

Judaism and Science

with Norbert M. Samuelson, “Reflections on the Distinctness of Judaism and the Sciences”; Noah Efron, “Zionism and the Eros of Science and Technology”; and Bradley Shavit Artson, “Co-evolving: Judaism and Biology”

REFLECTIONS ON THE DISTINCTNESS OF JUDAISM AND THE SCIENCES

by *Norbert M. Samuelson*

Abstract. The object of this essay is to explain what there is about discussions of Judaism and the sciences that is distinctive from discussions about religion in general and the sciences. The description draws primarily but not exclusively from recent meetings of the Judaism, Medicine, and Science Group in Tempe, Arizona. The author’s *Jewish Faith and Modern Science*, together with a selective bibliography of writings in this subfield, are used to generate a list of science issues—focused around the religious doctrines of creation, revelation, and redemption in Judaism—that raise specific challenges to Jewish faith. Special attention is given to Leon Kass’s *The Hungry Soul* as an example of a distinctive way to integration knowledge of both science and rabbinic Judaism on a philosophical issue.

Keywords: creation; Darwinism; democracy; food; Halachah; history; humanism; Kabbalah and filosofia; medicine; monism and dualism; rabbi; race; redemption; religion; revelation; wisdom

Given that both religions and sciences are integral parts of civilizations, and that both Judaism and Christianity are integral parts of Western civilization, it is obvious that much that is true of the history, thought, and interaction between Western sciences and Christianity will also be true of the interaction of Jewish civilization and the sciences. But they will not be identical, and the differences are significant. The danger of dismissing the differences in turning attention to an abstract mental construct called “religion” and the sciences is that the differences will be lost, and in losing those differences we are likely to overlook and even distort what is the real historical record of relations between religions, especially Judaism and Christianity, and the sciences.

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Two years ago, twenty-seven academics from various fields—including Jewish studies, assorted humanities, and a variety of physical sciences, both theoretical and applied—came together in Tempe, Arizona to form a group to study intellectual and academic issues of the relationship between Judaism and the sciences. They met annually on a three-year plan through Arizona State University's Center for Jewish Studies on funds made available through the Harold and Jean Grossman Chair of Jewish Studies. The papers presented in this issue of *Zygon* are a sample of the first two of these meetings.¹ An examination of the papers delivered at those meetings exhibits at least five differences from the usual topics of meetings on religion and the sciences.

First, religion and science meetings and publications tend to ignore history and focus on theological topics largely abstracted from time and place. Most discussions of topics in religion and science gatherings appear in form, like topics in analytic philosophy, as if they were questions of mathematics, that is, as if they were timeless and spaceless. In contrast, issues of science and Judaism are usually set within a historical context, as is appropriate for a religion where decisions of both practice and faith are primarily dependent on a historical chain of argument that relies for its authority on accepted voices within the literary traditions of the Jewish people.²

Second, questions about the nature and history of medicine are invariably at the center of discussions of Judaism and the sciences as opposed to religion and science meetings that tend to focus on physical cosmology and evolutionary biology, both as theoretical and practical concerns. If there is any area of contemporary discussions of Judaism and the sciences that has a large volume of academic books and papers, it is bioethics, but relatively little is published in academic circles about Jewish conceptions of ontology (for example, views about creation) in the light of astrophysics and cosmology, or of humanity in the light of evolutionary psychology. That is not to say that there is not a lot of contemporary academic literature about Jewish views of the origins of the universe and about human nature. But this literature almost universally focuses on literary and not scientific sources. There are a number of reasons for this difference, and a discussion of them is itself a topic for a separate article. Let it suffice to say here that medicine was an original point of entry into the university for Jews in the early modern period of European history when universities were church institutions that existed for Christians as a form of worship. The admittance of Jews and topics of post-Biblical Jewish studies into the university was a long process, and is not yet complete. In general Jews do not gain full acceptance in the most prestigious American and European universities until the end of World War Two, and even then their acceptance has been largely conditional on their willingness to (so to speak) “check their Jewish identity

at the door.”³ For a few decades, Jewish studies (sometimes together with Islamic studies) functioned within liberal Christian dominated departments of religious studies as the significant other with whom Christianity could be compared, but today that Christian global role has been taken over by Asian studies and increasingly there is less or even no role for Judaism.

