

Joseph Smith and the Plurality of Worlds Idea

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JOSEPH SMITH WAS NOT THE FIRST PERSON to use the plurality of worlds concept. In the early seventeenth century, natural philosophers began speculating on the idea of multiple world systems. By the eighteenth century, Protestant evangelicals absorbed the idea into their Natural Theology. For them nature contained clear and compelling evidence of God's existence, substantiating their own Christian beliefs and countering religious skepticism (Westfall 1958; Hovenkamp 1978). Joseph used the concept quite differently, though never defensively. Theologically he related man, God, and the universe; religiously, his message was millenarian and directed toward eschatological issues. On careful examination, these complex issues suggest that the environmental thesis — the view that one's cultural matrix is entirely sufficient to account for the emergence of a coherent set of ideas or conventions — does not provide a wholly adequate explanation of the style and structure of restorationist pluralism.

In addition to examining the astronomical pluralism in Joseph's writings, this essay will assess the merits of the environmental thesis without suggesting that Joseph Smith as a religious leader must always be seen either as a prophet or as a charlatan, a dichotomy which has prevented useful and productive understanding of an enigmatic character. For purposes of this study, it is perfectly consistent with Joseph's own experiences and writings to see him as an *emerging* prophet, as one who was as much a part of the process of religious

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innovation as its primary medium of expression (Shipps 1974, 1985; Bushman 1976, 1984).

ASTRONOMICAL PLURALISM IN WESTERN THOUGHT

The pre-Socratic atomists of ancient Greece, Leucippus and Democritus, explored the plurality of worlds concept first; but with the rise of Aristotle's system in the fourth century B.C., it became largely dormant until the middle years of the European Renaissance. The image of an earth-centered universe, supported during the Middle Ages by religion, philosophy, and Aristotelian science, suggested a unique position for the earth in the cosmos. Thus, it was conceptually difficult to argue in favor of co-existing multiple world systems. In fact, if the earth were the singular center of the universe, it seemed absurd to suggest that the stars in the firmament were suns comparable to our own, let alone that they possessed inhabited planets. After all, went the argument, life in the universe was logically and empirically only at the center. The expanse of the cosmos and its perimeter was reserved for God, angels, and quintessential substances (Oresme 1977; Dick 1982, 6–12).

Not until the late years of the sixteenth century, after Copernicus presented his astronomically tenable heliocentric (sun-centered) cosmology in *De revolutionibus orbium coelestium* (1543), did pluralistic ideas first begin to emerge in the West. Heliocentrism is not necessarily essential to the plurality of worlds debate, but moving the sun instead of the earth to the center of the universe made it possible for the plurality of world ideas to emerge (Dick 1980; Dick 1982, 61–105; Lovejoy 1936, 24–98). Furthermore, the revival during this period of early Greek cosmogony suggested, in the new science of the seventeenth century, that since atoms were the ultimate agents of causality and that infinite causes must have infinite effects, the formation of an infinite number of worlds was demanded by the fortuitous coalescence of an infinite number of atoms. The invention of this mechanical philosophy of nature provided the metaphysical support required by radical Copernican cosmology. Together, Copernicanism and atomism altered the climate of Western thought in new and creative ways. Although several generations passed before people were able to understand fully the theological and scientific nature of this emerging world view, with the subsequent refinement of heliocentrism by Kepler, Galileo, Descartes, Newton, Huygens, Leibniz, and a host of other seventeenth-century natural philosophers, the concept of astronomical pluralism began to develop in earnest.

Belief in the plurality of inhabited worlds eventually filtered down to the popular level with numerous editions and translations of Bernard de Fontenelle's widely known 1686 treatise, *On the Plurality of Worlds*, the first successful treatment of pluralism intended for general dissemination. (See also Wilkins 1640; Borel 1657). During the Enlightenment, belief in the doctrine became pervasive. Although some thought its reality improbable, many others accepted it. The European natural philosophers Thomas Wright, Immanuel Kant, Johann Lambert, and later William Herschel, the most important observational astronomer of the late eighteenth and early nineteenth centuries,

all advocated astronomical pluralism (Dick 1982, 159–75; Crowe 1978; Kawaler and Veverka 1981; Schaffer 1980). In eighteenth-century America the doctrine was advanced by a number of prominent figures. At Harvard, for instance, teachers explained that all the planets of the solar system, not just the earth, were inhabited; otherwise, they argued, these planets would have been created in vain, which God would not do. Within a decade, the pluralist view entered the curriculum and remained an essential ingredient of the theological training of Yale ministers. Thanks especially to Yale theologian Timothy Dwight, several generations of ministerial students were fed the pluralist diet. Such literary and religious figures as Ezra Stiles and the American Samuel Johnson spoke of the morals displayed by “those inhabitants of this earth and the planetary starry universe,” while both David Rittenhouse, the colonies’ foremost astronomer, and Benjamin Franklin, America’s foremost scientist of the period, espoused the doctrine (Leventhal 1976, 244). By the end of the eighteenth century, pluralism was advocated by leading scientists and natural philosophers, who wedded the doctrine to the current scientific theories of the day. For instance, Pierre Simon de Laplace, the most gifted mathematical astronomer since Newton, argued that multiple world systems had to exist since the formation of stars and planets resulted from the rotation, contraction, and condensation of the primeval solar material and gases (Jaki 1977; Numbers 1977).

The plurality of worlds doctrine accompanied the birth of modern science in the seventeenth century, a time that fostered the growth of Natural Theology, when scientific and religious views complemented mutual intellectual concerns. As a study in rational religion, Natural Theology asserted that the Christian God created a universe in which laws, design, purpose, and harmony were paramount and the scientist, being a Christian, could find justification for his religious convictions in his scientific studies. The basic premise of Natural Theology held that nature contained clear and compelling evidence of God’s existence and perfection. In defending Christianity, however, Christian scientists prepared the ground for the deists of the Enlightenment. In time a radically different world view surfaced in their writings: a mechanical universe governed by immutable natural laws; God removed and separated from his creation; moral law taking the place of spiritual worship; and rational man discovering true religion without special revelation. With these developments in the eighteenth century, natural religion (or deism) and Natural Theology became fundamentally different enterprises.

By the beginning of the nineteenth century, the concept of multiple inhabited worlds found wide acceptance among secularists, deists, and natural theologians. Early nineteenth-century Scottish evangelicals Thomas Chalmers, Thomas Dick, and later David Brewster and Hugh Miller all wrote on the plurality of worlds, stressing the compatibility of science and religion. Particularly in the context of Anglo-American developments, science increasingly supported the structure of biblical understanding. Not only was God’s word a testament of his continuing interest in human affairs, but his *works* offered abundant evidence of the nature, power, and majesty of the divine presence.

The secular tradition of plurality of worlds was transformed into a religious idea and frequently seen as an endeavor to support religious views. Ironically, however, the plurality of worlds concept was not only used by sectarians to substantiate their faith but also by deists and others to debunk the claims of Christianity. Thus both Christians and secularists, believers and deists found evidence to support their views in the pluralist doctrine. As a result, pluralism filtered throughout American frontier society not only in the writings of such popular figures as Chalmers and Dick but also with deists such as Thomas Paine. Pluralism was disseminated by books, newspapers, almanacs, as well as orally, at religious gatherings and casual meetings.

