

“INFORMATION OF THE UNLEARNED”:  
THE ENLIGHTENMENT IN EARLY  
AMERICAN ALMANACS, 1650-1800

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There are few clearer reflections of early American society than almanacs. From 1639 through the 1800s, thousands of almanacs circulated, first in the colonies and then in the United States. As early as 1683, Cotton Mather observed that almanacs came “into almost as many hands as the *best of books*”—the Bible.<sup>1</sup> This ubiquity only increased through the decades: By 1800, Americans read over half a million copies of 125 annual almanacs, nearly one per household.<sup>2</sup> The almanac market was highly competitive.<sup>3</sup> For popular appeal, almanackers included treatises on diverse subjects, reaching the heart of the American philosophical and scientific consciousness. As Dr. Moses Coit Tyler writes in his *History of American Literature*,

[n]o one who would penetrate to the core of early American literature, and would read in it the secret history of the people in whose minds it took root and from whose minds it grew, may by any means turn away, in lofty literary scorn, from the almanac, most despised, most prolific, indispensable of books, which every man uses and no man praises [...] the universal book of modern literature, the su-

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preme and only literary necessity even in households where the Bible and the newspaper are still undesired and unattainable luxuries.<sup>4</sup>

Almanacs were written by and for people of every class. Their necessity was universal, and their content reflects all levels of American society.

The almanac (from the Arabic word for “a timetable of the skies”) has a distinguished history in America, but it was not original to the continent.<sup>5</sup> The genre began in 13<sup>th</sup> century England with the Book of Hours, a calendar of Christian holy days.<sup>6</sup> Almanacs came to the New World in 1639, when William Pierce published his *Almanack Calculated for New England*. Pierce’s almanac was only the second imprint of the sole printing press in America, founded in 1638 by a group of Boston publishers.<sup>7</sup> Between 1639 and 1675, Harvard University tutors published America’s only almanacs from this press.<sup>8</sup> These Philomath (Greek for “lover of mathematics”) almanacs included astronomical data, poetry, and assorted municipal information.<sup>9</sup> Most contained sixteen pages—a cover, introduction, twelve calendar months with astronomical charts, and two miscellaneous pages that often included an astronomical essay.<sup>10</sup> By the early 1700s, almanacs had spread from Boston to New York and Philadelphia.<sup>11</sup> During the eighteenth century—what Robert K. Dodge calls “the time of glory for the American almanac”—volumes and printing runs expanded.<sup>12</sup> The popular appeal of almanacs also ballooned. Rob Sagentorph notes that Nathaniel Ames’s *Astronomical Diary and Almanack*, first published in 1726, was the first almanac to become “an household necessity alongside the Bible.”<sup>13</sup> This trend of popularity continued in 1733 with Benjamin Franklin’s first publication of *Poor Richard’s Almanack* under the pseudonym of Richard Saunders.<sup>14</sup>

Concomitant with the almanacs’ height in the late seventeenth and eighteenth centuries was the rise of the American Enlightenment and its tenets of rationalism, empiricism, and scientific discovery. The Enlightenment profoundly changed the nation, and almanacs are especially valuable to study that transformation. Their societal reach was broad enough to encompass the

diverse perspectives of many groups. The almanackers condensed broad Enlightenment philosophies to simple and practical discourses for their common audience: as the pseudonymous B.A. Philo-Astro wrote in 1723, almanacs contained “the Information of the Unlearned, that they may know the general Opinion of the Learned World.”<sup>15</sup> Most importantly, almanacs dealt profusely with astronomy and astrology, each of which changed profoundly with the new science. Almanacs from the latter half of the seventeenth century and the eighteenth century reflect many new scientific ideas, including the increasing empiricism in astronomy and astrology. But common Americans often did not accept these new concepts, and many almanacs continued to advance traditional ideas. Through their commentary on astronomy and astrology, almanacs reflect the progress of the Enlightenment in America and the tension between common people and scientists.

One of the greatest manifestations of the Enlightenment was the debate over the structure of the universe. For over 1500 years, the theory of geocentrism had been unquestioned. This model, conceived by Ptolemy, held that stars and planets revolved on concentric crystalline spheres around Earth. Beyond the spheres was ether—the realm of heaven and angels. In 1543, however, the Polish astronomer Nicolaus Copernicus published *De Revolutionibus Orbium Caelestium* (“*On the Revolution of the Heavenly Spheres*”). Using Ptolemy’s data, Copernicus showed that reversing the position of the Earth and the Sun resulted in a far more elegant model. Supported by the revolutionary work of Tycho Brahe and Johannes Kepler, the Copernican heliocentric model transformed society. As J. Rixey Ruffin writes, Copernicus “forc[ed] Western culture to contemplate [...] a reordering of the universe” and “set in motion an intellectual revolution that did not come to rest for more than one hundred and fifty years.”<sup>16</sup> Almanacs played a pivotal role in America’s debate between the two models. In the words of Ruffin, they served “to translate the latest findings about the universe for the reader.”<sup>17</sup> But not all almanackers adopted the new astronomy. Rather, almanacs contained a variety of views that exhibit both a tension between science and tradition and a clear evolution of scientific thought.

