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## Three Twentieth-Century Jewish Responses to Evolutionary Theory

In the Middle Ages, cosmogony was the area of greatest contention between adherents of biblical religion and those of the Greek philosophical tradition. Ever since Charles Darwin converted the scientific world to the transmutation hypothesis by the end of the third quarter of the nineteenth century, biology has been the primary focus of the tensions between religion and science. In the Protestant world, few nineteenth-century theologians bothered to master the nuances among competing theories of evolution. Thus *Darwinism* was frequently used as a synonym for *transmutation* or for *evolution*, an idea that was opposed to the special creation of species seemingly described in the first chapter of Genesis.<sup>1</sup> Some Jewish theologians,

\* The present essay is based loosely on the fourth chapter of my doctoral dissertation, "Creation, Evolution and Jewish Thought" (Brandeis University, 2001). I wish to thank my advisor, Arthur Green, and my readers, Sam Schweber and Shaul Magid, for their insights and support throughout that project. Lenn E. Goodman read and commented on an early draft of this paper. I am grateful to be a recipient of his wisdom and friendship. The anonymous referees for *Aleph*, and its copy editor, also provided very helpful suggestions during the process of revision.

<sup>1</sup> Jon H. Roberts, *Darwinism and the Divine in America: Protestant Intellectuals and Organic Evolution, 1859–1900* (Madison: University of Wisconsin Press, 1988), xiv.

especially the more traditional who were accustomed to mastering details of Jewish law, tended to be more interested in the niceties of evolutionary theory.<sup>2</sup> By the dawn of the twentieth century, the transmutation of species had been almost universally accepted within the world of Jewish theology; but Darwinism was rejected.

This paper examines the strategies of three prominent twentieth-century Jewish thinkers who addressed evolutionary theory: Rabbi Abraham Isaac Kook, Rabbi Mordecai M. Kaplan, and Prof. Yeshayahu Leibowitz. All three dilate upon the mechanics or meaning of evolution as well as its resonances with and implications for Judaism. Each engaged in two of Ian Barbour's models of the relations between religion and science—separation and dialogue.<sup>3</sup> Yet their styles of dialogue could not be more different. To use a biological metaphor, for Kook, science and religion are separated by a semipermeable membrane that allows information to flow from religion to science; for Kaplan, the membrane allows information to flow in both directions; while for Leibowitz, the flow is from science to religion.

Darwin's "descent with modification," or transmutation, presented special problems for biblical religions. To be sure, Darwin was not the first to challenge the conceit of the fixity of species, but he was the first to amass sufficient evidence to successfully undermine the ancient notion.<sup>4</sup> The transmutation of species, dependent on eons, is a potential problem to heirs of the biblical creation stories of Genesis. How does one reconcile the first chapter of the Hebrew Bible, which purports to describe the creation of all species in six days, with a scientific understanding of natural history?<sup>5</sup>

Another problem that Darwinism raises for religion concerns the mechanism of natural selection. Briefly stated, Darwin posited that slight variations within a species may confer an advantage to some individuals, given ever-changing environmental conditions.<sup>6</sup> These slight variations are inherited and thereby preserved. Over thousands of generations, they accumulate and spread throughout the population

until a new species evolves. Only in retrospect can it be known which variations prove to have been adaptive. Furthermore, though Darwin was ambiguous on this point, natural history is not necessarily progressive or designed to lead to the emergence of humanity.<sup>7</sup>

Darwin's theory of natural selection opposed the assumption of design held by most scientists of his time. As Darwin wrote in a letter

- <sup>2</sup> For a review of nineteenth-century Jewish responses to Darwinism, see Cherry, "Creation, Evolution and Jewish Thought," chapters two and three.
- <sup>3</sup> Ian Barbour, *Religion in an Age of Science: The Gifford Lectures, 1989–1991, Vol. I* (New York: Harper Publishing, 1991), chapter one.
- <sup>4</sup> See Arthur O. Lovejoy, *The Great Chain of Being: A Study of the History of an Idea* (New York: Harper & Row, 1936), chapter one.  
Fixity of species was never a rabbinic doctrine. See B Shabbat 28b and Rashi's comments on *teḥašim*, Ex. 25:5. Maimonides, however, did accept the notion: *The Guide of the Perplexed*, II:10. Translated and with an Introduction and Notes by Shlomo Pines, Introductory Essay by Leo Strauss (Chicago: University of Chicago Press, 1963), 272.
- <sup>5</sup> For responses within the Christian community, see James R. Moore, "Geologists and Interpreters of Genesis in the Nineteenth Century," in *God & Nature: Historical Essays on the Encounter between Christianity and Science*, ed. David C. Lindberg and Ronald L. Numbers (Berkeley: University of California Press, 1986), 322–350.
- <sup>6</sup> Charles Darwin, *On the Origin of Species By Means of Natural Selection, First Edition*, in *The Portable Darwin*, ed. Duncan M. Porter and Peter W. Graham (New York: Penguin Group, 1993), 110.
- <sup>7</sup> James R. Moore, *Post-Darwinian Controversies: A Study of the Protestant Struggle to Come to Terms with Darwin in Great Britain and America, 1870–1900* (New York: Cambridge University Press, 1979), 331; Gertrude Himmelfarb, *Darwin and the Darwinian Revolution* (New York: W. W. Norton & Co., 1959), 337–352; Michael Ruse, *Monad to Man: The Concept of Progress in Evolutionary Biology* (Cambridge: Harvard University Press, 1996), 136–177.

to Asa Gray, "I cannot see, as plainly as others do, and as I should wish to do, evidence of design and beneficence on all sides of us."<sup>8</sup> The rejection of teleology in nature presented a challenge to the argument from design then popular within natural theology. Although David Hume and Immanuel Kant had already demonstrated the insufficiency of the argument from design, Darwin's natural selection went beyond their philosophical ratiocinations. Not only can nature not prove God's existence; nature seems to defy divine control. Moreover, if God does not control the direction and contours of natural history, how can God control human history? The loss of divine design in nature undermines faith in divine providence in history. Thus the textual problem that Darwinism raises for biblical interpretation is compounded by the theological problem of providence.

Darwinism threw one more problem into relief. The paleontologist Georges Cuvier, no friend of the transmutation hypothesis, had established that the fossil record was brimming with evidence of mass extinction decades before Darwin sailed on the H.M.S. *Beagle*. (Darwin's argument relied heavily on Cuvier's findings.) The fossil record could thus be read as an indictment of divine beneficence. Why would a good God create so many species, only to have them end in extinction? If the mechanism of natural selection challenges divine providence, natural history, regardless of the mechanism of speciation, magnifies the problem of theodicy.

### **Abraham Isaac Kook (1865–1935)**

For many, Rabbi Abraham Isaac Kook is closely associated with the concept of evolution. Popular and academic treatments of his thought, as well as anthologies of his writings, consistently highlight his embrace of the principles, if not the details, of evolutionary theory.<sup>9</sup> There is, indeed, a strong correspondence between certain non-Dar-

winian evolutionary theories and Kook's own sense of the progressive unfolding of reality. (In the first decades of the twentieth century, Darwinism had been eclipsed by theories of evolution that supported progress and purpose.<sup>10</sup>) Yet nowhere does Kook directly cite Darwin or any other biologist.<sup>11</sup> Although it is true that evolutionary ideas permeated his thinking, he wrote very little about biological evolution. In addition to examining those few sections, I will sketch out the ways in which Kook's understanding of evolution accords with his general worldview.

Kook began writing on evolution in the first decade of the twen-

- <sup>8</sup> *The Correspondence of Charles Darwin*, ed. Frederick Burkholdt and Sydney Smith, Vol. 8 (Cambridge: Cambridge University Press, 1993), 224. This letter is dated May 22, 1860.
- <sup>9</sup> E.g., Jacob B. Agus, *High Priest of Rebirth: The Life, Times, and Thought of Abraham Isaac Kook* (New York: Bloch Publishing Co., 1972), 184; Lawrence Fine, "Rav Abraham Isaac Kook and the Jewish Mystical Tradition," in *Rabbi Abraham Isaac Kook and Jewish Spirituality*, ed. Lawrence J. Kaplan and David Schatz (New York: New York University Press, 1995), 23–40, on p. 35; Abraham Isaac Kook, *The Lights of Penitence, The Moral Principles, Lights of Holiness, Essays, Letters, and Poems*, trans. and intro. Ben Zion Bokser (New York: Paulist Press, 1978), 220f.; Isadore Epstein, *The Faith of Judaism: An Interpretation for our Times* (London: Soncino Press, 1954), 197. For a more nuanced assessment, see: Samuel Hugo Bergman, "On Reality in God," in *Essays on the Thought and Philosophy of Rabbi Kook*, ed. Ezra Gellman (New York: Herzl Press, 1991), 76–88, on p. 80; David S. Shapiro, "On World Perspective," *ibid.*, 187–210, on p. 202.
- <sup>10</sup> Peter J. Bowler, *The Eclipse of Darwinism: Anti-Darwinian Evolution Theories in the Decades around 1900* (Baltimore: The John Hopkins University Press, 1983).
- <sup>11</sup> Jack J. Cohen suggests that Kook never directly quoted from any non-Jewish sources. *Guides For an Age of Confusion: Studies in the Thinking of Abraham Y. Kook and Mordecai M. Kaplan* (New York: Fordham University Press, 1999), 9.

tieth century, long before the Modern Synthesis of the 1940s and before Darwin's mechanism of natural selection was largely accepted within the scientific community. Kook discusses evolution in the section of *ᵀOrot ha-qodesh* entitled "The Ascending Development."<sup>12</sup> From the title, it is already obvious that Kook believes that development has a direction. The world is moving toward greater perfection, even though there may be temporary setbacks.<sup>13</sup> Although Kook focuses on development and the process of perfection, he is careful to distinguish his theology from the philosophy of Henri Bergson, which is predicated *solely* on the dynamic process of becoming, to the exclusion of any notion of perfect, static being.

