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The Vitalism of Anne Conway: Its Impact on Leibniz's Concept of the Monad

CAROLYN MERCHANT

Introduction By the late seventeenth century, several reactions to the mechanical philosophies of Descartes, Gassendi, Hobbes, and Boyle had appeared in Western Europe. Among these were philosophies that reasserted the fundamental organic unity of nature, such as Cambridge Platonism and vitalism. The Cambridge Platonists Henry More and Ralph Cudworth retained the dualistic structure of mind and matter assumed by Descartes and attempted to bridge the gap by the reassertion of plastic natures and the spirit of nature as organic links. The vitalists, on the other hand, affirmed the life of all things through a reduction of Cartesian dualism to the monistic unity of matter and spirit. Among its proponents were Francis Glisson, Francis Mercury van Helmont, Lady Anne Conway, and Gottfried Wilhelm Leibniz.

In this paper I shall discuss the major tenets of vitalism as they appeared in the thought of the philosopher Anne Conway, a woman whose ideas, praised and respected in her own day, have been almost forgotten in ours. In so doing, I shall also try to assess their influence on and convergence with the vitalistic strand of Leibniz's thought as it appeared in papers of his later life, for example, the "Monadology" and "The Principles of Nature and of Grace."

Anne Conway, F. M. van Helmont, and Leibniz In his important work *Leibniz und Spinoza* (1890), Ludwig Stein pointed out that the first use of the term "monad" to characterize the concept of individual substance in Leibniz's thought occurred in a letter to Fardella of September, 1696.¹ The word "monad" had been utilized in the writing of Francis Mercury van Helmont and Lady Anne Conway and had appeared in the *Kabbala denudata*, published by Knorr von Rosenroth in 1677-78, to which van Helmont had contributed.² Significantly it was during the period of van

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¹ Ludwig Stein, *Leibniz und Spinoza* (Berlin: Georg Reimer, 1890), p. 209.

² 3 vols. (Sulzbach, 1677-78); see 1:310 and 3:28. Francis Mercury van Helmont, *A Cabbalistical Dialogue in answer to the Opinion of a learned doctor in Philosophy and Theology that the world was made*

Helmont's visit to Leibniz at Hannover in 1696 that Leibniz appropriated the word.³ Six years earlier van Helmont had carried Anne Conway's only manuscript, *The Principles of the Most Ancient and Modern Philosophy*, to Holland where it had been translated into Latin and two years later published again in an English retranslation.⁴ It is also known that Leibniz was familiar with the *Kabbala denudata* and had visited Knorr von Rosenroth at Sulzbach early in 1688.⁵ Leibniz therefore knew the writings of the younger van Helmont and, through him, the book by Anne Conway, and he found many of their ideas compatible with his own.

A number of scholars have provided background studies essential to elaborating the historical and philosophical connections among these three thinkers. Marjorie Nicholson has traced the fascinating relationship between Henry More, Lady Conway, and van Helmont, while dissertations and articles by Alison Coudert and Joseph Politella have delved more deeply into their response to Quakerism and cabalism.⁶ The philosophies of nature, however, of both the younger van Helmont and Anne Conway have been almost totally neglected.⁷

It is startling to note that Heinrich Ritter's discussion of van Helmont's philosophy in his *Geschichte der Philosophie* was based almost entirely upon Anne Conway's *Principles*, he having assumed van Helmont to be the author. Conway's *Principia philosophiae antiquissimae et recentissimae*, which appeared in the *Opuscula philosophica*, was edited by van Helmont and was either his or Henry More's Latin translation of her book.⁸ Ritter was apparently unaware of the account of van Helmont's life in Adelung's 1787 *Geschichte der Menschlichen Narrheit*, in which van

of nothing. As it is contained in the second part of the Cabbala denudata and Apparatus in Lib. Sohar, p. 308, etc., 1677. To which is subjoined a Rabbinical and Paraphractical Exposition of Genesis I, written in High Dutch by the author of the Foregoing dialogue, first done into Latin but now made into English (London: Benjamin Clark, 1682), pp. 4, 9, 13. [Anne Conway], *Opuscula Philosophica Quibus Continentur Principia Philosophiae Antiquissimae et Recentissimae Ac Philosophiae Vulgaris Refutatio* (Amsterdam, 1690). English retranslation: *The Principles of the Most Ancient and Modern Philosophy, Concerning God, Christ, and the Creatures*, trans. prob. by J. Crull (London, 1692), p. 28. The preface to the English translation states that the book is the work of "a certain English Countess, A Woman learn'd beyond her sex, being very well skilled in the Latin and Greek tongues, and exceedingly well versed in all kinds of Philosophy."

³ Stein, pp. 209-10.

⁴ Marjorie Nicholson, *Conway Letters: The Correspondence of Anne, Viscountess Conway, Henry More and their Friends, 1642-1684* (New Haven: Yale University Press, 1930), p. 453. See also, Johann Christoph Adelung, *Geschichte der menschlichen Narrheit*, 7 vols. (Leipzig, 1787), 4:306.

⁵ A. Foucher de Careil, *Leibniz, la philosophie juivre et la cabale* (Paris: Auguste Durand, 1861), pp. 56-59.

⁶ Nicholson, *Conway Letters*, and "The Real Scholar Gypsy," *Yale Review* (January 1929), pp. 347-63. Alan Gabbey, "Anne Conway et Henri More, Lettres sur Descartes," *Archives de Philosophie* 40 (1977): 379-404. Alison Coudert, "A Quaker-Kabbalist Controversy," *Journal of the Warburg and Courtauld Institutes* 39 (1976): 171-89, and "A Cambridge Platonist's Kabbalist Nightmare," *Journal of the History of Ideas* 36 (1975): 633-52. Alison Coudert Gottesman, "Francis Mercurius van Helmont: His Life and Thought" (Ph.D. diss., University of London, 1972). Joseph Politella, "Platonism, Aristotelianism, and Cabalism in the Philosophy of Leibniz" (Ph.D. diss., University of Pennsylvania, 1938), pp. 13-19, 55-57.