The Philomath almanacs, although published before the American Enlightenment's acme, were strongly heliocentric because of their academic roots. As early as 1656, Thomas Shepard suggested in his almanac that the spheres were not "physically engraven over our heads," though he adhered otherwise to the Ptolemaic system.<sup>18</sup> After Zechariah Bridgen's seminally heliocentric 1659 almanac, few Philomath almanacs unequivocally defended Ptolemy.<sup>19</sup> Bridgen provided a "brief Explanation and proof of the Philolaick [Copernican] Systeme" and a discourse on the orbits and periods of the planets.<sup>20</sup> He dismantled the Ptolemaic evidence as "but meer figments and altogether impossible with the uniform motion of the Planets" and called his Copernican rules "easily applicable, for the [satisfaction] of the ordinary objections, whether Astronomical or Physicall."<sup>21</sup> Following Bridgen, Nathaniel Chauncy presented discourses on solar motion in 1662 and on Tycho Brahe's heliocentric model (built on Copernicus's) in 1663.<sup>22</sup>

Yet some Philomath almanackers had reservations about the Copernican system. In his 1646 almanac, for instance, Samuel Danforth postulated that the length of days varied "[b]ecause the annuall periods of the Sun agree not together [...]. For the aequinoctial points are not fixed, but move onward under the 8<sup>th</sup> orbe."<sup>23</sup> Danforth grasped the concept of a *rational* universe but had not yet escaped from the terminology of orbs and spheres. Bridgen, too, was uncertain of heliocentrism: In the same 1659 almanac in which he explained the Copernican model, he acknowledged that certain Biblical passages were "seemingly contradicting" to his ideas.<sup>24</sup> As Rose Lockwood notes, in the almanacs' attempt to simplify astronomy for a common readership, "some issues were left unclear, their full ramifications indistinct."<sup>25</sup> Furthermore, some almanackers were opposed to the new science. Among them was Josiah Flint, who wrote an essay in 1666 entitled "The Worlds Eternity is an Impossibility." In the treatise, he condemned the Copernican notion that the universe was infinite: "Impious, Blasphemous, and detractive from the transcendent excellency of the Divine Majesty, have been the bold assertions of men unacquainted with, and unguided by the Spirit of Truth

[...T]hey endeavour to enthrone the World with the Antient of Dayes, to extend a Minute to Eternity [...].”<sup>26</sup> The Philomath almanacs brought the Scientific Revolution to America. But while their general heliocentrism reflected the new astronomy, some almanacs retained traditional geocentrism for mass appeal or religious faith. The Enlightenment’s tension between science and the common people was born.

By 1675, the Philomath almanacs had lost their monopoly on New England. A new class of populist almanackers, far less erudite than their Harvard predecessors, began to rise.<sup>27</sup> Seeking a mass audience, most of them turned toward familiar geocentrism. John Foster, the first of the new almanackers, wrote mockingly in 1675 of “this new heliocentric notion.”<sup>28</sup> In 1713, the popular almanacker Daniel Leeds advanced the Ptolemaic concepts of a divine “Mover” and the crystalline spheres: “All Stars do either keep a constant Course, / Whirle only round by the first Mover’s force, / Or else besides have Motions of their own, / Each in its Sphere, as on a proper Throne.”<sup>29</sup> And Nathaniel Bowen discoursed on the Ptolemaic model in his 1722 almanac: “[T]he Heavens are Transparent Orbs which are suppos’d extended as great Vaults or Arches round about the Earth, and one within another, and are Eleven in Number.”<sup>30</sup> Between 1675 and 1720, the new almanacs presented a more popular view of the new science than had the Philomath works. In the process, they returned to Ptolemaic astronomy.

These almanacs justified geocentrism with religious rhetoric — part of what Lockwood calls the “covert war between science and theology” that the Scientific Revolution spawned in almanacs.<sup>31</sup> Heliocentrism, as Ruffin writes, “raised a number of philosophic and religious questions about the cosmos, God, and humanity itself.”<sup>32</sup> Inherent in Copernicus’s eschewing of the finite spheres was that the universe was boundless. This idea was very disturbing to early eighteenth-century colonists, who craved the psychological comfort of a confined world and the assurance that God occupied himself with Earth alone.<sup>33</sup> Like intellectual debates, these religious quandaries demonstrate the tension in almanacs between popular tradition and the new science.