Kook tethers the dynamic creativity of Bergson to the static, ultimate reality pointed to by Benedict Spinoza. The metaphysical telos of the process of becoming is rooted in divine being.<sup>14</sup> Kook's concept of static and divine Being, for which he uses the kabbalistic term *ᵀEin Sof*, is the ground for his cherished goal of progress.<sup>15</sup> As Yosef Ben Shlomo has commented: "Rabbi Kook's argument against Bergson is that without a transcendent Being, i.e., absolute perfection above and beyond betterment, there is no goal toward which the world strives."<sup>16</sup> For Kook, the *ᵀEin Sof* is the telos of creation.

Once the metaphysical ground has been prepared for a discussion of change and becoming, Kook offers his most famous comments on evolution.

The theory of evolution (*hitpatteḥut*) is increasingly conquering the world at this time, and, more so than all other philosophical theories, conforms to the kabbalistic secrets of the world. Evolution, which proceeds on a path of ascendancy, provides an optimistic foundation for the world. How is it possible to despair at a time when we see that everything evolves and ascends? When we penetrate the inner meaning of ascending evolution, we find in it the divine element shining with absolute

brilliance. It is precisely the *Ein Sof in actu* which manages to bring to realization that which is *Ein Sof in potentia*.<sup>17</sup>

It is evident here that Kook treats evolution as a philosophical theory, not a scientific one. The biological mechanisms of evolution do not interest him at all. As I will show below, Kook is willing to accept that

- <sup>12</sup> *Orot ha-qodeš* (Jerusalem: Mossad Ha-Rav Kook, 1938; reprint, 1985), II:515–574 and sources, 612f. (hereafter O.Q.). David Cohen arranged and titled the sections in *Orot ha-qodeš*. For more on his role in presenting Rav Kook's work, see Dov Schwartz, *Challenge and Crisis in Rav Kook's Circle* [Hebrew] (Tel Aviv: Am Oved, 2001).
- <sup>13</sup> Shalom Rosenberg, "Introduction to the Thought of Rav Kook," in *The World of Rav Kook's Thought*, ed. Benjamin Ish-Shalom and Shalom Rosenberg, trans. Shalom Carmy and Bernard Casper (Jerusalem: Avi Chai, 1991), 16–127, on p. 37; Nachum Arieli, "Aspects of Rav Kook's Practical Approach to Society and Culture," in *ibid.*, 178–182. Arieli points out that, unlike Hegel and Herder, Kook allowed for interruptions and even reversals in the process of progress (p. 180). It would be difficult to *disallow* such possibilities when writing, as Kook was, in exile from the Land of Israel as a result of World War I.
- <sup>14</sup> Several scholars have discussed this issue. See: Zvi Yaron, *The Philosophy of Rabbi Kook*, trans. Avner Tomaschoff (Jerusalem: World Zionist Organization, 1991), 81f.; Samuel Hugo Bergman, *Men and Ways: Philosophical Essays* [Hebrew] (Jerusalem: Bialik Institute, 1967), 353; Benjamin Ish-Shalom, *Rav Avraham Itzhak HaCohen Kook: Between Rationalism and Mysticism*, trans. Ora Wiskind-Elper (Albany: State University of New York Press, 1993), 45f.; Yosef Ben Shlomo, *Mystical Theology of Moses Cordovero* [Hebrew], (Jerusalem: Bialik Institute, 1965), 301; Agus, *High Priest*, 148 and 182f. See also Kook, O.Q. II:529–534.
- <sup>15</sup> *Ibid.*, II:530f.
- <sup>16</sup> Yosef Ben Shlomo, *Poetry of Being* (Tel Aviv: MOD Books, 1990), 47.
- <sup>17</sup> O.Q. II:537.

humanity has its biological roots in wild beasts, but he conspicuously avoids elaborating on the details of biological evolution. He ostensibly accepts the ideas inherent in the facts of evolution—that humans appeared on earth after other animals and possess a physiological, ethical, and intellectual inheritance from them. But Kook uses these facts to point to the progress exhibited by natural history.<sup>18</sup> The theory of evolution, Darwin's or anyone else's, is no more than a fleeting theory that will undergo modifications, just like the cosmological theories of Ptolemy, Copernicus, and Galileo in the past.<sup>19</sup> "There is no contradiction whatsoever between the Torah and any of the world's scientific knowledge. We do not have to accept theories as certainties, no matter how widely accepted, for they are like blossoms that wither. Very soon, scientific knowledge will be further developed and all of today's new theories will be derided and scorned. ... But the word of God will endure forever."<sup>20</sup>

For Kook, evolution conforms to the secrets of Kabbalah. One of those secrets, contrary to Darwin's hypothesis, is that development has a direction and that the movement is progressing, albeit asymptotically, toward perfection.<sup>21</sup> Not only did that sense of optimism challenge Darwin's denial of biological teleology in natural history; it also countered Arthur Schopenhauer's "blind will" in human history.<sup>22</sup> For Kook, the mystical monist, the lesson of evolution applies as much to human history as to natural history. Even the political theorist Moses Hess, whom Kook had read, applies notions of progressive biological evolution to human history: "History, like nature, will finally have her epoch of harmonious perfection. ... There is a law of progress."<sup>23</sup>

That law of progress is metaphysically rooted in the *Ein Sof*, which somehow actualizes the divinity latent in all phenomenal reality. Note that here Kook uses the term *Ein Sof* in association with potential. In traditional Kabbalah, *Ein Sof* is the actualized and static realm of pure divine being. In the passage cited above, which betrays Kook's proclivities toward the acosmism of Chabad theology, the *Ein Sof* is



hidden in the potential of the phenomenal world. It is only the illusion of individuation that prevents humans from perceiving the divinity of the world. As Rachel Elior explains: "Acosmism is a concept that expresses the argument of the sole existence of the divine essence and denies that the world is a distinct entity. ... Man is called to deny his sensory experience and his empirical knowledge and to embrace a form of consciousness which maintains that everything is a single divine substance."<sup>24</sup>

Let us return to Kook's description of the law of progress. "In the

<sup>18</sup> Ibid., II:543.

<sup>19</sup> A. I. Kook, *Eder ha-yaqar* (Jerusalem: Mossad Ha-Rav Kook, 1967), 38; idem, *Letters of Rav Kook* [Hebrew] (Jerusalem: Mossad Ha-Rav Kook, 1967), Letter 91, p. 106f. See also Rosenberg, "Introduction to the Thought of Rav Kook," 94f.

<sup>20</sup> *Letters of Rav Kook*, Letter 91, p. 106. Protestant fundamentalists in the United States, and those who mimic their positions, make similar claims about Darwinism. See Ronald L. Numbers, *The Creationists: The Evolution of Scientific Creationism* (Berkeley: University of California Press, 1992), 50–53.

<sup>21</sup> O.Q. I:9; Yosef Ben Shlomo, "Perfection and Betterment in Rav Kook's Concept of the Divine" [Hebrew], *Iyyun* 33 (1984):289–309, on p. 294; Rosenberg, "Introduction to the Thought of Rav Kook," 38–42.

<sup>22</sup> O.Q. II:484, 555. Arieli, "Aspects of Rav Kook's Practical Approach," 180; Rosenberg, "Introduction to the Thought of Rav Kook," 85.

<sup>23</sup> Moses Hess, *Rome and Jerusalem: A Study in Jewish Nationalism*, trans. Meyer Waxman (New York: Bloch Publishing Co., 1945), 117 and 119. Hess originally published his work in 1862 and rejected Darwinian evolution. See note 7, 222. See also Eliezer Goldman, "Rav Kook's Relation to European Thought," *The World of Rav Kook's Thought*, 142.

<sup>24</sup> Rachel Elior, *The Paradoxical Ascent to God: The Kabbalistic Theosophy of Habad Hasidism*, trans. Jeffrey M. Green (Albany: State University of New York Press, 1993), 49 and 51.

past, the nature and will of humanity was more wild than it is currently, and in the days to come it will be more settled and better than in the present. ...The aspiration of the natural will is directed toward the divine goodness.”<sup>25</sup> As humanity evolves, world history will approach its messianic culmination. Kook, in a remarkable reevaluation of the traditional concept of *teshuvah*, folds together his notions of individual, social, and cosmic evolution.

The life process is built on the basis of *teshuvah*. Particular existences become manifest in progressive descent from the divine to the worldly. ... The descent is governed by divine providence. ... But this descent bears hidden within itself the basis of subsequent ascent. ... When we realize to what extent the particularities of existence, the spiritual and the material, in miniature, all embody the general principles, and the smallest fragment has elements of greatness in the depths of its being, we shall no longer be surprised at the mystery of *teshuvah* that penetrates so deeply the spirit of man. ... This process is re-enacted in the historical processes of humanity. When we shall understand better the qualitative value of man and his spirit, and the character he gives to existence through his influence, we shall at once clearly discern the luminous relationship between the great, cosmic form of *teshuvah*, in its broadest, deepest and highest aspects, and the *teshuvah* of the person, the individual and the collective. ...<sup>26</sup>

Rabbinic literature associates *teshuvah* with halakhah (religious law) and understands it as a commitment to return to obedience to the commandments.<sup>27</sup> Hence the term is frequently translated as “repentance.” Kook complements this legal sense of *teshuvah* with the etymological sense of returning to God and not merely to His commandments.<sup>28</sup>

Kook's rendering of *teshuvah* conflates the biological, social, and cosmic processes of evolution and also blends the traditional concepts of *teshuvah* and *tiqqun 'olam*. For Kook, as the process of betterment (*hištallemut*) advances, the world approaches perfection (*šelemut*). Kook calls this process of bettering the world *tiqqun 'olam*.<sup>29</sup> As Lawrence Englander has noted, "the teshuvah of the individual, then, has cosmic significance in that it contributes toward *Tiqqun Olam*, the repair and the unification of the universe."<sup>30</sup> The driving force behind this unification is the ontological relationship between the *'Ein Sof* and all creation. Ben Shlomo explains Kook's description of the relationship between betterment and perfection as follows: "All of existence 'wants' to be perfect. ... The internal, metaphysical meaning of this process is the spontaneous aspiration of everything that exists—beginning with the first *sefirah*—to unite with the *'Ein Sof*."<sup>31</sup>

<sup>25</sup> O.Q. II:544f.