DEISM AND THE PLURALITY OF WORLDS

The most widely known source of deism in early nineteenth-century America was Tom Paine's *The Age of Reason* (1794). Fanned by the fires of the French Revolution and the Enlightenment, Paine popularized along the lines of English anticlerical and rationalistic thought. Assuming the apotheosis of man's divine gift of reason, Paine's thesis was that Christian theology is fundamentally incompatible with human reason and man's increasingly scientific understanding of the universe. Reason alone, not biblical myth, is capable of informing man of the universe and its laws of operation.

Paine, who had immersed himself in the new astronomy of the seventeenth and eighteenth centuries, made his understanding of science — and astronomy in particular — the basis of his deism (Roper 1944). Part I of *The Age of Reason* manifests the power of astronomy over Paine and the central position the plurality of worlds came to occupy in his theological and scientific thinking. Thus, after describing in detail the immensity of the solar system, Paine extended his views to the vastness of the cosmos:

Beyond this [the solar system], at a vast distance into space, far beyond all power of calculation, are the [fixed] stars. . . . Those fixed stars continued always at the same distance from each other, and always in the same place, as the sun does in the center of our system. The probability, therefore, is that each of those fixed stars is also a sun, round which another system of worlds or planets . . . performs its revolutions, as our system of worlds does round our central sun. . . . [T]he immensity of space will appear to us to be filled with systems of worlds, and that no part of space lies at waste (p. 47).

Intellectual historian Marjorie Hope Nicolson has argued that "the real basis of Paine's 'deism', . . . the chief source of his theological beliefs, . . . is the climatic and inevitable popularizing of . . . the controversy whether ours is not merely one of a plurality — even, some dared to think, of an infinity — of worlds, and whether such of these universes may not possess rational inhabitants" (Nicolson 1936, 107–8). Based on his understanding of astronomy, Paine believed that every evidence of science either "directly contradicts the Christian system of faith or renders it absurd" (p. 50). Thus, he wrote:

From whence, then, could arise the solitary and strange conceit that the Almighty, who had millions of worlds equally dependent on his protection, should quit the care

of all the rest and come to die in our world, because, they say, one man and one woman had eaten an apple? And, on the other hand, are we to suppose that every world in the boundless creation had an Eve, an apple, a serpent, and a redeemer? In this case, the person who is irreverently called the Son of God, and sometimes God himself, would have nothing else to do than to travel from world to world, in an endless succession of deaths, with scarcely a momentary interval of life (p. 49).

Paine's unrelenting attack on Christianity, the support he marshalled for his views in terms of the plurality of worlds and astronomy, and his claims of deism generally all entered early nineteenth-century American thought. As American historian Merle Curti has pointed out, "humble men in villages from New Hampshire to Georgia and beyond the Alleghenies discussed it by tavern candlelight" (Curti 1964, 153). In the six years between its publication and 1800, at least sixteen published criticisms of *The Age of Reason* appeared. The British Museum Catalogue lists more than fifty published responses (Nicholson 1936, 114; Stauffer 1919, 75-76).

While many wrote responses to Paine's *The Age of Reason*, however, others used it with missionary zeal to combat their perceptions of religious tyranny. Evidence indicates that Joseph Smith's father even had a copy. Joseph Senior's father, Asael, disapproved of Methodism, perhaps "because of its vigorous preaching of the eternal condemnation of the unregenerate," a view in contrast to Asael's own universalism (Anderson 1971, 207). Consequently, according to Lucy Mack Smith's unpublished history, when his son later considered joining the Methodists, Asael "came to the door one day and threw Tom Paine's *Age of Reason* into the house and angrily bade him read that until he believed it" (Bushman 1984, 38; Hill 1974, 90).

Although it has been argued that Joseph Smith himself read *The Age of Reason* and wrote the Book of Mormon to defend Christianity, there is no hard evidence that he either possessed or read a copy of Paine's work. It seems almost certain that he was acquainted with the ideas of "natural religion," but he shared New England attitudes that were, by the 1820s, already strongly and consciously opposed to infidelity (Hill 1969).¹ Thus, as far as deism is concerned, it is irrelevant whether Joseph was acquainted personally with *The Age of Reason*. In his insightful study of Joseph Smith, Richard Bushman has recently argued that the Smiths had been "more directly affected by Enlightenment skepticism than by Calvinist evangelism" and thus "were destined to live along the margins of evangelical religion" (Bushman 1984, 5-6). Though it lost ground for a time early in the nineteenth century, skepticism surfaced again beginning in the 1820s with the founding of various periodicals and remained an influence in frontier villages through newspaper editors and other home-spun intellectuals (Bushman 1974; McLoughlin 1978, 99-105, 108-11). Yet Paine's plurality of worlds concept in *The Age of Reason* was not presented in a conceptually useful manner to have allowed Joseph Smith to develop his own

¹ Joseph's religious milieu, stretching from Vermont to the Western Reserve of Ohio, was saturated not so much with infidelity as with religious contention for authority. Joseph prayed not asking if Christianity was true (skepticism), but which religious sect had authority. (See T. Smith 1980, 3-21).

complex system of pluralist concepts. In fact, Joseph's theology of astronomical pluralism would more easily have been developed from sources other than Paine's *The Age of Reason*. We can be certain, though, that the plurality of worlds concept was widely understood and diffused during the early years of the century, partially as a direct consequence of Tom Paine.

RELIGIOUS ORTHODOXY AND THE PLURALITY OF WORLDS

By far the most influential source of astronomical pluralism in the 1820s was no longer *The Age of Reason* but *A Series of Discourses on the Christian Revelation Viewed in Connection with the Modern Astronomy* (1817) by the Reverend Thomas Chalmers, a young gifted Scottish minister. Though other writers espoused pluralism in the first decades after Paine's work, such as English poets Shelley and Byron, it was Chalmers's *Astronomical Discourses*, beginning with the American edition, that produced among American readers an unparalleled appreciation of the magnificence of God's creation. Originally delivered as a series of seven complementary religious sermons, *Astronomical Discourses* met with instant and wide success. Its influence, like *The Age of Reason*, prompted one divine to express the view that "all the world is acquainted with Dr. Chalmers' splendid *Astronomical Discourses*" (in Crowe III, 3, 1).

Besides the brilliance Chalmers displayed in his literary talents, it appeared in America at a time characterized by religious revivals and evangelical fervor, when deism and rationalism were increasingly associated with infidelity and the excesses of French revolutionary tyranny and Jacobin extremism (Lipson 1977, 81–3). Furthermore, it was with *Astronomical Discourses* that *The Age of Reason* finally found a worthy opponent. As Paine had earlier used the plurality of worlds to argue against Christianity, Chalmers now used pluralism to support and defend the revival of religious neo-orthodoxy. Chalmers's intention thus became twofold: (1) to counter the skeptics' arguments and to remove difficulties in the way of belief, and (2) to examine the implications for Christian belief entailed in science and astronomy, particularly as suggested in the plurality doctrine (Cairns 1956). Thus Chalmers's *Astronomical Discourses* became a significant example of Natural Theology — science used to support religious convictions.