Beginning in the 1720s and 1730s, most almanacs shifted away from geocentrism. Still seeking a popular appeal, they could not firmly adopt a heliocentric model still unfamiliar to the masses. But as colonial theologian-scientists like Cotton Mather argued that traditional religion and science could coexist, many almanacs encouraged colonists to follow what Ruffin calls “a hybrid cosmology that, while gradually introducing new scientific thought, neither contradicted their secular knowledge nor offended their spiritual beliefs.”<sup>34</sup> Some almanackers simply questioned heliocentric beliefs: Robert Treat noted that many people asked “of Astronomers, Why they attribute the Annual Revolution to the Earth, & not to the Sun.”<sup>35</sup> But most almanacs, if reluctant to adopt heliocentrism with complete faith, at least presented more complete accounts of the Copernican system than before. In 1723, B.A. Philo-Astro wrote a twelve-page discourse on the new astronomical science.<sup>36</sup> And in his 1737 almanac, fifteen years after having advocated geocentrism, Nathaniel Bowen included a lengthy essay on Isaac Newton’s synthesis of Copernican heliocentrism, showing a remarkably inquisitive and open mind:

In the middle is placed the Sun. About him Six Globes continually role. These are the primary Planets. [...] Besides these are discovered in this System ten other Bodies [moons], which move about some of these primary Planets in the same Manner as they move round the Sun. [...] Without this System the fixed Stars are placed. These are all so remote from us, that we seem almost incapable of contriving any means to estimate their Distance. Their Number is exceeding great, Besides two or three Thousand, which we see with the naked Eye, Telescopes open to our View vast Numbers [...] each of which, it is to be supposed, performs the Same Office, as our Sun, affording Light and Heat to certain Planets moving about them.<sup>37</sup>

Benjamin Franklin similarly discussed the planets and stars in his 1745 almanac.<sup>38</sup> Moreover, William Birkett suggested in 1744 that not only scholarly almanackers but also the common people could adopt the new astronomy. In “a Dialogue between a Pedler and a Plebeian” in Birkett’s almanac, the Plebeian suggests that almanackers “can tell their Distances in Miles from the Sun, no more than I know what the Pope drank last.” The Pedler’s response: “Things that seem impossible to you may be possible to

them, and all from the fundamental Rules of Astronomy.”<sup>39</sup> Almanacs of the 1720s and 1730s reflect a broader acceptance of the new science in common society.

But although the popularity of heliocentrism was *broader*, almanacs show that it was far from complete. Nathaniel Bowen, seven years before his 1737 discourse, included charts of planetary diameters and periods. His data were accurate in some cases. He gave the diameter of the Sun, for instance, as 822,148 miles—less than five percent below the actual value. But he grossly overstated the diameter of the Earth (as 160 million miles, where the actual figure is less than eight thousand) and the distance of the Earth from the Sun.<sup>40</sup> Bowen’s errors, which exaggerated the stature and isolation of the earth, suggest his unwillingness to give up geocentrism even while trying to write scientifically. Moreover, in the 1723 almanac containing his essay on heliocentrism, B.A. Philo-Astro noted that his Copernican “Hypothesis has not the publick Stamp.”<sup>41</sup> The heliocentric model was hard for readers to accept. It required a departure from sensual realism with which children still struggle: If the earth is moving, why do we feel at rest? Many almanackers tried to convince readers to ignore the paradox — as B. A. Philo-Astro wrote in 1723, not to “condemn every Thing that squares not with [...] common Notions.”<sup>42</sup> Some tried to explain: In 1734, Nathaniel Ames noted that “the Air [...] encompassing the whole Globe, encompasses our Bodies also [...]”<sup>43</sup> But popular skepticism of heliocentrism did not disappear within the century. In 1744, William Birkett wrote: “Regard the Orbs sublime in...æther born, / which the blue Regions of the Skies adorn [...]”<sup>44</sup> Benjamin Franklin, similarly, wrote in 1748 of “Planets in pure Streams of Ether driven.”<sup>45</sup> And as late as 1796, an almanac contained an anecdote entitled “Star-gazing repulsed,” in which Tycho Brahe tries to explain heliocentric astronomy to his ploughman, Hodge, while walking near the water. When Brahe trips, falls, and nearly drowns, Hodge concludes: “Ah, zur, I trow, / Of heaven’s highways ye no great matters know; / Else why such great mistakes in these below!”<sup>46</sup> Almanacs reflect the slow pace at which common Americans allowed science to dictate their view of the heavens.