<sup>26</sup> A. I. Kook, *Orot tešuvah* (Jerusalem: Mossad Ha-Rav Kook, 1985), 11:4, 33f. (hereafter *O.T.*); here cited in the English translation in Bokser, *Abraham Isaac Kook*, 81f.

<sup>27</sup> See, e.g., B Yoma 86b.

<sup>28</sup> The Bible uses the root *š.w.b.* to express coming toward God in more than a strictly legalistic sense. See, e.g., Jer. 3–4. The rabbis undoubtedly played on these meanings as well; Kook rehabilitated that original sense and applied it to all of creation. See Itamar Gruenwald, "The Concept of *Teshuvah* in the Teachings of Maimonides and Rav Kook," in *The World of Rav Kook's Thought*, 283–304, on pp. 283f.

<sup>29</sup> A. I. Kook, *Arfillei tohar*, ed. Y. Sheilat (Jerusalem: Ha-Makhon 'al šem ha-Rav Ševi Yehudah Kook, 1983), 335; cited in Samuel Hugo Bergmann, "Death and Immortality in the Teachings of Rabbi Kook," *Judaism* 7 (1958): 245. *Tiqqun 'olam*, in Lurianic usage, was exclusively theosophical. See Fine, "Rav Abraham Isaac Kook and the Jewish Mystical Tradition," 29.

<sup>30</sup> Lawrence A. Englander, "Rav Kook's Doctrine of Teshuvah," *Judaism* 34 (1985): 215. See also Rosenberg, "Introduction to the Thought of Rav Kook," 40.

Now we can understand how progressive and purposeful biological evolution fits into Kook's worldview. Although it is certainly true that philosophies of progress, as espoused by European *Naturphilosophen* and Lamarckians, were standard European fare in the late nineteenth and early twentieth centuries, Kook is on solid ground in his assertion that they are compatible with Jewish esoterism. Kook merely points out that, in the theory of evolution, Western thought had finally caught up with the Kabbalah!<sup>32</sup> Kook's embrace of evolutionary theory, progressive and directed, is consonant with his previously held monistic understanding of the unfolding of reality.

Shalom Rosenberg, who analyzed the texts in which Kook deals specifically with issues of science, has described his approach as a synthesis.<sup>33</sup> One element of Kook's synthesizing project involved making room for the partial truths of science within the larger framework of religious truth. Like earlier mystics, Kook sought to integrate a devalued science into his worldview.<sup>34</sup> *Orot ha-qodeš* opens with a salvo aimed squarely at secular science: "Religious wisdom ranks higher than all other sciences in this: religious wisdom transforms the will and the spiritual attributes of its learners, drawing them to the supernal heights on which its concern is focused. ... All secular sciences lack this capacity because they cannot, by themselves, engender anything new."<sup>35</sup>

Among those secular sciences was the relatively new field of biblical criticism. Kook adroitly navigates the minefield of the creation narrative. Rather than attempting to read science into Genesis, he separates Torah from science. In a 1905 letter to Moshe Seidel, Kook articulates his position on the relationship between the creation narrative of Genesis and modern science.

Even if it were clear to us that the order of creation was through the evolution of the species, there would still be no contradiction. We calculate time according to the literal sense of the

biblical verses, which is far more relevant to us than is ancient history. ... The Torah obviously obscures the account of creation and speaks in allusions and parables. Everyone knows that the account of creation is part of the secrets of the Torah. And if all these statements were taken literally, what secrets would there be? ... The essence [of the Genesis narrative] is the knowledge of God and the truly moral life.<sup>36</sup>

Kook treats the Genesis material somewhat differently than had earlier Jewish theologians. Many European rabbis had attempted to read science into the biblical story of creation. They claimed that science helps us read the Bible and understand certain cosmogonic and cosmological midrashim. Others argued that the Torah is a guide for moral behavior, not a scientific text. Kook synthesizes the two approaches.

On the one hand, Genesis does provide an account of the creation of the universe and its description is not wrong; but that description is opaque. "Everyone knows," Kook wrote, that creation is a secret of the Torah.<sup>37</sup> He refuses to belittle the Bible by reading the science of the day into the eternal Torah. The Torah contains a "contracted" version of the esoteric account of creation.<sup>38</sup> As Rosenberg has observed: "The contraction of the esoteric into the exoteric, according to Kook, is the

<sup>31</sup> Ben Shlomo, "Perfection and Betterment," 299.

<sup>32</sup> Cf. Agus, *High Priest*, 238.

<sup>33</sup> Rosenberg, "Introduction to the Thought of Rav Kook," 88–97.

<sup>34</sup> See Y. Tzvi Langermann, "Acceptance and Devaluation: Nachmanides' Attitude Towards Science," *Journal of Jewish Thought and Philosophy* 1(2) (1992):223–245.

<sup>35</sup> O.Q. I:1.

<sup>36</sup> *Letters of Rav Kook*, Letter 91, p. 105.

<sup>37</sup> See also O.Q. II:542.

<sup>38</sup> This shift in the Lurianic idea of *šimšum* can be traced to Rabbi Joseph Ergas (1685–

resolution to the problem of the relation between Torah and science.”<sup>39</sup> The esoteric Torah will be known only at the end of days; meanwhile, nothing in the exoteric Torah can contradict science, because the exoteric Torah does not contain intelligible scientific or philosophic information.<sup>40</sup> The exoteric essence of the Torah is its moral message and its insistence on the purposeful divine creation of the cosmos. Although the esoteric Torah does contain true science, we can currently learn only theology and morality from the exoteric Torah. In this way Kook preserves the verisimilitude of the Torah and neutralizes evolution’s textual challenges to the Torah account of creation.

Although Kook does not accept Darwinism, he does, in theory, accept the transmutation of species.<sup>41</sup> (The scientific community itself had not accepted Darwinism even at the time of Kook’s death in 1935.) Yet Kook’s acosmic theology is capable of contending with the particular theological challenges of Darwinism. Since individuation is an illusion, asserting individual providence merely states the more modest claim of general providence.<sup>42</sup> “The entire essence of individuality,” he wrote, “has no true status on its own. ... Everything that exists is one principle. And if that is so from the divine perspective, from which the radiant truth shines, [divine] providence and knowledge are truly general.”<sup>43</sup> The psychological and epistemological effects of higher consciousness, activated through *teshuvah*, allow one to understand the divine truth embodied in the theory of acosmism: since all is God, the notion of divine providence is superfluous.

The theological problem of providence is accompanied by the related issue of theodicy. How could a good God incorporate mass extinctions into the course of natural history? Here too Kook’s acosmism comes to the rescue. Just as our separate existence from God is an illusion, so is the separate existence of evil. All is God and all, ultimately, is good.<sup>44</sup> “The more deeply rooted *teshuvah* is, the more there recedes the fear of death until it stops altogether. ... The individual identity continues to expand, it becomes part of the general

being of the people in a very real fusion, and from there it is absorbed in the general existence of the whole world.”<sup>45</sup> *Teshuvah* brings about a higher state of consciousness in which the illusion of individuality is shed. At that point, there is no more fear of death because death is properly understood as an opportunity to advance to a higher level of being.<sup>46</sup>

Kook’s only objections to Darwinian evolution in particular would have been Darwin’s lack of telos and his insistence on gradual change. (These issues, of course, distinguish Darwinism from other theories of transmutation.) Kook believed in leaps on all planes of reality: metaphysical, biological, and religious.<sup>47</sup> He admits that there is much truth

1730), *Šomer ʿemunim*, first dialogue. See Gershom Scholem, *Major Trends in Jewish Mysticism* (New York: Schocken Books, 1946), 410, n. 42. Chabad theology accepted the nonliteral meaning of *šimšum* as a process by which God reveals Himself in the world in finite or contracted ways. The Lurianic notion of divine withdrawal, and its deistic edge, was blunted by such an allegorical interpretation. See: Tamar Ross, “Rav Kook’s Concept of Divinity,” *Daʿat* 8 (1982): 100f.; Ben Shlomo, “Perfection and Betterment,” 293.

<sup>39</sup> Rosenberg, “Introduction to the Thought of Rav Kook,” 91.

<sup>40</sup> Ibid.

<sup>41</sup> Ibid., 94; and Abraham Isaac Kook, “Fragments of Light: A View as to the Reasons for the Commandments,” in Kook, *The Lights of Penitence*, 303–323, on p. 306.

<sup>42</sup> Lawrence J. Kaplan, “Rav Kook and the Jewish Philosophical Tradition,” in *Rabbi Abraham Isaac Kook and Jewish Spirituality*, 41–77, esp. 43f.

<sup>43</sup> O.Q. II:549f.

<sup>44</sup> See Ben Shlomo, “Perfection and Betterment,” 293–302.

<sup>45</sup> O.T. 11:3 (trans. Bokser, 80). See also O.T. 9:2 and O.Q. II:456.

<sup>46</sup> See: Bergmann, “Death and Immortality,” 245f.; Tamar Ross, “Immortality, Natural Law, and the Role of Human Perception in the Writings of Rav Kook,” in *Rabbi Abraham Isaac Kook and Jewish Spirituality*, 248. See also O.Q. II:380–386.

in the *philosophy* of evolution and that the theory accords with esoteric Jewish wisdom.

Darwin's claim that human beings descended from other animals might be the biological parallel to Rabbi Naphtali Zvi Yehuda Berlin's understanding of the verse in Genesis that humans were created in "our" image: all of nature is included in the image of God.<sup>48</sup> Kook follows his teacher's lead. "The soul of man, in its expansiveness, includes inside itself all the individual souls of the entire creation. Every living creature is a spark from the great, universal torch, the soul of man."<sup>49</sup> In another passage Kook, dispensing with references to the soul, acknowledges humanity's descent from animals: "[humanity's] foundation is from beasts and crude savages."<sup>50</sup> So, for Kook, the descent of man was not a theological problem; it was, on the contrary, scientific corroboration of Judaism's insistence on the divine unity of organic life.