⁷ On van Helmont see especially Coudert, "Kabbalist Nightmare," pp. 639-43. Also Adelung, chap. 48, "Franciscus Mercurius von Helmont, ein Pantheist," pp. 294-323. On Conway see Coudert, "Kabbalist Nightmare," pp. 643-44. Marjorie Nicholson (*Conway Letters*, p. 454, n. 8) states, "I have discussed the technical philosophy of the Principles more fully in a forthcoming paper." I have not located this paper and do not know if it was in fact published.

⁸ Ritter, *Geschichte der Philosophie*, 12 vols. (Hamburg, 1829-53), 12:3-47, see p. 7, n.1. Although Ritter used three other books by van Helmont, the most substantial part of his account of Helmont's ideas is based upon Conway's book, cited in note 2 above. It is therefore almost wholly unreliable.

Helmont was clearly named as editor and Conway as the author, or of the English translation, which stated that it was written by "a certain English Countess." Quotations from her book on the use of the term "monad" were attributed to van Helmont by Ritter and accepted by Selver, the two-faculty interpretations becoming the basis for Stein's discussion of the transmission of the term to Leibniz.⁹ Moreover, although van Helmont did use the concept, the book containing his discussion was not known to either Ritter or Stein. Thus the major textual evidence for attributing Leibniz's appropriation of the term "monad" to van Helmont, instead of to Anne Conway, was due to inaccurate scholarship. The withholding of Conway's name, as a woman writer, from the Latin edition has therefore resulted in excluding from scholarly recognition her important role in the development of Leibniz's thought. Below, I shall deal more specifically with the use of the term by Conway and van Helmont. But first, in order to provide a historical context for the development of these ideas, let us briefly review the relevant biographical background.

Francis Mercury van Helmont, the wandering "scholar gypsy," had arrived in England in 1670 for his first visit, the purpose of which was to deliver to Henry More several letters from Princess Elizabeth of Bohemia and to discuss with him their mutual interest in the cabala.¹⁰ He had planned to remain in England only one month, but through the joint efforts of More and Viscount Edward Conway he was finally persuaded to travel to Ragley to visit the brilliant woman Lady Anne Conway, in order to attempt a cure of her incessant and intolerable migraine headaches.¹¹

Anne Finch, Viscountess of Conway (1631–79), as a young woman had been one of Henry More's most accomplished and brilliant disciples, known to him through her brother, John Finch, a pupil of More at Christ College, Cambridge. An avid reader of philosophy, literature, the classics, mathematics, and astronomy, she was an intelligent, vital conversationalist and had a charming personality. Her home at Ragley Hall in Warwickshire became an intellectual center where lively debates were held with philosophers such as More, Ralph Cudworth, Joseph Glanvill, Benjamin Whichcote, and the younger van Helmont.¹²

Tormented by headaches, which gradually increased in frequency and severity until they were pronounced incurable after attempts by Europe's most noted physicians, including William Harvey, the noted healer Valentine Greatrakes, and van Helmont, Anne Conway nevertheless carried on an active intellectual life.¹³ The single written work attributed to her and published posthumously carried on the Cambridge school's interest in spiritualism, Platonism, and cabalism and bears the influence of van Helmont. Truer to the Platonic tradition than to the writings of

⁹ David Selver, *Der Entwicklungsgang der Leibnizschen Monadenlehre bis 1695* (Leipzig, 1885), pp. 78–79: "Schliesslich sei noch, um den Schein einer unabsichtlichen Uebergewandlung zu vermeiden, bemerkt, dass wir auch in den Schriften des jüngeren van Helmont keinerlei Quelle der Leibniz'schen Monadenlehre entdecken können. H. Ritter, der die Schriften des v.H. als diejenigen ansieht (*Gesch. d. Philos.*, XII, Bd.S.4.67ff. . . .) See also Stein, p. 212, n.1, which cites Helmont on the monad from: "*Princ. phil.* III, 9, p. 25 . . . angeführt von Ritter, *Gesch. d. Phil.* XII, 22." Stein went even further than Ritter by quoting the passages from the *Kabbala denudata* that Conway had cited in her discussion of the monad, attributing them to van Helmont. I shall discuss this more fully below.

¹⁰ Nicolson, "Scholar Gypsy," p. 356.

¹¹ See Gilbert Roy Owen, "The Famous Case of Lady Anne Conway," *Annals of Medical History* 9 (1937): 567–71.

¹² Nicolson, *Conway Letters*, pp. 1–9, 39–51.

¹³ *Ibid.*, pp. 116–18, 244–61.

either of her colleagues More or Cudworth, it was far more sweeping in its rejection of Cartesianism and embracement of vitalism.

In March of 1696, van Helmont arrived in Hanover, where he remained for several months, meeting with Leibniz each morning at nine for philosophical discussion.¹⁴ According to Leibniz, van Helmont took the desk while he became the pupil, interrupting frequently to ask for greater clarification. Van Helmont recounted to Leibniz the history of the "extraordinary woman," the Countess of "Kennaway," and his own relationship with Henry More and John Locke.¹⁵ From him Leibniz learned of Anne Conway's metaphysics and her studies of the works of Plato and Plotinus and of the cabala.¹⁶ In an undated letter to Thomas Burnett in 1697, Leibniz, having read her book, went so far as to state: "My philosophical views approach somewhat closely those of the late Countess of Conway, and hold a middle position between Plato and Democritus, because I hold that all things take place mechanically as Democritus and Descartes contend against the views of Henry More and his followers, and hold too, nevertheless, that everything takes place according to a living principle and according to final causes—all things are full of life and consciousness, contrary to the views of the Atomists."¹⁷

Leibniz spoke subsequently with praise and approval of both Lady Anne Conway and van Helmont, although the latter he often found puzzling and quixotic. In the *New Essays*, begun in 1697, he referred to both as explicating the doctrine of vitalism better than their Renaissance predecessors, writing that he saw "how it is necessary to explain rationally those who have lodged life and perception in all things, as Cardan, Campanella, and better than they, the late Countess of Connaway, a Platonist, and our friend, the late M. François Mercure van Helmont (although elsewhere bristling with unintelligible paradoxes), with his friend the late Mr. Henry More."¹⁸

The elements of Conway's system thus represented a significant input in the important period of Leibniz's thought, leading up to the writing of the 1714 "Monadology." We now turn to a discussion of her philosophy of nature, pointing out congruences with Leibniz's views.