Third, the issues on which Jewish thinkers have focused in considering modern science had more to do with challenges to the survival and prosperity of the Jewish people than with Judaism. There are also several reasons for this difference, not the least of which is that biology rather than faith defines a Jew as a Jew. People do convert to Judaism for religious reasons, but even then there is an aspect (often primary) of the conversion itself that makes it more like the adoption of a national social identity than like the acceptance of a faith creed. Furthermore, biology in particular in the twentieth century has introduced certain unique challenges to Jewish national survival. I have in mind two challenges in particular. One is the use of Darwinian biology by respected intellectuals in the first half of the twentieth century to discriminate against (in the case of U.S. Immigration laws) and even exterminate (in the case of German Nazi laws) Jews in the name of eugenics. The memory is sufficiently strong, even some eighty or ninety years later, for thoughtful Jews to question what really distinguishes late twentieth and early twenty-first century social advocacy of genetic engineering from early twentieth century political eugenics. Two is modern advancements in genetics that have enabled us to identify specific fatal genetic diseases that specifically target Jews of European descent—notably Tay-Sachs, Canavan, Familial Dyautonomia, Niemann-Pick, Gaucher, cystic fibrosis, Fancon anemia, and Bloom syndrome diseases. What is most important about the identification of these diseases is the threat they pose to the Jewish people who, especially post-holocaust, almost fanatically value the creation and preservation of Jewish lives.⁴

These diseases are interesting for less practical and more theoretical reasons as well. One, they suggest some credibility to the notion of a Jewish race. Two, they threaten continued faith in democracy as a political ideal. Democracy traditionally rests on some conception of the natural equality of all citizens, irrespective of national or racial identity, and this political belief is easiest to justify on what Steve Pinker (2002) calls a “Blank Slate” conception of human nature, viz., that all relevant social and political differences between people are a product of environment (nurture), none of which is functionally attributable to physical nature.

Fourth, the philosophical foundations for most contemporary discussions of science and religion are Anglo-American, relying especially (but not exclusively) in liberal religious circles on the process philosophy of Alfred North Whitehead. In contrast, the philosophical foundations for most contemporary discussions of Jewish faith, even in relationship to questions

about the sciences, are Germanic. The major intellectual philosophical influences on most Jewish philosophers and theologians are a tradition of thinking that arguably begins with Nietzsche and continues through the students of Heidegger, notably Hans Jonas. Jonas's central concern with Darwin and biology in his philosophy of life is somewhat unique for post-World War Two Jewish intellectuals. For most of those who were inspired by Nietzsche followed the directions of his French disciples who themselves focused their philosophical powers on literature and language rather than on mathematics and science, notably Jean-Paul Sartre (a self-defined but not rabbinically recognized Jew), Emmanuel Levinas, and Jacques Derrida, as well as Heidegger's other "Jewish children,"⁵ especially Hannah Arendt. Yet, the foundations for a distinctively Germanic-Jewish approach to Judaism and science had already been laid in the past, most obviously in the philosophy of Hermann Cohen, whose philosophy of Judaism grew directly out of his neo-Kantian philosophy of science, and whose most influential student was Franz Rosenzweig. Furthermore, Rosenzweig's own philosophy was deeply rooted not only in Cohen but also (arguably) in the writings of Friedrich Nietzsche, whose work was at least in part a response to late nineteenth century Darwinianism. In any case, the Darwinian connection to a Jewish philosophy that traces its intellectual roots through Nietzsche, Cohen, and Heidegger, has barely been touched and constitutes in itself an important historical topic for contemporary research in Judaism and the sciences.

