or the efficient cause, thus the final cause must also be in the infinite or be infinite. The final cause cannot be in the means but only in the end; nor can it terminate in the finite, but only in the infinite. According to Swedenborg, if it terminated in the finite, “then all the effects would be for the same, and the efficient cause would have no end to exist for. This would be at variance with its infinity” (Swedenborg, 1908, 95). All of creation thus, must tend toward that infinite end, as humanity is a means, so we, too, enter into communion with that same end. In fact, humanity is the last effect or last means of creation; thus, it is means whereby the final end of creation can be realized. But why? What is it about human beings that distinguish them from the rest of the finite created world?

Swedenborg viewed the smallest natural seed as the first end or effect. He saw it as mechanical; whereas, he wrote that the last effect must be active or responsive. That is, it must be able to comprehend and acknowledge the end or purpose of creation—that it is Infinite. Swedenborg, then identifies human qualities that enable the connection between them and the Infinite. Reason, he wrote, can teach us what the “divine principle” consists: namely, that they have the ability to acknowledge (reflectively or freely) the existence of God, the infinity of God, and to feel delight in the love of God.

⁴⁵I have no doubt that Swedenborg was deeply indebted to Aristotle for this way of thinking.

With the previous philosophers we have seen human reason, understanding, and discernment used in discussion of the infinite. Swedenborg, however, introduced two new concepts: acknowledgement and love. The introduction of these concepts created a platform for the final cause, and fundamentally altered the discussion of the infinite. Even though Swedenborg asserted that we can know that the Infinite is, and that there is a God, by way of reason, and he made the same claim about nexus; he also was clear that we cannot know what the infinite is, what the quality of God is, or what the next is, by way of reason. And yet, by introducing acknowledgment and love, as the divine principle in the nexus, he has humanized the infinite.

Not only did Swedenborg add a new dimension to the infinite by introducing the concepts of acknowledgment and love, but he was clear that reason alone could not achieve the final end. He stated that neither the sensual, the rational, or even the soul allow for the realization of the final end, because they are finite; but acknowledgment and love, on the other hand, are boundless and endless. Thus, Swedenborg wrote, reason alone cannot achieve this end, but all of our human faculties taken together [freedom, reason, love, and worship] can work together to accomplish this end.

Swedenborg altered the conversation at a time in history when few were open to exploring the implications of such a shift. Swedenborg, in the 1730s wrote to overcome the divide between faith and reason. He wrote at a time when men of reason went one direction, and men of faith another—regardless of the subject at hand. Thus, when the focus was as lofty as the infinite itself, it is not surprising that Swedenborg’s attempted synthesis was essentially unnoticed and did not have an impact on the subsequent conversations.⁴⁶

⁴⁶ There was one review of this small work by Swedenborg. It appeared in the *Acta Eruditorum* in December of 1735. While the reviewer presented a brief overview of the arguments of both essays, his commentary is only focused on the second essay “The Mechanism of the Intercourse between the Soul and the Body”. While his philosophy concerning the infinite did not enter the conversation, when he enlarged on these themes in his theology, none other than the philosopher, Immanuel Kant (1724-1804) engaged Swedenborg’s thought. While he mocked it in *Dreams of a Spirit Seer*, 1766, recent dissertations on Kant suggest that some of Swedenborg’s views were incorporated into Kant’s mature philosophy. See Gregory R. Johnson, 1999, and Dan Synnestevedt, 1997.

The soul and its kingdom or domain

Emanuel Swedenborg tackled the philosophical investigation of the soul's domain twice. He published his first attempt anonymously in Amsterdam in two volumes in 1740/41—English title, *The Dynamics of the Soul's Domain*. The first two volumes of his second attempt—English title *The Soul's Domain*—were published in The Hague in 1744, and the third was published in London in 1745. This, as it turned out, was his last volume of philosophy.

Swedenborg was engaged in the search for the soul for almost ten years of his life. One might say that this pursuit was to discover the operating principles of the vessel whereby the Infinite could be acknowledged by creation. Having learned in *The Infinite* that the universe was created for some purpose, Swedenborg wanted to understand the mechanism through which that end was achieved.

Harold Gardiner in a presentation on "Swedenborg's Search for the Soul" suggested a similarity between Swedenborg's exploration of the cosmos and his search for the soul. He said:

Just as matter was formed in descending stages, and as each stage is a covering for the preceding one and is activated by it, so did Swedenborg regard the soul as lying above the material body and as using the body as a covering and instrument. [Because] the soul lies above the conscious mind, and therefore cannot be examined directly, . . . Swedenborg set out to explore the soul by a process of removing coverings—the outermost being the material body. Thus, he discovered that all parts of the body are fashioned for the use they have to perform. (Gardiner 1936, 12)

Gardiner then observed that just as Swedenborg noted the order and perfection of the created universe, and then argued that behind it lay an Infinite intelligent Being, so, too, with his exploration of the body. Gardiner stated: "He then argues that it is inconceivable that such a perfect thing, perfect in its parts and in their harmony with themselves, could be produced by mere chance" (Ibid., 12–13). Swedenborg, then tested the truth of this philosophy by exploring the whole body, and the whole human mind.

The human is the microcosm of the universal macrocosm. It differs from the macrocosm in one important respect. While the material parts of the body are like all other created matter, according to Swedenborg, and are essentially dead, the soul, however, is granted eternal life, and can thus respond to the Infinite. As Gardiner explained Swedenborg's view: "The soul is the inmost recipient of life; it is the most elementary substance for the direct reception of life from the Creator and in order that it could become fixed and stabilized, it had to clothe itself and descend into its material covering" (Ibid.,16). According to Gardiner's reading of Swedenborg, the intermediate coverings of the soul are the different planes of the mind.

In his comparison with *The Principia*, he writes: "Just like the first substance of the material universe, which passes through stages of modification until solid matter is reached, so does the primal living substance of the soul pass through a descending series of mental planes until it reaches the material plane which it then vivifies" (Ibid.). Swedenborg describes the descent in three steps: from the soul to the highest conscious or rational part of the mind, to the animus or lower mind akin to animals, and finally to plane of physical sensations. These levels are discrete and cannot intermingle, but they react to and depend on the others for existence.

Bodily sensations received from the outer world are communicated to the lower mind, where these sensations are converted into mental images. These sensations are then ordered or organized by the rational mind, with some sensations being ignored or rejected. Others however feed the development of intellectual ideas and nurture affections. Thus, "there is a constant descent of spiritual and living force from the soul through the mind to the body and a constant reverse process of ascent from the impulses of the material world through the mind to the soul" (Ibid.,17–18). This description does indeed harken back to Swedenborg's claim in *The Infinite* that the human is the final cause of creation, because individuals are created with the capacity to freely acknowledge their Creator—that is to return to the Infinite the life He has given them. It is this very gift of soul that Swedenborg wanted to show to "the very senses" that those who require rational demonstration might believe.

With this goal in mind, although Swedenborg's aim was philosophical in nature, he believed it was necessary to ground his understanding on the

best science that was available. He read and absorbed the works of well over one hundred anatomists and philosophers. He used the work of such luminaries of his day as Malphigi, Ruysch, Leeuwenhoek, Harvey, Heister, and Boerhaave among many others. He also consulted the thought of great minds of the past such as, Aristotle, Plato, and Aquinas, and contemporaries like Pascal, Locke, and Wolff.⁴⁷ He was initially drawn to personally investigate and experiment in anatomy and dissection in order to better understand the workings of the body. However, he reported:

. . . that as soon as I discovered anything that had not been observed before, I began (seduced probably by self-love) to grow blind to the most acute lucubrations and researches of others, and to originate the whole series of inductive arguments from my particular discovery alone; . . . I therefore laid aside my instruments, and restraining my desire for making observations, determined rather to rely on the researches of others than to trust my own. (Swedenborg 1955, 1:7-8)

His plan was to first identify the universal principles through which the body operated, and then he would examine the various systems and, finally, the parts would be examined in greater detail. As he grappled with the complexity of the human body, his approach changed several times. At one stage he wanted to start his investigation with the brain; however, in the end when he began to write in 1739, he opted to begin with the blood. His developing insights led him to see that the blood is:

. . . the common fountain and general principle [of that kingdom] . . . For on the nature, constitution, determination, continuity and quantity of blood depends the fortunes and conditions of the animal life . . . the blood is as it were the complex of all the things that exist in the world and the storehouse and seminary of all that exists in the body. (Ibid., 1:1)

Furthermore, in order to study the blood, which is the “all in all,” it is necessary to utilize “all the sciences that treat of the substances of the

⁴⁷ It is interesting to note that in his search for the soul, he referenced many philosophers and a few theologians. This is a departure from his practice in the *Principia* and *The Infinite*. Perhaps because the method he employed in this project was more contestable.

world, and of all the forces of nature,” for example, anatomy, medicine, chemistry physics, and physiology (Ibid., 1:2-3).

It is clear that the more Swedenborg studied the body, the deeper he delved into it, peeling away layer after layer, and seeing order, coordination, and communication at every level and within every system, and between systems, he saw a miracle. He saw order, forms, series and degrees. He saw evidence of the Creator, His intelligence, and His care. So he wrote to share with those seeking proof of God’s existence written pictures of these intricate yet perfect systems. As *The Dynamics of the Soul’s Domain* unfolds, Swedenborg presents one amazing picture to the reader after another: the blood, arteries, veins, the circulatory system, and then the same systems in a chick formed in the egg, or in the heart of the turtle, the motion of the adult heart, the motion of the brain and its coincidence with the motion of the lungs and more. Each chapter provided an opportunity for intellectual doubters to say, “ah ha, now I see, now I understand, and now I believe.” In the final section, “The Human Soul,” he wrote this final line: “That the mountain of God shall rise above all other mountains, and that the Gentile and the stranger shall come to it, to pay their worship” (Ibid., 2:356). A line written to encourage the very acknowledgement of the Infinite that, of course, would be due once the “soul was shown to the very senses.”

Assessment of The Dynamics of The Soul’s Domain

Unlike the *Principia* and *The Infinite*, Swedenborg initially published this work anonymously. He had done this with smaller works he had published in the 1720s, when he was writing on a topic that was new to him. Perhaps that was the only reason he did not publicly claim authorship, as he wished for an open and unbiased review. He also may have been waiting to assess the response to the work before he acknowledged it as his. In any case, he did not have to wait long.

The brief first review appeared in August, 1740 in the *Neue Zeitung*. The reviewer focused on the chapter on “Rational Psychology.” He commented on the author’s rejection of the common approaches to the relationship between the soul and body: Physical Influx, Occasional Causes, and Pre-established Harmony, in favor of what he called “Established

Harmony." The reviewer understood this to mean that while all things precede in a series from highest to lowest, or the most perfect to the least perfect, nonetheless they are in harmony with one another, even as one is determined by the other (*The New Philosophy*, 1930, April, 202).⁴⁸

By June of 1741, and the release of the second volume, another more lengthy review appeared, in the *Zunverlässige Nachrichten*. By this time Swedenborg's authorship had been discovered. The reviewer stated that he recognized the author because "the nature of the work" had Swedenborg written all over it. He complimented Swedenborg for amassing so much valuable material on the functioning of the human body in one place. In addition, Swedenborg himself has shed much light on the realm of causes through the use of his "profound principles of natural philosophy" (*Ibid.*, 213).