Anne Conway's Monistic Vitalism Whereas the Cartesians and the Cambridge Platonists More and Cudworth were dualists, Anne Conway, like van Helmont, was a monist. In her philosophy there was no essential difference between spirit and body, and, moreover, the two were interconvertible. She distinguished her views sharply from those of Descartes and also from those of More and Cudworth on these points. Body was condensed spirit, and spirit was subtle volatile body.¹⁹ Body and spirit were not contrary entities, the one impenetrable and discerptible, the other penetrable and indiscerptible, as More had held.²⁰ Matter was not dead, stupid, and

¹⁴ Leibniz to Sophie, September 1696, in Leibniz, *Correspondance de Leibniz avec l'Electrice Sophie de Brunswicke-Lunebourg*, ed. Onno Klopp, 3 vols. (Hanover, 1974), 2: 8.

¹⁵ Leibniz, *Philosophischen Schriften*, ed. C. I. Gerhardt, 7 vols. (Berlin, 1875-90), 3: 176, 180 (hereafter cited as Gerhardt).

¹⁶ Politella, p. 16; Nicolson, *Conway Letters*, p. 455.

¹⁷ Gerhardt, 3: 217.

¹⁸ *New Essays concerning Human Understanding*, trans. Alfred G. Langley (Lasalle, Ill.: Open Court Publishing Co., 1949), p. 67.

¹⁹ Conway, *Principles*, pp. 140, 147.

²⁰ *Ibid.*, pp. 104, 126.

devoid of life as Descartes and the Cambridge Platonists had thought. For Lady Conway, an intimate bond and organic unity existed between the two. Body and soul were of the same substance and nature, but soul was more excellent in such respects as swiftness, penetrability, and life.²¹

She pointed out that spirit would have no need of body at all nor of corporeal sense organs if, as More asserted, spirit was the principle of motion in dead unorganized matter, and if spirit could see, hear, and sense of itself.²² In consideration of the undenied circumstance that the soul felt pain and grief when the body was cut or wounded, the two must be united and of one substance, for otherwise the soul, as an independent substance, could simply move away from the suffering of a damaged body and thereby be insensitive to it.²³

Her break from Descartes and the Cambridge Platonists was sharpest on the issue of dualism. She insisted that her philosophy was not Cartesianism in a new form as she perceived that of her friends to have been, but was fundamentally anti-Cartesian. "For first, as touching the Cartesian Philosophy, this saith that every body is a mere dead mass, not only void of all kind of life and sense, but utterly incapable thereof to all eternity; this grand error also is to be imputed to all those who affirm body and spirit to be contrary things, and inconvertible one into another, so as to deny a body all life and sense."²⁴

Body and spirit were interconvertible because they were of the same substance and differed only as to mode.²⁵ She argued that the distinctions made between the attributes of matter as impenetrable and extended, and spirit as penetrable and unextended, were not to be assigned respectively to two separate substances. Body was simply the grosser part of a thing and spirit the subtler; both spirits and bodies had degrees of grossness and subtlety.²⁶ The penetration of spirits within a body caused it to swell and puff up, an alteration that might or might not be visible to the senses.²⁷ Just as spirit and body could interpenetrate in this way, so a less gross body could penetrate a more gross, or a more subtle spirit, a less subtle one. Just as other properties of objects such as heat, weight, and solidity were relative, so was penetrability in both body and spirit; each could be more or less penetrable or impenetrable.²⁸ The dualists had "not yet proved that body and spirit are distinct substances; . . . unless they are, it follows that one nature is not more penetrable than the other, according to their sense [sic]."²⁹

The other attribute by which bodies and spirits were supposed to be distinguished, discernibility, or division into parts, was no less an attribute of one than the other. Just as bodies were composed of lesser bodies, the human spirit was composed of several spirits under one governing spirit.³⁰ Equally nondifferentiating as attributes of body rather than spirit were shape and mobility. Motion and figure, which were

²¹ *Ibid.*, p. 132.

²² *Ibid.*, pp. 127–28.

²³ *Ibid.*, p. 132.

²⁴ *Ibid.*, p. 147.

²⁵ *Ibid.*, p. 82.

²⁶ *Ibid.*, p. 112.

²⁷ *Ibid.*, pp. 114–15.

²⁸ *Ibid.*, pp. 106–7.

²⁹ *Ibid.*, p. 110.

³⁰ *Ibid.*, pp. 118, 123.

supposed to be attributes of extended matter, applied equally to spirit, for spirit was far more moveable and figurable than body.³¹ The interpretation of matter and spirit that Lady Conway deemed significant was their unity as two different aspects of the same substance.

This and other ideas in her treatise she extracted from works on the cabala included in the *Kabbala denudata*, such as the *Philosophia Kabbalistica dissertatio* and the *Adumbratio Kabbalae Christianae*. Spirit in the *Kabbala denudata* was the capacity to enlarge or contract by sending out light from a center. Matter was a “naked center or a point wanting eradication.”³² Interest in cabalistic literature was keen among the members of the Cambridge school, and both More and Cudworth had at times viewed Descartes as the restorer of the true philosophy of Moses. One of More’s works least appreciated by modern scholars was his *Conjectura Cabbalistica* (1653), written before he had read the *Zohar* and admitted by him to be the product of his own imagination, but nevertheless an important influence on Milton.³³ More subsequently repudiated the cabala in a treatise in the *Kabbala denudata* entitled “The Fundamentals of Philosophy.”³⁴ Nevertheless, the cabala was an important source of validation to those philosophers who wished to restore life and spirit to the dead world of the mechanists. Cudworth, More, and Conway all used it to argue that the ancient wisdom that saw the total unity and vitality of the universe was the true knowledge, whereas the dead mechanical world of the moderns was a distortion emphasizing only the atomistic aspect of old gnosis.³⁵

Like More and Cudworth, Lady Conway differed from Descartes on the subject of cosmic and animal mechanism. Although Descartes had discovered many mechanical laws of nature, nature was not a machine, but a living body. “But yet in nature, and her operations, they [natural operations] are far more than merely mechanical; and the same is not a mere organical body, like a clock, wherein there is not vital principle of motion; but a living body, having life and sense, which body is far more sublime than a mere mechanism, or mechanical motion.”³⁶ Likewise, animals were not machines, composed of “mere fabrick” or “dead matter,” but had spirits within them “having knowledge, sense, and love, and divers other faculties and properties of a spirit.”³⁷

An individual atom of dead matter, the building block of the mechanists, could never, if isolated, do anything to develop or perfect itself, for an atom had no internal motion and no capacity for sensation. Having no sight, taste, or hearing from

³¹ Ibid., p. 107.