Fifth, the study of Judaism and the sciences will not rely exclusively, as it does in religion and the sciences, on Jewish philosophy but will also look to the Kabbalah. Today, at both the academic and the popular level, a number of books are being written on Kabbalah and the sciences.⁶ It is specifically in connection with Kabbalah that issues about the origins of the cosmos in physics and astronomy are coming to the fore. What is important for our purposes in distinguishing Jewish discussions of "Judaism" and science from Christian discussions of "religion" and science is that, contrary to what most contemporary "neo-Hasidim" think, there is no radical separation in sophisticated Jewish thought between philosophy and mysticism. On the contrary, as Elliot Wolfson has demonstrated in many of his writings,⁷ Kabbalah and filosofia (as Jewish mysticism and philosophy are called in Hebrew) are complementary and interactive developments where throughout history the former emphasizes the centrality of a kind of concrete, imaginative geometric while the latter emphasizes the centrality of a kind of abstract generalist algebraic thinking about shared questions of Jewish faith.

In my own case I would like to emphasize what I see as the philosophical issues that modern science raises for reflection in Jewish philosophy.⁸ Since Judaism developed historically in conversation with Muslims and Christians as commentaries out of a shared tradition of revelation in

the Hebrew Scriptures, it is to be expected that many of the issues I want to identify are familiar to Christians as well as to Muslims. Yet, there are times when Jews are more in conversation with Muslim philosophers than Christians (notably in the tenth through the twelfth centuries, at precisely the time that classical Jewish belief doctrines were being formulated) and there are other times when Jews are more in conversation with Christian philosophers than Muslims (notably in the nineteenth and twentieth centuries when the classical Platonic-Aristotelian tradition of sciences is being radically reconsidered along Stoic-Epicurean-Sceptic lines in connection with the new modern sciences). Hence, among the interconnected issues that challenge contemporary Jewish faith, some of the issues are distinctively Jewish. In brief, the issues focus around three classical doctrines about divine activity—creation, revelation, and redemption. Some of these issues are clearly Jewish rather than Christian, some of them are not, and others that seem to be the same really are not. (My elaborations will be limited only to points that suggest something distinctively Jewish about the issue.)⁹

ISSUES WITH CREATION

- (1) Are academic Bible scholars (with their knowledge of the History and Archeology of the Ancient Near East) better trained than rabbis to (a) say what the Bible means and (b) serve as moral guides for our lives? Are Bible scholars wiser than rabbis? A rabbi has always been first and foremost a “chakham,” a sage, and a sage is not just a teacher. He is an individual whose knowledge enables a level of moral perfection that is not attainable (at least in theory) in any other way. The authority of the rabbi then is the foundation of the authority of Judaism, and that authority rests on a claimed moral excellence for the rabbi made possible by his superior knowledge of the Hebrew Scriptures. However, that authority is seriously questionable today, when rabbis in general exhibit no special moral authority in their lives and no special knowledge of the biblical text in their rabbinic training.
- (2) If quantum mechanics explains the universe, and there is some relationship between reality and ethics, then the following two claims seem to follow: (a) The moral value of individuals is questionable in God’s physical universe, and (b) The existential value of individuals also is questionable. Both problems significantly undercut the rationale for a liberal Judaism. In a universe where the very laws of nature are probability equations, reality is less like a purposeful project of an all-powerful, all-benevolent craftsman and more like an Ethan and Joel Coen movie plot where through either a pure accident or an act of human stupidity a chain of

events occurs that determine the fate of all the players, including the wise and virtuous ones.

- (3) Pre-modern Jewish philosophy interpreted the constellations to be the living entities that the Scriptures call “angels” and understood that they were the divine messengers by means of whom God governs the universe. However, since modern astronomy teaches us that constellations are not real, how does the God of the universe relate to earth bound creatures?