Paine's most serious criticism of Christianity dealt with the presumed absurdity that Jesus Christ, the incarnation of God Almighty, should either come to this earth to extend the atonement and redemption to *all* his creations or travel from world to world in an endless succession of deaths. Paraphrasing the infidel, Chalmers introduced his first sermon by citing Psalms 8:3–4 that "he is mindful of us," and then stating the main theme of the discourses:

This very reflection of the Psalmist has been appropriated to the use of infidelity, and the very language of the text has been made to bear an application of hostility to the faith. 'What is man that God should be mindful of him or the son of man, that he should deign to visit him?' Is it likely, says the Infidel, that God would send His eternal Son, to die for the puny occupiers of so insignificant a province in the mighty field of His creation? (p. 32; Brooke 1977, 259)

In one form or another, this theme thoroughly dominates *Astronomical Discourses*. Because of the relevance between Chalmers's treatment of deism, skepticism, and pluralist doctrine and Joseph Smith's treatment of these issues, it may be useful to summarize Chalmers.

After introducing his main theme, Chalmers sketches the dimensions of our solar system and the extent of the stellar universe, including the idea of multiple inhabited world systems. Here, he argues, since God's benevolence extends to all his creations, including the most insignificant of creatures, Christians should not be disturbed by God's having sent "His eternal Son, to die for the puny occupiers of so insignificant a province in the mighty field of His creation" (p. 32). In the second discourse, entitled "The Modesty of True Science," Chalmers praises the empiricism of Sir Isaac Newton vis-a-vis the rationalism of Voltaire and argues that the skeptic uses selective evidence and criteria based upon unverifiable assertions to speculate on other worlds while denying the universal applicability of Christianity. In "The Extent of the Divine Condescension," the third discourse challenges the assumptions imposed upon Christianity by the skeptic. Chalmers defies his opponents to indicate a single instance of God's inability to deal with the details of his universe. Moreover, to assume that God lacks commitment to his creations misrepresents the divine presence. In answer to the question of Christ's atonement, Chalmers responds that "the plan of redemption may have its influences and its bearings on those creatures of God who people other regions, and occupy other fields in the immensity of his dominions; that to argue, therefore, on this plan being instituted for the single benefit of the world we live in, and of the species to which we belong, is a mere presumption of the Infidel himself" (p. 73). Although the scriptures are not intended to give us a knowledge about worlds other than ours, Chalmers suggests in his fourth discourse that just as Christ's redemption is efficacious through the millennia of human history, so the atonement reaches throughout the universe. Not only is the human drama pursued with intense interest by the angels (the fifth discourse), but, just as a small and perhaps insignificant piece of land may decide the results of larger interests (the sixth discourse), so the earth, tiny and insignificant as it is, may decide the outcome of struggles between light and darkness universally.

The primary purpose of Chalmers's *Astronomical Discourses* was not to lecture on the plurality of worlds or even to counter Paine's *The Age of Reason*, but to awaken its readers to the power of God's saving word. Thus, ending with the seventh discourse, Chalmers reminds his readers that they are agents in a cosmic battle and that Christianity provides not only the knowledge but the power needed for universal and personal salvation. Whether Chalmers succeeded as an evangelist is not entirely certain. What is clear, however, is that "many [of his readers] left convinced pluralists, certain that Christianity could not only be reconciled with the doctrine of a plurality of worlds, but could derive a new grandeur thereby" (Crowe III, 3, 13).

While Chalmers's *Discourses* was known widely in America, other sources of pluralism and Christian doctrine were also influential. Almost without exception, these sources are all examples of Natural Theology, any one of which

could have been used equally to support the Christian message. Though less accessible but perhaps more important as a source of ideas on astronomical pluralism among ministers was the work of a noted Calvinist, Timothy Dwight. As president of Yale University from 1795 until his death in 1817, Dwight delivered 173 sermons, published in 1818 as *Theology Explained*, to Yale undergraduates "to save them from infidelity, to inspire their morality, and to instruct them in Christianity" (Crowe III, 5, 3). During Dwight's tenure, as many as one-third of Yale undergraduates studied for the ministry. As these men fanned throughout New England and the western territories, no doubt many of their sermons asserted, implicitly or otherwise, the pluralist doctrine (Cunningham 1952, 330; Bainton 1957, 77).²

In many of his sermons, notably sermons 5–7, 13, 17, and 42, Dwight drew heavily upon astronomical pluralism and Natural Theology generally. Dwight, like Chalmers, felt compelled to answer Paine's central criticism of Christianity — that Christ would be forced either to travel from world to world in an endless succession of deaths or to atone on this earth for all of God's countless creations:

This world was created, to become the scene of one great system of Dispensations toward the race of Adam; the scene of their existence, and their trial, of their holiness, or their sin, and their penitence and reformation, or their impenitence and obduracy. It was intended, also, to be a theatre of a mysterious and wonderful scheme of providence. The first rebellion in the Divine Kingdom commenced in Heaven: the second existed here. The first was perpetrated by the highest, the second by the lowest, order of Intelligent creatures. These two are with high probability the only instances, in which the Ruler of all things has been disobeyed by his rational subjects. The Scriptures give us no hint of any other conduct of the same nature: and no beings are exhibited in them as condemned at the final day, or sent down to the world of perdition, beside fallen angels, and fallen men. As, therefore, these are often mentioned as fallen creatures, and these only; it is rationally argued, that no other beings of this character have existed (Dwight 5:508).

As Dwight asserted, Christ's atonement on this earth was needed only by its inhabitants and was therefore unique among God's creations.

In addition to the pluralism presented in Paine, Chalmers, and Dwight, a fourth widely read source was available in rural America. Fawn Brodie has claimed that by 1835 Joseph had recognized the importance of formulating a metaphysics that would rationalize science with his own special brand of "Jewish and Christian mysticism." That synthesis, she argued, was the book of Abraham, and a major source of ideas was Thomas Dick's *The Philosophy of a Future State*, a work first published in 1828, which Joseph "had recently been reading" and which "made a lasting impression" on him (Brodie 1946, 171).

² To date, we have firm information on only one minister, the Reverend George Lane, who may have had contact with Joseph Smith during the early 1820s. Lane was an itinerant Methodist preacher involved in the revivals of this period. Whether his sermons made reference to astronomical pluralism is not known, but being a neo-orthodox revivalist and believing that the spread of infidelity would undermine Christian faith, he probably dwelt occasionally on this topic (Porter 1969). It is unlikely, however, that the pluralist doctrine would have been as developed as in the writings of Dwight or Chalmers.

Not only Dick's *Philosophy*, but nearly all of his ten books were laced with astronomical pluralism. Though it did not specifically deal with the plurality of worlds, Dick's first work, *The Christian Philosopher; or, the Connection of Science and Philosophy with Religion* (1823), launched him on a successful career as a writer of science, religion, and Natural Theology. In his *Philosophy of a Future State* (dedicated to Thomas Chalmers), Dick speculates on the plurality of worlds in increasing detail, even calculating the number of inhabited worlds within the universe. His approach to the plurality doctrine and science generally assumed a cosmos characterized by purpose, order, and direction. This sort of teleological approach was often developed within Natural Theology, yet nowhere in his extensive writings does Dick feel compelled, as Chalmers and Dwight had earlier, to answer Paine's objections to Christianity. Even without this defense of the faith, Dick's writings became extremely popular both in Britain and America, and served to sustain much interest in the pluralist view.