³² Ibid., p. 113. She cited *Kabbala denudata*, vol. 2, *Tract. ult.*, p. 6, sec. 13.

³³ Henry More, *Conjectura Cabbalistica: or a Conjectural Essay of Interpreting the Mind of Moses, in the Three First Chapters of Genesis, According to a Threefold Cabbala: viz. literal, philosophical, mystical, or divinely moral* (1653), in *A Collection of Several Philosophical Writings of Dr. Henry More* (London, 1712). On this work see Marjorie Nicolson, “Milton and the Conjectura Cabbalistica,” *Philological Quarterly* 6 (1927): 1–18.

³⁴ Gottesman (= Coudert), “Van Helmont: Life and Thought,” pp. 519, 526, 536; Nicolson, *Conway Letters*, p. 83, letter of 9 August 1653.

³⁵ See Gunnar Aspelin, “Ralph Cudworth’s Interpretation of Greek Philosophy,” in *Acta Universitatis Gotoburgensis*, Göteborgs Högskolas Arsskrift, vol. 49, no. 1 (1943), pp. 1–47; J. E. McGuire and P. M. Rattansi, “Newton and the Pipes of Pan,” *Notes and Records of the Royal Society* 21 (1966): 108–43; Politella, *Platonism, Aristotelianism, and Cabalism*.

³⁶ Conway, *Principles*, p. 148.

³⁷ Ibid., p. 60.

within, it could receive nothing from without.³⁸ The atom of the mechanists, described in this way by Conway, was thus the antithesis of Leibniz's monad, the attributes of which were internal activity and perception.

Like those of other organicists of the period, her system of creation was based not on the machine but on the great hierarchical chain of being; however, like van Helmont, she conceived it as a chain along which an evolution or transmutation to higher forms could occur, based upon the acquisition of goodness and perfection. Conway denied that any created essences could reach God's essence, which was infinitely perfect, but within the creation there was an ascension up the scale of being.³⁹ Dust and sand were capable of successive transmutation to stones, earth, grass, sheep, horses, humans, and the noblest spirits, so that after a long period of time they could achieve the perfections common to the highest creatures, that is, "feeling, sense, and knowledge, love, joy, and fruition, and all kind of power and virtue."⁴⁰

Creation was like a ladder whose steps were species placed at finite, rather than infinite, distances from one another. Hence, "stones are changed into metals, and one metal into another; but lest some should say these are only naked bodies and have no spirit, we shall observe the same not only in vegetables, but also in animals, like as barley and wheat are convertible the one into the other, and are in very deed often so changed. . . . And in animals worms are changed into flies and beast, and fishes that feed on beasts, and fishes of a different kind do change them into their own nature and species. . . ." ⁴¹ This, she believed, was consistent with the Biblical account that the waters brought forth birds and fishes and the earth, beasts and creeping things, at the command of the creator.⁴²

The transmutation of spirits into new bodies after death was effected by the soul's plastic nature, a concept obtained from More and Cudworth that hypothesized a force capable of forming matter into new shapes.

And when the said brutish spirit returns again into some body, and hath now dominion over that body, so that its plastick faculty hath the liberty of forming a body, after its own idea and inclination (which before in the humane body, it had not); it necessarily follows, that the body, which this vital spirit forms, will be brutal, and not humane. . . . Because its plastick faculty is governed of its imagination, which it doth most strongly imagine to its self, or conceive its own proper image; which therefore the external body is necessarily forced to assume.⁴³

Leibniz, differing from Conway and van Helmont on this point, argued not only against transmigration or metempsychosis in animals, but also against the idea of plastic natures. Plastic natures could not move, alter, or change the direction of a body, all motion being consonant with the system of pre-established harmony.⁴⁴ Furthermore, vital principles belonged only to organic bodies, although all matter,

³⁸ Ibid., p. 120.

³⁹ Ibid., pp. 152-53.

⁴⁰ Ibid., pp. 69, 153, 155.

⁴¹ Ibid., pp. 64-65.

⁴² Ibid., p. 65.

⁴³ Ibid., p. 70.

⁴⁴ Leibniz, "Considerations on Vital Principles and Plastic Natures, by the Author of the System of Pre-established Harmony" (1705), Gerhardt, 6:539; trans. in Leroy E. Loemker, ed., *Philosophical Papers and Letters*, 2 vols. (Chicago: University of Chicago Press, 1956), 2:954.

even inorganic matter, was permeated by organic animated bodies. In a letter of 1710, he called plastic natures an outmoded theory.⁴⁵

Anne Conway radically opposed Hobbes and Spinoza, both of whom had reduced nature to a monistic materialism that denied any distinction between God and his creation.⁴⁶ Both, like Conway, accepted the interconvertibility of all things, but on the materialist assumption it would follow that there was no distinction between lower and higher forms and that God was interconvertible with corporeal species. Furthermore, sense and knowledge were far more noble than the Hobbesian reduction to the mechanical motion of corpuscles would allow.⁴⁷ The transmission of vital action could take place by a more subtle kind of penetration than any mechanical action by the finest corporeal matter, that is, intrinsic presence, which was an instantaneous action.⁴⁸ This subtle spiritual action of all created substance was one of its modes of existence. Since the whole of creation was alive, every motion within it was vital, "a motion of life" and "vital virtue."⁴⁹ Thus, all bodies had "not only quantity and figure, but life also," were "not only locally and mechanically but vitally moveable," and could "receive and transmit vital action."⁵⁰ In corroboration Conway cited texts from the Old and New Testaments to argue that "all things have life, and do really live in some degree or measure."⁵¹

In much of her discussion of the essential spiritual vitality of the whole world, Anne Conway's thought converged with that of Leibniz, and she was for this reason held in high esteem by him.⁵² Like Leibniz, who believed that in each portion of matter there was a whole world of creatures, each one containing within it also an entire world,⁵³ Anne Conway wrote that "in every creature, whether the same be a spirit or a body, there is an infinity of creatures, each whereof contains an infinity, and again each of these, and so *ad infinitum*."⁵⁴