Furthermore, almanackers had to convince readers not only of the scientific validity of heliocentrism, but also of its religious acceptability. Interpreting traditional religion as a pseudoscientific construct, many suggested that the Bible was not literal in content but symbolic. Zechariah Bridgen wrote in 1658 that the “Scriptures being fitted as well to the capacity of the rudest mechanick, as of the blest Philosopher, do not intend so much propriety and exactness, as playness and perspicuity; and in Philosophicall truths therein contayned, the proper literal sense is always subservient to the casting vote of reason.”<sup>47</sup> Other almanackers appealed to traditional religion as *confirmation* of their theories. In 1737, for instance, William Birkett used the Biblical division of the universe—“a Firmament in the midst of the Waters”—to explain why the planets could move in retrograde cycles while appearing stationary to observers on earth.<sup>48</sup> Heliocentric almanacs, like their geocentric counterparts, evince the tensions between traditional religion and Enlightenment science that marked the seventeenth and eighteenth centuries.

A concomitant, similar struggle between science and popularism dealt with astrology, the art of relating the stars to earthly events. Astrology was essential to almanacs for calendars and weather predictions, and every volume included astrological symbols and commentary. Almanac astrology survived the Scientific Revolution and even the rise of modern American city life, which devalued some of its primary applications in agriculture.<sup>49</sup> But between 1650 and 1800, many almanacs shifted their portrayal of astrology from an *occult* practice involving direct supernatural intervention to a rational, scientific enterprise. Peter Eisenstadt has suggested that this movement, which he dubs the “disenchantment,” took place in two stages. Between 1650 and 1730, an increasing number of almanacs questioned occult astrology in what Eisenstadt calls “a rising sense of the inadequacy of the occult as a predictive science.”<sup>50</sup> Many of the philosophical and institutional forces of America aligned to intensify the disenchantment. The Great Awakening of the late 1730s and 1740s contributed: The liberal New Lights rejected the notion of divine intervention, and the conservative Old Lights viewed the occult as subversive to

the power of God.<sup>51</sup> At the same time, church and school attendance rose, especially in New England. Each of these powerful institutions condemned occultism. Most importantly, as the rational spirit of the Enlightenment intensified during the middle of the eighteenth century, the disenchantment grew. Beginning in the 1730s, some almanackers who had equivocated began to reject the occult outright, and many espoused a rational and symbolic view of astrology.<sup>52</sup> The disenchantment transformed the country, beginning what Eisenstadt calls a “continuing confrontation, adjustment, and redefinition of the boundaries between magic and the culture of scientific rationality.”<sup>53</sup> Eisenstadt asserts, in fact, that the disenchantment was “in many ways as epochal” as the first Great Awakening.<sup>54</sup> In essence, the movement was driven by intellectual elites striking at an archaic and irrational occult art. But as with astronomy, continuing traditional influences marked Enlightenment tensions between science and the people.

Between 1650 and the 1730s, occult astrology had not yet fallen to the rising tide of skepticism. The Philomath almanacs, ahead of their time in scientific rationalism, eschewed the occult. Yet they did include observations of surreal, inexplicable natural phenomena. In his 1648 almanac, for instance, Samuel Danforth wrote that a mysterious “great light appeared” in the sky on July 11, 1641.<sup>55</sup> John Foster, a populist almanacker and the first to publish outside Harvard, embraced occult astrology. His 1680 edition contained the first occult-based weather forecast in America, in which he examined the planets as “packages of essential qualities, using the four elements and humours” of Aristotelian pseudoscience.<sup>56</sup> Even more occultist was Samuel Clough’s comment in his 1706 almanac that a lunar eclipse “doth fore-show a continuance of Wars, motions of Armies by Land, and Fleets by Sea, great Slaughters of men, Tumultes, Seditions, Captivities, Treacherous Plots and Devices.”<sup>57</sup> Clough considered no rational or scientific explanation for his predictions. In the occult astrology of early almanacs, an eclipse was not a confluence of planets whose influence natural laws could describe, but a mystical event with unsure and dangerous ramifications. In this early stage of the

confrontation between science and the tradition of occultism, occult astrology was still alive.