While it may be doubtful that Joseph Smith consulted any of these works, it is probable that he heard them discussed in formal or casual conversation. Indeed, we can posit with reasonable confidence that Joseph first heard of the plurality idea during the revivalistic meetings of his youth. Chalmers, Dwight, Dick, and nearly all other religionists wrote on both the plurality of worlds and science in general as an example of Natural Theology to support Christian evangelicalism.

PLURALIST THOUGHT ON THE AMERICAN FRONTIER

Over the last fifty years, it has been routinely suggested that during the 1820s Joseph Smith may have made use of the area's most important library (Paul 1982). Sometime around 1815, in the township of Farmington just five miles south of the Smith farm, the Manchester Rental Library Society was organized. As one of the region's first libraries to open to all patrons who paid for initial membership and continued with annual dues, the Manchester Library included a wide selection of books eventually growing to at least 421, of which 275 had actually been purchased by 1830. Included were copies of Dick's *The Christian Philosopher* (1826) and *Philosophy of a Future State* (1829), and Andrew Fuller's *The Gospels Its Own Witness; or, the Holy Nature, and Divine Harmony of the Christian Religion, Contrasted with the Immorality and Absurdity of Deism* (1803). Dick's *Philosophy of a Future State* is saturated with pluralism, while Fuller, though not nearly as influential as others we have considered, joins with Chalmers and Dwight in refuting Paine's *The Age of Reason*. As a critique of deism, Fuller's book was intended more as a religious work than as a defense of pluralism.

Despite the claims of some writers, none of the principals involved in the early years of the Restoration — including Joseph Smith — were members of the Manchester Rental Library Society nor made direct use of its splendid, though relatively sparse, resources. Moreover, if Joseph had wished to explore the literary materials of the day, it would have been unnecessary to travel the

five miles to Manchester when in Palmyra, only two miles distant, there were several book stores and at least one "library," the contents of which he would presumably have been free to peruse (Paul 1982; Backman 1980, 47-52). The contents of these "libraries," with the exception of the Manchester Rental Library, are unfortunately no longer preserved. Still, it is possible to surmise their holdings by examining the lists of books available for purchase in the Palmyra-Manchester-Canandaigua area as advertised in local newspapers.³

Timothy C. Strong, owner and editor of the *Palmyra Register*, announced the opening of a bookstore on 10 and 24 December 1817 in his Palmyra printing office. The following 12 May, Strong announced he had received a new selection of books for sale and advertised about 250 volumes on 15 September 1818 and on 27 October 1819 (Backman 1980, 48-49). From 27 December 1820 to 2 October 1822, two other bookshops opened in Palmyra, advertising works on science, history, religion, philosophy, medicine, and travel. After Pomeroy Tucker and E. B. Grandin purchased Strong's newspaper in 1823, they opened the Wayne County Bookstore (changing its name back to Palmyra Bookstore in 1826) and offered "a general and well selected assortment of books" (*Wayne Sentinel*, 12 May, 14 July 1824, 1 Dec. 1826). Shipments of a wide variety of books apparently arrived regularly about every year from 1818 on (*Palmyra Register*, 12 May, 15 Sept. 1818, 27 Oct. 1819; *Palmyra Herald*, 2 Oct. 1822; *Wayne Sentinel*, 12 May 1824, 1 Dec. 1826, 25 Jan., 19 Dec. 1828, 11 Dec. 1829). On 24 November 1824, for instance, *The Wayne Sentinel* advertised it had just received for sale *The Works of Thomas Chalmers* in three volumes, an edition that may have included his *Astronomical Discourses*, while the *Ontario Repository* advertised 16 February 1825 that both Dwight's *Theology Explained* and Chalmers's *Works* were available at the Canandaigua bookstore. These "bookstores" were generally part of a larger commercial enterprise, such as a newspaper or printing office, and thus the range of available books was limited.

Such advertisements were, of course, not the only source of the plurality of worlds doctrine available to local residents. Newspapers themselves constituted an important, if not a major, source of knowledge.⁴ We know from second-hand information that the Smith family regularly obtained the *Palmyra Register* and that they may have continued with the *Wayne Sentinel* (Backman 1969, 316; *Wayne Sentinel*, 11 Oct. 1825, 6 Oct. 1826). Yet a close

³ The first weekly newspaper in Palmyra was the *Palmyra Register* (1817-21) followed by the *Western Farmer* (1821-22) and the *Palmyra Herald, Canal Advertiser* (1822-23), all published by Timothy C. Strong. In 1823 Strong sold his paper to Pomeroy Tucker and E. B. Grandin, who superseded Strong's paper with *The Wayne Sentinel*. Five years later, *The Palmyra Freeman* (1828-29) began publishing as did *The Reflector* (1829-30), a short-lived serial best known for printing portions of a pirated copy of the Book of Mormon manuscript. The county seat for Palmyra, prior to the formation of Wayne County in 1823, was Canandaigua in Ontario County, about eight miles south of the Smith farm. A variety of newspapers were published there including the *Ontario Messenger*, the *Ontario Repository*, the *Ontario Republican*, and the *Ontario Freeman*.

⁴ In 1835 the New York *Sun* published Richard Adams Locke's six-part satirical fancy on moonmen. The articles were widely read and, for a time, helped raise the circulation of the *Sun* (Griggs 1852).

perusal of all Palmyra papers from the inception of the *Register* in 1817 through the *Wayne Sentinel* in 1830, as well as an examination of other newspapers in the region, principally those published in Canandaigua, the county seat of Ontario, reveals very little discussion of the pluralist doctrine. Occasionally area newspapers carried articles on science; particularly of interest were such astronomical topics as "solar spots," comets, and meteors (*Palmyra Register* 28 July, 11 Aug., 15 Dec. 1819, 22 March 1820; *Wayne Sentinel*, 6, 27 March, 9, 16, 23 Oct. 1829).

While Strong's *Palmyra Register* was opposed to deism and included material favoring a position similar to that held by Dwight or Chalmers, references to the pluralist doctrine were surprisingly infrequent (10 March 1818, 7 Feb. 1821). Except for a short extract from Chalmers's *Astronomical Discourses* appearing in the *Ontario Repository* (25 May 1825), dealing explicitly with the plurality of worlds and related implications, there are only two additional essays, neither dealing with pluralism in a substantial way (*Wayne Sentinel*, 23 March 1827, 22 Aug. 1828). The 24 November 1819 issue of the *Palmyra Register* published the only really significant piece on the plurality of worlds during this period. Entitled "Varieties of Nature," this article described the cosmos and its creations by the "Supreme Architect" and urged readers to

the contemplation of the heavenly bodies, which roll with so much majesty and regularity through the immensity of infinite space. . . . Some of them are opaque, others whose nature is that of our sun. They are constructed to enlighten superior worlds, and those worlds must be inhabited. The Creator has made nothing without adjudging it to some purpose and those suns above were not made for affording this earth a dubious light. A most convincing fact may be mentioned as a further proof of the plurality of worlds; that the optic tube [telescope] discovers at every glance more worlds and systems in the blue immense.