While a physician in another review took exception to Swedenborg's notion that air can actually enrich and nourish the blood in the lungs, it would appear that this work over all was quite successful. Swedenborg published both a second and third edition.⁴⁹

One of the reasons for its success was the fact that Swedenborg had digested the research of so many eminent anatomists, scientists, and physicians, and the scientifically-aware public was eager to be economically educated. Perhaps another was his development and use of the philosophical methodology contained in his "doctrines." Clearly Aristotle profoundly enriched the world with his identification of the four types of causes: material, formal, efficient, and final. Swedenborg, likewise, may have made a similar contribution with the conceptual and analytical framework he developed. He began with the concept of series and degrees, which he also at times called, the doctrine of order and degrees. While he began with this approach, and it helped him to observe that blood was a compound substance, it did not permit him to unveil what he called "the spirituous fluid." In order to proceed further, he developed doctrines of

⁴⁸ Or as the author, Swedenborg, stated, it is a process of subordination and coordination.

⁴⁹ It was re-published in 1742 because the work had sold out. This edition had a new title page identifying the name of the author and his rank. It was also sold out, because a third edition was printed in 1748, similar to the 1742 edition.

forms, influx, modification, and correspondences. In the “Prologue” of *The Soul’s Domain*, he lists them in the following order: forms, order and degrees, series and society, influx, correspondences, and modification.⁵⁰

It would be useful to define them. However, before doing so, it should be pointed out that the tools were not developed by Swedenborg in the abstract, but rather he discovered them by way of or in connection with empirical examples. Once these concepts have been briefly explained, some of their origins and applications will be presented.

Since Swedenborg introduced the doctrine of series and degree first, that will be defined and discussed before taking up his other doctrines. This doctrine was discovered through observation of the formation and development of the embryo, given Swedenborg’s intuition that the soul itself formed the body as its own habitation. With the hypothesis that the soul descends through stages into the body, then by ascending from the outermost covering to the inmost along the same path, the soul might be revealed.

Swedenborg had observed in the body or in the dynamics of the soul’s domain, “that in the whole circle of things, from first to last, there is not a single one which is altogether unconnected or detached from the rest” (Swedenborg 1955, 2:6). Thus, “. . . series are what successively and simultaneously comprise things subordinate and coordinate. But degrees are distinct progressions, such as when we find one thing is subordinated under another, and when one thing is coordinated in juxtaposition with another : in this sense there are degrees of determination and degrees of composition. . . . Consequently, the science of natural things depends on a distinct notion of series and degrees, and of their subordination and coordination” (Ibid., 2:7–8).

Swedenborg quickly confronted the limited utility of this method, when he realized that it would not permit him to transcend the sphere of familiar things. While it was a very useful tool with which to explore the body, it did not permit him to enter the realm of the universal, the prior, and the superior. The closer he came to the soul, the more it eluded his grasp. Although, as he wrote: “it never absolutely disappeared from view” (Ibid., 2:201). He had hoped that this tool would enable him to cross over

⁵⁰ Swedenborg lists these “Doctrines” in the *Soul’s Domain*, 1744, page 10, although he had discussed them previously. These are an extension of his methods developed in *Principia*.

what he came to call “the abyss” but could not. So he developed a bigger tool box, which he developed and put to use in *The Soul's Domain*.⁵¹

Unique contributions

Swedenborg made several anatomical discoveries in both *The Dynamics of The Soul's Domain* and *The Soul's Domain*, although initially they were not attributed to him. In *The Dynamics*, he discovered that the motion of the brain is synchronous with the inspirations and expirations lungs (Ibid., 2:67).⁵² He also discovered the uses and functioning of the foramen. He wrote: “The communicating foramina in the cerebrum are called anus and vulva, beside the passage or emissary canal of the lymph; by these the lateral ventricles communicate with each other and with the third ventricle” (Swedenborg 1960, 1:250r). Additionally he is now noted for having understood the hierarchical organization of the nervous system, the localization of the cerebrospinal fluid, the functions of the pituitary gland, and the concept of the neuron.⁵³

It is interesting to realize that Swedenborg made these discoveries not as an anatomist or physician but in pursuit of unveiling the soul or life force that connects humanity with the Divine. While what he saw and learned was rediscovered by others with less lofty aspirations, it is interesting to reflect on the context in which they were viewed and understood. Swedenborg was on a sacred mission as he poured over the texts and engravings of the scientists whose works he used. It is possible that his vision had him pause and ponder at what he saw in a fresh way, precisely because he was seeking the path of life.

At the end of *The Dynamics*, Swedenborg devoted 155 pages or 158 paragraphs to his first consideration of the soul. In this exploration he saw

⁵¹ His larger toolbox will be examined in a discussion of *The Soul's Domain*.

⁵² For a discussion of the history of the others who discovered this after Swedenborg see “The Animal Kingdom” in *The Monthly Review* Volume II, June 1844, 167–204. Additionally it should be noted that in recent years acknowledgement of Swedenborg’s contributions have been written in such journals as *The Neuroscientist* 3:2 (1997), *Uppsala Journal of Medical Sciences* 2007: 112: 142–164, *Experimental Brain Research* 192:321 2009, and others.

⁵³ See David B. Fuller, “Review of Swedenborg’s Paradigm of the Brain” in *The New Philosophy*, July–Dec. 2011, 129–147; H. Fodstad, “The neuron theory” *Stereotactic and Functional Neurosurgery* 2001:77:20–4.

that the natural body was the habitation of the soul, but that in itself was dead. Likewise, he saw what he called the “spirituous fluid” providing force and motion to body as an instrumental cause, transmitting life, but it was not life itself. In this way Swedenborg separated the phenomena of existence into two distinct categories: in one category was everything that pertained to life or ends, and in the other category everything that pertained to nature, or effects. This duality, according to Swedenborg, was an essential aspect of created existence itself, and thus, in seeking the principle that animated the soul, it was necessary for Swedenborg to look beyond nature, to the Deity of the universe.

This need to move beyond nature touched on the limits of the human mind because while it contains what is immortal, its finite nature cannot ascend beyond nature to the Infinite Being. How then is it possible to know the manner in which this life and wisdom flow in? Swedenborg saw “no analysis and no abstraction that [could] reach so high” and thus the only “representation we can have of it is in the way of comparison with light” (Swedenborg 1955, 2:239). Here Swedenborg expressed what he felt was the key to at least some understanding of the realm of life or ends, that key being comparatives or correspondences. Philosophically, “all that is possible is to kiss the threshold, so that we may know that there is a Deity, the sole Author and Builder of the universe. . . . But what his Divine Nature is; and how he is to be worshipped; . . . this has pleased him, . . . to reveal in his holy testaments and oracles” (Ibid., 2:246).

In this manner, Swedenborg closed his discussion of “The Soul” in the *Dynamics of the Soul’s Domain*. He saw where he needed to go, he needs to approach search for the soul in a kingdom of ends.

Dissatisfied by what he saw was his hasty pursuit of the soul in *The Dynamics*, he set about a new search to find the soul, “who sitting like a queen in her throne of state—the body—dispenses laws, and governs all things with her good pleasure” (Swedenborg 1960, 12). He resolved as he wrote: “to run through the whole field to the very goal—until I have traversed the universal soul’s kingdom, to the soul” (Ibid.). He hoped he would reach his end “with divine permission” (Ibid.).

In *The Soul’s Domain* he equipped himself with additional analytical tools, and he developed a new plan or approach to the soul. He was aware

that seeking the soul analytically was similar to seeking the Infinite, and it was therefore, quite possibly beyond reach. Nonetheless he was convinced that because the soul is the model of the body, and therefore the body is the image and type of its soul . . . [that] thus, by the body, we are instructed respecting the soul; by the soul respecting the body; and by both, respecting the truth of the whole" (Ibid., 13).

In his "Prologue," he confessed, that there may exist an interdiction against seeking, by way of reason, those things that transcend reason and which are matters of faith and revelation. After all, Swedenborg proclaimed, the intellect should be content within its own broad sphere of competence that is the human realms of social, civil, and moral concerns, and in the animal, vegetable, and mineral kingdoms. He also observed that whenever the intellect intrudes beyond its own sphere into matters of faith, the outcome is most often not an enhancement of faith but its destruction. He was clearly aware of the palpable tension between faith and reason. Thus, he cautions people of faith not to read his books which are written for those only "who never believe any thing but what they can receive with the intellect" (Ibid., 14). That is "those who honor and worship nature, the world and themselves" (Ibid.). Swedenborg dedicated his work to them, to those without faith. His hope, he wrote, was that by using an analytic method regarding so profound a subject that "a way would be laid down to faith" for them (Ibid., 15). He turned to his new tools of analysis to accomplish this goal.

The doctrine of forms explained how in the order of creation, the terrestrial and the corporeal were and are successively formed from the spiritual. Swedenborg hypothesized a scale of six forms from the lowest level which is angular, through the circular, the spiral, the vortical, the celestial, and the infinite. It is interesting to observe in this principle Swedenborg's previous work on magnetism in the *Principia*, in which he saw a relationship between the motion of the magnetic element and the forms generated which were spiral or vortical.⁵⁴

⁵⁴ A discussion of Swedenborg's work on magnetism was reported by the Marquis de Thomé, Paris, August 4, 1785 to the Royal Commissioners investigating the merits of *animal magnetism*. Letter In *The Intellectual Repository* for 1815, 191. Thomé was of the opinion that Swedenborg had demonstrated that the magnetism of bodies depended, not on their substance, but on their form.

The doctrine of influx explains the process whereby what was formed from a higher order or form subsists. It explains the manner in which the body subsists from the soul, and how the natural world is continually maintained from the spiritual (Swedenborg, 1843, 1:xxi). With regard to the body, Swedenborg noted that influx did not just flow from higher to lower within, but from forces outside the body also. In this way he did not just recognize the power of the body, but saw it as an active (choosing or discerning) force (Ibid.).

Swedenborg discussed the doctrine of correspondences and representations in the following way:

That the natural sphere is the counterpart of the spiritual and presents it as in a mirror; consequently that the forms and processes of the body are images of the forms and activities of the soul, and when seen in the right order, bring them forth and declare them. It shows that nature is the type of which the spiritual is the ante-type, and therefore is the first school for instruction in the realities of that which is living and eternal. (Ibid.)

The doctrine of modification “teaches the laws of motion and changes of state in the several auras and atmospheres of the world” (Ibid.). It also teaches the manner whereby the influx from either a higher or lower order is accommodated by the next level in its descent or ascent.