Like Leibniz, who wrote that there was nothing dead or fallow in the universe,⁵⁵ she asked: "How can it be, that any dead thing should proceed from him, or be created by him, such as is mere body or matter. . . . It is truly said of one that God made not death, and it is true, that he made no dead thing: For how can a dead thing depend of him who is life and charity?"⁵⁶ Death was not annihilation, but "a change from one kind of and degree of life to another."⁵⁷ Dead Body could not receive goodness nor perfect itself in any way; changes in motion or shape would not help it to attain life or improve itself intrinsically.⁵⁸ Again, this idea is echoed in Leibniz's

⁴⁵ William B. Hunter Jr., "The Seventeenth Century Doctrine of Plastic Nature," *Harvard Theological Review* 43 (1950): 212; Leibniz, *Opera Omnia*, ed. Ludovici Dutens, 6 vols. (Geneva, 1768), 5:359 (hereafter cited as Dutens).

⁴⁶ Conway, *Principles*, p. 148.

⁴⁷ *Ibid.*, p. 159.

⁴⁸ *Ibid.*, p. 163.

⁴⁹ *Ibid.*, p. 165.

⁵⁰ *Ibid.*, p. 168.

⁵¹ *Ibid.*, p. 143.

⁵² Gerhardt, 3:217.

⁵³ "The Monadology," Gerhardt, 6:607-23, secs. 66, 67.

⁵⁴ *Principles*, p. 20.

⁵⁵ "The Monadology," sec. 69.

⁵⁶ *Principles*, p. 93.

⁵⁷ *Ibid.*, p. 144.

⁵⁸ *Ibid.*, pp. 96-97.

statement that "every possible thing has the right to aspire to existence in proportion to the amount of perfection it contains in germ."⁵⁹

Like Leibniz, who stressed the interconnectedness of all spirits (or minds) in a "kind of fellowship with God," so that the totality composed the City of God,⁶⁰ Lady Conway based her system on the interdependence of all creatures under God in a "certain society of fellowship . . . whereby they mutually subsist one by another, so that one cannot live without another."⁶¹ Each creature had a "central or governing spirit" having dominion over the other spirits that composed it.⁶² "The unity of spirits that compose or make up this center or governing spirit, is more firm and tenacious, than that of all the other spirits; which are, as it were, the angels or ministering spirits of their prince or captain. . . ."⁶³ Akin to this idea is Leibniz's concept of the dominant monad, or entelechy, which unifies the monads, or simple incorporeal substances, which can enter into compounds.⁶⁴

But unlike Leibniz, who held to a system of pre-established harmony to solve the problem of the dualism between the body and the spirit, and unlike More and Cudworth, who used plastic natures to unify the two worlds, Conway followed the *Kabbala denudata* and the ancient system of the Hebrews. She argued that the soul was of one nature and substance with the body, "although it is many degrees more excellent in regard of life and spirituality, as also in swiftness of motion, and penetrability, and divers other perfections. . . ."⁶⁵ Between the two extremes of gross and subtle bodies were "middle spirits," which either joined body and soul or if absent dissolved its unity. Similarly, Jesus Christ functioned as a middle nature or medium uniting the soul of man to God.⁶⁶

Anne Conway's vitalism was an influential reaction against the ideas of the mechanists. She was well versed in and sharply critical of the ideas of her adversaries, Descartes, Hobbes, and Spinoza, as well as her teachers and friends, More and Cudworth. Ritter, mistaking the work of Conway for that of van Helmont, saw the author of the *Principles* as carrying out a wide-ranging battle against the Cartesian philosophy of dualism and against the basis of mechanical physics in general.⁶⁷ Of the two vitalists, Conway had a far more rigorous and critical and a less enthusiastic mind than van Helmont. For these reasons, as well as for the compatibility of her ideas with his own, Leibniz found her work more "extraordinary" and less "paradoxical" than that of van Helmont.

Yet Anne Conway's philosophy ultimately did not go beyond the limits of the categories of substance philosophy within which she worked. Her monistic resolution of the mind-body problem, although more parsimonious than the dualism of Descartes, was simply a reduction of all of reality to the idealist category of spirit. By denying the validity of body as an explanatory category, her philosophical framework was unable to provide a satisfactory description of empirical phenomena.

⁵⁹ "The Monadology," sec. 54.

⁶⁰ *Ibid.*, secs. 84–86.

⁶¹ *Principles*, p. 122.

⁶² *Ibid.*, p. 123.

⁶³ *Ibid.*

⁶⁴ "The Monadology," secs. 1, 2, 70.

⁶⁵ *Principles*, p. 132.

⁶⁶ *Ibid.*, pp. 36, 133, 136.

⁶⁷ *Geschichte der Philosophie*, 12:26, 27, 30.

Unlike Leibniz, whose system of pre-established harmony and "well-founded phenomena" obeying mechanical laws also fell short of a solution, she did not even address herself to the issue of bodies and their interactions.

Furthermore, her assumption of the transmigration of souls, and the concepts of "middle natures," plastic natures, and vital virtues, which composed the core of her vitalism, were based neither on rigid logical consistency nor on firm empirical evidence, a problem that continued to weaken the case for vitalists and holists of the nineteenth century such as Hans Driesch, Henri Bergson, and J. C. Smuts. Like that of other protagonists in the mechanist-vitalist debates that have continued ever since the rise of mechanism, her embracement of vitalism was based on meta-theoretical commitments. Her philosophy falls within a philosophical, scientific tradition that operates on the assumption that the living and nonliving constitute two fundamental categories of reality.⁶⁸ Her commitment to spirit as the solution to the dualistic dilemma grew as much from psychological needs connected to her physical health and her embracement of Quakerism as a refuge, as it did from a consideration of the logic of philosophical alternatives.

The Monads of van Helmont, Conway, and Leibniz It is historically noteworthy that by September, after van Helmont's March 1696 arrival in Hanover, one finds in Leibniz's writings the first use of the term "monad" to characterize his concept of "individual substance."⁶⁹ In long hours of conversation with Leibniz and the Electress Sophie, van Helmont spoke about his own ideas, those of Anne Conway, and of Knorr von Rosenroth's *Kabbala denudata*, conversations that Leibniz found "very instructive," whereas many of van Helmont's writings he had found "bristling with unintelligible paradoxes."⁷⁰

Prior to 1696, Leibniz had used the terms *entelechie*, *formes substantielles*, *unité substantielle*, *point metaphysical*, and *forces primitives* interchangeably to mean individual substance.⁷¹ But in 1696, the disparate elements of his metaphysics coalesced when he began using the concept of the monad to represent an independent individual—a substance endowed with perception and activity—existing in a state of accommodation and consensus with other substances.