In addition to the theme of unity, evolution in the early twentieth century shared with Kabbalah the idea of progress. For Kook, creation is always engaged in renewal, a variety of *creatio continua*, and the inner tendency for that renewal is progressive.<sup>51</sup> The idea of progressive history has a distinguished pedigree in Jewish thought; many of Kook's influences (Moshe Hayyim Luzzatto, Shlomo Alkabetz, Moshe Cordovero, and even Moses Hess) developed that theme. Just as humanity's descent from animals demonstrates the divine unity of life, humanity's intellectual and ethical ascent from animals demonstrates the essentially progressive tendency of nature.<sup>52</sup> Modern science, however, did not prompt modifications to Kook's theology. Evolution merely corroborated previously held theological convictions. What is new in evolutionary theory—the zoological origins of humanity and the progressive unfolding of natural history—is old and hallowed in Jewish thought.

It is ironic that although Kook is often perceived to have tacitly endorsed Darwinian evolution, he did not. The irony is all the stronger because Kook's acosmic, mystical monism neutralized the issues of



providence and theodicy that so vexed other theologians in their confrontations with Darwinism. Furthermore, his strategy of reading the creation narrative as an esoteric mystery dissolves any problem of biblical interpretation. Finally, evolutionary claims of biological unity, progressive speciation, and human moral development complemented Kook's view of reality. But Kook refused to yoke his theology to anything other than the kingdom of heaven. He need endorse no scientific hypothesis. Darwin's insistence on adaptation (as opposed to design) and gradual change did not mesh with Kook's optimistic theological convictions that there are periodic eruptions in the usual slow flow of divinely directed history. For Kook, leaps like *creatio ex nihilo* and revelation punctuate natural history and penetrate human consciousness.

### Mordecai M. Kaplan (1881–1983)

Mordecai M. Kaplan was perhaps the greatest single influence on the non-Orthodox American rabbinate in the twentieth century. In addition to founding Judaism's fourth denomination, Reconstructionism, he

<sup>47</sup> See O.Q. II:567f., *‘Eder ha-yaqar*, 154, and *Letters of Rav Kook*, letters 134 and 164. See also Cohen's introduction, O.Q. 37.

<sup>48</sup> Naphtali Zvi Yehuda Berlin, *Ha‘ameq davar* on Genesis 1:27. See also Genesis Rabbah 8:3 and Nahmanides on Gen. 1:26.

<sup>49</sup> O.Q. II:359.

<sup>50</sup> *Ibid.*, II:543.

<sup>51</sup> On Kook and renewal, see: Norman Lamm, "Harmonism, Novelty, and the Sacred in the Teachings of Rav Kook," in *Rabbi Abraham Isaac Kook and Jewish Spirituality*, 159–177; O.Q. I:517.

<sup>52</sup> *Ibid.*, II:543.

taught at the Jewish Theological Seminary for half a century. Kaplan's secular education was largely shaped by the academic emphasis on evolutionary thinking. According to his biographer, Mel Scult, Herbert Spencer "was a primary force in molding Kaplan's thought. ... Spencer influenced Kaplan through his own works and indirectly through his effects on other thinkers such as the Zionist philosopher Ahad Ha'am and the sociologist Emile Durkheim."<sup>53</sup> When Kaplan completed his secular education with a master's in philosophy from Columbia University he had an abiding appreciation for and belief in the evolution of both human beings and human culture.

Although his outlook was greatly affected by his exposure to evolutionary ideas, Kaplan, like Kook, wrote very little on biological evolution. His well-known emphasis on functionalism rather than metaphysical speculation undoubtedly inhibited him from dilating on the niceties of creation or evolutionary theory.<sup>54</sup> It was almost enough for Kaplan to assert that "strictly speaking, there can be no conflict between science and religion as such. The function of science is merely to study the sequences of phenomena. ... The moment science generalizes about the meaning of those sequences and tries to interpret them in relation to existence as a whole, it is no longer science but philosophy."<sup>55</sup>

"Regarding the question of cosmology," writes Richard Hirsh, "Kaplan emphasized the irrelevancy of attempting to answer unanswerable questions."<sup>56</sup> On the issue of *creatio ex nihilo*, Kaplan argues that "to the modern way of thinking, its connection with spiritual life is remote, if not altogether irrelevant."<sup>57</sup> In another context, he writes: "Nothing really would be gained from understanding the *cause* of creation and revelation, but we stand to gain much by knowing their *purpose*."<sup>58</sup> What is the cash value, Kaplan might have asked, using William James's term, of a belief in creation or evolution? Unless that belief affects one's behavior or one's chance of achieving salvation, Kaplan is disinclined to devote much attention to the topic.

Nevertheless, Kaplan does discuss Darwinian evolution, and with

good reason. Kaplan understands that his bedrock metaphysical conviction might be in direct opposition to, or at least in tension with, the fundamental assumptions of Darwinism. Kaplan has often been interpreted as having no metaphysics, even by those sympathetic to his religious agenda.<sup>59</sup> But such critiques are mistaken. Kaplan may be a metaphysical minimalist, because of his pragmatic emphasis on functionalism, but he most certainly has a metaphysics.

- <sup>53</sup> Mel Scult, *Judaism Faces the Twentieth Century: A Biography of Mordecai M. Kaplan* (Detroit: Wayne State University Press, 1993), 54f. Kaplan contended that Aḥad Ha'am was influenced by Darwin as well as by Spencer. Mordecai M. Kaplan, *The Greater Judaism in the Making* (New York: Reconstructionist Press, 1960), 416. For Darwin in Aḥad Ha'am, see his 1891 essay, "Slavery In Freedom," in *Selected Essays by Ahad Ha-'Am*, trans. Leon Simon (Philadelphia: Jewish Publication Society of America, 1912), 171–194. For discussions of Aḥad Ha'am's influence on Kaplan, see: Scult, 309–312; Meir Ben-Horin, "Ahad Ha-Am in Kaplan: Roads Crossing and Parting," in *The American Judaism of Mordecai M. Kaplan*, ed. Emanuel S. Goldsmith, Mel Scult, and Robert M. Seltzer (New York: New York University Press, 1990), 221–233.
- <sup>54</sup> Richard Hirsh emphasizes this theme in "Mordecai Kaplan's Understanding of Religion and the Issue of Cosmology," in *Jewish Civilization*, vol. 1, ed. Ronald A. Brauner (Philadelphia: Reconstructionist Rabbinical College, 1981), 205–219.
- <sup>55</sup> Mordecai M. Kaplan, *Judaism as a Civilization: Toward a Reconstruction of American-Jewish Life* (Philadelphia: Jewish Publication Society of America, 1934), 37f.
- <sup>56</sup> Hirsh, "Kaplan's Understanding of Religion," 207.
- <sup>57</sup> Mordecai M. Kaplan, *The Meaning of God in Modern Jewish Religion* (Detroit: Wayne State University Press, 1937), 62.
- <sup>58</sup> Mordecai M. Kaplan, *The Purpose and Meaning of Jewish Existence: A People in the Image of God* (Philadelphia: Jewish Publication Society of America, 1964), 113.
- <sup>59</sup> Milton Steinberg, *Anatomy of Faith*, ed. Arthur A. Cohen (New York: Harcourt Brace, 1960), 248. Cf. William E. Kaufman, *The Evolving God in Jewish Process*

Belief in God as here conceived can function in our day exactly as the belief in God has always functioned; it can function as an affirmation that life has value. It implies, as the God idea has always implied, a certain assumption with regard to the nature of reality, the assumption that reality is so constituted as to endorse and guarantee the realization in man of that which is of greatest value to him. If we believe that assumption to be true, for, as has been said, it is an assumption that is not susceptible of proof, we have faith in God. No metaphysical speculation beyond this fundamental assumption that reality assures both the emergence and the realization of human ideals is necessary for the religious life.<sup>60</sup>

In this passage, Kaplan describes only what is *necessary* for a religious life. Eliezer Schweid, in his analysis of Kaplan, has captured what I believe is the key to understanding Kaplan:

In Kaplan's early writings, there is sometimes this kind of noticeable pragmatic orientation; but upon examining his principal later writings, we find in them the intuition of someone who believes in a supernatural power that subdues nature for an ethical purpose. This is the basic intuition of biblical prophecy and of the talmudic rabbis, but Kaplan prefers to mask his faith in camouflaging scientific colors in order to make it attractive to those impressed by the importance of science in our time.<sup>61</sup>

What Schweid calls "supernatural" can also be referred to as "metaphysical", and such an intuition can already be seen in Kaplan's earliest writings.<sup>62</sup> Schweid's assessment helps explain why Kaplan does not challenge the perceived scientific verities of Darwinism head on: Kaplan did not want to alienate the very audience he was seeking to persuade.

Nevertheless, Kaplan did engage Darwinism, if only obliquely. In his magnum opus, *Judaism as a Civilization* (1934), he echoes the sentiments of many of his nineteenth-century rabbinic predecessors: “What can exercise a more blighting effect upon all moral endeavor than the notion that there is no meaning or purpose to the world, and that it is soulless in its mechanistic perfection...? We may accept without reservation the Darwinian conception of evolution, so long as we consider the divine impulsion or initiative as the origin of the process.”<sup>63</sup>

Kaplan’s concern here is clearly moral behavior. Kaplan shares this concern with most other theologians, Jewish and Christian, who address themselves to Darwinism. Kaplan does not reject Darwinism, but only, at this point, conditions it on divine impetus. Of course, past divine initiative does not necessarily guarantee future human salvation as a result of the structure of the cosmos. Thus Kaplan must clarify his position. Toward the conclusion of *Judaism as a Civilization*, Kaplan

*Theology* (Lewiston, NY: Edwin Mellen Press, 1997), 132; idem., “Kaplan’s Approach to Metaphysics,” in *The American Judaism of Mordecai M. Kaplan*, ed. Emanuel S. Goldsmith, Mel Scult, and Robert M. Seltzer (New York: New York University Press, 1990), 271–282, on p. 275.

<sup>60</sup> Kaplan, *The Meaning of God*, 29.

<sup>61</sup> Eliezer Schweid, “The Reconstruction of Jewish Religion Out of Secular Culture,” in *American Judaism of Mordecai M. Kaplan*, 35–49, on p. 46. Lenn E. Goodman, in a private communication, noted that Kaplan’s camouflage is a reversal of the esotericism that Leo Strauss attributes to Maimonides.