Classical Jewish philosophy, under the influence of the Hellenistic Aristotelian and Platonic astronomers and psychologists, associated constellations with distinct spheres who governed their spatial regions as vegetable, animal, and human souls governed their respective bodies, and these living celestial beings were used as the means by which the finite and fallible material creatures of a terrestrial world were bridged to connect with an infinite, infallible immaterial divinity. But in no apparent way can modern astronomy be able to describe a bridge between any traditional conception of divine nature and any modern conception of human nature.

Furthermore, the smallest entities in the universe are no less a problem for determining universal divine governance than these largest entities. As modern astronomy seems to tell us nothing about divine governance, so microbiology and microphysics seems to tell us nothing relevant. Is there anything we can learn from microbiology and microphysics that can enlighten us on how God governs the universe through particles in the way that Pre-Modern astronomy enlightened us on how God governs the universe through constellations?

- (4) What is the relation of God to space-time given the claim of relativity physics that space and time are inseparable? With the (arguable) exception of the seventh day, the object of the so-called “days” of creation are divisions of space without reference to time.
- (5) What could count as a soul within the ontological framework of general physics? Is it a form of energy or is it something spiritual or is it something else?
- (6) What would a cosmology look like that fits the data of physics and astronomy but assigns reality to morality in the physical universe? Where in the modern conception of the universe is there room for quality and purpose as physically real?
- (7) Ignorance of physics results in inadequate views of the universe in a number of respects. The universe of humanists and other Jewish philosophers (a) is too small and too shallow (too small from the perspective of the cosmos and too shallow from the perspective of the micro cosmos), (b) can make no sense out of the notion of purpose in our purely mechanical/mathematical

world view, and (c) cannot account for all changes that occur within our universe.

- (8) Our universe is too old and human existence is too brief for humanity to provide the reason for the existence of the universe. If we give up this humanist assumption, how can we understand why God created the universe? The question itself is at least an option for Jewish philosophers, for from a Jewish perspective there need not be any special commitment to any inherent value to homo sapiens in comparison with other species. I am in no position to say what Christians can and cannot believe, but it at least seems to me as an outsider to the Christian faith that the central role in any Christian story of the salvation-history of the universe of the human Jesus, and even more so when this man is also seen to be substantially identical with the deity of the universe, that Christians have a vested interest in humanism. In a sense humanism is a form of chosenness comparable to rabbinic faith in the Jewish people. If it stretches credibility to offer an account of how or why God chose the Jewish people-nation from among all the potential people-nations of the Earth, it equally stretches credibility from what we now know about life forms on the Earth to offer an account of why God chose humanity from among all the potential species in the long stretch of evolutionary history in the universe. (If the criterion for selection is adaptability to a foreign and hostile environment, my personal preference would have been for some kind of virus.)
- (9) Especially in light of the principle of inertia, is there a good reason to posit a creator of the universe? A critical assumption in all traditional proofs of the existence of a creator deity is that in some significant sense an effect cannot be greater than its cause. Hence, the cause of an infinite universe cannot be a finite being. In this sense it is clear that all the classical proofs for God's existence are not absolute proofs; they are conditional proofs whose validity is dependent on the presupposed and often unspoken dominant natural philosophical (what we sometimes call "scientific") most general conceptions of reality from astronomy, physics, biology, and geology. The principle of inertia undercuts this most fundamental assumption about the relationship between a cause and its effect. Where pre-modern physics maintained that there must be something that causes something to happen, modern physics maintains in opposition that there must be something that causes something to cease to happen. What happens needs no thing to cause it to happen. The principle of inertia renders the notion of a universe that exists by chance

more self-evident than the notion of a universe whose origin is determined.

- (10) Jewish philosophy needs to rethink ontological monism and negative theology. For guidance in how to rethink these subjects, models can be adapted from the metaphysics of both Alfred N. Whitehead and Franz Rosenzweig. To my knowledge no one has yet carefully examined how Whitehead's metaphysics, grounded in his knowledge of late nineteenth and early twentieth century physics, parallels Rosenzweig's new thinking about the world (his "meta-physics"), grounded in what he learned from his teacher Hermann Cohen, the foremost Kantian philosopher of the science of the same historical period. While Cohen and Whitehead have comparable knowledge and interest in modern physics and a comparable critique of the then-dominant tradition of Hegelian rationalist philosophy, Cohen's model is ultimately German Jewish while Whitehead's is English Christian. It should be of interest to students of science and religion to explore how these differences are related to perceived differences in their ways of thinking about and describing reality.