Using these doctrines or analytical tools, Swedenborg attempted to trace the path of the soul and to get a glimpse of its manner and operation. In *The Soul's Domain*, Swedenborg opens his examination of the body in search of the soul through a presentation of the Tongue in Part I. He then worked through the viscera of the lower body, moving to an examination of the thoracic region in Part II; and in Part III he focused on the skin and the sense of touch, and the sense of smell. These three Parts were just a small part of his overall plan, which he set forth in the Prologue in Part I. He never completed his plan. In it, he was going to examine “the whole Anatomy of the Body; of all its Viscera, Abdominal and Thoracic; of the Genital Members of both sexes: and of the Organs of the five senses” (Swedenborg, 1960, 10).⁵⁵ This was just the beginning. It was to be followed

⁵⁵ In the first part of his plan, he never published on the Genital Members of both sexes, nor the senses of sight, hearing, or smell.

by a complete examination of the brain, diseases, particularly of the head. Then using his analytical tools outlined above to explore the Rational Psychology, focused on action, internal and external sense, imagination, memory, the affections, the intellect, or thought and will; and then at last the soul, its state in the body, and its immortality. After publishing the three parts listed above, he abandoned this project, leaving seventeen transactions in manuscript form.⁵⁶

Having outlined his project in *The Soul's Domain*, it would be useful to illustrate it with a small sample of his effort, using his discussion of "The Tongue":

The primary, proper, and natural office of the tongue, consists in sucking, sipping, eating and drinking, or to speak more plainly, in receiving food for the nutrition of the body and the blood, in working this food about and forming it into a ball, and in rolling the ball into the esophagus and swallowing it. . . . thus the lesser parts perform not only the same office on a small scale as the entire tongue, but also the same office as the tongue performs in conjunction with its associate and contiguous organs,—the lips, the cheeks, the fauces, and the palate; and the least parts as the tongue performs in conjunction with its continuous organs,—the pharynx, the esophagus, the stomach, etc.: for the least in every series comprehends an idea of its universe. (Ibid.,1:35,37)

A second proper office of the tongue consists in feeling and perceiving what is about to be received, with a view to becoming acquainted with its qualities; that is, in tasting. This office makes it necessary that the tongue shall be capable of undergoing all the changes of condition which the sensation of taste presupposes and involves: that it shall have the power of properly expanding and relaxing, extending and retracting its sensoriola or papillae; of applying them to objects and touching the objects at all points in a word of suiting itself to all affections, proximate and remote. (Ibid., 1:37–38)

⁵⁶ Some of the transactions in manuscript form were on: Generation, The Brain, The Fibre, The Animal Spirit, Action, The Intellect and Rational Mind, Affections and Disorders of the Animus, The Soul.

A third office of the tongue (however, not proper to it) consists in speaking, or in modifying the sound emitted from the larynx and trachea, in a common or general manner, so as to give it infinite variety; thereby producing words and speech. The office of the tongue is confined to transmitting the sounds properly, and to regulating them in their passage: the rest belongs to the larynx, the palate, the antrum, the throat, the uvula, the lower jaw, the teeth, the mount, the lips, and the nares. By the office and gift of speaking, the tongue feeds the higher principles, the very mind itself; by the office of eating, it feeds the lower principles or the body. Thus it may be said to afford food to both the soul and the body; wherefore it guards the meeting of the two ways which lead to the two regions of the body,—to the viscera of the abdomen, through the pharynx and the esophagus, and to the viscera of the chest through the larynx and the trachea; as well as the crossway which leads to the cerebrum, the hall and palace of the mind. For this reason it is, that the human tongue has a less acute sense of taste than the tongues of the lower animals; for in proportion as we approach the soul, in the same proportion we receded from the body. (Ibid., 1:38-39)⁵⁷

This brief introduction demonstrates Swedenborg's attention to detail, and at the same time provides a wonderful picture of the way in which the marvel of each element of the body is so fashioned that it works in cooperative harmony with the other elements supporting both higher and lower functions flawlessly.

Swedenborg's legacy—reason and faith/faith and reason

In his Prologue to *The Soul's Domain*, Swedenborg enthusiastically wrote about the journey which lay ahead: "The ship is in the harbor; the sails are swelling; the east wind blows; let us weigh anchor, and put forth to sea" (1:15). When he set sail, he had in hand an almost complete manuscript with a new approach fashioned with more elaborate or sophisticated analytical tools. And yet in the end, while still under full sail,

⁵⁷ The article in *The Monthly Review* concerning a review of "The Animal [Soul's] Kingdom" used excerpts from "The Tongue" to illustrate Swedenborg's efforts. It inspired me to do likewise. See *The Monthly Review* for June Vol. II (1844) No. 2, 167–203.

he abandoned ship—still fully equipped with detailed charts and the intellectual equivalent of the most advanced navigational tools. To understand his decision, it must be examined from two perspectives. One will be presented here, and another in the following chapter.

Jonathan Israel will help to set the stage:

... after 1650, everything, no matter how fundamentally or deeply rooted, was questioned in light of philosophical reason and frequently challenged or replaced by startlingly different concepts generated by the New Philosophy and what may still usefully be termed the Scientific Revolution. (Israel 2001, 3–4)

... after 1650, a general process of rationalization and secularization set in which rapidly overthrew theology's age-old hegemony in the world of study, slowly but surely eradicated magic and belief in the supernatural from Europe's intellectual culture . . . (Ibid., 4)

To many the consequences of this seemed alarming in the extreme. Especially worrying, according to Seckendorff, was the growing trend among ordinary folk to mock Holy Scripture, reject Heaven and Hell, doubt the immortality of the soul, and question the existence of Satan, demons, and spirits. (Ibid., 6)⁵⁸

Swedenborg chose to use the “new philosophy” and the latest science of the Scientific Revolution to address the issues of rationalization and secularization, wishing to reverse the trend of doubt, particularly about the immortality of the soul. Swedenborg wished to address the crisis of faith through philosophic reason and science. This was the thrust of his whole philosophic project, but most particularly and passionately in his search for the soul.

However, for all his desire and his incredible acumen and labor, Swedenborg could not complete the task he had so ardently pursued for so long. He could not do so because his tools, however sharp, could not

⁵⁸ Veit Ludwig von Seckendorff (1626-1692), Pietist and author of *Der Christen Stat* 1685.

cross the abyss from the shore of the finite to Infinite. Philosophically he was dead in the water. His observation and methods had gained him a great deal. He knew countless amazing details about the human body, the home of the soul, but sighting her continued to elude him. With the tools of philosophy and science, she would forever remain hidden.

Beyond, the problem of an appropriate starting point, and an appropriate vessel with which to cross the sea, as Swedenborg so enthusiastically had hoped to do in his Prologue, Swedenborg's motivation for the project had fundamentally altered. Scholarship and a love of truth for its own sake, which he had when he commenced his project, were transformed as he proceeded, from ends in themselves into means. Creating an opening for faith in his readers had now become his primary end, with his philosophy as the means. Such an end was perhaps more compatible with the love of saving souls, which is a priestly love, rather than a philosophic one. Truth was no longer the sole end for which Swedenborg was striving; rather, it was for rational or analytical truth to serve as a path toward the good, and as a way toward salvation. Given this new goal, philosophy, most surely, could not be the ultimate or final means toward that end, even with the favor of God.

In point of fact, the analytical method for Swedenborg had never been the way to faith; he used it, instead, instrumentally in order to confirm faith. Given a belief in God and in the existence of the soul, philosophy and analysis could transport him to a point where a clear view of the soul's kingdom was possible; however, philosophy itself could not provide the means of disembarkment nor provide an adequate guide to the new land.

Swedenborg's doctrine of correspondences and representatives might provide a glimmer of insight into the manner of the soul's operation comparatively, but it could never reveal the essential nature of its operation. And if philosophy could not do this for Swedenborg, a man of apparent great faith, how would it be able to do so for those of lesser, little or, even, of no faith at all? How could it speak to the very audience for whom *The Soul's Domain* was written?

For the man who loved to reveal secrets, the secret of soul remained, despite his ardent search for it. Swedenborg devoted extraordinary passion to demonstrating the rational soul to Faith. He developed wonderful analytical tools to help him achieve his goal, and still it eluded him. He

wanted reason to be able to lay a path to faith. Convinced that the soul was the purest natural substance, he believed that the natural rational tools he developed could reveal it, or perhaps, if not it, then its throne to him. It is fitting that in the last sentence of *The Soul's Domain*, Swedenborg, wrote: "Thus the tongue, like other sensorial organs, is governed by two rulers; to wit, by our understanding according to the will, and by the soul" (Swedenborg, 1960, 593). The very last word is soul, and Swedenborg remained committed not only to its existence, but to it as the Divinely given life force to each and every member of His human creation. It should be said that although Swedenborg abandoned his philosophical vessel to use in pursuit, he did so not because he abandoned reason so much as he was called by Faith.

Comparative assessment of Swedenborg's philosophical project with Descartes, Spinoza, Leibniz, and Wolff

In a notebook believed to have been written by Swedenborg in 1741–44 in between his two works in search of the soul, are found quotes from well over two-hundred philosophers, literary authors, and Church fathers, as well as extensive passages from the Bible.⁵⁹ The notebook is a compilation of excerpts from authors of interest to Swedenborg with regard to his soul project from ancient times up through the era in which he was writing. The *Philosopher's Notebook* is 545 pages in its current format. Included in it are figures such as Anaximander, Plato, Aristotle, Plotinus, Pliny, Cicero, Augustine, Aquinas, Luther, Calvin, Berkley, Locke, and Newton. Also found are the four philosophers included in this study. The most recent book from which Swedenborg took notes was the Latin translation of Leibniz's *Theodicy* (1739). It is a storehouse of information connecting Swedenborg and his work to the flow of of some of the central

⁵⁹ These dates are found in the Preface to *The Philosopher's Notebook*, translated and edited by Alfred Acton 1931. The notebook may have been started earlier, since some of the references appear in *The Dynamics of the Soul's Domain* published in 1740/41. There are actually quotes from 227 authors. The notes found in this book come from Codex 36 of Swedenborg's collected works housed in the *Kungliga Ventenskaps Akademi* (The Swedish Royal Academy of Sciences). It was republished in 1970 through University Microfilms, Ann Arbor, MI. I have been informed by a Latin scholar, Stephen D. Cole that other codices contain additional notes of a similar nature that have never been translated.

ideas of Western Intellectual history. Some of the topics touched on are: the soul, mind, reason, sensation, imagination, truth, logic, ideas, fate, God, love, free decision, nature, immortality, cause motion, evils, correspondence, and form.

It would be useful to at least briefly examine what he found of interest in the four philosophers in question. He drew on Descartes when he was reflecting on topics such as, God, the soul, reason, the will, the intellect, substance, and motion, among others. He consulted Spinoza about God, mind, providence, cause, and form. He drew copiously from Leibniz's letters and *Theodicy* on concepts like the soul, the mind, faith, the will, happiness, God, love, freedom, and substance. He also noted many of Wolff's ideas from *Rational Psychology* about the soul, the mind, the will, sensation, the imagination, truth, ends, and immortality.⁶⁰

There does not seem to be one concept for which Swedenborg drew on all four of the philosophers used in this study. Therefore, for comparative purposes two have been chosen: God and the soul. The three philosophers that Swedenborg read regarding God are Descartes, Spinoza, and Leibniz. These three are among nine different philosophers he noted on this topic, as well taking notes from the Sacred Scriptures.