It can be inferred that the author favored Chalmers's or Dick's position rather than Dwight's regarding the significance and role played by Christ on this earth with respect to all of God's creations. The reference to telescopic observations of "more worlds and systems in the blue immense" deals with the large number of nebulae discovered by William Herschel during the preceding several decades. Herschel, however, was unable to resolve these objects into the stellar galaxies, star clusters, and planetary and gaseous nebulae astronomers subsequently accomplished.

Besides books and newspapers, perhaps the most widely read literature was almanacs. Literature, art, historical and current events, manners, morals, and entertainment were often presented in eighteenth-century almanacs, including astronomy, mathematics, Copernican theory, Newtonian mechanics, natural history, geology, and medicine. Typical astronomical data that might affect the weather — and according to some, humanity itself — included the positions of the sun and moon, the moon's phases, the position of the planets, and dates of eclipses (Stowell 1977, ix, xiv–xvii). The "philomath" almanacs of colonial times emphasized natural philosophy and particular astronomy for many years, including the plurality of worlds doctrine (Stowell 1977, 164–66 and *passim*). As "farmer's" almanacs were developed towards the end of

the seventeenth century, they emphasized more utilitarian concerns and fewer discussions of pluralism emerged in late eighteenth- and nineteenth-century editions.

In Palmyra, as was typical throughout America, notices appeared in newspapers for every year from 1818 through 1830 advertising almanacs. Almanacs were also on sale in both Palmyra and Canandaigua, but they rarely discussed science and natural philosophy and, with only a few exceptions, never made reference to astronomy, let alone astronomical pluralism. For example, Andrew Beers's *The Farmer's Diary* (1824), published by James D. Bemis, editor of the *Ontario Repository*, printed one of the few essays on astronomy found in this period. Entitled "Formation of the Universe," this essay, however, only obliquely assumed the notion of the plurality of worlds. Generally speaking, even though almanacs were widely available, they represented a poor source of ideas dealing with the pluralist doctrine.

Other sources of a *formal* discussion of pluralism are possible but not likely. Masonic thinking does not use the plurality of worlds idea. The most relevant parallel between Mormonism and Freemasonry is the common use of certain astronomical symbols. In the construction of the Nauvoo Temple, for instance, sun, moon, and star stones adorned its exterior. In Freemasonry, these images symbolize degrees of understanding, while in Mormon temple cosmology they represent the several heavens of Mormon afterlife with all their pluralistic implications of multiple world systems. Even if Joseph was influenced by Freemasonry in his temple theology, such influence did not extend to his ideas on astronomy and its implied pluralism.⁵

Were other — more ancient — sources available to Joseph Smith dealing with the astronomy of either Abraham or Enoch? Excluding the canonized scripture of orthodox Christianity, it appears that the only non-Greek writings available in area bookshops and libraries in Palmyra and Canandaigua were editions of Josephus's *Works*. In his discussion of Jewish antiquities, however, Josephus barely touches on Abrahamic astronomy and nowhere discusses astronomy in any significant detail. Elsewhere, however, derivatives of Abrahamic astronomy were considered in the writings of some classical Greek authors. Unfortunately, the only writings of Greek origin advertised in local newspapers and available in bookstores and libraries included an occasional grammar, reader, or New Testament. Even the works of Aristotle, Plato, and neo-Platonists such as Proclus were rarely found in the area. In fact, the only serious classical source discussing Abrahamic astronomy was Thomas Taylor's 1816 English translation of Proclus's *Theology of Plato*, a work virtually unknown in America at the time.⁶ Not until 1840 did a few apocryphal sources,

⁵ For an invaluable and mammoth exegesis of Masonic ceremony and mysticism, see Pike 1871, 581–800.

⁶ The library of Thomas Jefferson, perhaps the finest in America, contained only one book by Proclus, *Philosophical and Mathematical Commentaries on the First Book of Euclid's Elements* (London, 1792). The more relevant *Six Books of Proclus on the Theology of Plato* (1816), trans. by Thomas Taylor, was virtually unknown at the time. For possible Pythag-

such as the works of Jasher and Enoch, become known among Mormons in Nauvoo.⁷

ASTRONOMICAL PLURALISM IN MORMON THOUGHT

Concerning the development of a plurality of worlds, intellectual historian Arthur Lovejoy has suggested five innovations implied in the new heliocentric cosmology: (1) other planets of the solar system are inhabited by living, sentient, and rational beings; (2) the closed world of medieval cosmology is replaced with an infinite universe; (3) fixed stars are suns similar to our own and surrounded by planetary systems; (4) these planets are inhabited by conscious beings, and (5) an infinite number of solar systems exist (Lovejoy 1936, 108; Koyre 1957).

As it emerged in Jacksonian America, the plurality of worlds doctrine reflected its Old World roots, conforming in broad outline to Lovejoy's scheme. Following the appearance of the books of Moses, Abraham, and the Doctrine and Covenants, Mormon writers began to develop this theme more fully. Although writers within the Church referred to the idea of celestial pluralism as early as 1832, the most significant development occurred first during the Nauvoo years of Joseph Smith and later in Utah by leading authorities. For instance, Brigham Young, Orson Pratt, Charles W. Penrose, Orson Hyde, and Erastus Snow all wrote on pluralism, particularly in light of the science of the day. Among the most significant treatises by Mormon authorities are those by Parley P. Pratt (1855, 1891), John A. Widtsoe (1903/04, 1908, 1927/28), and B. H. Roberts (1908, 1928, 1930).⁸

orean connections with Abrahamic astronomy, see William Dibble's "The Book of Abraham and Pythagorean Astronomy," *DIALOGUE* 8 (Autumn/Winter, 1973): 134-38.

⁷ "The Book of Jasher," *Times and Seasons* 1 (June 1840): 127; and "The Apocryphal Book of Enoch," *The Latter-day Saints' Millennial Star* 1 (July 1840): 61-63. For a recent examination of the importance of the Book of Enoch in the development of Mormon theology, particularly the concept of Zion, see Olsen 1981.

⁸ For Mormonism's earliest commentaries on this theme, see W. W. Phelps, "Nature," *The Evening and the Morning Star* 1 (Oct./Nov. 1832): 40, 47; and Oliver Cowdery, "Signs in the Heavens," *The Evening and the Morning Star* 2 (Dec. 1833): 116. Extensive commentary is also given in Parley P. Pratt, *Key to the Science of Theology* (Liverpool and London, 1855, 1891, 5th ed.), Chs. 6, 16; three works by John A. Widtsoe, "Joseph Smith as Scientist: The New Astronomy," *Improvement Era* 7 (1903-04): 337-44; *Joseph Smith as Scientist, A Contribution to Mormon Philosophy* (Salt Lake City: General Board of YMMIA, 1908), p. 49; *How Science Contributes to Religion* (Salt Lake City: Church of Jesus Christ of Latter-day Saints, 1927), pp. 32-38, 44-48; three works by B. H. Roberts, comp. and ed., *The Seventy's Course in Theology. Second Year: Outline History of the Dispensations of the Gospel* (Salt Lake City, 1908), pp. 33-36; "The Truth, The Way, The Life: An Elementary Treatise on Theology," (1928) photocopy of manuscript made available to me by an associate, Chs. 4-11; and *A Comprehensive History of the Church of Jesus Christ of Latter-day Saints* (Salt Lake City: Church of Jesus Christ of Latter-day Saints, 1930), 2:394-96. For a brief discussion of Roberts's ideas on the plurality of worlds, see Truman G. Madsen, "The Meaning of Christ—The Truth, The Way, The Life: An Analysis of B. H. Roberts' Unpublished Masterwork," *BYU Studies* 15 (Spring 1975): 263-69. For modern LDS advocates of the plurality of worlds idea see R. Grant Athay, "Worlds Without Number: The Astronomy of Enoch, Abraham, and Moses," *BYU Studies* 8 (1968): 255-69; and Hollis R. Johnson, "Civilizations Out in Space," *BYU Studies* 11 (1970): 3-12. Both Athay and Johnson, however, in their otherwise insightful essays, assumed uncritically that