ISSUES WITH REDEMPTION

- (11) Given what is by now considered the standard interpretation of Darwin's particular account of biological evolution, his story of the history of life on this planet involves critically three suppositions. The first is the principle of "natural selection." The second is the principle of "the survival of the fittest," and the third is the expectation that evolution is both gradual and continual. None of them are conceptually as clear as they ought to be. What does "selection" mean if no one is doing the selecting? Furthermore, what does it mean to call these three "principles?" However, whatever the interpretations, it is quite clear that for the exponents of any philosophy intimately associated with this interpretation of the biological records, reality/nature do not exhibit purpose and design. But purpose and design are fundamental to any religious interpretation yet conceived of what Genesis 1:4, 10, 12, 18, 21, and 25 mean when God calls his activity "good" (tov). Can the following two claims be reconciled? (a) Natural selection and the survival of the fittest are laws of nature. (b) From an absolutist divine perspective, what exists was created by God to exist and as such is inherently good. Can there be some way to interpret these two claims to justify something that Ron Numbers (1998) called "Creation evolution?"

- (12) There is a need to move beyond the dogma that seeing is believing to a new affirmation of the reality of God. No one really believes seeing is believing, neither religious people who in some sense or another believe that our plastic world is only a shadow of a more complete reality or a devotee of modern science who believes that the world as we sense it is an objective but still only mental product of the way our brains have evolved. Even the brain as we experience it is a creation of our human brain as it really is. The old Aristotelian-Platonic world view located deity within the realm of the intellect and this location meant that it is more real than any other reality. Can the new empiricist-materialist view also locate a viable candidate for deity within the realm of mind so located that this mental entity is more real than any other reality?
- (13) We need to move beyond mind-body dualism to a new monism.
- (14) We need to move beyond mechanistic science to a philosophy of the soul in terms of grounds for analysis of objective morality and of redemption. There are many available non-Aristotelian and non-Platonic candidates for the definition of a soul. In the Hebrew Scriptures the “soul” (nefesh) is warmth breathed by God into an otherwise cold body. Some transhumanists interpret soul as a kind of “information,” where information is a third kind of ontological entity, neither mind nor matter. And philosophers such as Whitehead and Rosenzweig adopt a process interpretation of reality in which thoughts and bodies alike are frozen icons so to speak of realities that in actually never stand still from their moment of origin in creation to their fulfillment or wholeness at redemption.
- (15) We need to move beyond life and death absolutes to redefine humanity in terms of a conception of an asymptotic end of worshipping God. The pursuit of a defined point at which life begins and life ends is a futile activity. It rests on the fallacious assumptions that there are in reality fixed, definite, defined entities that have fixed, definite, and defined moments of origin and end at fixed, definite, and defined points in space.
- (16) We need to rethink the commitment to preserving human nature and restricting moral responsibility exclusively to human life forms. Everything in creation exhibits some aspects of life. Everything acts and not merely is acted upon, including matter and even including space. To that extent, as something alive, it deserves respect, for it no less than each of us is a creature of God, and as such, it subjects us to a covenant of responsibility. To say the same thing in more theological language, there is

nothing in the universe that stands outside of moral duty and moral obligation.