A theory expounded by Dühring in his *Kritische Geschichte der Philosophie* (1869) and based on a letter in the 1746 *Thesauri epistolici la Croziani* held that Leibniz had based his whole system upon Bruno's book *De Maximo et Minimo*, from which he

⁶⁸ On the mechanist-vitalist debates, see Hilda Hein, "Mechanism and Vitalism as Theoretical Commitments," *Philosophical Forum*, n.s. 1, no. 1 (Fall, 1968): 185–205; idem, "The Endurance of the Mechanism-Vitalism Controversy," *Journal of the History of Biology* 5, no. 1 (Spring, 1972): 159–88; L. Richmond Wheeler, *Vitalism: Its History and Validity* (London: Witherby, 1939).

⁶⁹ Dutens, 6:70.

⁷⁰ Ibid. See also Gerhardt, 3:427; Loemker, 2:1027; *New Essays*, p. 67. Leibniz had visited Knorr von Rosenroth in 1688 (see note 11). He referred to Helmont's friendship with him in a note: "Ce fut Mr. Knorr de Sulzbach, qui donna la *Cabbala denudata* au public et quoyque Monsieur Helmont l'y ait porté et encouragé néanmoins ce sont proprement les sentimens de Monsieur Knorr, dont M. Helmont ne demeure pas toujours d'accord, comme il me l'a dit luy même." Joachim Fredericus Feller, ed., *Otium Hanoveranum*, 2nd ed. (Lipsae, 1719), p. 217, no. 163. Also, Politella, pp. 13–19.

⁷¹ Stein, pp. 194, 206. On Leibniz's concept of individual substance, see Ian Hacking, "Individual Substance," in Harry G. Frankfurt, ed., *Leibniz: A Collection of Critical Essays* (New York: Doubleday Anchor, 1972), pp. 139–53.

obtained the term "monad."⁷² The influence of Bruno on Leibniz was traced back to Nicholas of Cusa, from whom Bruno had borrowed the term. This view, questioned by Selver and Auerbach, was refuted at length by Ludwig Stein in his *Leibniz und Spinoza*. Selver pointed out that for Bruno the term "monad" was used in an entirely different sense as an arithmetical entity meaning both largest and smallest, represented in the material world by the Neoplatonic world soul on the one hand and on the other by the corporeal atom.⁷³ He cited Pythagoras, Plato, and Cusa as indirect influences; but, based on the work of Ritter, the most likely direct source was the younger van Helmont. Selver, Akerbach, and Wendt alternatively traced the evolution of the monadology within the larger context of the development of Leibniz's system as a whole.⁷⁴

Stein then pointed out that Leibniz had merely mentioned Bruno's name in his *Dissertatio de arte combinatorio* of 1666 and in two other instances in 1682 and 1690.⁷⁵ In 1691, he had quoted Bruno's term *de Monade* but seems to have known only that, rather than the whole doctrine.⁷⁶ Although Leibniz's philosophy of individual substance and immaterial force was well developed by that year, he did not mention Bruno's work or appropriate the term "monad" until 1696, five years after the time of Bruno's most likely influence on the doctrine of the monad.⁷⁷ He was in fact so little familiar with the writings of Bruno that in 1708, writing to La Croze, he misspelled the title of Bruno's *Lo Spaccio* as "Specchio."⁷⁸

Whether Leibniz knew of John Dee's *monas* symbol described in his *Monas Hieroglyphica* (1564) is uncertain. He did refer to Meric Casaubon's publication of Dee's book on his encounters with spirits, recognizing that Dee had been deceived by Kelley.⁷⁹ The *monas* represented a combination of cabalistical, alchemical, and mathematical ideas, giving insight into the spiritual divine world, and had been absorbed into the Rosicrucian manifestoes of 1614–16.⁸⁰ He had, however, used both the words *monas* and *monachon* in other contexts.⁸¹

Let us now examine the use of the term "monad" as it appears in the writings of van Helmont and Anne Conway. In the *Cabbalistical Dialogue*, van Helmont had stated:

For these are our positions. 1. That the creator first brings into being a spiritual nature. 2. And that either arbitrarily (when he please;) or continually, as he continually understands,

⁷² On the scholarship surrounding this thesis, see Stein, p. 198.

⁷³ *Entwicklungsgang*, pp. 78–79.

⁷⁴ Sigmund Auerbach, *Zur Entwicklungsgeschichte der Leibnizschen Monadenlehre* (Dessau, 1884); Emil Wendt, *Die Entwicklung der Leibnizischen Monadenlehre bis zum Jahre 1695* (Berlin, 1885); Selver, *Entwicklungsgang*; see also Stein, chap. 6, pp. 111–219.

⁷⁵ Stein, p. 201.

⁷⁶ Feller, p. 142: "Jordani Bruni, Nolani, de Monade Numero et figura liber, de minimo, magno, et mensura. Item de innumeralibus, immenso et insigurabili, seu de universo et mundis libri octo; . . ."

⁷⁷ Stein, p. 206; see also Politella, pp. 5–8.

⁷⁸ Stein, p. 204. In another instance he referred to Bruno, the native of Nola who had spent a long time in Germany and whose opinions on the pluralities of worlds and the indefinite extent of the universe closely approached those of Descartes (Feller, p. 142).

⁷⁹ Feller, p. 221.

⁸⁰ Francis Yates, *The Rosicrucian Enlightenment* (London: Routledge and Kegan Paul, 1972), pp. 38–39.