As early as 1830, Joseph Smith first presented his ideas on multiple world systems within the context of Old Testament studies, justifying his own brand of astronomical pluralism as part of a long tradition of religious speculation on the subject. It has been argued (Brooke 1977) that Psalms 8:3-4 ("When I consider thy heavens, the work of thy fingers, the moon and the stars, which thou hast ordained; What is man, that thou art mindful of him? and the son of man, that thou visiteth him?") has historically served as the point of departure for treatises on the plurality of worlds. Here the suggestion is made that man, as one of God's creatures, is no more significant than the creations of God elsewhere — on *other* planets! But in Joseph Smith's case both the Old and New Testaments provided material in new and innovative ways. In the process of revising these sacred books, Joseph presented new meanings of Genesis and sought for new understandings of celestial cosmology. In June 1830, he received the "Visions of Moses":

And he beheld many lands; and each land was called earth, and there were inhabitants on the face thereof.

And worlds without number have I created; and I also created them for mine own purposes; and by the Son I created them, which is mine Only Begotten.

But only an account of this earth, and the inhabitants thereof, give I unto you. For behold, there are many worlds that have passed away by the word of my power. And there are many that now stand, and innumerable are they unto man; but all things are numbered unto me, for they are mine and I know them.

And the Lord God spake unto Moses, saying: the heavens, they are many, and they cannot be numbered unto man; but they are numbered unto me, for they are mine.

And as one earth shall pass away, and the heavens thereof even so shall another come; and there is no end to my works, neither to my words (Moses 1:29, 33, 35, 37-38).

And in December, he recorded the "Prophecy of Enoch":

And were it possible that man could number the particles of the earth, yea, millions of earths like this, it would not be a beginning to the number of thy creations; . . .

Behold, I am God; Man of Holiness is my name; Man of Counsel is my name; and Endless and Eternal is my name, also.

Wherefore, I can stretch forth mine hands and hold all the creations which I have made; and mine eye can pierce them also, and among all the workmanship of mine hands there has not been so great wickedness as among thy brethren (Moses 7:30, 35-36).

when Joseph Smith introduced the plurality of worlds doctrine, pluralism was considered at the time as either "quite advanced" or "fanciful speculation." In a later essay, Athay corrected himself but quoted from the noted historian of astronomy, Antoine Pannekoek, *A History of Astronomy* (New York: Barnes and Noble, Inc., 1961), p. 402, who wrongly claimed that the plurality of worlds doctrine was "strongly antagonistic to the dominant religious creeds." See R. Grant Athay, "Astrophysics and the Gospel," *The New Era* 2 (Sept. 1972): 14-19. For a discussion of some Mormon implications of the plurality of worlds idea, see Frank B. Salisbury, *Truth by Reason and by Revelation* (Salt Lake City: Deseret Book Co., 1965), pp. 234-52. Surprisingly one of the few historical surveys of multiple inhabited worlds was undertaken by Mormon scientist Ralph V. Chamberlin, professor of biology at Brigham Young University and later at the University of Utah. Not always reliable in detail, it does not treat the concept of pluralism in Mormon theology. "Life in Other Worlds: A Study in the History of Opinion," *Bulletin of the University of Utah*, 22 (Feb. 1932): 3-52.

Although some of these sources were not publicly presented until 1843, they, together with Joseph's scriptural Copernicanism (Hel. 12:15 and Alma 30:44), formed the essential features of the Mormon concept of the plurality of worlds during the early years of the Church (Matthews 1975, 72, 221–24).

As a whole, this early pluralistic view supports Lovejoy's fivefold scheme. The ideas of inhabited planets and of an infinite number of planetary systems are directly expressed in these verses of Moses, while the infinity of space and stars whose planets are inhabited are all implied. In other words, the basic features of astronomical pluralism were evident in Joseph's thinking by December 1830. Moreover, in addition to this conventional view of the plurality of worlds, Joseph also stated the simultaneous existence of multiple world systems throughout time itself. Again in Moses, we read: "There are many worlds that have passed away. . . . And there are many that now stand . . . And as one earth shall pass away, and the heavens thereof even so shall another come; and there is no end to my works, neither to my words" (Moses 1:35, 38).

The pluralism developed early in Moses was carried over into Joseph's increasingly sophisticated theology. In February 1832, he and Sidney Rigdon received "The Vision" and as published in *The Evening and the Morning Star* (July 1832: [10–11]), it asserts "that by him [Christ], and through him, and of him, the worlds are made, and were created, and the inhabitants thereof are begotten sons and daughters of God; . . . worlds without end" (see D&C 76:24, 112). Later in December, Joseph recorded the "Olive Leaf," and in May of the following year he received Doctrine and Covenants 93, both of which record astronomical pluralism conforming to Lovejoy's scheme and to the notion of pluralism in time (see D&C 88:36–38, 42–47; 93:9–10; Cook 1981; Woodruff 1974).

The Book of Abraham presents a detailed cosmology featuring not only a plurality of worlds but an astronomy within which pluralism is an integral part.⁹ Perhaps the central feature of "Abrahamic" astronomy is the concept of governing worlds — places that apparently delimit and control the bounds and dimensions of other worlds.

Kolob is set nigh unto the throne of God, to govern all those planets which belong to the same order as that upon which thou standest. . . .

And he [God] put his hands upon mine eyes, and I saw those things which his hands had made, which were many; and they multiplied before mine eyes, and I could not see the end thereof (Abr. 3: 9, 12).

Again, the plurality doctrine embedded in Abraham conforms to Lovejoy's scheme; but the notion that planets, or systems of planets, are controlled by other planets is a novel suggestion. (This idea of hierarchical control had been suggested in 1832, Doctrine and Covenants 88:42–44.)

Summarizing Joseph's views on the plurality of worlds, it is clear that he espoused a position in keeping with Lovejoy's but also had additional views:

⁹ A number of references in Abraham deal with cosmology and pluralism: "Facsimile no. 2," figs. 1 and 2, and Abr. 1:31, 3:1–17. Although all three references were originally published in 1842, Joseph had understood the principles of Abrahamic astronomy by 1835 (HC 2:286).