Yet many almanacs had already begun to question its validity. In 1688, for instance, John Tulley denigrated the work of “Ass-trologers.”<sup>58</sup> In 1694, Thomas Brattle edified his readers that occult “Astrological Predictions [...] serve only to Delude and Amuse the Vulgar [...] and are] not fitting to be joynd with Astronomical Certainties.”<sup>59</sup> And an anonymous almanac of the same year (likely written by Brattle) added that “the Rules whereon [...] astrological predictions] are built [...] are] very Arbitrary and fallible.”<sup>60</sup> Even Clough, in the 1706 almanac where he predicted the effects of an eclipse, acknowledged that occult astrology “has been despis’d by many, as a Science built on the Sand.”<sup>61</sup> Many almanackers held more complex views on the occult. Nathaniel Bowen, for instance, was one of the foremost almanac weather forecasters in the 1720s and 1730s. Yet he struggled to isolate himself from the occult through some measure of empiricism.<sup>62</sup> Daniel Leeds was once among the foremost occultists of colonial America.<sup>63</sup> Yet in 1693, he acknowledged that occult-based forecasts “miss as often as they hit,” and in 1688, he wrote of occult astrology: “[T]here is nothing more pernicious, nothing more destructive to the well-being of men, or to the Salvation of our Souls.”<sup>64</sup> Almanac occultism had begun its sharp decline as the disenchantment strengthened. By 1729, Nathaniel Ames noted that skilled occult astrologers “spring up so thinly, scarce one in a hundred.”<sup>65</sup>

By the 1730s, almanackers had moved into the second stage of their disenchantment. In some cases, it was an outright rejection of astrology, occult or not. Benjamin Franklin’s *Poor Richard’s Almanack*, whose long and seminal publication run began in 1733, espoused this view. Franklin’s emphasis on diligence and industry diminished the toil of astrologers, which by the 1730s many saw as fruitless. Through mocking satire, Franklin suggested that astrology was a fallen art. In his 1753 publication, he made light of weather predictions by declaring “that there’s not a single One of them [...] but when comes to pass *punctually* and *precisely* on

the very Day, in some place or other on this little *diminutive* Globe of ours” (emphasis original).<sup>66</sup> Franklin mocked astrologers again in 1735: “[T]here is no Harmony among the Stargazers; but they are perpetually growling and snarling at one another like strange Curs.”<sup>67</sup> And in 1739, he satirized the astrological method:

Ignorant Men wonder how we Astrologers foretell the Weather so exactly, unless we deal with the old black Devil. Alas! 'tis as easy as pissing abed. For Instance; The Stargazer [...] spies perhaps VIRGO (or the Virgin;) she turns her Head round as it were to see if any body observ'd her; then crouching down gently, with her Hands on her Knees, she looks wistfully for a while right forward. He judges rightly what she's about: And having calculated the Distance and allow'd Time for it's *[sic]* Falling, finds that next Spring we shall have a fine April shower.<sup>68</sup>

The tremendous popularity of Franklin's and other occult-free almanacs shows the broad reach of the disenchantment.<sup>69</sup> From the 1730s through 1800, many Americans—especially those with scientific education or high social status—no longer accepted occult astrology.<sup>70</sup>

But not everyone rejected astrology outright, as Franklin did. Many almanackers began to explain astrology not as a mystical pseudo-science of discerning divine intervention but as a rational science of identifying the planets' physical influence. Among the most prominent of these rationalizers was Jared Eliot, a Connecticut minister and disciple of Baconian empiricism. Eliot considered physical evidence as essential to any scientific proof.<sup>71</sup> In 1761, he published an essay on agricultural science, examining the common practice of cutting shrubs under the astrological sign of Leo in order to curtail their regrowth. An occult astrologer would have explained the phenomenon in terms of the mystical influence of the heavens. But Eliot, referring to Isaac Newton's analysis of lunar gravity, concluded that since “the Moon's Attraction hath great Influences on all Fluids,” the position of the planets physically affected water in the shrubs. In order to support this argument, he gathered evidence in repeated experiments.<sup>72</sup> Nathaniel Ames, too, attempted to rationalize astrology. Ames was not so radical as Eliot; according to Sagendorph, his work was

never “entirely divorced from the pseudo-science of astrology.”<sup>73</sup> But he did reject the seemingly entrenched distinction between astrology and empiricism, arguing (like Eliot) that planets physically affected objects on earth by some sort of gravitational attraction.<sup>74</sup> Unlike Eliot, who was devoted completely to the new science, Ames sought to *purify* almanac astrology through empiricism—to liberate the science from what he called a “Barbarous Crew” whose “savage Rapes deflower’d her Blooming Honour.”<sup>75</sup> Through their rejection of the pseudo-scientific methods of occult astrology, Eliot and Ames led the astrological rationalizers of the disenchantment.