<sup>62</sup> Kaplan preferred to call his theology *transnaturalism*, thus avoiding the more problematic term *supernaturalism*. For a discussion of transnaturalism, see William E. Kaufman, “The Transnatural Theology of Mordecai M. Kaplan,” *Judaism* 30 (1981): 45–52. See also Meir Ben-Horin, “Kaplan’s Hypothesis of Faith,” *ibid.*, 36–44.

<sup>63</sup> Kaplan, *Judaism as a Civilization*, 98.

adumbrates the metaphysical position that he will later articulate repeatedly:

Ultimately, the forces for good that inhere in the world and in human nature will give rise to a just social order, one in which every human being will be able to achieve the full measure of self-realization and accord to his neighbor the same right and opportunity. The evolution of mankind, though marred by frequent and disheartening reactions, moves irresistibly in the direction of universal security and freedom. From the standpoint of the Jewish religion, ethical purpose does not emerge merely as an incident of social history, but is a directive and creative force.<sup>64</sup>

As Schweid has argued, Kaplan camouflaged his deeply traditional, religious sentiments in scientific garb. Not only did creation have a divine impetus, but the progressive nature of evolution is guaranteed by “the forces for good that inhere in the world and in human nature.” Of course, we must distinguish progress from design. Kaplan affirms the former, but endorses the latter only in the most general fashion. While holding fast to the conviction of an ideal future, as in the foregoing citation, Kaplan nowhere suggests that the path to “universal security and freedom” is preordained. It is precisely in this arena that human freedom, contingency, and what Kaplan calls “spiritual selection” operate.<sup>65</sup>

Kaplan’s theology was greatly influenced by Bergson and John Dewey.<sup>66</sup> Both thinkers understood reality as an open-ended process that has no preordained goal or telos. In contrast to Kook’s theology, Kaplan’s theology offers no single vision or version of *šelemut* toward which *hištallemut* is progressing. This distinction is paramount. Evolution, for Kaplan, is necessarily progressive, but teleologically undetermined. Perfection is a moving target because of the creative ele-

ment in human behavior. Humanity is, quite literally, shaping its future evolution. Kaplan exploits the idea of *emergent evolution*, which scientists apply to those properties that do not appear at the level of their constituent parts, such as consciousness, and uses it to describe an empowered humanity taking responsibility for shaping its own evolution.<sup>67</sup>

Unlike other living creatures [man] must take a hand in his own metamorphosis. He must consciously and deliberately share in the cosmic or divine process which impels him to become fully human. ... The nature of man, far from being a finished affair, is still in the making. Just as modern man is an improvement over the caveman, so his continued development may be assumed in the process of emergent evolution.<sup>68</sup>

Kaplan insists that “man is not merely affected by evolutionary change; he participates in the process.”<sup>69</sup> While Kaplan’s understanding of Judaism demands progress toward some vision of a messianic future, his

<sup>64</sup> Ibid., 477.

<sup>65</sup> Mordecai M. Kaplan, *The Future of the American Jew* (New York: Macmillan Company, 1947), 246–256.

<sup>66</sup> Sandra B. Lubarsky, “Judaism and Process Thought: Between Naturalism and Supernaturalism,” in *Jewish Theology and Process Thought*, ed. Sandra B. Lubarsky and David Ray Griffin (Albany: State University of New York Press, 1996), 47–58, on p. 51.

<sup>67</sup> Mordecai M. Kaplan, “What Is Our Human Destiny?” *Judaism* 2 (July 1953): 202f. See also *The Meaning of God*, 122f.

<sup>68</sup> Mordecai M. Kaplan, *Religion of Ethical Nationhood: Judaism’s Contribution to World Peace* (New York: Macmillan Company, 1970), 103–105.

<sup>69</sup> Kaplan, *The Meaning of God*, 123.

commitment to pragmatism and pluralism demands that the future be open-ended. Although there is a direction for humanity and the cosmos, there is no unique destiny. Both the path to the future and the particulars of that future are yet undetermined. They depend on human freedom and chance.

Progress cannot mean for us today a definitive approach to a static final goal. But there is still a sense in which we can speak of progress. It lies in the perception that evolution has direction. Movements that conform to this direction are progressive; those that obstruct it are reactionary. Although that progress is not always in a straight line, the course of human history shows that the human race is moving in the direction of enhanced personality and enhanced sociality.<sup>70</sup>

Jacob Staub criticizes Kaplan for making such a statement. "Kaplan ... subscribed to the widespread view of his time that accepted Darwin's conception as a confirmation that progress pervades life's overall history. ... In what sense can we [today] continue to affirm the divine, salvific impulse, in human beings and in the world, if the history of human life itself is not the inevitable outcome of divine law but is rather subject to contingency on the grandest scale?"<sup>71</sup> Not only has Staub misread Kaplan on this point; he has fallen victim, from Kaplan's perspective, to the pernicious effects of scientism.

Kaplan understands that Darwinian theory is not necessarily progressive and chooses to demur: "Those who are sure that man's sense of moral responsibility is a freak or paradox of nature may be arguing from an inadequate knowledge of nature. They assume that man is the product of natural selection, and that natural selection is absolutely devoid of any directive, or creative, factor."<sup>72</sup> This is as close as Kaplan comes to an explicitly anti-Darwinian statement. Later in the same section, he cites contemporary thinkers to support the contention that



evolution is both progressive and directed.<sup>73</sup> Kaplan is well aware that Darwinian evolution has no teleology and rejects such an account, for religious reasons, as an “inadequate knowledge of nature.”

Kaplan often rails against scientism. His theology of trans-naturalism is designed to accommodate precisely that realm of reality for which a strict naturalism, or scientism, cannot provide an adequate accounting. “Sinister scientism ... makes unwarranted claims for itself. The naturalism which reduces all that differentiated man from the subhuman to illusion, and all life and mind and spirit to the operation of mechanical cause and effect is bound to end up in the denial of all moral objectivity and spiritual sanctity.”<sup>74</sup>

Kaplan accepts Darwin’s contention that humans descended from lower animals but refuses to accept that natural selection alone explains the emergence of humanity. Moreover, the progressive direction of evolution provides messianic hope for the future. In the following passage, Kaplan echoes Kook’s optimism:

We know that man has attained to such spiritual powers and graces as he possesses by a long and arduous ascent from the beast. The social instincts which are mainly responsible for man’s success in maintaining his life on this planet came into

<sup>70</sup> Ibid., 122.

<sup>71</sup> Jacob J. Staub, “Evolving Definitions of Evolution,” *The Reconstructionist* 61 (1996): 7 and 11. Kaplan actually leans toward Spencer’s understanding of inexorable progress in evolution.

<sup>72</sup> Kaplan, *The Greater Judaism in the Making*, 497.

<sup>73</sup> Ibid., 503. Because Kaplan’s main point in this section is to account for moral development in human beings, he cites mainly social scientists such as Edward Westermarck, James Leuba, and Carl Rogers.

<sup>74</sup> Kaplan, *The Future of the American Jew*, 21; see also 462.

play only in the later stages of his evolution, and have still to contend with atavistic passions that are an inheritance from his prehuman past. ... The evils that exist in human nature are therefore not to be looked upon as evidences of the fall of man. The fact that they are recognized as evil and that man aspires to their removal may be taken as evidence of the probable eventual rise of man to heights that today seem unattainable.<sup>75</sup>

Elsewhere Kaplan is more succinct: “[Darwinism] holds forth the promise of man’s evolution into a much higher type of being than he is now.”<sup>76</sup>

Kaplan consistently emphasizes the descent of humanity from animals rather than natural selection. Indeed, when discussing natural selection, he either qualifies the adequacy of the concept or complements it with references to spiritual selection. In his emphasis on humanity’s connection to the animal kingdom, Kaplan strikes a mystical tone that is again reminiscent of Kook. A *piyyut* (liturgical poem) that Kaplan wrote in 1936 expresses this mystical monism: “God is the oneness that spans the fathomless deeps of space and the measureless eons of time, binding them together in act, as we do in thought. ... He is the unity of all that is, the uniformity of all that moves, the rhythm of all things and the nature of their interaction. ... God is the mystery of life, enkindling inert matter with inner drive and purpose.”<sup>77</sup> While it might be inappropriate to subject religious poetry to fine analysis, Kaplan’s repeated discussions of organicity and ontological polarity support similar monistic ideas.<sup>78</sup>

Religious poetry aside, Kaplan distances divine creation and creativity from the biblical account in Genesis. Kaplan, who accepted the tenets of biblical criticism early in his education, explicitly applies the method of functional demythologization to the creation narrative and concludes: “The main purpose of the opening chapter of the Torah is not to give an account of creation but to teach that the world, as God

created it, is a fit place for man to achieve his godlikeness, or salvation.”<sup>79</sup> The creation story is neither about physics nor about metaphysics, but “soterics.” Because God created the world “very good,” humans can achieve salvation in it.<sup>80</sup> Kook’s strategy of identifying the creation narrative as a Torah secret serves a similar function.

This example of functional demythologizing is a perfect illustration of Barbour’s separation and dialogue models.<sup>81</sup> The separation model precludes conflict between science and religion by positing that they have different objects of inquiry, aims, methods and vocabularies. “A conflict presupposes a common basis on which to fight. But there is no common basis between theology and philosophy.”<sup>82</sup> For the Protestant theologian Paul Tillich, a proponent of the separation model,

<sup>75</sup> Kaplan, *The Meaning of God*, 135f.

<sup>76</sup> Mordecai M. Kaplan, *Questions Jews Ask: Reconstructionist Answers* (New York: Reconstructionist Press, 1956), 107.

<sup>77</sup> Mordecai M. Kaplan, “Revelation of God in Nature: A Piyut for the First Benediction of the Evening Prayer,” *The Reconstructionist* 1(18) (1936): 11–13. Reprinted in the *Sabbath Prayer Book* (New York: Jewish Reconstructionist Foundation, 1946), 387ff.

<sup>78</sup> Kaplan, *Greater Judaism in the Making*, 498–501; “When Is A Religion Authentic?” *The Reconstructionist* 30(11) (1964): 9–18, on p. 16f.