- (17) We must understand “halachah”¹⁰ more in accordance with the modes in which Eastern religions understand what they call a “way” and less in terms of the modes of what Western religions call a “law.” Beyond all the confusion of the mostly unintelligible rhetoric of Jewish theologians, this distinction is the bottom line difference between liberal and traditional Judaism. No one in any nation in the world is obligated by law to follow what the rabbis determine the halachah to be. That is very different than the situation with national laws. Even the most orthodox of Jews are bound to obey halachah only because they choose to do so. They may suffer social ostracism if they refuse to obey, but at least in this empirical world there are no other apparent punishments for disobedience. Nature punishes people who eat foods that are too fatty, and courts punish people who steal private property, but neither nature nor civil society punishes Jews who eat well-cooked pork products or who work on Saturdays. Does it make sense to say that the God of creation cares about doing honest, beneficial work on what seems arbitrarily to be designated as the seventh day of a totally unnatural arrangement of days into units of seven? Similarly does it really matter to the God who created the world what we eat? Why should cow muscle be permitted but pork muscle must be denied and why are the rules different for Jews than for other human beings?¹¹
- (18) When and how does life begin and end?
- (19) What does it mean to be “human”? When do chemical reactions become living things? When do living things become human beings?
- (20) What role does and should capitalism play in decisions about living and dying? In general, what role does and should capitalism play in living a Jewish life? No one alone can be a Jew. To be Jewish involves inherently a communal set of actions. It includes manufacturing objects used in worship (candelabra on Shabbat, special covers for bread, bread and wine themselves for Shabbat and festivals, buildings in which to conduct worship and study, and no less important, money to pay livable salaries to Jewish professionals, especially to teachers and rabbis). But it is this very capitalism that makes democracy non-operative in Jewish life. Only a fool (and some contributors of endowments to prestigious universities) gives money to institutions where the donors have no say over how the money is spent. (In political terms this is called “taxation without representation.”) This means that donors

to Jewish organizations, if they are to be donors, have more of a say over the expenditure of funds in Jewish community houses of worship and schools than do other Jews who cannot be donors. That ultimately means that votes in a democracy, even a "Jewish" democracy, empowers people whose primary success is in accumulating dispensable money, not in learning and not in piety, and in at least this world there is no necessary correlation (positive or negative) between wealth, piety, and knowledge.

Intimately related to the problem of capitalism is the problem of separation of church and state, especially in countries (such as Germany) where religious institutions are paid for with funds collected from a state "church-tax" (Kirchensteuer). Precisely because the wealthiest members of local religious communities have no privileged control over the funds allotted for their communal activities can religious communal governments be truly democratic, which here means blind to considerations of the sources of funds in determining communal expenditures.

The American principle of separation of church and state has never been understood until recent decades, either in social and political thought or in law, as a fundamental principle (whether or not it is specified in the U.S. constitution). Responding to a time when religious institutions were closely allied with aristocracies that used their connections to suppress opposing religious institutions, this principle protected religious minorities from religious majorities, and in the United States in particular this principle was useful for promoting inter-denominational tolerance if not harmony because of the peculiar circumstances where no religious community felt that it was the majority and every religious community had living memory of intolerance at the hands of another religious community. However, it was never intended, and should not be intended, to render the politics of religious communities into oligarchies of wealth or to allow the exclusion of all voices from government institutions (including schools) except those of material reductionists.

ISSUES WITH REVELATION

While in many respects this is the most crucial of all the issues, it is the easiest to set aside from this discussion of deep challenges to the survival or flourishing of a Jewish faith from modern science. It is easiest to set aside because it has been central to religious discussions between religious denominations for more than a century. The science is history, and the particular history in question is source-critical studies of not only the Hebrew Scriptures but of all traditional rabbinic texts that make claims about history.