God

Descartes

It is interesting to note that his excerpt from Descartes, although it is taken from his *Rationes Dei Existentiam et animae a corpore distinctionem probantes more Geometrico*, does not in fact use the word "God." It is as follows: "By substance itself, we understand that substance which is most highly perfect, and in which we conceive of there being nothing whatever that involves defect or a limitation of perfection. (Descartes, Definit. viii)." This concept is reminiscent of ideas Swedenborg expressed in his work *The Infinite*.

⁶⁰ It would be wonderful to do a comprehensive comparative study of what Swedenborg learned from each of the four philosopher's in this study and /or others. However, at this time, such a study has not been done either by me or any other scholar.

Spinoza

The excerpt that he has taken from Spinoza came from the Appendix containing the Metaphysical Thoughts Part I Chapter II (Spinoza 1660, 1998). Spinoza stated:

God contains eminently that which, in created things, is found formally: that is, God has attributes wherein, in a more eminent way, are contained in all created things. (App. Cogit. Metaph [part I, c:ii], 98)

The *esse of essence* is nothing else than the mode whereby created things are comprehended in the attributes of God. Thus we have *esse of Idea* inasmuch as all things are contained objectively in the idea of God. Furthermore the *esse of potency* is used only in respect to God's potency whereby, from absolute liberty of will, He could create all things which are not yet existent. Finally the *esse of existence* is the essence of things outside of God and considered in themselves; and it is attributed to things, after they have been created by God. (Ibid., Part I, c:ii)

Swedenborg systematically rejected Spinoza's view that God and nature are one, or that everything is contained in God. He referred to philosophers with such views as naturalists, as we have seen frequently in this chapter.

Leibniz

Swedenborg has also taken a note from Leibniz rejecting Spinoza's doctrine that God alone is substance. This is in agreement with Spinoza's idea above that all created things are attributes of God. Swedenborg noted that Leibniz wrote: "Why should we not say with Spinoza that God alone is substance and creatures are nothing but accidents and modifications?" (n. 393). Leibniz goes on to say that we should beware in confounding substances with accidents, which would deprive creative substances of all action. He wished to retain the ancient idea that substances remain and accidents change (Leibniz, 1985, § 393).

Swedenborg took more extensive notes from Leibniz on the nature of God than from the other two philosophers in question, twenty-two from the *Theodicy*, and one from a letter to Madame Madeleine Scudéry (1607–1701). He wrote to her, “When I see that a man has true zeal for procuring the general good, he is not far from the love of God” (Epistles, Vol. III, [97] Epist. vii ad Mad. de Scudery §). The first note from the *Theodicy* comes from § 7 in the essay “On the Justice of God.” It is interesting to see that Swedenborg highlighted several ideas from this paragraph, but did not copy it verbatim. This is what he noted:

[God is the first reason of things . . . The reason for the existence of the world must be sought for in a substance which contains in itself the reason for its own existence . . . This reason can be nothing else than intellect; and its determining upon one world out of many that are possible, can be nothing else than the act of a will choosing.] The power of this substance then renders the will efficacious. Power tends to *esse*; wisdom or intellect to *truth*; and will to *good*. This intelligent cause must also be infinite in every way, and absolutely perfect in power, wisdom and goodness; for it tends to all that which is possible. Furthermore since all things are inter-connected, it must be acknowledged as being one only. Its intellect is the origin of essences, and its will is the origin of existences. Here in a few words you have a demonstration of the one God with his perfections, and of the origin of things through him. (*De Bonitate Dei*, n. 7)⁶¹

What Swedenborg essentially eliminated in this shortened note was Leibniz’s discussion of this create world and the elements of that world. Swedenborg focused entirely on the attributes or qualities of God and

⁶¹ Comparing these two paragraphs is a bit difficult, given that I am dealing with two English translations, and not the French origin or Swedenborg’s Latin notes (While the translator and editor of this Notebook mentioned that the letter of Madame Scudéry was taken down in French, he does not do the same for the quotes from the *Theodicy* or *Théodicée*). However, in the Preface to this Notebook, the editor mentions that Swedenborg used the Leibniz’s *Tentamina Theodicaeae* Tom III which was published in June of 1739, by C. H. Berger. Thus, Swedenborg must have used the Latin translation from the French and not the original French edition. However, in English the Swedenborg note contains 167 words, while the Huggard translation in the Open Court Classic *Theodicy* first published in 1951 has 313 words. Huggard’s paragraph is almost double in size.

their inter-connectedness. The focus on the relationship between wisdom and truth and goodness with the will, are ideas that Swedenborg carried into his theological writings.

This theme is carried into Swedenborg's next note. He quotes Leibniz from § 106 of the *Theodicy*: "Nothing is more sublime than God's wisdom, nothing more just than his judgments, nothing more pure than his holiness, and lastly nothing more immense than his goodness" (Ibid., n. 106).

Swedenborg also make a small note of an extended discussion about ancient forms of worship, particularly fire-worship. Light and heat in this discussion were attributes of good, while evil was associated with dark and cold. Swedenborg focused on the idea of Thomas Hyde which stated that "they used the sun and fire only as symbols of Divinity" (Ibid., n. 137). This is another idea that finds its way into Swedenborg's theological works. Swedenborg discusses the ancients as understanding living correspondences in which God is symbolized by the sun.

In the *Theodicy* Leibniz added four appendices. The fourth appendix was a Latin summary of the positive teachings of the French *Théodicée* by Leibnitz. Swedenborg took notes on thirteen paragraphs of the summary which contained 144 total paragraphs. It is called *Causa Dei Adserta per Justitiam Ejus*. He skipped paragraph one and three, but copied remaining numbers up to number thirteen. And he took notes on paragraphs sixty-five and one hundred and ten.

In number two Leibniz wrote: "That the error of those who infringe upon the greatness of God may be called *Anthropomorphism*; that of those who take away his goodness, *Despotism*." Swedenborg in *The Soul's Domain* referred to them as those who worshipped nature and themselves.

The remaining numbers in sequence, § 4–§ 13, discuss God's Omnipotence, independence and power and the fact that all things are dependent on God. They also point out God's concurrence or immediate presence in creation. This is because God is not only the cause, but because "God concurs in the production of the effect" (Leibniz, 1739, § 11). According to Leibniz, "[God flows] to the modes and qualities of a things existence, . . . and this ever flows forth from God, the Father of lights and the giver of all goods" (Ibid., § 12). Having treated of God's power, Leibniz then turns to discuss His Omniscience, which "embraces every idea and every truth, in

other words, all things both simple and complex which can be an object of the intellect . . .” (Ibid., § 13).

In paragraph sixty-five, Leibniz discussed the Epicureans and the Manichaeans who unsuccessfully attempted to reconcile God’s omniscience and his omnipotence with the present of evil in the world. And in paragraph one hundred and ten, Leibniz quotes Augustine on the issue of grace: “God deserts only the deserter.”

The final quote that Swedenborg took from Leibniz concerning God came from the Preface. Here Leibniz stated that “God is the whole of order, . . . [and] he presides over universal harmony; all beauty is the effluvium of his rays” (Leibniz, 1985, 51). Thus, true piety and happiness are to be found in an illuminated love of God. And most importantly, God cannot be loved unless he is known (Ibid.). This concept that God must be known to be loved which Leibniz articulated in the *Theodicy*, took on new meaning in Swedenborg’s religious writings when he presented in great detail the fundamental idea of God’s Divine Humanity and the necessity of knowing the visible Risen Lord as seen in His Word.

The soul

Swedenborg also took notes from nine different philosophers with regard to their conceptions of the soul as well as from Sacred Scripture. The three philosophers used in this comparative study that he drew on are: Descartes, Leibniz, and Wolff. He took three notes from Descartes, nineteen from Leibniz, and ninety-eight from Wolff. Not only did Swedenborg take more notes from Wolff from his recently published (1734) *Rational Psychology*, but three of Wolff’s quotes find their way into Swedenborg’s work *The Dynamics of the Soul’s Kingdom*. As Swedenborg was contemplating his own exploration of the soul, it must have thrilled him to find the work by Wolff, dedicated to the “science of those things which are possible through the human soul” (“Prolegomenon” § 1).⁶²

⁶² <http://plato.stanford.edu/entries/wolff-christian/> Hettche, Matt, “Christian Wolff”, *The Stanford Encyclopedia of Philosophy* (Fall 2013 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/fall2013/entries/wolff-christian/>. As I have stated earlier most of Wolff’s work is not currently available in English, so articles like this one are the best source to find information from Wolff’s works.

Descartes

The three notes from Descartes focus on the location of the soul in the body, and the mechanisms whereby the soul communicates with the body. He wrote: "It must be know that the human soul, although it informs the whole body, yet has its principal seat in the brain, wherein alone it exercises not only understanding and imagination but also sensation . . ." (*Principles of Philosophy*, 1644, Part IV, n. 189). He continued: "It is proved manifestly that, by means of the nerves, the soul can sensate the things that happen to the body in its several members, not because it is in the members, but solely because it is in the brain" (*Ibid.*, n. 196). Descartes then sets up various examples of conditions in the body, whereby he knows that this is, in fact, so.

Swedenborg took the final note from Descartes in his *Passions of the Soul* (1649). Descartes wrote: "Since we do not conceive of the body as in any way thinking, we rightly believe that all the kinds of thoughts that are within us pertain to the soul" (Part First, Article IV).

Swedenborg must have appreciated Descartes sense of the interconnection between the brain and the nervous system, as he was to spend so much of his own effort to describe the wonders of the transmission of sensations from the body to the brain and the reverse; and as well, the relationship between thinking and the reflective life force found in the soul.

Leibniz

With regard to Leibniz's conceptions of the soul, Swedenborg took notes on four separate letters from volume III of *Leibnitzii Epistolae ad Diversos*, edited by Christian Kortholtus, and published in Leipzig in 1738. According to Alfred Acton, the translator and editor of Swedenborg's notebook, he also has one note from a letter that is not from the volume of *Epistolae*.⁶³

⁶³ After the note Acton only has a page number 131; however, in the Index of persons and works, Acton states that the letter is not in Volume III of the *Epistolae*, it is found in the *Opera Omnia*. The problem with that, however, is that the six volumes were not published until 1768. It turns out that this note comes from a letter from Leibniz to M. Gottlieb Hanschium on July 25, 1707. It is on "De Enthusiasm Platonico." It was published in *Epistola Godefredi Guilielmi Leibnitti ad Michaellem Gottlieb Hanschium*, ed. G. Veessenmeyer, Leipzig: Gleditsch 1716. Obviously, this could be one source of Swedenborg's note; another is Volume II of the 1738 *Epistola*, because another source I have seen is that volume, pages 222-225.