<sup>79</sup> Kaplan, *Greater Judaism in the Making*, 510. The ungainly expression *functionalist demythologizing* comes from Robert M. Seltzer, “Kaplan and Jewish Modernity,” in *The American Judaism of Mordecai M. Kaplan*, 10. The German Protestant theologian Rudolf Bultmann (1884–1976) popularized the method of demythologization. See also Kaplan, *Religion of Ethical Nationhood*, 35–40.

<sup>80</sup> Scult, *Judaism Faces the Twentieth Century*, 250.

<sup>81</sup> See Barbour, *Religion in an Age of Science*, chapter one.

<sup>82</sup> Paul Tillich, *Systematic Theology*, vol. 1 (Chicago: University of Chicago Press, 1951), 26.

“philosophy deals with the structure of being in itself; theology deals with the meaning of being for us.”<sup>83</sup>

Kaplan, however, is not content with the compartmentalized separation model. His predilection for organicity influenced him to engage in the dialogue model. Kaplan states explicitly that we should apply the methods of science to issues of religion<sup>84</sup> and goes so far as to recommend that religion “submit itself to the scientific approach.”<sup>85</sup> As long as science confines itself to its proper jurisdiction, science can have a salutary effect on religion. But, to paraphrase Kaplan, Darwinism gets a vote, not a veto.<sup>86</sup> Kaplan accepts evolution but rejects natural selection as its primary mechanism. Kaplan’s theological sensibilities influenced him to favor those versions of evolution that were progressive; thus his theology acted as a filter to select among different evolutionary theories. Those theories, however, had a constructive influence on Kaplan’s understanding of religion and theology.

The dialogue between science and religion led Kaplan to formulate the beginnings of Jewish process theology.<sup>87</sup> Yet his commitment to pragmatism and functionalism kept him from expatiating on that topic.<sup>88</sup> Thus he frequently uses the term “process” when describing God but refrains from a systematic exposition in the style of famous process thinkers like Bergson, Alfred North Whitehead, and Charles Hartshorne.<sup>89</sup> Process thinking focuses on the dynamic element within the cosmos and within the divine. To use Kook’s terms, it emphasizes *hištallemut*, the dynamic process of progress, rather than *šelemut*, static being.

But the fact is that God does not have to mean to us an absolute being who has planned and decreed every twinge of pain, every act of cruelty, every human sin. *It is sufficient that God should mean to us the sum of the animating, organizing forces and relationships which are forever making a cosmos out of the chaos. This is what we understand by God as the creative life of the universe. ...* That the world has not reached finality, but is

continually being renewed by God and in need of improvement by man if it is to serve his ends, is a familiar Jewish idea. Likewise is the idea that man also is, in a sense, a creator, and therefore a collaborator with God.<sup>90</sup>

In this passage, Kaplan explicitly connects his idea of God as process with teleology and theodicy. God is not responsible for the evil in the world. Elsewhere Kaplan rejects both the traditional concept of *creatio ex nihilo* and the identification of God with nature.<sup>91</sup> “Nature is infinite chaos, with all its evil forever being vanquished by creativity, which is God as infinite goodness. ... The power of God is inexhaustible but not infinite. ... Evil is chaos still uninvaded by the creative energy, sheer chance unconquered by will and intelligence.”<sup>92</sup>

<sup>83</sup> Ibid., 22.

<sup>84</sup> Kaplan, *Judaism as a Civilization*, 307; *The Meaning of God*, 316f.

<sup>85</sup> Kaplan, *Judaism as a Civilization*, 307.

<sup>86</sup> Cf. Mordecai M. Kaplan, *Not So Random Thoughts* (New York: Reconstructionist Press, 1966), 263.

<sup>87</sup> For more on Kaplan and process theology, see: Kaufman, *The Evolving God*, 79–94; Lubarsky, “Judaism and Process,” 47–58; Jacob. J. Staub, “Kaplan and Process Theology,” in *The American Judaism of Mordecai M. Kaplan*, 283–293.

<sup>88</sup> Ibid., 285

<sup>89</sup> See, e.g., *The Future of the American Jew*, 183; *Questions Jews Ask*, 102–106.

<sup>90</sup> Kaplan, *The Meaning of God*, 76f. (emphasis in original). For rabbinic sources for this idea, see B Shabbat 10a and 119b; Genesis Rabbah 43:7.

<sup>91</sup> Kaplan, *Judaism as a Civilization*, 98. See also Jack J. Cohen, *Guides for an Age of Confusion*, 130–134. Note that Kaplan’s rejection of *ex nihilo* creation in 1934 antedated the formulation of the Big Bang theory.

<sup>92</sup> Kaplan, *The Religion of Ethical Nationhood*, 51 and 72f. See Kaufman’s critique of Kaplan’s theodicy, “Transnatural Theology,” 52.

Kaplan may not be entirely consistent,<sup>93</sup> but his agenda is clear. Human beings must take responsibility for banishing evil by asserting their own creativity. This creativity is divine. Even though it is not of infinite intensity at any given moment, the reservoir of creativity is inexhaustible over time. The meaning of divine omnipotence shifts from all-powerful to powerful always. God is, thereby, exonerated from past evils and humanity is charged with eliminating future ones. Kaplan entitled his section on theodicy “The Irrelevance of Theodicy.” From his functionalist perspective, our reactions to evil are of far greater moment for our salvation than is God’s ontological relationship to evil. As in process theology, divine omnipotence has been undermined.<sup>94</sup> Reconceptualizing divine omnipotence, however, has long been a Jewish approach to theodicy. Kaplan’s reevaluation of omnipotence has multiple precedents in the history of Jewish thought.<sup>95</sup> What is distinctive in Kaplan is his attempt to express himself without resorting to the mythical language of classical Judaism.

Not only Kaplan’s theology, i.e., his understanding of God, but also his understanding of religious practice engages in a robust dialogue with science, because each domain affected his interpretation of the other. He appropriates scientific methods and scientific language in his reconstruction of Judaism. Staub has pointed out how Kaplan linked the metaphysics of process and the tenets of Reconstructionism: “By affirming that reality is progressive and that God—as the perfect process—is ever changing and growing, ever surpassing past perfections in the innovations of the universe’s component parts, ... process theology provides the appropriate metaphysical correlate to the affirmation of the *evolutionary* nature of Jewish civilization.”<sup>96</sup>

Kaplan’s reconstruction of Jewish theology and praxis flows from his embrace of secular ideas about evolution. Kook’s embrace of certain aspects of evolutionary theory, on the other hand, flows from his traditional, kabbalistic understanding of the nature of reality. Kook did not allow science to influence his understanding of Judaism. For Ka-

plan, science influenced his understanding of religion *and* religion influenced his understanding of science.

Kaplan accepts humanity's descent from lower animals and embraces some of the sociological and psychological implications of such descent.<sup>97</sup> He also accepts the idea that evolution has no predetermined telos. Nevertheless, his commitment to the Jewish vision of a messianic future shapes his response to evolution. Kaplan holds fast to his belief in progress and consequently rejects Darwinian evolution. Both natural history and human history have direction, and natural selection alone is an inadequate explanation for human evolution. Although he was writing for a scientifically minded audience, Kaplan felt bound to articulate a Judaism that was both intellectually honest and religiously compelling.<sup>98</sup>

Kaplan, emphasizing human freedom and creativity while rejecting the traditional notion of divine omnipotence, finds theodicies irrelevant. He revalues providence as "self-metamorphosis."<sup>99</sup> Thus two of the greatest religious obstacles to the acceptance of Darwinism are addressed if not resolved. As for the tensions between Genesis and the transmutation of species, they are neutralized by biblical criticism and functional demythologizing. Hence evolution is acceptable as long it remains a scientific theory and not a metaphysical one. In other words,

<sup>93</sup> See Staub, "Kaplan and Process Theology," 292.

<sup>94</sup> Kaplan, *The Religion of Ethical Nationhood*, 51-56. For the parallels with process theology, see John B. Cobb, Jr. and David Ray Griffin, *Process Theology: An Introductory Exposition* (Philadelphia: Westminster Press, 1976), 69-75.

<sup>95</sup> E.g., B Yoma 69b; and Scholem, *Major Trends*, 63.

<sup>96</sup> Staub, "Kaplan and Process Theology," 290 (emphasis in the original).

<sup>97</sup> See, e.g., *Judaism as a Civilization*, 334.

<sup>98</sup> Kaplan, *The Purpose and Meaning of Jewish Existence*, 307f.

<sup>99</sup> Kaplan, *The Religion of Ethical Nationhood*, 113ff.

Kaplan rejected scientism, or strict naturalism. He was a *transnaturalist*. If the religious axiom of progress is preserved and progress is identified with the creative powers of the God process, then Kaplanian Judaism and biological evolution are compatible. That *if*, however, is precisely what separates science from religion. It is what constitutes Kaplan's metaphysical minimalism, which maintains that reality "is so constituted as to enable man to achieve salvation."<sup>100</sup>

### Yeshayahu Leibowitz (1903–1994)

Unlike Kook and Kaplan, Yeshayahu Leibowitz had an extensive scientific education. His doctorate in biochemistry gave Leibowitz a different vantage point from which to view the relationship between evolutionary theory and Judaism than our previous two thinkers possessed. Again unlike Kook and Kaplan, Leibowitz wrote extensively on scientific figures, including Darwin, and their theories. What unites these three thinkers is their utilization, although in strikingly different fashions, of the dialogue model of religion and science. Here I focus on Leibowitz's understanding of the relationship between evolutionary theory and Judaism.