- (21) Should scholars rewrite Jewish history? The traditional story of the Jewish people begins with the tribe of Abraham and progresses on through the formation of a national theocracy at Sinai with Moses, on through the creation of a theocratic monarchy during the reigns of Saul and David, on through a second Jewish, scriptionally limited monarchy after the Babylonian exile, on through the establishment of a global rabbinic oligarchy governed by Hebrew Scriptures compiled at the end of the second Jewish state from reliable traditions from the first Jewish state. Not one clause in the preceding one sentence summary of the whole of Jewish history as taught by the rabbis is generally accepted by modern scholars of Jewish history. There was no Abraham and there probably was no Moses either. It is not likely that the ancestors of modern Jews were slaves in Egypt; it is as certain as any historical claim can be that they did not destroy the Egyptian army escaping into the Sinai wilderness; at the time of Sinai there was no form of written contract between God and the nation; the five books of Moses did not exist until after the destruction of the first Jewish state which itself may not have been in reality anything like what the Scriptures. The authorship of the complete Hebrew Scriptures does not occur until after the destruction of the first Jewish state, and the so-called “Old Testament” may not be much older, if older at all, than “The New Testament.” In any case both works are in reality early forms of Hellenistic Jewish fiction.
- (22) Is Judaism “philosophy”? Certainly it is not in the sense of contemporary philosophy, whose domain is limited to questions of the meanings of language not already covered by the more scientific and more academically rigorous discipline of linguistics. However, if we use the term as the Hellenistic Stoics used it, viz., as a very particularized expression of the love of (philo) wisdom (sofia), then Judaism is (or better, was) a philosophy, a detailed set of regulations, viz., a way, a “halachah” intended to guide its followers to achieve wisdom, here identified and often personified or reified as God.
- (23) Are the Hebrew Scriptures a “fraud”? They are if biblical source-critical scholars are to be believed, for these texts were intentionally fabricated to justify among the illiterate Judean masses a series of priestly overthrows of successive governments, from the time of King Josiah in Judah through the destruction of the first Temple in Jerusalem and beyond. If the scholars’ story of the political origins of the text is correct, these scriptures are not just a “fiction.” (The Homeric tales are just a fiction.) They are a

fabrication intended to justify the rise of its authors to political power. In other words, it is a fraud.

- (24) Are the Hebrew Scriptures “pious”? Not if the authors intentionally lied in creating a text whose primary purpose was to justify their series of seizures of power. In contrast, “pious fictions” are stories created to explain something the authors truly believe. The stories in Plato’s *Timaeus* are pious lies. They are, as Plato explains, true “mythos,” which he explains to mean instances of bastard reasoning where no legitimate reasoning is possible.
- (25) Are the Hebrew Scriptures “history”? Not if they are not ultimately based on actual reports of events that actually occurred.
- (26) Are the Hebrew Scriptures “authoritative”? Not if their authors are liars whose lies have as a primary intention political gain for themselves and the fellow members of their family.

There are of course several ways to respond to these now century-old devastating criticisms. All of them turn on a viable, that is, believable, conception of a God of Israel who is fundamentally well meaning and profoundly powerful in his/her own way, who uses the nature of all of creations toward a somewhat preconceived redemptive end for himself and for his world. In part the offering of this kind of solution, contrary to humanism, inevitably involves a devaluing of human initiative (at least human wisdom) without entirely denying that humanity, like all other species in the divine creation, play a critical role in the world’s self-improvement of God’s original act of creation.

APPENDIX : SOME RECOMMENDED RECENT BOOKS ON JUDAISM AND SCIENCES FOR A PERSONAL LIBRARY

What I have described in this essay is one program for reviving Jewish philosophy as the study of the relationship between Judaism and the modern sciences. There are of course others. A notable example is Leon Kass’s ([1994] 1999) most original book, *The Hungry Soul*, where Kass presents a serious philosophy of food out of his knowledge of Western philosophy and rabbinic Jewish texts, reasoned historically rather than analytically out of his knowledge of both the history of food from zoology (chapter 1), paleoanthropology (chapter 2), philosophical ethics (chapter 3), and sociology (chapters 4–5), culminating in an account of the physical consumption of food in a society as a highly religious or spiritual form of activity, where eating becomes a primary mode (as it is in rabbinic Judaism) of humanity establishing relationship with God as a form of the highest good.