But not all of the anti-occult almanackers held to this still-radical empiricism. Other forms of non-occult astrology were less scientifically sound and less coherent in their rejection of pseudo-science. For instance, many almanacs in the middle-to-late eighteenth century employed ‘recipe knowledge,’ linking temporal or astronomical circumstances to a discrete result. The recipes, although not as outrageous as occult predictions, were no more rationally grounded than Clough’s forewarning of eclipse-spawned wars. The *Farmer’s Almanac* of 1799, for instance, instructs readers to chop firewood on January 6, “[a]t this quarter of the moon [...] to prevent its snapping.”<sup>76</sup> Similarly, Benjamin Banneker’s 1795 almanac advised readers to “[t]ake notice of the 24<sup>th</sup> of November, and as that day is, so the winter is like to prove; and as you find the 25<sup>th</sup> of the same month, so will the month of January be.”<sup>77</sup> Obviously, these recipes had no scientific truth. But they did represent a new, non-occult definition of astrology, which Eisenstadt summarizes as “a collection of related, but distinct and practical rules, without a superintending purpose or connection.”<sup>78</sup> This definition was not as empirical as Eliot conceived, but it also was not figmentary. The recipes demonstrate that not all almanackers of the mid- to late eighteenth century repudiated astrology; a more populist class of scientists struggled to *adapt* astrology to rationalism without destroying its fundamental character.

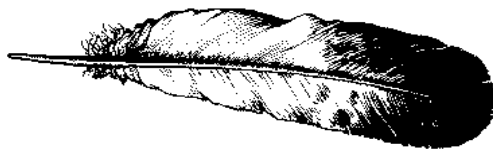
Yet as Eisenstadt notes,

[t]he various attempts to recast astrology as an empirical science had little lasting impact. Though one could reduce astrology to rational recipe knowledge, it was another matter to prove to the satisfaction of objective observers that the correlations between astronomical formations and meteorological occurrences had a demonstrable link. The underlying rationale of astrology resides in the conviction of a transcendent connection between the planets, the weather, and human welfare.<sup>79</sup>

The result of this intellectual quagmire was the survival of occult astrology through the eighteenth century as a *popular* force, immune to the onslaught of scientific and intellectual elites. This “folklorization thesis,” first promulgated by John Butler in 1979, has come to dominate the study of almanac astrology.<sup>80</sup> The common people of America craved what was familiar, and therefore many almanacs included occult astrology long after its academic downfall. William Birkett, in his 1737 almanac, asked, “Who would not but fore-know his future Doom?”<sup>81</sup> His suggestion that astrology could predict the future carried a strong occult tone. And in his 1748 almanac, Thomas More wrote that “the Eclipse—Prognosticates Prosperity to the Godly, and Adversity to the Wicked,” associating (like Clough) an astronomical event with divine action.<sup>82</sup> Even more commonly, almanackers wrote ambiguously of the occult. In his 1762 almanac, for instance, Nathaniel Low acknowledged that his occult-based weather forecasts were “uncertain.”<sup>83</sup> But he also condemned the scientific and intellectual elites who viewed occult astrology “as nothing but a meer whim” and praised “those not so biased against the art as the Multitude are.”<sup>84</sup> Another example of folklorization is the Man of Signs (or anatomy), a diagram linking parts of the human body to the constellations that controlled them. Scientists and intellectuals derided the Man of Signs for its occultism. But many almanacs included it through the mid-eighteenth century in order to please the common people. As Samuel Clough wrote in 1703: “The Anatomy must still be in / Else th’ Almanac’s not worth a pin / For Country-Men regard the Sign / As though ’Twere Oracle Divine.”<sup>85</sup> Nathaniel Ames wrote similarly in 1729 that he hoped by

his first inclusion of the Man of Signs “to please my Countrymen.”<sup>86</sup> The folklorization of occult astrology in eighteenth-century almanacs shows clearly how almanacs reflected society on all levels. As Eisenstadt writes, “white educated New Englanders learned to speak and think in the language of the High Enlightenment.”<sup>87</sup> But many almanacs included material for the public who, in the words of Richard Godbeer, “continued to see the world as an enchanted place, filled with occult forces.”<sup>88</sup>

Between 1650 and 1800, almanacs reflected the rise of the Enlightenment in America. Where once the principles of Ptolemaic geocentrism and occult astrology reigned supreme, new and rational ideas began to imbue the nation. To academic and scientific elites, including many almanackers, the movement was a blessing for American society. The structure of the universe conformed more closely to reason—if not religious sensibility—and mystical notions of divine intervention fell under scrutiny. The Enlightenment ushered in a new age in American thought, with an entirely novel conception of the universe. But not all of American society cleaved to the new beliefs. To common Americans, traditional concepts of divinity and the heavens were dear. To accept the new science was to alter one’s way of thought, and many Americans were unwilling to make this leap. Eisenstadt aptly identifies the role of the almanac during this philosophically and intellectually tumultuous time: to offer “a model for readers on how to adapt to the Enlightenment.”<sup>89</sup> Almanackers provided readers with both the new precepts of Enlightenment science and comfortable, traditional thought—sometimes at once. The resulting volumes illuminate the progress of the Enlightenment in American consciousness and the inevitable tensions between science and the common people.