(6) worlds have passed away and others have and are being formed (Moses 1:35, 38); (7) worlds are governed in a hierarchical relationship (Abr. 3: 8–9); (8) every system of worlds has its own laws and bounds (D&C 88:36–38); (9) Christ made and/or makes all worlds (D&C 76:24; 93:9–10); (10) different kinds of people inhabit different worlds (D&C 76:112); (11) the earth has been the most wicked of all worlds (Moses 7:36); (12) resurrected beings also reside on worlds (D&C 88:36–38); and (13) worlds exist both in space and time (Moses 1:35, 38; D&C 88:36–38, 42–47; 93:9–10). Concerning the idea that this world is the most wicked of all God's creations, Joseph later wrote in Nauvoo,

And I heard a great voice bearing record from Heav'n,
He's the Savior, and only Begotten of God —
By him, of him, and through him, the worlds were all made,
Even all that career in the heavens so broad.

Whose inhabitants, too, from the first to the last,
And sav'd by the very same Saviour of ours;
And, of course, are begotten God's daughters and sons,
By the very same truths, and the very same pow'rs.

(*Times and Seasons* 4 [February 1843]: 82–85)

Thus, (14) Christ's redemption is universal.

Although there was very little exegesis of this or any topic before Nauvoo, the framework within which pluralism is presented in Mormon scripture complements the basic theological ideas Joseph was developing.¹⁰ In Moses, pluralism is developed within the context of the inhabitants of God's creations, particularly their unrighteous nature. In Abraham the focus shifts to a hierarchical ordering of a pre-mortal spiritual creation. Doctrine and Covenants 76 deals almost exclusively with the disposition of post-mortal mankind and the characteristics of the various Mormon heavens; the context of Section 88 presents a discussion of the laws governing these kingdoms. These two sections describe not only the several heavens of Mormon cosmology but also their conditions, binding laws, and inherent bounds. Hence, Joseph's concept of multiple inhabited worlds is more properly seen as cosmological pronouncements of religious and metaphysical import than speculations to convince the unbeliever of the truthfulness of Christianity.

MORMONISM AND PLURALIST THOUGHT ON THE AMERICAN FRONTIER

The ready availability of the concept of a plurality of worlds on the American frontier in the 1820s is obvious. This is not to suggest, however, that

¹⁰ For a discussion of the emergence of a Mormon theology, see Thomas Alexander, "The Reconstruction of Mormon Doctrine: From Joseph Smith to Progressive Theology," *Sunstone* 5 (July/Aug. 1980): 24–33; T. Edgar Lyon, "Doctrinal Development of the Church During the Nauvoo Sojourn, 1839–1846," *BYU Studies* 15 (Summer 1975): 435–46; Van Hale, "The Doctrinal Impact of the King Follett Discourse," *BYU Studies* 18 (Winter 1978): 209–25; Grant Underwood, "Book of Mormon Usage in Early LDS Theology," *DIALOGUE* 17 (Autumn 1984): 35–74.

accessibility to the idea constitutes sufficient evidence that Joseph derived his notion of multiple inhabited world systems exclusively from his environment. The mere availability of pluralist views is in itself not an adequate argument for Joseph's *coherent* system of beliefs. Ideas by themselves do not form an integrated and consistent system without the dimensions of a broader conceptual structure. Here, that basis is to be found neither in Natural Theology nor in a response to deism, but is uniquely cosmological. While it is not clear that Joseph's ideas on the plurality of worlds were coherent in his *own* mind, they are surprisingly self-consistent and coherent if viewed cosmologically.

Ultimately, the question is not whether Joseph Smith was acquainted with Chalmers's *Astronomical Discourses* or Dwight's *Theology*, for example. Reading the book of Moses closely, one cannot fail to be impressed with the repeated reference to vast numbers of creations. Not only do we read of "millions of earths like this," but also "the heavens cannot be numbered" and "worlds without number." The overwhelming impression is one of awesome size and grandeur. Paine had earlier argued that such conditions imply the absurdity of the atonement. Whereas Chalmers suggested that there was nothing contradictory or absurd in the claim that God could use the earth and its inhabitants to work out a universal atonement, Dwight believed the earth only was in need of redemption. Joseph Smith, on the other hand, while assuming Chalmers's assertion and implicitly denying Dwight's, provided perhaps the most innovative alternative: "Wherefore, I can stretch forth mine hands and hold all the creations which I have made; and mine eye can pierce them also, and among all the workmanship of mine hands there has not been so great wickedness as among thy brethren" (Moses 7:36).

In the context of Enoch's discussion on the plurality of worlds, this verse justifies pluralism in light of the skeptics' most serious argument against Christianity.¹¹

Besides the agreement on the plurality of worlds idea, there are other similarities between Dick's *Philosophy* and in the emerging theology of Joseph Smith. The two most prominent features that share some similarity deal with the "throne of God" and the "perfectibility of man," both of which Brodie notes and emphasizes. While she implies that Joseph derived his notion of Kolob from Dick's idea of the "throne of God," Dick views God as ubiquitous, universal, and ethereal. Thus, it would preclude Joseph's idea of a universal center upon which God, as a being, dwells. Joseph, and many others, shared Dick's view of the "perfectibility of man" but, in contrast to Dick, argued for the ultimate *divine* perfectibility of man, a concept Dick rejected. On such crucial doctrines as the attributes of God and his place of dwelling, the concept of eternal progression, creation *ex nihilo*, and the eternal nature of matter, there is also a wide divergence of belief. Moreover, Dick espoused a dualistic metaphysics, while Joseph became a strict monist. Theologically, Dick claimed

¹¹ Not all persons who actively engaged in Natural Theology to substantiate their Christian faith and who espoused the pluralist doctrine felt threatened by Paine and other skeptics. See, for instance, Henry Fergus, *An Examination of Some of the Astronomical and Theological Opinions of Dr. Chalmers* (Edinburgh: Macredie, Skelley and Co., 1818).

that man is utterly contingent upon God, while Joseph eventually argued that man is necessary (Ostler 1982). On the nature of evil, sin, and the fall, the two also held polar views. After an analysis of external evidences and doctrinal issues dealing with God, man, salvation, and other metaphysical views, at least one scholar, Edward T. Jones (1969), concluded there are so few similarities in their thinking that Brodie's assertion must be rejected.

Are there, however, as Brodie asserts, external reasons to justify the claim that Joseph had read Dick's *Philosophy* prior to producing the book of Abraham? Although Jones has shown that Brodie made numerous incorrect conclusions in trying to identify Joseph Smith's possession of Dick's *Philosophy*, Oliver Cowdery knew the book or excerpts. In the *Messenger and Advocate* (Dec. 1836, pp. 423–25), Oliver as editor quoted from Dick's *Philosophy* on, among other things, the plurality of worlds doctrine. In a later issue (Feb./March 1837, pp. 468–69), Oliver's brother Warren further inserted quotes from Dick's book, *The Philosophy of Religion; or, An Illustration of the Moral Laws of the Universe*, published in 1826. The first part speculated on the moral relations and conditions of extraterrestrial intelligences, while the second dealt with the foundations of morality. What cannot be ascertained without additional evidence is whether Joseph was acquainted early in his career with Dick's writings, irrespective of a general contact with the idea. Even if he were, it seems unlikely that Joseph benefited significantly from Dick's ideas. Moreover, Joseph had already extensively expounded upon the subject six years prior to the Dick references appearing in the *Messenger and Advocate*. Later he possessed a copy of Dick's *Philosophy*, though in January 1844 he donated it with about forty of his own books to the recently organized Nauvoo Library and Literary Institute (Godfrey 1974).