⁸¹ Feller, p. 205: "Petrus Damiani Gregorio VII, Pontificidono mittet cochlearia linea apud Baronium. Multa hic observari possunt. Primum, monachos, olim (qualis Petrus, etsi Cardinalis fuerat) manuarum opera curasse." See also Loemker, 2:1191, n. 198.

generates, etc. 3. That some of these spirits for some certain cause or reason, are slipt down from the state of knowing, of penetrating or of moving into a state of impenetration. 4. That these monads or single beings now become spiritless or dull, did cling or come together after various manners. 5. That this coalition or clinging together, so long as it remains such is called matter. 6. That out of this matter, all things material do consist, which yet shall in time return again to a more loosened and free state.¹²

Elaborating upon the nature of the matter produced, he wrote: "Matter is made by a coalition or clinging together of spiritual degenerate dull monades or single beings and that this coalition is called creation. . . ."¹³ Another example of his use of the term "monad" was as a single being in a state of death: "After . . . a spirit is immediately created, it doth for certain assignable causes . . . descend into that state of death, that it admitteth of the qualities and name of matter, being now a natural monade or single being, and a very atome. . . ."¹⁴ The term had also appeared in Anne Conway's *Principles*, in the following context:

But as was said before, God cannot do that which is contrary to his Wisdom and Goodness, or any of his Attributes. [Mathematical Division of Things, is never made in Minima; but Things may be Physically divided into their least parts; as when Concrete Matter is so far divided that it departs into physical monades, as it was in the first state of its materiality. Concerning the production of matter, see *Kab. denud. Tom. 1*, Part 2, p. 310 following; and *Tom. 2* the last Tract pag. 28, Numb. 4,5. then it is again fit to resume its activity, and become a spirit, as it happens in our Meats.]¹⁵

The sections from the *Kabbala denudata* referred to by Conway stated that matter had been made from a coalition of spiritual monads in a state of inactivity, or stupor, out of which is created the material world. In slipping downward, these material monads retain some of the original light, such that if excited in a certain manner they can emit radiations peculiar to the matter and seeds of the various classes of animals, plants, and the inanimate. Matter consists of singular monads, deprived of their own motion, but disposed toward it through the capacity for light and irradiation.¹⁶

¹² P. 4.

¹³ Ibid., p. 9.

¹⁴ Ibid., p. 13.

¹⁵ P. 28; brackets in the original. Both Ritter and, following him, Stein attributed this passage to van Helmont, who had only edited the Latin edition of Conway's *Principia Philosophiae* contained in the *Opuscula Philosophical* of 1690. It is quoted in full with the omission of the *Kab. denud.* sources from the 1690 Latin edition in Ritter, 12:22, and in Stein, p. 212, n. 1. In his text Stein stated: "Sicherlich ist diese physische monade van Helmont's noch recht weit von der metaphysischen des Leibniz entfernt, wenn auch beide Denker gleicher weise die Bezeichnung der Substanz als mathematischen Punktes ablehnen."

¹⁶ *Kabbala denudata*, I, 6, p. 310: "Dum materiam factam statuerem e coalitione *monadum* spiritualium torpentium." *Kab. den.*, III, 28, *Adumbratio Kabbalae Christianae*: "(id est naturas has, quae facta sunt *monades* materiales, è quibus deinde combinatis facta est mundi materialis creatio:). . . Sicut autem de vasis illis delapsis dicitur, quod prolapsa sint in lucem sibi propriam, qua intelligerent et amarent se ipsas . . . hinc patet etiam *monadibus* istis materialibus remansisse, partim lucem aliquam propriam (quae si excitetur certo modo suos iterum posset emittere radios, ad quam pertinent formae materialis et seminales tam inanimatorum quam plantarum et brutorum) partim aliquam ad minimum ad istam eradiatorem tendentiam." Ibid., p. 29, reads: "Deinde dicatur materia in eo consistere quod singulae *monades* puncta saltem sint, motu proprio destituta, sed ad eundem prona; lucisque et eradiationis capacia" (italics added).

These indivisible monads as the basis of all life were close to Leibniz's own metaphysical position on individual substance.⁸⁷ Through his own acquaintance with Knorr von Rosenroth he knew the *Kabbala denudata* in which had appeared *The Cabbalistical Dialogue* of van Helmont, and through van Helmont he was acquainted with Anne Conway's *Principles*. He lacked only the term "monad," which he now appropriated from the two vitalists.

As Stein has pointed out, the word first appears in Leibniz's "Letter to Fardella" of September 3/13, 1696: "All substance seems to me to be wonderfully fruitful in its operations. But I do not hold substance, that is a monad, to be produced from substance. . . ."⁸⁸

Responding, in 1697, to further inquiry from Fardella, he again used the word: "Concerning the nature of the monad and substances about which you have asked further, I think you can be easily satisfied if you ask in particular what you would like explained."⁸⁹

Then in the 1698 essay "On Nature Itself," he characterized the monad in terms of internal force and consensus of actions: "What we can establish about the external . . . actions of creatures may better be explained elsewhere; in fact, I have already partly explained it—the intercourse of substances or of monads, namely, arises not from an influence but from a consensus originating in their preformation by God, so that each one is adjusted to the outside while it follows the internal force and laws of its own nature. It is also in this that the union of soul and body consists."⁹⁰ At a later point in the same essay he defined the monad more explicitly as containing appetite and perception: "Neither is it [body] to be taken for a simple modification but for something which perseveres and is constitutive and substantial. This I customarily call a monad, which contains perception and appetite, as it were."⁹¹

At some time during the period from 1700 to 1710, Leibniz read and annotated Maimonides's *Guide to the Perplexed*, the first part of which contained a polemic against the atomistic doctrine of the Motekallemin, an orthodox Islamic sect. Leibniz's remarks upon this section of the *Guide* are relevant to the development of his "Monadology." Although the indivisible atomic elements of the Motekallemin were not conceptually the same as the monad, their propositions, as set out by Maimonides, served as a format for the "Monadology."⁹²

Then in the year 1714, the doctrine of the monadology was set out in detail in the well-known essays "On the Principles of Nature and of Grace"⁹³ and the "Mona-

⁸⁷ Stein, p. 212.

⁸⁸ Stein, p. 209. Foucher de Careil, ed. *Nouvelles Lettres et opuscules inédits de Leibniz* (Paris, 1857), p. 328: "Mihi omnis substantia operationum mire fertilis videtur. Sed a substantia (praeterquam infinita substantiam, id est monada, produci non arbitror."