The first note was from a letter written by Leibniz on September 11, 1716 to Pierre Dangicourt. The subject of the letter is Leibniz's Monads. He wrote: "The Monads (of which those that are known to us are called souls) change their own state according to the laws of final causes, or appetitions; the kingdom of final causes, however, is in accord with the kingdom of efficient causes which is that of phenomena ...Intellectual wholes have no parts except in potency" (*Epistolae*, Tom. III, p. 284–85).

The second note was from Leibniz's letter to the young M. G. Hansch (1683–1752) concerning his small work on "Platonic Enthusiasm." Leibniz wrote that he read the work "with much pleasure" (Loemker, 1956, 592). Although Swedenborg only highlighted a certain portion of this letter, it is most interesting to reflect on the fact that he, no doubt, read all of Leibniz's comments. For example: "I recognize that the worship of one God, almost wiped out among mankind, was restored by the Hebrews" (*Ibid.*). Another thought that Leibniz expressed was:

No ancient philosophy comes closer [than Plato's] to Christianity, although we justly censure those who think that Plato is everywhere reconcilable with Christ. But the ancients must be excused for denying the beginning of things, or creation, and the resurrection of the body, for these doctrines can be known only through revelation. (*Ibid.*)

This thought must have impressed Swedenborg, since, he too, believed that revelation provided humanity with essential truths that they could get nowhere else. Swedenborg in his notes was particularly interested in understanding God's relationship to the mind and the soul. Thus, he quoted the following passages from Leibniz's letter to Hansch:

Although our mind, like every creature, depends continually on God in its existence and action, yet I do not think that, for its perceptions, it has any need of His peculiar concurrence in addition to the laws of nature; but rather, that it deduces posterior thoughts from prior, by virtue of an implanted power and in an order prescribed by God. . . . I would say the same thing also in regard to its perceptions of things sensible; for since these are not infused by God miraculously, and cannot be sent into the body naturally, it follows that, by means of a Harmony divinely pre-

established in the beginning, they are born in the soul by a set law. This is more worthy of a supremely wise Creator, than that He should perpetually violate, by new impressions, the laws given to the body and the soul. Meanwhile by means of that divine concurrence which continually attributes to every creature, whatever of perfection in him lies, it can be said that object external to the soul is God alone, and in that sense, that God is to the mind what the light is to the eye. This is that Divine truth shining forth within us, which is so often spoken of by Augustine who, in this respect, is followed by Malebranche. (Ibid., 593)

While Swedenborg was not a proponent of Leibniz's Pre-established Harmony, he did support the idea that the body operates according to set natural laws, and that the soul sought information from the body, creating as system of animation from the soul, and a flow of information back to it from the body. He was also impressed with the "correspondence" between God and the sun; thus he, too, would support the analogy that God is to the mind, like light is to the eye. He would concur that God is the source of the truth within us.

The next passage that Swedenborg quoted from this letter is: "That there is a sound sense in which we can understand that the soul is in this body as in a prison" (Ibid.). However, Swedenborg was in agreement with Leibniz that this prison was not constructed to punish humanity for its past sins, as the ancients believed. Rather that the body has a specific function to play in the drama of salvation. God has ordained that the body serve the soul, like a commander orders the soldier to his post (Ibid.). This is where Swedenborg ended his note under the heading of the soul. However, he continued to quote the letter in his notes on providence.⁶⁴

In another excerpt from the same letter, Swedenborg made note of a belief that was held by the ancient philosophers, and also by some moderns,

⁶⁴ See Acton, *A Philosopher's Notebook*, page 120. The body serves the soul, by allowing a person to freely choose a course of action in the mind from among many options. Once he chooses and acts, however, the person makes the choice his or her own. The mind is free, and the body, determined. It shapes the person, and over a life-time, the soul becomes what the person has chosen, or what the person loves. In this sense, one could see that the body imprisons the actions of a person, constructing an eternal home for the soul that survives death. This is a distillation of Swedenborg's philosophy/theology developed by the author in a paper on "Swedenborg and Occultism" written for a volume on *Occultism* to be published by Routledge in the Spring of 2014, edited by Christopher Partridge.

that God is a spirit diffused throughout the universe, that animates it the way the wind produces sound in an organ. In this way, at death, “souls returned to God as rivers to an ocean . . . Spinoza leaned to the same position but in another way. To him there is only one substance, God, whose creatures are modifications, continually arising and disappearing by means of motions, like figures in wax. Thus, to him, equally as to Almericus, the soul does not survive, except by means of its Ideal Being, which is in God, as it was there from eternity” (Ibid.). Leibniz has a strong belief in the immortality of the soul, and Swedenborg’s efforts in his works on the “Soul” led to the same conclusion.

This view is borne out in the next note that Swedenborg took from Leibniz in his notebook. This note is from a letter to “Un Ami.” Here Leibniz made a distinction between the essential and accidental modifications of the soul. He made an even greater refinement between modifications that represent qualities and those that represent actions and passions. The former Leibniz viewed as enduring, while he saw the latter as transitory. The qualities he deemed as either connate or acquired. He then wrote: “It is manifest that what is essential to the soul is never changed, otherwise the soul would be destroyed (Tom. III [p. 98–99] Espit. viii, A un Ami)” (Acton, 1931, 278). While Swedenborg, would certainly agree that there is an essence of the soul that could never be destroyed, he also viewed the communication between the soul, mind, and body as essential to the soul’s realization of itself, which implies that actions in the world in some manner affect and shape the soul.

It would appear that Leibniz had also followed this line of thinking, particularly in the *Theodicy*. Swedenborg has taken several series of numbers from Leibniz’s *Theodicy*, as well as some independent numbers from the same work. The first series of numbers is from number 86 through 91. He then has notes from number 105, and number 124. He then skipped to number 322, and 323, 356, 397, and then ends with number 403.

The first series is focused on the origins of the soul and various different views held by theologians. Two views are put forth, “traduction” and “education.” Traduction was a theory that the soul of an infant is generated by an offshoot or “‘tradux’ from the soul or souls of those by whom they are generated, exactly like a body from a body . . . (n. 86)” (Acton, 1931, 279). While education was seen as “forms that were educed

from the active power of an efficient cause, that is of God, if they were created, or of other forms, if they were generated . . . (n. 88)" (Ibid., 279–280). But wrote Leibniz: "traduction and education are equally inexplicable when it is a question of finding the origin of the soul (n. 89)" (Ibid., 280).

Leibniz, thus, stated his own opinion in number 90:

My own opinion is that souls, and generally speaking, simple substances, can have neither commencement, except by creation, nor an end, except by annihilations. And since it does not seem possible to explain the formation of organic animate bodies according to the order of nature, except by positing a preformation which is already organic, I have therefore inferred that which we call the generation of an animal is nothing else than a transformation and augmentation. Therefore since the body itself has already been organized prior to conception, it must be supposed to have been already animated and possessed of the same soul (n. 90). (Ibid.)

Since this is true for animals, it seems reasonable for mankind also. According to Leibniz, in number 91, it seems unnecessary to therefore claim that the souls of humans are only effected miraculously. He, therefore, concluded that the souls of humans were already in seeds going all the way back to Adam. He noted that this was also the opinion of many learned men including some anatomists and philosophers (Ibid., 281). While the notion of preformation is vital to Leibniz, he does not appear to have rationally dealt with the question of transmission from one generation to the next. According to Swedenborg, the seed is a vessel capable of receiving life, but is not the life itself.

In number 322, Leibniz dismissed the idea that the soul is found in incorporeal atoms, although he did not fault Epicurus (341–270 BC) for thinking that because "he sought the origin of the soul's determination in that which he supposed to be the origin of the soul itself. However, while matter is discussed as a necessary element related to the soul, in number 323, the relationships appears to be different, as transcribed in Swedenborg's notebook, and as it is translated by E. M. Huggard in the Open Court edition of *Theodicy*. Acton's translation of Swedenborg is the following:

It is indeed true that by the gift of matter, form or the soul is able to function as the principle of actions since it has in itself the principle of motion or mutation. In a word the automotive, as Plato calls it: while matter, on the other hand, is merely passive and has need of impulse before it can act. It is acted upon, in order that it may act (n. 323). (Ibid., 283)

The Huggard translation states:

It is true that the Form or the Soul has this advantage over matter, that it is the source of action, having within itself the principle of motion or change in a word, automotive, as Plato called it; whereas matter is simply passive and has need of being impelled to act *agitur ut agat*.⁶⁵ But if the soul is active of itself (as indeed it is), for that very reason it is not of itself absolutely indifferent to action, like matter, and it must find for itself a ground of determination. (Leibniz, 1985, 321)

It would seem that the difference between the translation or transcription of these two passages is the idea in the Swedenborg version that it is because the soul can work on matter (the gift of matter) which functions as a principle of motion, even while the soul is active and matter is passive; whereas in the Huggard translation, the soul is active of itself and thus can impel matter. While the second half of each passage, though different, contain essential the same meaning, the first half does not. Without exploring the original in both cases the difference cannot be resolved.

Swedenborg has made a note on only one sentence in number 356: “A representation has a natural agreement with that which it is to be represented” (Ibid., 284). This is striking because it fits so well with his doctrine of correspondences that he employed in *The Soul’s Kingdom*. It would be interesting to explore when he wrote his doctrines, and whether he had them in mind before his reading of the *Theodicy*.

In number 397, which Swedenborg copied into his notebook, Leibniz wrote:

⁶⁵ Note that in the Huggard translation the word “automotive” is written in Greek.

I have shown above that souls can neither be born naturally, not be derived from other souls, and that necessarily our soul must either be created *de novo*, or must have had a previous existence . . . This production must be a kind of offshoot (*tradux*), but somewhat more tractable than an offshoot as commonly pictured, being the offshoot not of a soul from a soul, but of one animated being from another; and avoiding the repeated miracles of a new creation, by which a soul newly created and pure, could be let into a body which will corrupt it. (Ibid., 284)⁶⁶

While it is not exactly clear why Leibniz felt it was necessary to see the soul as an offshoot of an animated being, rather than of a soul from a soul, *per se*, perhaps, this is his view of including a living personality as part of process, making it part of the natural world, and therefore based upon a law set up by the Creator.

In the final number that Swedenborg transcribed from Leibniz's *Theodicy*, Leibniz combined his concept of preformation and the soul as a spiritual automaton. He stated:

In like manner as an offspring is formed in an animal, or as other miracles of nature are produced by a certain instinct implanted in things by God, that is to say, by virtue of a divine preformation which weaves these admirable automaton, so we can conclude that the soul is a spiritual automaton still more marvelous; and that by virtue of a divine preformation it produces those elegant ideas in which our will has no part and to which our art cannot reach. The operation of spiritual automata or souls is not mechanical, but it eminently contains all that is beautiful in mechanics. In other words, by representation, the motions evolved in bodies are concentrated in the soul as a kind of ideal which exhibits the laws of the actual world and the effects; but with this difference from the perfect ideal world which is in God, that in us many perceptions are merely confused (n. 403). (Ibid., 285)

Swedenborg likewise saw the relationship between the soul and body, and the generation of offspring as wonderful gifts from God; but he

⁶⁶ The material in the ellipse was actually written down by Swedenborg with one ellipse.

focused on the correspondential relationship between what he saw as two worlds, and that the life force from the spiritual formed the body by means of what he called the spirituous fluid.