<sup>1</sup> Qtd. in Peter Eisenstadt, "Almanacs and the Disenchantment of Early America," Pennsylvania History 65.2 (1998) p. 147

<sup>2</sup> *Ibid.*, p. 147

<sup>3</sup> Robert K. Dodge, "Access to Popular Culture: Early American Almanacs," Kentucky Folklore Record 25, 1-2 (1979) p. 11

<sup>4</sup> Qtd. in Robb Sagendorph, America and her Almanacs: Wit, Wisdom, and Weather, 1639-1970 (Dublin, New Hampshire: Yankee; Boston, Massachusetts: Little Brown, 1970) p. 32

<sup>5</sup> *Ibid.*, p. 11

<sup>6</sup> *Ibid.*, p. 105

<sup>7</sup> *Ibid.*, p. 31

<sup>8</sup> Rose Lockwood, "The Scientific Revolution in Seventeenth-Century New England," New England Quarterly 53.1 (1980) p. 77

<sup>9</sup> Sagendorph, pp. 33-35

<sup>10</sup> Robert K. Dodge, "Didactic Humor in the Almanacs of Early America," Journal of Popular Culture 5.3 (1971) pp. 592-593

<sup>11</sup> J. Rixey Ruffin, "'Urania's Dusky Vails': Heliocentrism in Colonial Almanacs, 1700-1735," New England Quarterly 70.2 (1997) p. 307

<sup>12</sup> Dodge, "Humor," p. 593

<sup>13</sup> Sagendorph, p. 52

<sup>14</sup> Dodge, "Access," pp. 11-12

<sup>15</sup> Qtd. in Ruffin, p. 308

<sup>16</sup> *Ibid.*, p. 306

<sup>17</sup> *Ibid.*, p. 308

<sup>18</sup> Qtd. in Lockwood, p. 82

<sup>19</sup> *Ibid.*, pp. 77-78

<sup>20</sup> Zechariah Bridgen, An Almanack of the Coelestial Motions for this Present Year of the Christian Aera 1659 (Cambridge, Massachusetts: Samuel Green, 1659) p. 14

<sup>21</sup> *Ibid.*, p. 15

<sup>22</sup> Lockwood, p. 82

<sup>23</sup> Samuel Danforth, An Almanack for the Year of our Lord 1646 (Cambridge, Massachusetts: Stephen Day, 1645) p. 5

<sup>24</sup> Bridgen, p. 15

<sup>25</sup> Lockwood, p. 89

<sup>26</sup> Josiah Flint, An Almanack or, Astronomical Calculations of the Most Remarkable Celestial Revolutions, &c. Visible in

our Horizon (Cambridge, Massachusetts: Samuel Green, 1666) pp. 15-16

<sup>27</sup> Ruffin, p. 307

<sup>28</sup> Qtd. in Lockwood, p. 90

<sup>29</sup> Qtd. in Ruffin, p. 308

<sup>30</sup> Ibid., p. 309

<sup>31</sup> Lockwood, p. 77

<sup>32</sup> Ruffin, p. 312

<sup>33</sup> Lockwood, p. 89

<sup>34</sup> Ruffin, p. 312

<sup>35</sup> Ibid., p. 309

<sup>36</sup> Ibid., p. 310

<sup>37</sup> Nathaniel Bowen, An Almanack for the Year of our Lord Christ, 1737 (Boston, Massachusetts: Bartholemew Green, 1736) pp. 15-16

<sup>38</sup> "Poor Richard's Almanac, 1745," AMDOCS: Documents for the Study of American History eds. Lynn Nelson and Kendall Simmons (21 September 2001) Anschutz Library, University of Kansas, 28 September 2001 <<http://www.cc.ukans.edu/carrie/docs/texts/prichard45.html>>

<sup>39</sup> William Birkett, Poor Will's Almanack for the Year of Christian Account, 1744 (Philadelphia, Pennsylvania: Isaiah Warner, 1743) p. 2

<sup>40</sup> Nathaniel Bowen, An Almanack for the Year of our Lord Christ, 1730 (Boston, Massachusetts: Bartholemew Green, 1729) p. 16

<sup>41</sup> Ruffin, p. 309

<sup>42</sup> Ibid., p. 310

<sup>43</sup> Ibid., p. 310

<sup>44</sup> Birkett, p. 7

<sup>45</sup> "Poor Richard's Improved Almanac, 1748," AMIDOCs: Documents for the Study of American History eds. Lynn Nelson and Kendall Simmons (21 September 2001) Anschutz Library, University of Kansas, 28 September 2001 <<http://www.cc.ukans.edu/carrie/docs/texts/prichardimpr48.html>>