The primary sources for astronomical pluralism during the first third of the nineteenth century, Paine, Chalmers, Dwight, and Dick, were all widely known among the American reading public, with Dwight best known to the religious community. In a significant study of the development and diffusion of astronomical pluralism throughout this period, historian Michael J. Crowe has analyzed nearly every published source of the concept appearing in the English-speaking world.¹² The breadth of literature dealing with pluralism is astounding, and, in addition to the above, it may be grouped into the following categories: (1) that rejecting pluralism as irreconcilable with Christianity (Walpole); (2) that rejecting pluralism as absurd (Coleridge); (3) that accepting

¹² Pluralist works exerting peripheral influence during this period include: A. Fuller, *The Gospel Its Own Witness, or the Holy Nature and Divine Harmony of the Christian Religion Contrasted with the Immortality and Absurdity of Deism* (Clipstone, printed by J. W. Morris, 1799); E. Nares, *An Attempt to Shew How Far the Philosophical Notion of a Plurality of Worlds is Consistent, or Not So, with the Language of the Holy Scriptures* (1801); R. Harrington, *A New System on Fire and Planetary Life* (London, T. Cadell and W. Davies, 1796); J. Mitchell, *On the Plurality of Worlds* (London, 1813); Anon., *A Free Critique of Dr. Chalmers's Discourses on Astronomy* (London, 1817); H. Fergus, *An Examination of Some of the Astronomical and Theological Opinions of Dr. Chalmers* (Edinburgh, Macredie, Skelley and Co., 1818); J. Overton, *Strictures on Dr. Chalmers' Discourses on Astronomy* (Deptford, Kent, 1817); A. Maxwell, *Plurality of Worlds* (London, 1817); A. Copland, *The Existence of Other Worlds* (London, J. G. and Rivington, 1834).

pluralism as opposed to deism and supporting Christianity (Fuller, Nares, Harrington, Mitchell, Chalmers); (4) that rejecting Chalmers's particular advocacy of pluralism (Fergus, Overton, Maxwell); (5) that accepting pluralism and rejecting religion (Shelley, Byron); (6) that advocating pluralism as reconcilable with religion (Dwight, Swedenborg); (7) that advocating pluralism as science (Dick, Herschel, Copland); and (8) variations of the above.

The majority of these books were of minor importance or derived their arguments from the works of Chalmers, Dick, or Paine. A major purpose of many of these writers was not to explain science to the public so much as to provide arguments for the Christian message. Their arguments almost always took the form of extrapolation to the sciences of the day, of analogy to the human habitation, and of a teleological approach to God and the universe. Joseph Smith's version of pluralism, however, does not fit any of these categories easily. It is true that he could have supported positions (3), (4), and (6). Doing so, however, would have considerably altered the purposes for which he constructed his cosmology and would have compromised the terms in which he developed his views. He assumed pluralism — without defense! Astronomical pluralism, in Joseph's version, possessed its own, unique foundation, which, in the final analysis, was based on the emerging theology of the Restoration. Finally, Joseph Smith's writings on the pluralist question were never based on contemporary science nor did he argue by analogy or use a teleological approach. Because his views were presented in a variety of sources spread across a decade, however, it is not clear whether he built his system deliberately or otherwise. But from whatever sources Joseph Smith derived his views on the plurality of worlds, he developed them into a coherent system different from available sources.

CONCLUSION

The idea that Joseph may have borrowed from cultural sources cannot, of course, be totally discounted, yet asserting indigenous sources requires at the very least an explanation of both his deviations from available sources and his integration of his pluralistic ideas with his scriptural writings. In the pluralist concept, Joseph seems to have deviated significantly from the mainstream of those writing on this subject, whether evangelical or deistic. Furthermore, in so doing Joseph integrated his ideas on astronomy into a cosmological framework of complex dimensions.

While we have explored only one aspect of Joseph's cosmology, his pluralism was primarily as an excursion into metaphysics and cosmology, rather than into Natural Theology. Joseph was not trying to substantiate the Christian faith by association with prevailing concepts and theories of science and philosophy. Neither was he interested in debunking deism. He felt no need to do so, since he personally, and the Smith family generally, did not feel threatened by deistic arguments. If he had, he would have emphasized pluralism as an example of Natural Theology. But none of this appears. Given the available data, I believe it is reasonable to conclude (1) the plurality of

worlds idea saturated both the scientific and religious communities of Joseph's time; (2) among the religiously orthodox, pluralism was used almost entirely as an instance of Natural Theology to substantiate the Christian message as a bulwark against skepticism; (3) Joseph himself probably first encountered the idea of the plurality of worlds within the oral traditions of his times; (4) he likely did not use available literary materials (Chalmers, Dwight, Paine, Dick, etc.) as primary sources for his own version of pluralism; and (5) while he would not have rejected the conclusions of his religious contemporaries on the idea of the plurality of worlds, his own version extended far beyond theirs into cosmological and eschatological issues.

Is there, however, a larger purpose Joseph addressed by advancing the doctrine of the plurality of worlds? If my analysis is reasonable and Joseph provided a framework for astronomical pluralism that extended beyond the concerns of his contemporaries, what purposes did his doctrine serve? Although others have suggested this theme, let me note the following, admittedly an after-the-fact historical justification for the evolution of his pluralistic cosmology.

Within Mormon theology, as it developed within the Utah church, the concept of the plurality of worlds has implications extending far beyond the idea of multiple inhabited worlds. Fundamentally, the plurality doctrine is wedded to a complex fabric with both theological and religious dimensions. Theologically, astronomical pluralism is a necessary feature of the other forms of Mormon pluralism — wives and gods. Speaking on plural marriage before a General Conference session on 6 October 1854, Brigham Young clarified this feature of the Restoration: "The whole subject of the marriage relationship is not within my reach or in any man's reach on this earth. It is without the beginning of days or the end of years; it is a hard matter to reach. We can feel some things with regard to it: it lays the foundation for worlds, for angels, and for Gods; for intelligent beings to be crowned with glory, immortality, and eternal lives" (JD 2:90). The sealing of men and women is the essential condition to attain godhood. In turn, God (male/female) propagates spiritual and eventually physical progeny, requiring, of course, worlds for inhabitation. Thus the complex of pluralism — wives, gods, worlds — establishes the fundamental basis of nineteenth-century Mormon cosmology.

This view of pluralism also has profound religious significance. It is within the Mormon concept of the temple that pluralism takes on a dimension unavailable in the theological relationship of these ideas. Not only does the temple represent the sacred place needed to consummate eternal sealings and blessings, but it also becomes a microcosm of the universe, entailing both symbolic and ceremonial representations of the various heavens of Mormon afterlife. Here pluralism is illustrated "as a program of intense and absorbing activity which [rewards] the faithful by showing them the full scope and meaning of the Plan of Salvation" (Nibley 1970, 247). Within this scheme, the plurality of worlds doctrine for Mormonism allows for the completion of the divine creation process. In this sense, Mormonism possesses an eschatological orientation that looks towards pluralism in its various dimensions for its ultimate justification.

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