Leibowitz frequently invokes both Immanuel Kant and Maimonides as models for his epistemological and methodological separation of religion and science.<sup>101</sup> Leibowitz, fond of citing traditional Jewish literature to illustrate his arguments, maintains that such a separation model is found already in the book of Job: "It presents the cosmic and terrestrial world, from the inanimate to the living, from the splendid and wondrous to the awful and monstrous—especially the monstrous phenomena—without hinting at any purpose in this amazing creation, or any secret intention underlying the monstrosity."<sup>102</sup> Instead of understanding Job to be asserting that there is purpose in nature and history but God's will is inscrutable, Leibowitz offers an inter-



pretation that is in consonance with his own philosophy that neither nature nor history has any religious purpose or religious meaning whatsoever.<sup>103</sup>

Contemporary science employs a method of empirical investigation that produces facts of knowledge that force themselves upon the intellect.<sup>104</sup> Religion involves the actions of its practitioners.<sup>105</sup> Leibowitz's formulation is significantly different from that of most other separationists, like Kaplan, who speak of scientific facts and religious *values*. For Leibowitz, religion is the service of God. In Judaism, that service is observance of halakhah. Values emerge from halakhah, the observance of which is predicated exclusively on the decision to serve the deity.<sup>106</sup> Leibowitz's separation, therefore, is not between scientific facts and religious values but between scientific facts and the religious practice that flows out of the individual's autonomous decision to worship God.<sup>107</sup>

<sup>100</sup> Kaplan, *The Meaning of God*, 26.

<sup>101</sup> Yeshayahu Leibowitz, *Judaism, Human Values and the Jewish State*, ed. Eliezer Goldman (Cambridge: Harvard University Press, 1992), xiv (hereafter *JHV*). Yeshayahu Leibowitz, *Between Science and Philosophy* [Hebrew], (Jerusalem: Academon, 1987), 48f. and 229.

<sup>102</sup> *JHV*, 52.

<sup>103</sup> Yeshayahu Leibowitz, *Judaism, the Jewish People, and the State of Israel* [Hebrew] (Jerusalem: Schocken Books, 1979), 359 (hereafter *JJP*).

<sup>104</sup> *Ibid.*, 340.

<sup>105</sup> *Ibid.*, 337.

<sup>106</sup> *Ibid.*, 339ff. and 346–350.

<sup>107</sup> In Leibowitz's reevaluation of religious facts, such as revelation at Sinai, he is, inter alia, responding to Kant's charges of heteronomy. See Avi Sagi, "Yeshayahu Leibowitz—A Breakthrough in Jewish Philosophy: Religion Without Metaphysics," *Religious Studies* 33(2) (June 1997): 203–216, esp. 206f.

Leibowitz's emphasis on halakhah is part of his polemic against the antinomian elements of Reform Judaism.<sup>108</sup> But Leibowitz, unlike a number of nineteenth-century thinkers, does not exploit evolutionary theory to corroborate his view of Judaism.<sup>109</sup> Rather, he offers a historical description of the Jewish people and concludes that the only enduring theme in the history of the Jews is their commitment to halakhah.<sup>110</sup>

Science cannot pronounce judgment on the value of specific Jewish practices. For Leibowitz, science has no religious or ethical meaning.<sup>111</sup> Furthermore, in opposition to Kook and Kaplan, he holds that values are not rooted in nature.<sup>112</sup> Correspondingly, the Bible provides no scientific information and makes no cognitive claims on the human intellect.<sup>113</sup> Leibowitz's God is utterly transcendent.<sup>114</sup> Thus the divorce between scientific facts and religious meaning is total.

But if science is no more than a matter of functional relationships which we succeeded in discovering in factual data, the world it describes does not express any specific meaning. ... Our science is indifferent to values, hence its objective force. Our science is single, uniform, and common for all who understand it. In no way does it depend on their different outlooks and values.

In effect, there is no direct confrontation today between natural science and philosophy, between natural science and history, and, least of all, between natural science and religion. The process of emptying scientific knowledge of all meaning-content goes on.<sup>115</sup>

Leibowitz's position is similar to that of the school of Protestant neo-orthodox theologians.<sup>116</sup> Both Protestant neo-orthodoxy and Leibowitz renounce the claim that the Bible contains scientific information.

Because science has proven successful in describing our universe and has demonstrated that the Bible makes statements that are scientifically incorrect, these theologians have attempted to put up a wall between scientific facts on one side and religious values and acts on the other. Thus scientific advances have changed how one relates to traditional religions and their religious texts. Returning to the image of the semi-permeable membrane, for Leibowitz scientific facts have flowed toward religion and affected it, but not vice versa.

In theory, Leibowitz's separation model makes his religious faith and halakhic commitment impervious to his conclusions about the truth of Darwinian evolution.<sup>117</sup> Leibowitz understands providence as es-

<sup>108</sup> *JHV*, xvii, xxxii, 97, 113, and 256–262.

<sup>109</sup> Many of the Orthodox respondents to Darwinism, like Elijah Benamozegh and Samson Raphael Hirsch, emphasized evolution's slow pace and lawful progress. Many of the reformers, like Emil Gustav Hirsch, emphasized evolution's progressive changes. See Cherry, "Creation, Evolution and Jewish Thought," chapters two and three. See also Marc Swetlitz, "American Jewish Responses to Darwin and Evolutionary Theory," in *Disseminating Darwinism: The Role of Place, Race, Religion and Gender*, ed. Ronald L. Numbers and John Stenhouse (Cambridge: Cambridge University Press, 1999), 209–245.

<sup>110</sup> *JJP*, 337.

<sup>111</sup> Leibowitz, *Between Science and Philosophy*, 297.

<sup>112</sup> *JHV*, 80 and 87.

<sup>113</sup> *JJP*, 338ff., 364; *JHV*, 136.

<sup>114</sup> *Ibid.*, 24.

<sup>115</sup> *Ibid.*, 134f. (translated by Zvi Jacobson).

<sup>116</sup> For more on neo-orthodoxy and science, see Keith E. Yandell, "Protestant Theology and Natural Science in the Twentieth Century," in Lindberg and Numbers, eds., *God & Nature*, 448–471.

<sup>117</sup> For an analysis of this aspect of Leibowitz's position on the relationship between

sential rather than functional. “The apprehension of God and the adherence to Him are not means toward the attainment of a ‘good’; rather, they are ‘good’ itself, compared to which all the *necessary* evil encountered is as naught, *as though* it did not exist.”<sup>118</sup> If evil is considered not to exist, there is no need to justify God’s actions. This approach obviates one of the theological problems raised by Darwinism, theodicy. As for teleology in human and natural history, science is inadequate to the task. Science deals exclusively with efficient causality—how things happen, not why they happen. Like Maimonides, Leibowitz refuses to endorse the anthropocentric conceit that humanity is the pinnacle of creation.<sup>119</sup> Science is incapable of demonstrating design, and Leibowitz’s Judaism makes no cognitive claims of design in nature or history. Thus Leibowitz essentially does away with traditional notions of functional providence and progress.

In Leibowitz’s *Encyclopedia Hebraica* article on “development,” we find his evaluation of Neo-Darwinism and the Modern Synthesis. There he discusses ontogeny, phylogeny, and the relationship between the two. After a lengthy analysis, he contends that Neo-Darwinism has not successfully taken into account the findings of embryology and that there remains a gap in our understanding of the relationship between ontogeny and phylogeny.<sup>120</sup> Leibowitz concludes his discussion with the following remarks:

The extreme representatives of Neo-Darwinism see in their system the “Modern Synthesis” of different lines of research in biology. The truth of the matter is that, even today, they have attained only a synthesis of the research in evolution and genetics, whereas the discoveries in the field of ontogeny do not coincide at all with the conclusions of [evolution and genetics]. The teaching of the Neo-Darwinists gives extra emphasis to genetic factors—but the problems of experimental embryology are ignored. At present, the research being conducted in on-

togeny and that in phylogeny are on different tracks, with no coordination or synthesis between them.<sup>121</sup>

Throughout his career, Leibowitz asserted that there were increasing problems with Neo-Darwinism and that the biological mechanism of development was still unknown.<sup>122</sup> But, he added, even were the mechanism to be scientifically demonstrated it would not warrant the extreme materialistic reductionism of the Neo-Darwinists. “As for the reductionist trends in the philosophies of science, which strive to base the realms of value and meanings on necessary functional relations—to date, their failure is absolute.” Leibowitz sees no evidence of some “unified science” that encompasses the natural and social sciences and the humanities; nor does he believe that biology can be reduced to physics and chemistry.<sup>123</sup>

Leibowitz repeatedly claims that there are certain problems that human beings lack the capacity to answer. The dispute between vitalism and mechanism belongs to the domain of metaphysics and is, therefore,

science and faith, see Naomi Kasher, *The Faith of Yeshayahu Leibowitz* [Hebrew] (Jerusalem: MOD Books, 2000), 132–140, esp. 137.

<sup>118</sup> *JHV*, 59 (italics added).

<sup>119</sup> *Ibid.*, 97.

<sup>120</sup> Leibowitz, *Between Science and Philosophy*, 85. Leibowitz’s scientific entries from *The Encyclopedia Hebraica*, originally published in the early 1960s, are reprinted in *Between Science and Philosophy*.

<sup>121</sup> *Ibid.*, 90.

<sup>122</sup> *Ibid.*, 125, 132, and 134. See also Leibowitz, “Creation, Evolution and Religion,” in *Creation, Evolution, and Religion: Proceedings of the HEMDAT Day of Study, 25.11.92* [Hebrew] (Jerusalem: Council for HEMDAT: Freedom of Science, Religion and Culture in Israel, 1995), 71f.

<sup>123</sup> *JHV*, 137. See also *Between Science and Philosophy*, 54.

irresolvable. Leibowitz maintains that this is a dispute for “the sake of heaven” and will never end.<sup>124</sup>

Leibowitz’s critique of Neo-Darwinism has two parts. The first concerns content. The embryological evidence of ontogeny, Leibowitz claims, does not harmonize with Neo-Darwinian theories of phylogeny.<sup>125</sup> His main criticism, however, pertains to the materialistic reductionism of Neo-Darwinism, which is an overreaching of the proper jurisdiction of science. Science is about function and has no room for either vitalistic or mechanistic reductionism.<sup>126</sup> Leibowitz’s strict separation is not merely methodological; it is also epistemological, because final causes are inaccessible to the human intellect. Thus, not only *should* science confine itself, methodologically, to efficient causality, it *must* do so because of epistemological limitations.