While there are significant differences between Swedenborg and Leibniz, particularly in relation to the idea of Pre-established Harmony, it is also clear that Swedenborg could see a kindred spirit in Leibniz, and who, on many occasions, provided Swedenborg with both concepts and insights for his own daunting project that hoped to bring reason to faith.

Wolff

While we have just explored the nineteen relatively extensive notes that Swedenborg took from Leibniz's letters and the Theodicy, he took ninety-eight notes from Wolff's *Rational Psychology* related to the soul. All of these notes were only one or two sentences in length.⁶⁷ Due to a fairly long-standing lack of interest in the philosophy of Christian Wolff in the English-speaking world, it is difficult to get access to his works that were so immensely popular in Swedenborg's day. Therefore, there is no easy way to compare notes that Swedenborg took with the original. This will have to be left to another scholar on another day. What can be done, however, is to sample these notes related to the soul that Swedenborg took, and explore them in relations to what he wrote. Keeping in mind that he had a chapter on An Introduction to Rational Psychology in his own work *The Dynamics of the Soul's Domain*.⁶⁸

Wolff wrote both a *Psychologia Empirica* (1732) and a *Psychologia Rationalis* (1734). In fact, he has been recognized as the first person to use the word "psychologia" in the modern sense. His first work was descriptive, and his second was speculative and metaphysical. Its focus was on the human soul, its faculties and its immortality. Clearly, with respect to the soul, Swedenborg and Wolff had similar projects. Therefore it is not

⁶⁷ According to Acton, he also read Wolff's *Empirical Psychology* (1732). However, in the Index of *The Philosopher's Notebook*, regardless of the topic the only work of Wolff's cited is *Rational Psychology*. Altogether there are 130 citations from Wolff.

⁶⁸ He also wrote a transaction that he never published in 1742 posthumously titled *Rational Psychology*. In this work Swedenborg began to move away from an anatomical search for the soul to exploring the idea of correspondence between the mental and the physical.

surprising that Swedenborg in his notes showed interest in many aspects of Wolff's understanding of the soul: its generation, its relationship to the universe, its relationship to the body, and its essence. There are points of agreement between their views, and also of disagreement.

Swedenborg quoted Wolff several times in his chapter on "The Human Soul" in the second volume of *The Dynamics of the Soul's Domain*. Most of the quotes come from his notes specifically in reference to the soul; and one comes from a reference to the concept of Pre-established Harmony. The first reference is found in number 276. The topic of that number is: "And as it is the soul, it is seated so high above all the other faculties, that it is their order, truth, rule, law, science, art . . . Consequently its office is, to represent the universe" (Swedenborg 1955, 253 & 256).

At the very end on number 276, Swedenborg used Wolff on the topic of "representing the universe" to reinforce his own conception of that function. He quoted:

"In every system," says Wolff, "of explaining the intercourse between the soul and body, it is necessarily supposed, that the essence and nature of the soul consist in the power of representing the universe, according to the place of the organic body in the universe, and suitable to the changes that happen in the sensory organs" (*Psychologia Rationalis*, § 547, 62). (Swedenborg 1955, 257)

Immediately after quoting Wolff, Swedenborg continued: "Therefore it follows that it is the office of the soul to have intuition of ends; to be conscious of all things; principally to determine" (Ibid.). Here it would appear that for Swedenborg the idea of representing the universe is to provide the soul with the universal tools that distinguish the human from mere brutes. Most particularly, this means that the soul can represent ends to itself that are within the bounds of the created universe.

To claim that the soul can represent ends, as Swedenborg did, places the soul above the intellectual mind. He illustrated this truth by the following explanation: we frequently observe that the body continues to function when the mind has gone insane; this implies that the economy of the body is directed by the soul and not the mind. He wrote: "Unless this soul flowed in from science, while from itself, into every point of our

intellect, it would be impossible for us to perceive anything in order, or to reduce anything we had perceived to order; we should therefore look in vain for understanding in intellect, or judgment in thought” (Ibid., 258).

This idea of Swedenborg’s seems to fit with a quote from Wolff recorded in his notebook, but not used in *The Dynamics of the Soul’s Domain* in which Wolff stated: “By the same force the soul at different times sensates, imagines, remembers, recalls, is attentive, reflects, forms notions, judges, reasons, appetizes, loathes, and freely wills or does not will (n. 61)” (Swedenborg, 1931, 274). This number from Wolff is just prior to one of the numbers Swedenborg does quote (n.62), and it suggests a degree of agreement on the matter of the soul being above the mind.⁶⁹ However, they may be in disagreement with respect to what “the power of representing the universe” means, given Wolff’s belief in the rationality of Pre-established Harmony. This will be investigated later in this section.

Swedenborg has a second but somewhat oblique reference to Wolff’s number 715, in his own paragraph number 294. Wolff wrote the following:

In its state of pre-existence, the soul represents this universe to itself, in accordance with the mutations which occur in the spermatic animalcule, or organic corpuscle containing the stamens of the fetus.

Swedenborg’s number 294 states the following:

The soul, from the very initial stages of conception, which it derives in the first instance from its parents, is born accommodated at once to the beginning of motion and to the reception of life: consequently to all its Intuition and intelligence, and it [the soul] takes this intuition and intelligence with it, from the first stamen and the earliest infancy to the most extreme old age For the force that directs and builds a body which is to be governed according to all the intelligence of the future mind, must pre-exist in an Intelligence above the mind (Swedenborg 1955, 275).

⁶⁹ In *The Dynamics of the Soul’s Domain*, however, Swedenborg stated that the idea that the mind is not identical with the soul went “against the stream of general opinion” in his day (258). That would imply that Wolff’s philosophy of the soul, also went against the consensus of opinion.

In the material by Swedenborg, the words from Wolff are "stamen" and "pre-existence." Swedenborg used these ideas to discuss whether or not humans are born with connate ideas or not. He suggested that "both those who advocate the doctrine of connate ideas, and those who oppose it, may base their arguments upon the same facts; showing that the controversy is not about the truth, but only about the mode in which the one truth or the other is to be explained. For if ideas are connate in the soul, and if ideas are procured to the mind, then the two opinions agree, and their reconciliation comes from the same demonstration as that which shows the communication between the operations of the soul and of the mind" (Ibid.).

What might Wolff think of Swedenborg's adaptation of his concepts? What did Wolff think about the place of parents in the process of conception of the soul/body and, do Wolff and Swedenborg mean the same thing by the concept of "pre-existence"? According to Wolff in paragraph number 704: "Souls pre-exist in the pre-existing organic corpuscles from which the fetus is formed in the womb" (Acton, 1931, 270). He continued, "In its state of pre-existence, the soul is united to the organic corpuscle from which the fetus is afterwards formed in the womb (n. 727)" (Ibid., 272). Where, however, does the soul come from, and what role, in fact, do parents play in its creation or transmission? It is interesting to note Wolff's use of the term "pre-existing" twice in the first sentence, both souls and the corpuscles pre-exist. Where do they pre-exist, with parents or with the Creator/God?

Swedenborg took extended quotes from Wolff on the question regarding the origin of the soul. The numbers begin with 697 and run through 719, although he skipped number 714. Wolff made the following statements as noted by Swedenborg:

Creation is usually defined as a production out of nothing or out of no pre-existing thing. (n. 697).

If the human soul has an origin it can have that origin only by creation. (n. 698)

Those that defend the position that the soul originates by creation are called Creationists. (n. 699)

If the human soul has an origin, it cannot be generated with the body, by parents. (n. 700)

According to the hypothesis of the Materialists, the soul is generated with the body by parents. (n. 701)

Generation of the soul effected by parents, that is, its origin from corporeal seed is called Propagation of the soul by transmission. And those that defend the propagation of the soul by transmission are called Traducians. (n. 702)

Since the soul cannot be generated with the body by parents its propagation by transmission is impossible. (n. 703)

Where then is the origin of soul from Wolff's perspective? Wolff is no materialist. He made that clear early on in his work. In number 31, he stated: "The materiality of the soul cannot be inferred from the celerity of thoughts. The soul cannot be material or a body (n. 47). The soul is a simple substance (n. 48). The soul lacks parts, is not extended, is endowed with no figure, fills no space, lacks magnitude, and is destitute of intestine motion (n. 49). Materialism is a false hypothesis (n. 50)" (Ibid., 274).

Swedenborg, on the other hand, in number 311, raised the question of the soul, as to whether it "is to be called material or immaterial" (Swedenborg, 1955, 297). He believed that the soul is an absolute fluid, produced by the auras of the universe, and enclosed in fibers or what he called, "the matter by which, from which, and for which the body exists: the supereminent organ" (Ibid.). The soul flows into the nexus of organic substances, "according to the form of the fibers, . . . and that these operations, in so far as they are natural, cannot be separated [from the fluid] except in thought; so that nothing here occurs but appears to be fairly comprehended under the term matter. But pray, what of matter?" (Ibid.).

He continued:

Is not every created thing in the world and nature a subject of extension? And may not everything, as extended, be called material? In fact the first substance itself in this sense is the *materia prima* of all other substances,

and every controversy, even our present one, is a matter of dispute. But let us trifle no longer. According to reason, whatever is substantial in the created universe is matter: therefore modification itself is matter, as it does not extend one iota beyond the limit of substance . . . but the soul is an organism formed by the spirituous fluid, . . . This essence and life is not created, and therefore it is not proper to call it material; so for the same reason we cannot call the soul material in respect to its reception of this life; nor therefore the mind; nor therefore the animus . . . nor even the body itself insofar as it lives. For all these live the life of their soul, and the soul lives the life of the spirit of God, who is not matter but essence; whose esse is life; whose life is wisdom; and whose wisdom consists in beholding and embracing the ends to be promoted by the determinations of matter and the forms of nature. Thus both materiality and immateriality are predicable of the soul; and the materialist and immaterialist may each abide in his own opinion. (Ibid., 299)

While Wolff is no materialist, it is not clear in his philosophy what role the material or matter plays in the drama of life either here and now or beyond the death of the body. At times, it would appear that he like Leibniz sees the mind as a universe unto itself, not requiring or even needing anything outside of itself, other than God. While he also maintains that "the law of sensations contains the essential determinations of the soul (n. 78)" (Acton, 275). But these sensations are perhaps essential perceptions of the mind, and are not in any way related to the motive forces of bodies.

Wolff also asserts that the soul is finite substance (n. 264). This he clearly contrasts to the Infinite and what is proper to the Infinite. However, it would appear that for Wolff the Infinite finite dichotomy is different than the contrast between Immaterial material. In any case, Swedenborg would suggest that the soul is finite, and both material and immaterial.