What follows now is a list of twenty-nine books, all of which are from my personal library, that all deal with Judaism and the modern

sciences. They may be grouped under the following nine subject categories: (1) Biology and Bioethics, (2) Creation (the event of), (3) Food, (4) Historical impact of Judaism on Western civilization, (5) History of the Jewish people, (6) Medicine and Health, (7) Physics and Astronomy, (8) Psychology, and (9) Rabbinic Law and Rabbinic Reasoning. The books I have in mind are the following:

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NOTES

1. The meetings of the Judaism-Medicine-Science Group (JMSG) were held at the Buttes Hotel in Tempe AZ, on August 17–18, 2008 and August 16–18, 2009. A third meeting was held on October 8–10, 2010 on issues from the neurosciences. Out of a membership of more than one hundred names, the following academics attended one or both of the first two meetings: Bradley Artson (American Jewish University of Los Angeles [AJULA]), Zachary J. Braiterman (Syracuse University), Suzanne Brody (AJULA), David and Jean Cahan (University of Nebraska), Shai Cherry (AJULA), Adam Cohen (Arizona State University [ASU]), Joseph P. Cohen (St Johns College), Professor Elliot Dorff (AJULA), Noah J. Efron (Bar Ilan University), Carl Feit (Yeshiva University), Matt Goldish (Ohio State University), Kenneth Kendler (Virginia Commonwealth University), Barry Leshowitz (ASU), Kenneth Mossman (ASU), Peter Ochs (University of Virginia), Joel Primack (University of California Santa Barbara), Heidi Ravven (Hamilton College), Hava Tirosch Samuelson (ASU), Norbert M. Samuelson (ASU), Solomon Schimmel (Hebrew College), Jules Simon (University of Texas El Paso), Howard Smith (Harvard University), Elliot Wolfson (New York University), and Laurie Zoloth (Northwestern University). The topics discussed through formal papers included “Judaism, Darwinianism, and the Topology of Suffering,” “We Are Alone in the Universe; What Should We Do About It?” “Kabbalah and Science vs. Magic and Technology,” “Apophatic Embodiment and Material (Im)materiality: A Kabbalistic Cosmology,” “The Theology of Interruption: Religion, Science, and Estrangement,” and “What is ‘Science’ and Why Does It Matter?”

2. A recent conference publication by Aaron Hughes and Elliot Wolfson (2010) brings together a collection of essays that attempt to do Jewish philosophy abstracted from historical contexts. Somewhat ironically some of the essays begin by locating their positions within the history of Jewish thought and almost all (if not all) presuppose an implicit historical setting.

3. Emil Fackenheim was fond of saying that Jews made it into Western culture as an “every man” but not as a Jew. By reputation the ultimate Jewish everyman was Benedict Spinoza. My candidate would be Henri Bergson.

4. It should be noted that there is a certain emotional incompatibility between these two memories. It is a reflection of two primary values commonly asserted post World War II by Jewish community leaders in popular Jewish literature. First, the desire to avoid another Holocaust, and second the desire to promote Jewish life. The former makes historically aware committed Jews skeptical of any proposed programs of government support for genetic engineering. The latter makes Jews collectively conscious of their diminished numbers, and anxious to support anything that will increase the number of Jews. Hence, it is not uncommon that Jewish political leaders will be very skeptical of the kinds of genetic social programs advocated by most public voices in the Transhumanism movement while enthusiastically in favor of support for any kind of biological program (including cloning) that would enable Jews to give birth to more healthy Jews (see Wahrman, 2002).

5. See Wolin (2001).

6. See, for example, Matt (2001).

7. See, for example, Wolfson (2006).

8. These issues are discussed in more detail in Samuelson (2009).

9. The following discussion of issues receives more detailed elaboration in Samuelson (2009).

10. Literally, “way.” It is the most general, standard term for all of Jewish rabbinic law.

11. In my judgment one of the best books of contemporary philosophy that integrates into a single whole insights from both rabbinic literature and modern science is Kass’s *The Hungry Soul: Eating and Perfecting of our Nature*.

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