<sup>46</sup> An Almanack for the Year 1796 (Washington, D.C.: John Colerick, 1795) p. 33

<sup>47</sup> Lockwood, p. 78

<sup>48</sup> William Birkett, The American Almanack for the Year of Christian Account, 1737 (Philadelphia, Pennsylvania: Andrew Bradford, 1736) p. 2

<sup>49</sup> Eisenstadt, pp. 147-148

<sup>50</sup> Ibid., p. 151

<sup>51</sup> Ibid., p. 146

<sup>52</sup> Ibid., p. 151

<sup>53</sup> Ibid., p. 162

<sup>54</sup> Ibid., p. 145

<sup>55</sup> Samuel Danforth, An Almanack for the Year of our Lord 1648 (Cambridge, Massachusetts: Matthew Day, 1647) p. 16

<sup>56</sup> Eisenstadt, p. 148

<sup>57</sup> Samuel Clough, An Almanack for the Year of our Lord 1706 (Boston, Massachusetts: Bartholemew Green, 1705) p. 16

<sup>58</sup> Eisenstadt, p. 155

<sup>59</sup> Sagendorph, p. 36

<sup>60</sup> An Almanack of the Coelestiall Motions, Aspects, and Eclipses, &c. for the Year of our Lord God MDCXCIV (Boston, Massachusetts: Bartholemew Green, 1693) p. 16

<sup>61</sup> Clough, p. 2

<sup>62</sup> Eisenstadt, pp. 156-157

<sup>63</sup> Ibid., p. 153

<sup>64</sup> Ibid., p. 153

<sup>65</sup> Ibid., p. 143

<sup>66</sup> Ibid., p. 157

<sup>67</sup> "Poor Richard's Almanac, 1735," AMDOCS: Documents for the Study of American History eds. Lynn Nelson and Kendall Simmons (21 Sept. 2001) Anschutz Library, University of Kansas, 28 Sept. 2001 <<http://www.cc.ukans.edu/carrie/docs/texts/prichard35.htm1>>

<sup>68</sup> "Poor Richard's Almanac, 1739," AMDOCS: Documents for the Study of American History eds. Lynn Nelson and Kendall Simmons (21 Sept. 2001) Anschutz Library, University of Kansas, 28 Sept. 2001 <<http://www.cc.ukans.edu/carrie/docs/texts/prichard39.html>>

<sup>69</sup> Eisenstadt, p. 148

<sup>70</sup> Ibid., p. 158

<sup>71</sup> Ibid., p. 148

<sup>72</sup> Ibid., p. 149

<sup>73</sup> Sagendorph, p. 55

<sup>74</sup> Eisenstadt, p. 159

<sup>75</sup> Ibid., p. 159

<sup>76</sup> Ibid., p. 150

<sup>77</sup> Benjamin Banneker, Banneker's New Jersey, Pennsylvania, Delaware, Maryland, And Virginia Almanac (Baltimore, Maryland: Samuel Adams, 1794) p. 19

<sup>78</sup> Eisenstadt, p. 151

<sup>79</sup> Ibid., p. 160

<sup>80</sup> Ibid., p. 144

<sup>81</sup> Birkett, "1737, " p. 4

<sup>82</sup> Thomas More, The American Country Almanac for the Year of Christian Account, 1748 (Philadelphia, Pennsylvania: Benjamin Franklin, 1747) p. 15

<sup>83</sup> Eisenstadt, p. 145

<sup>84</sup> Ibid., p. 144

<sup>85</sup> Ibid., p. 156

<sup>86</sup> Sagendorph, p. 55

<sup>87</sup> Eisenstadt, p. 144

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28 July 2001

Dear Mr. Fitzhugh,

I read your congratulatory letter twice because I wanted to make certain that I understood it correctly. I was so excited to learn that you will be publishing my paper in your Fall 2001 edition, and it is truly an honor to receive this recognition. My family is extremely proud, and I am certain that Mr. Mullins, my history teacher, will share in our reaction.

I also enjoyed reading the article that you enclosed from *The Boston Globe*. I think your publication is an invaluable opportunity for high school students. Both the authors and the readers benefit from the experience, and I am hopeful that your efforts continue far into the future.

As you know, I am just beginning my junior year, so I will not know the college I will be attending until sometime next year. As soon as that is determined, I will inform you of that decision.

Thank you again for this wonderful privilege and distinction.

Sincerely,  
Nicole S. Bonoff  
*Russian Revolution* (Fall 2001)