Swedenborg's discussion of the materiality or immateriality of the soul is separated by one paragraph from number 313 where Swedenborg employed three quotes from Wolff to support his position concerning the mutability of the soul. Swedenborg in number 312 has discussed the adaptability of the spirituous fluid. He wrote of the spirituous fluid,

. . . as a perpetual mother and nurse it enters into every texture, the least as well as the greatest, and continues, irrigates, nourishes, actuates, modifies, forms and renovates it. It feels whatever of mutability happens in any degree of its series . . . From the wonderful character of this fluid originates every sensation and determination of the will into act; also the amazing production of forms; the perpetual animation of the system; . . . Wherefore this accidental mutation of this fluid is its veriest perfection, and derogates in no respect from its form, and takes nothing from its essence and attributes. . . . Wherefore the most perfect constancy in form and essence ever accompanies this perfect mutability of the higher entities. Wolff corroborates this position: "The state of the soul," he says, "is continually changing: the soul continually tends to change its state: all the changes of the soul take their rise from sensation" etc. (*Psychologia Rartionalis*, § 58, 56, 64) (Swedenborg 1955, 303).

At this juncture in his work, I believe that it was important for Swedenborg to use the work of the renown Wolff to support the idea of a changing and mutable soul. Quoting Wolff at this pivotal point, added important intellectual weight to Swedenborg's argument. He wanted to put it on a firm foundation because the discussion of accidental mutability grounded his discussion of the possibility of real mutation and an eventual discussion of human choice and free will. The real mutation Swedenborg wanted to focus on was the soul's reception of and response to life.⁷⁰ Swedenborg observed that life flows into the soul, all souls, like a beam of light or a pure river "in only one manner"; but its reception is "according to the modified character and capacity of the subject" (*Ibid.*, 305). This truth makes possible the immense variety of subjects and individuals found in the world. And within each subject a coordinated and harmonious system.

Swedenborg continued:

By means of this variety, the soul is enabled to know everything whatever that happens without and within the body, and that comes in contact

⁷⁰ In the text the word, life, is not capitalized, and yet the essence of what Swedenborg is saying fits well with the concept of Life from the Creator.

with the body; and to apply its force to those things that occur within, and to give its consent to those things that occur without. (Ibid., 308)

Thus we may understand what free choice is: namely, that the mind has the power to elect whatever it desires in a thought directed to an end; hence to determine the body to act; whether in according to what the animus wishes, or whether the contrary number. (Ibid., §317, 308)

It was important to Swedenborg to chart or describe in detail the process whereby humanity, in an orderly fashion, becomes rational in successive stages, and then has the capacity to act and to choose over time the shape and form of the soul—whether to be open to Life and in what way. Wolff's discussion of mutations of the soul provided an intellectual platform to do that.

In a final comparison between Swedenborg and Wolff, it is useful to see what each of them wrote regarding the possible causal relationship between the soul and the body.

Wolff wrote in the *Rational Psychology* that: "In a system of Pre-established Harmony there is a true union of soul and body. In the system of Occasional Causes the soul is united to the body by the mere will of God. In the system of Physical Influx physical union and its bond are empty terms (n.724-6)" (Acton 1931, 272).

This quote indicates that Wolff felt that the idea of Pre-established Harmony was a more rational explanation of the causal relationship between the soul and the body than either of the other two systems which, when taken together, are generally viewed as the three logical options available. Descartes' radical differentiation between the thinking mind and the extended body set up the problem that demanded a solution. Pre-established Harmony denies the existence of inter-substantial causation, but affirms intra-substantial causation. In this system the mind can only generate its own thoughts or movements. But in the mind the whole universe is represented which included all the possible objects and how to behave at any given moment. Therefore there can be an appearance of interactions because each substance (the soul/minds and object/bodies) is programmed to be in harmony with the other at all times. In reality, nonetheless, there is no interaction, and it would seem that it is not necessary

for objects to exist in order for there to be sensations in the mind. This tends to lead to a solipsistic universe with isolated independent minds the essential reality.

Swedenborg also took up this discussion of these three systems of causation. He determined that—without a proper guide which he believed was the doctrine of order, or series and degrees—“we shall have a tendency to fall into various premature opinions; . . . whence, it necessarily follows, that the communication of operations between the soul and the body must be explained either by Physical Influx [Aristotle], or by Occasional Causes [Descartes]; or if by neither of these, a third is assumed, as the only alternative, namely, that of Pre-*est*ablished Harmony [Leibniz]” (Swedenborg, 1955, 6).

Swedenborg was of the opinion that the principles a person uses to investigate phenomenon have an impact on what is actually observed. Thus, he felt that his principles of order, series and degrees opened up a new possibility of viewing the relationship between the soul and the body. He wrote, “Thus the one or other system flows as a consequence from our want of knowledge respecting the subordination of things and the connection of things subordinate . . . But whereas all things in succeeding each other follow one another in order, and whereas in the whole circle of things, from first to last, there is not a single one which is altogether unconnected or detached from the rest . . .” (Ibid.).

Swedenborg in his *Rational Psychology* proposed to test his doctrine to see if it indeed coincided with his observations of the soul’s kingdom. He set out four ways to ascertain the truth: First, in case the truth spontaneously manifests itself, without far fetched arguments; . . . Secondly, in case all experience, both particular and general, spontaneously favors it; Thirdly, in case the rules and maxims of rational psychology do the same” and he concluded with, Lastly:

In case the proposed views makes the different hypotheses, which have been advanced on the subject, to coincide, supplying us with the proper condition, or common principle, which bring them into order and connection, so that, contemplated in this manner, they are agreeable to the truth. We may remark that a system constructed on the ground of such an agreement, merits the title of Established Harmony. (Ibid., 7)

With this method and with this statement, Swedenborg developed a wholly new approach to the question of soul body communication. With it he saw the soul, as a force in the spirituous fluid, shape the body as its own habitation. The harmony was established in process of making and shaping the body. The material body in Swedenborg's view played an essential and vital role to the soul because as it acted in the natural world, in response to options present in the mind, it modified the soul either by opening it more and more to life, or bit by bit closing it off from life. This process is essential to the soul's unique individuation. Through this process, to quote Wolff, "the immortal soul . . . remains the same moral individual after death, and preserve[s] its state of personality (n. 742)."

Quite clearly, as this section on Wolff demonstrates, Swedenborg was impressed and influenced by Wolff both positively and negatively. He shared many philosophical interests with Wolff and he borrowed both terminology and insights from him. And, he may have, in fact, developed his concept of Established Harmony, after analyzing why Wolff's version of Pre-established Harmony was inadequate.⁷¹

An assessment of the notebook excursion

Dipping into Swedenborg's own extensive notebook in which he has quotes from such a vast array of philosophers, including those in this study and many other of his contemporaries, has been a valuable exercise, actually extremely valuable. Working with this material draws Swedenborg out of his, all too frequent isolation, and locates him within the flow of Western philosophy.⁷² It has shown his deep indebtedness to and connec-

⁷¹ For a useful discussion of borrowed terminology and other aspects of the relationship between Wolff's philosophy and Swedenborg's see Kurt P. Nemitz, "The German Philosophers Leibniz and Wolff in Swedenborg's Philosophical Development" in *The New Philosophy* 97.3 & 4, (1994): 411-425.

⁷² The source of this isolation is at least three-fold: 1) his lack of referencing that heritage in many of his philosophical works (although certainly not in the Soul series), and almost never in his theological works; 2) the indifference and or hostility of the philosophical and intellectual worlds to Swedenborg's work, particularly after his "call" which persists to this day (although he was a secret source of inspiration and insight to some philosophers through the years, including Kant; and has been seen as having influenced many authors and artists); and 3) the reticence of many of those most influenced by his Theological works to make these sort of connections.

tion with his and our intellectual heritage. Engaging in such explorations by other scholars and on other philosophers or even those touched on here could shed light on the path he travelled, and what helped him support his arguments and what he discovered he needed to dismiss; and even why in the end, he abandoned his project. What can we learn from his notebook about both the richness of and limits of philosophy?

With regard to the four philosophers in question and their impact, influence, and relationship to Swedenborg, this brief study indicates that Descartes was less of an influence on Swedenborg than others have thought, most significantly, Inge Jonsson, in his book, *Emanuel Swedenborg* (1971). While a more extensive study of the material quoted from Descartes might reveal a more significant influence than what was found in the study of the two concepts of God and the soul, nonetheless, these two concepts are central to both Swedenborg and Descartes. What Swedenborg gained from Descartes was both necessary and basic to his project; however, in the end, Swedenborg saw the soul as suffusing the body, and not just in the brain. The intense Cartesian training he received in Uppsala no doubt helped Swedenborg to shape his philosophical quest.

With regard to Spinoza, first of all, it is impressive that Swedenborg quoted him given Swedenborg's clear and often stated bias against naturalism, and also the general cultural assessment of Spinoza as an atheist and heretic. While it is true that some modern scholars see Spinoza's work as God-infused, he also was a determinist. This is another position that Swedenborg emphatically rejected. The inclusion of Spinoza suggests a certain catholicity of Swedenborg's mind, and the necessity of seeing things from a variety of positions and points of view. If Swedenborg rejected naturalism and determinism, it was a rejection based on knowledge and not on prejudice.

Swedenborg and Leibniz held similar views of God. God is the first reason of things, and he contains the reason for His own existence. He is wisdom, truth, goodness, and justice. He is Omnipotent, and the whole of order. Reading the *Theodicy* of Leibniz and its appendices must have inspired Swedenborg in relation to his own project and given him hope of obtaining a hearing. Swedenborg must also have appreciated Leibniz's optimism, given his own assessment of the irreligious temper of the times. Of course, Leibniz later became the subject of criticism and ridicule when

Voltaire (1694-1778) published his work *Candide* (1759) that challenged his conception that this is “the best of all possible worlds.”

Swedenborg also had much appreciation for many of Leibniz's thoughts expressed in relationship to the human soul. The scope of the quotes he took from Leibniz demonstrates an affinity to his thought. He appreciated Leibniz's belief that revelation provides human beings with truths not obtainable from natural sources, and his use of correspondences as a way to understand truths that can't be grasped by means of reason. He responded positively to the idea that the body operates according to set natural laws, and that there needs to be a system of feed back between the soul and the body. However, he could not accept Pre-established Harmony as the source of that system. Nevertheless, it seems clear that Leibniz developed his conception of Pre-established Harmony as an attempt to reconcile faith and reason.

Swedenborg was attracted to the broad scope of Wolff's philosophy. According to Kurt Nemitz in an article on the impact of German philosophy on the direction of Swedenborg's own philosophy, Swedenborg owned five of Wolff's works and two books about him. He draws on Wolff's work in his 1734 *Principia*, and also in both works on the soul, *The Dynamics of the Soul's Domain*, and *The Soul's Domain*. In terms of his notebook excursion, he was very drawn to Wolff's work in his *Rational Psychology*.