In this insistence on scientific agnosticism, Leibowitz relies not only on Kant and his antinomies, but also on Maimonides.<sup>127</sup> Leibowitz’s interpretation of the Garden of Eden story, which he maintained was the same as Maimonides’, explains our confusion between scientific facts and value judgments about nature. Prior to the transgression, humanity knew only scientific facts of truth or falsehood. This is the meaning of creation in the divine image. Following the transgression, humanity became preoccupied with issues of good and bad and *applied those concepts to nature*.<sup>128</sup> For Leibowitz, nature cannot be good or bad, but only true.<sup>129</sup> Hence scientists should refrain from imputing value to nature, as Darwin did in his reference to progress in the final passage of *On the Origin of Species*. The need to impute value to nature is a sign of the “spiritual weakness” that is a consequence of the transgression.<sup>130</sup>

This total divorce between God and creation, which is the ontological meaning Leibowitz ascribes to the Bible’s first verse,<sup>131</sup> leads him to claim that natural theology has a whiff of pantheism or polytheism.<sup>132</sup> Leibowitz, like Martin Heidegger and the existentialists, claims that science and nature are incapable of leading to values. In

other words, there is no ontological foundation for ethics.<sup>133</sup> Without philosophy to ground one's ethics, claims Leibowitz, the only other possibility is religious faith.<sup>134</sup>

As Avi Sagi has pointed out, Leibowitz was deeply concerned about finding ways to preserve Orthodox religious commitment.<sup>135</sup> His strict separation between science and religion strips the Torah and traditional Jewish literature of its cognitive claims. As Sagi has argued, Leibowitz removes both theology and religious facts from

<sup>124</sup> Ibid., 33. Cf. M Avot 5:17.

<sup>125</sup> Leibowitz, *Between Science and Philosophy*, 62f. Leibowitz's evaluation of Darwinism was no more favorable than that of Neo-Darwinism. He calls *natural selection* an undemonstrated postulate and *survival of the fittest* a tautology (ibid., 105 and 100).

<sup>126</sup> Ibid., 48f.

<sup>127</sup> *JJP*, 340.

<sup>128</sup> Maimonides, *Guide* I:2; Leibowitz, *Between Science and Philosophy*, 300. For an analysis of Maimonides' reading, see Shlomo Pines, "Truth and Falsehood Versus Good and Evil: A Study in Jewish and General Philosophy in Connection with the *Guide of the Perplexed* I:2," in *Studies in Maimonides*, ed. Isadore Twersky (Cambridge: Harvard University Press, 1990), 95–157.

<sup>129</sup> When asked how he understood the statement in the Bible that God saw that His creation was "very good," Leibowitz responded that he did not know what "very good" meant. Yeshayahu Leibowitz and Joseph Agassi, *Conversations Concerning the Philosophy of Science* [Hebrew] (Tel Aviv: MOD Books, 1996), 86.

<sup>130</sup> Leibowitz, *Between Science and Philosophy*, 298.

<sup>131</sup> *JHV*, 140.

<sup>132</sup> *JJP*, 358.

<sup>133</sup> Ibid., 366.

<sup>134</sup> *JHV*, 138. For a critique of Leibowitz's ethics, see: Marantz, "Bearing Witness," 40; Rosenberg, *Torah and Science*, 37–40, esp. 40.

<sup>135</sup> Sagi, "Contending With Modernity," 424.

Judaism.<sup>136</sup> One cannot take the Bible literally.<sup>137</sup> Leibowitz, in a characteristically caustic phrase, proclaims that Jews are not bibliolaters.<sup>138</sup>

Yet Leibowitz asserts that we know the Bible is not to be taken literally because science has demonstrated that the ostensibly scientific representations in the Torah are not true.<sup>139</sup> Hence, they *must* mean something else. Like Rudolf Bultmann and Mordecai Kaplan, Leibowitz demythologizes Scripture to extract its meaning.<sup>140</sup> Here we have a breach in the wall between science and religion. Without science, how would we know that the Torah's ostensibly scientific claims are not to be understood literally?

Leibowitz was critical of Darwinism and the Modern Synthesis. But what distinguishes him from Kook and Kaplan is that he did not use this criticism to argue for divinely guided or inspired evolution.<sup>141</sup> According to him, even if the Modern Synthesis were to be scientifically demonstrated, there would be no necessary religious consequences. Science, like nature and history, is religiously meaningless. Leibowitz's faith and halakhic practice are impervious to scientific truth claims.

Let us recall what Kant wrote in the *Critique of Pure Reason*: "I have therefore found it necessary to deny knowledge, in order to make room for faith."<sup>142</sup> Leibowitz's self-proclaimed affinities with Kant and Maimonides lead me to suspect that his strict separationism was religiously motivated. His lifelong polemic against the antinomianism of Reform was well served by his identification of Judaism with halakhic praxis.<sup>143</sup> Because science has no claim on religion—neither on religious faith nor on religious practice—arguments by Reform Jews and others that the Torah and halakhah are human constructs lose their force.<sup>144</sup> Religion is not about facts; it is a decision to worship God. The irony is that Leibowitz enlisted history, which, he says, is religiously meaningless, in order to demonstrate that halakhah is the essence of Judaism.<sup>145</sup> For Leibowitz, history is an ally of traditional halakhah;



whereas, for Reform and Reconstructionism, history is usually taken to undermine the binding authority of traditional halakhah.

Maimonides admitted that were the eternity of the universe demonstrated, a shift to less pious opinions would occur. As a result of his strict separation thesis and insistence that modern science cannot address final causality (because of epistemological constraints), Leibowitz rules out the possibility that a reductionist, mechanistic scientific theory could ever be demonstrated. Hence, no shift is possible in the Leibowitzian model. Knowledge is denied to make room for faith.

Leibowitz has updated Maimonides' esoteric writing style, which obfuscated knowledge to make room for a naive faith, into a pedagogic preference for the strict separation model. He projects his own method onto Maimonides: "Where reason cannot determine the issue, religious interest decides the matter."<sup>146</sup> A strict separation thesis, motivated by religious interests, declares reason to be unable to decide the issue of final causality—thus allowing religious interests to prevail. Halakhic Judaism has thus been rendered unfalsifiable.

<sup>136</sup> Sagi, "Yeshayahu Leibowitz," 206f.

<sup>137</sup> *JHV*, 140.

<sup>138</sup> *Ibid.*, 11 and 337.

<sup>139</sup> *Ibid.*, 340.

<sup>140</sup> *JJP*, 336. See also Sagi, "Contending With Modernity," 429–436.

<sup>141</sup> Leibowitz, *Between Science and Philosophy*, 134.

<sup>142</sup> Immanuel Kant, *Critique of Pure Reason* B xxx, trans. Norman Kemp Smith (New York: Humanities Press, 1950), 29.

<sup>143</sup> *JHV*, 95–105.

<sup>144</sup> *JJP*, 346–350.

<sup>145</sup> *JHV*, 96–105.

<sup>146</sup> Yeshayahu Leibowitz, *The Faith of Maimonides*, trans. John Glucker (New York: Adama Books, 1987), 52. Cf. *Guide*, II:23, 321.

## Conclusions

None of our thinkers looks to the Bible for scientific information. Kook claims it is there but in a form that is currently inaccessible. Kaplan, agreeing with the insights of biblical scholarship, understands the Torah's creation stories to be ancient myths that speak about the underlying relationship between the Creator and creation. Leibowitz, too, demythologizes the Torah's creation narratives and brackets all ostensible scientific claims within the Torah. Thus, the textual problems raised by acceptance of the transmutation of species over deep time are rendered impotent.

For Kook, selected aspects of evolution corroborate his mystical worldview, leaving his commitment to traditional halakhah unaffected. Kook's *philosophy* of evolution demands that any biological theory of evolution include aspects of progress. Kook's semipermeable membrane allows Jewish wisdom to filter out science that is religiously unacceptable while preserving the integrity of traditional Jewish thought and practice.

For Kaplan, science corrects ancient Jewish myths. Thanks to the process of functional demythologization, however, those myths still preserve some of their religious power. The evaluation of Genesis that creation is very good, for instance, resonates with Kaplan's interpretation of reality. He allows demonstrated scientific facts to inform and transform his religious system in ways that Kook does not; but his religious system, in turn, informs his understanding of science and serves a filtering function similar to what we have seen with Kook. Hence he is unwilling to accept Darwinian evolution and opts instead for a variety that includes purpose and direction. Kaplan's model of robust dialogue allows science and religion to inform each other.

Leibowitz, too, rejects the claim that the Torah has scientific content but offers no argument to support the traditional religious concepts of theodicy or providence. Leibowitz emphasizes the limitations of

both science and the human intellect in shedding light on metaphysical issues. Leibowitz's reconstruction of Judaism shares with Kaplan's the functional demythologizing of the Torah. But Leibowitz's dialogue model stops there. Religion does not influence Leibowitz's choices among scientific theories, although it may have influenced his philosophy of science. Traditional Jewish notions of progress and providence are undercut by Leibowitz's theology, but religious observance is safeguarded. With Kaplan, progress is protected—but traditional religious observance is undercut.

Interestingly, each of the strategies employed by Kook, Kaplan, and Leibowitz has antecedents in traditional Jewish thought. Kook's emphasis on divine immanence is dominant in the mystical streams of Judaism. Kaplan's reevaluation of divine omnipotence also has deep roots within traditional Jewish thought. Both Kook and Kaplan preserve the traditional commitment to progress. And Leibowitz associates his separation model with Maimonides' (and even Job's!) approach to religion and science.

Although none of the twentieth-century thinkers presented here rejects evolution, none accepts orthodox Darwinism or Neo-Darwinism. Kook demands that evolution progress toward perfection. Kaplan agrees that there is an upward tendency or progress in evolution but dismisses any unique and static perfection. For Leibowitz, the jury is still out on the mechanisms of speciation.

For all three thinkers, the problem with Darwinism is scientific reductionism, the dogma that speciation is exclusively the product of the random and mechanistic processes of natural selection and genetic mutation. For Kook and Kaplan, scientific reductionism is theologically problematic because of the attendant denial of teleology and progress. For Leibowitz, scientific reductionism is, ostensibly, epistemologically problematic. In any case, though, scientific findings are religiously meaningless, because religion is about human acts, not natural facts. For none of these three twentieth-century Jewish thinkers,

however, does the transmutation of species over deep time, by itself, pose a theological problem or threat that has not been addressed in prior generations of Jewish thought.