⁸⁹ Stein, p. 209. See Leibniz, "Letter to Fardella," in Feller, p. 104. Also in Dutens, 2: "De natura monadum substantiarum quod porro quaeris, putem facile satisfieri posse, si speciatim indices quid in ea re explicari velis. De origine earum puto me iam dixisse, omnes sine dubio perpetuas esse nec nisi creatione oriri ac nonnisi annihilatione interire posse, id est, naturaliter nec oriri, quod tantum est aggregatorum. Vellum videre antea liceret, quae de meis sententiis dices in tuo, quod moliris, Augustiniano opere."

⁹⁰ Gerhardt, 4:510; trans. Loemker, 2:817.

⁹¹ Gerhardt, 4:510; trans. Loemker, 2:819-20.

⁹² Foucher de Careil, *Leibniz*, pp. 4, 8, and appendix ("Observations de Leibniz, sur le livre du Rabbini Moise Maimonide intitulé *Le Guide des égarés*"), pp. 13-17.

⁹³ Gerhardt, 6:598-606.

dology.”⁹⁴ Here he expounded a vitalistic metaphysics that held that the world was really organic, unlike the constructed mechanical world of well-founded phenomena. “Every being in the universe from living animals down to the simple monad was alive or composed of living parts, there being nothing fallow, sterile or dead in the universe; no chaos, no confusion, save in appearance.”⁹⁵

Organic life was divisible to infinity, still retaining its organic living character. “There is a world of creatures, living beings, animals, entelechies, souls, in the smallest particle of matter.”⁹⁶ “Each part of matter can be thought of as a garden full of plants or as a pond full of fish. But each branch of the plant, each member of the animal, each drop of its humors, is also such a garden or such a pond.”⁹⁷ In this connection, we recall Anne Conway’s statement that “in every creature, whether the same be a spirit or a body, there is an infinity of creatures, each whereof contains an infinity, and again each of these, and so *ad infinitum*.”⁹⁸

Life and death, like activity and passivity, were reciprocal and interconvertible states of substance. Sleep, like death, was a diminution of perception in which the soul was like a simple monad.⁹⁹ If perceptions were not activated, we would be continually in a state of stupor, like the naked monads.¹⁰⁰ “When there is a large number of small perceptions with nothing to distinguish them we are stupified. . . . Death can produce this state in animals for a time.”¹⁰¹ These ideas are very close in language and in content to the younger van Helmont’s view that matter is to spirit as a dead man is to a living man—the same in substance, but dull, blind, resting and “in privation”—and to the passages from the *Kabbala denudata* referred to by Conway.¹⁰²

Conclusion As established by the evidence earlier presented, Leibniz appropriated the term “monad” from both van Helmont and Conway, its origins stemming initially from the cabala. The influential role that Anne Conway’s ideas played in his decision to use this concept has hitherto not been recognized because of a series of scholarly errors originating from Heinrich Ritter’s assumption that van Helmont was the author rather than the editor of her *Principles*.

The almost total neglect by historians of philosophy of the work of Anne Conway raises a question about a cluster of women who studied and contributed to the philosophy of the seventeenth and eighteenth centuries. Do they not also deserve more detailed study and evaluation than has been accorded them? Besides Anne Conway, other women whom Leibniz took seriously as students of philosophy included Sophie, the Electress of Brunswick, Princess Caroline (in answer to whose questions the entire Leibniz-Clarke correspondence of 1716 was directed), and Lady Masham, daughter of Ralph Cudworth and friend of John Locke, with whom Leibniz carried on an extensive correspondence. One of the most brilliant women of the

⁹⁴ Ibid., pp. 607–23.

⁹⁵ “Monadology,” sec. 69.

⁹⁶ Ibid., sec. 66.

⁹⁷ Ibid., sec. 67.

⁹⁸ *Principles*, p. 20.

⁹⁹ “Monadology,” sec. 20.

¹⁰⁰ Ibid., sec. 24.

¹⁰¹ Ibid., sec. 21.

¹⁰² *Cabbalistical Dialogue*, p. 13.

eighteenth century, Madame Gabrielle Émilie du Châtelet, was a principal expounder of his system.¹⁰³

The basic elements that went into Leibniz's concept of the monad had been well developed by 1686, the crucial year of synthesis in which the main tenets of his philosophy were laid out in the *Discourse on Metaphysics*, the *Correspondence with Arnould*, and the "Brief Demonstration of a Notable Error of Descartes. . . ." By then he had set out the concept of an individual substance whose essence was perception and activity, the animation of matter, the concept of the organic continuity of life, the idea of pre-established harmony, and the metaphor of each soul mirroring the universe from its own point of view. He had read the work of the Cartesians, Scholastics, microscopists, and the Cambridge Platonists. During the decade 1686 to 1696, he refined many of these fundamental ideas and developed his system of dynamics in more detail. In addition he read and incorporated into his philosophy ideas from Chinese Philosophy, Maimonides, and the cabala.¹⁰⁴ The writings of Francis Mercury van Helmont and Anne Conway served to confirm and buttress his vitalistic view of nature and to stimulate the coalescence of his ideas into a "monadology."

University of California, Berkeley

¹⁰³ On Princess Caroline of Wales, pupil of Leibniz at Hanover, see "The Controversy Between Leibniz and Clarke," Loemker, 2:1095-1169; Gerhardt, 7:345-440. Leibniz's correspondence with Lady Masham is collected in Gerhardt, 3:336-75. On Gabrielle Émilie du Châtelet as an exponent of Leibnizian thought, see Carolyn [Merchant] Iltis, "Madame du Châtelet's Metaphysics and Mechanics," *Studies in History and Philosophy of Science* 8 (1977): 29-48, and W. H. Barber, "Mme du Châtelet and Leibnizianism: The Genesis of the Institutions de Physique," in Barber et al., eds., *The Age of Enlightenment: Studies Presented to Theodore Besterman* (Edinburgh, 1967), pp. 200-222.

¹⁰⁴ On the historical development of Leibniz's monadology, see the work of Selver, Wendt, Auerbach, and Stein, cited above. For a more recent discussion see Politella. On the role of Chinese thought in Leibniz's philosophy, see Joseph Needham, *Science and Civilization in China*, 5 vols. in 8 (Cambridge: Harvard University Press, 1954-76), 2:291-343, 496-505. On the Cabala and Maimonides, see Foucher de Careil, *Leibniz*.