A more exact and careful comparison between Wolff's *Rational Psychology* and Swedenborg's chapter on The Soul in *The Dynamics of the Soul's Kingdom* ought to be done. While in this study, the focus was on examining the quotes of Wolff that Swedenborg used in his own work, it would be useful to actually compare both the structure and content of Swedenborg's work to Wolff's. Nemitz in his article indicates that Swedenborg adopted Wolff's use of the terms successive and simultaneous from Wolff that helped him to shape his discussion of series and degrees, and perhaps, his idea of the simple.⁷³ If this is the case it would be useful to read Swedenborg's discussion of “the premature opinion” associated with the three theories of casual relations between the soul and the body. Swedenborg felt that it was his understanding of series and degrees that led him to the concept of

⁷³ Nemitz, 1994, 424.

“Established Harmony” (Swedenborg, 1955, 6, 7). If Wolff had similar ideas, why did he continue to maintain belief in the superiority of Pre-established Harmony?

Richard J. Blackwell in “Christian Wolff’s Doctrine of the Soul,” at the end of the article asks the question: “Is Wolff saying that the soul body problem is insoluble in principle? At times one gets this impression.” Yet, Blackwell wonders, if, as Wolff maintains, “everything has a sufficient reason, why it is, rather than is not, as Wolff constantly insists, then the sufficient reason of the cooperation of soul and body must be hidden somewhere waiting to be discovered.”⁷⁴ Did Swedenborg make that discovery?⁷⁵

Comparison of the philosophical projects of Descartes, Spinoza, Leibniz, Wolff and Swedenborg

In the previous section the relationship between Swedenborg and the four philosophers in this study has been examined by exploring Swedenborg’s use of their philosophical perspectives in his own study and work. Swedenborg’s relationship to their works was examined in a limited and detailed manner. It is clear that Swedenborg read, absorbed, reflected upon, engaged and, in some cases, actually used their insights in his own works. Now it would be useful to step back and reflect on their broader philosophical projects and compare them to Swedenborg’s. This will involve a brief recapitulation of the essential goals of each philosopher.

Descartes

René Descartes had an ambitious project; he wanted to modernize philosophy. He was a mathematician and scientist and he needed philo-

⁷⁴ Richard J. Blackwell, “Christian Wolff’s Doctrine of the Soul,” *Journal of the History of Ideas*, Vol. 22 No. 3 July–Sept. 1961, 354.

⁷⁵ There are lots of ways to play with an answer to this question. Philosophically, the idea of Established Harmony, & or Revelation or Love. I just thought it would be fun to throw it in. And then: “The end or purpose of creation is a heaven from the human race” *Divine Providence* 27.

sophical tools appropriate to the discoveries he had made in mathematics and physics. He wanted to move beyond the ancients' and the scholastics' understanding of knowledge, to take into account new approaches to the physical world of extension. To do this he posed a series of questions. He used doubt to move toward certainty. He believed that science could not move forward if it remained encumbered by Aristotelian physics and metaphysics, and was limited by the heavy hand of theology. In his natural philosophy he revolutionized how we view the natural world composed of matter, seeing it governed by universal laws. Humans in this world had bodies governed by the laws of extension, and minds that lived and ruled an immaterial world of thought. The essence of matter is extension and the essence of mind is thought. He developed a metaphysics to take these conceptions into account.

While Descartes provided arguments for the existence of God, his project was to rationalize our understanding of the world—to empirically ground reason.

Spinoza

Baruch Spinoza had an audacious project. He wanted to totally comprehend and rationally systematize our philosophical approach to reality. Spinoza, the lens grinder, ground and refined ethics and transformed it from an understanding of human freedom in action, to defining it as rationally determined geometrical formulas focused on the application of right thinking. Spinoza viewed human beings as governed solely by the laws of nature—because there is nothing that essentially differentiates the human from the rest of nature. Thought and extension, which for Descartes were separate from God, in Spinoza's philosophy are attributes of God. Individual's emerge, for a time, from the eternal that has no beginning or end, and then they, like the wax figures, Leibniz mentioned in his letter to Hansch, will melt back into the one substance from which they sprang.

One strong and underlying motive or goal of Spinoza's philosophic project was to use Descartes' rationalism to destroy the dualism his philosophy proposed, and in the process re-define human nature. Spinoza had no patience for, interest in, or "love" for the emotions and passions of

humanity. They lure us away from the “right way of life.” Human life is thus reduced to a geometrical method, ordered and rational, but neither vibrant nor living. In banishing dualism, and favoring oneness or unity, Spinoza took the rationality of extension to be the order of the whole. While this approach may be intellectually attractive and may make understanding reality, on the surface, more manageable, it simply may not be true.

Be that as it may, his project remains surprisingly attractive. The naturalistic positions that he took during his life-time have become increasingly persuasive to many intellectuals. Perhaps more for what is rejected (the tenants of the Judeo-Christian tradition) than what is offered.

Leibniz

Gottfried Wilhelm Leibniz’s broad philosophical project was similar in many ways to Descartes’. He wanted to reform the scholastic philosophical tradition to take modern science into account. Like Spinoza, he, too, was troubled by the mind-body dualism of Descartes’ rationalism, so he invented the idea of a Pre-established Harmony to overcome this problem of dualism.

In his *Theodicy* he quite explicitly wanted to reconcile faith and reason. He was pleading God’s cause, but using natural reason to do so. Leibniz saw evil in the world, but lay its existence at the feet of humanity and not God. The world was rationally organized by a wise and just God, and humanity was given freedom, by that God, to choose the good. Choice creates identity for the chooser, and freedom allows the chooser not to select what is good. Nonetheless, God permits evil, according to Leibniz, for the sake of some good.

For Leibniz the mix of God, reason, and human freedom created the best of all possible worlds. His optimism about the human condition, however, did not sit well with the intelligentsia, and his project was ridiculed by Voltaire, specifically, and the “philosophes,” more generally.

Wolff

Christian Wolff was a rationalizer and a systematizer. The focus of his project was to use the power of natural reason to establish a foundation of rational morality. He brought rigor, order, and discipline to German philosophy. As it has been said, "he taught philosophy to speak German." He used his philosophy and his tremendous personal popularity to challenged the deep and abiding interests of the state churches and faculties of theology at the universities. He wanted a clear separation of philosophy and religion. While he was not opposed to faith, he did not want faith polluting the philosophical enterprise. He was certain that natural reason could generate a natural morality, without having recourse to faith. His focus challenged both revelation and miracles. His emphasis on natural reason led to the relativizing of faiths and minimizing the distinctions between them. In Germany, Wolff and his followers successfully broke the power of the established churches by restricting their influence on other social institutions, paving the way for secularization.

Swedenborg

Emanuel Swedenborg's project was to use the power of natural reason to demonstrate the marvelous order of creation: both in the macrocosm and within the microcosm for the sake of those with little or no faith. He used the tools of natural reason because they are human tools, gifts from God. It is possible with them to explore the natural finite worlds—the physical universe of the cosmos, the earth, and humanity. They can reach high enough to demonstrate that there is an infinite Creator, but they cannot show his nature or qualities to us. Given that reality, Swedenborg's project was to examine the created world and show its remarkable, astounding order and perfection in the vast and in the minute. Not only was there order and perfection at every turn, but there was also connection and coordination at every level and between levels; these were and are everywhere.

Swedenborg used the platform of Descartes' rationalist dualistic project, not for the sake of reason alone, but for the sake of faith. As a dualist he had to reject the naturalism of Spinoza which equated God and nature. He saw that Spinoza's project favored reason and an "intellectual love" for a God who, according to Spinoza, could not reciprocate and who was devoid of purpose or ends—what to Swedenborg was the key to creation itself. Swedenborg's project shared a great deal with Leibniz. Leibniz's interest in demonstrating the goodness of God in the face of evil, is similar to Swedenborg's desire to demonstrate the existence of God, with the tools of reason. Where Swedenborg parted company with Leibniz was over the idea of Pre-established Harmony—a perspective developed to overcome the problems of Descartes' dualism, which, however, challenged the need for a material world. Swedenborg saw the necessity of a material world in order for choices to have consequence in the shaping of eternal souls. Wolff's project attracted Swedenborg for its scope and definitional precision, as well as for the subjects he engaged. He was particularly drawn, as has been shown, to his *Rational Psychology*. Wolff's philosophy is a significant source for Swedenborg in his cosmological work, *The Principia*, and in his two works on the soul. Swedenborg draws upon him for validation of his own efforts. However, that leaves open the question of how he saw Wolff's broader project, particularly his desire to clearly separate religion and philosophy, the relativizing of faiths, and the questioning of revelation and miracles, and a purely rational morality. It is possible to imagine Swedenborg seeing the necessity of at least some these innovations, in an era of state church domination. It is also possible to imagine him rejecting some of Wolff's rationalizing project as perhaps going too far.

It should also be pointed out that Wolff was a living contemporary, while the other philosophers were not. Thus, it could be imagined that Swedenborg saw that the two of them were in the game together, so to speak, and that Swedenborg could just as easily influence Wolff's work as Wolff did his. It is also true that while Wolff was at the height of his popularity and influence, the long term consequences of his philosophy were yet to unfold. And as we are aware, Swedenborg's own emphasis and work would soon take a dramatic shift, and he would leave this project behind, even as he took everything he had learned from it with him.

The faith and reason framework

Descartes, although personally a man of faith, laid the foundation for the rationalist project. While he provided proofs for the existence of God, he was committed to a rational and scientific understanding of the world of nature and the human being; if he had to choose he would chosen reason over faith.

Spinoza in all his works, including his biblical criticism, was a rationalist and in every instance he eschewed faith in the name of reason.

Leibniz's was a scientist and mathematician as well as a man of faith. He wanted to reconcile faith and reason. He comes the closest to Swedenborg regarding the faith and reason question. Ideally he would not want to abandon reason for faith, or faith for reason; however, it would appear that his concept of Pre-established Harmony strains reason for the sake of faith.

Wolff was a rationalist who even wanted a rational morality, and saw faith entrenched in powerful state churches, perhaps more as traditional social institutions than as vehicles for intellectually viable doctrines. He appears to have been certain that the moral life could be rationally established apart from these faith traditions. Thus, he would and did choose reason over faith.

Swedenborg was a man of faith with a deep and abiding interest in science. He was drawn to rationality, and for a time thought that he could rationally pave the way to faith. The more he tried the harder the project became because his tools simply were not equal to the task. With them, in the end, he could not show the soul to the very senses. At that point faith called him. Responding to the call, changed both his project and his contribution to the world.

Regarding Israel's larger framework of "faith and reason," by 1740 the outcome was, in fact, what he suggested. Intellectuals gravitated to the side of faith or the side of reason. Of the five philosophers, three would side with reason, two with faith. I think the two with faith, if asked, would have wanted to maintain a close relationship with reason. However, if it was somehow declared that they could not, they would have chosen faith over reason due to their abiding faith in a wise and intelligent infinite Creator and Redeemer.

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