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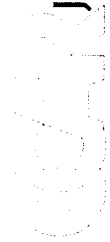
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About the convergence between the humanities and science that Samuelson wants is, in fact, already well underway, both inside and outside academe. This underscores how out of step the field of Jewish philosophy is with currents in the culture at large. Consider the following:

- We live in a technological world, the ramifications of which effect every sphere of human life, extending from the environmental, to the social, and down to the biological. Deep anxieties about technology found in works by Heidegger and Heschel or in the counterculture of the 1960s have lost almost all of their critical traction, at least for the moment.¹ I do not think anyone can seriously maintain that the problems that impact technological civilization can be solved without input from science itself.
- Even in continental philosophy, perceived by its critics as the bastion of contemporary relativism, there has been a definite fatigue with the “classical” postmodern theory represented in caricature by Jacques Derrida’s famous quip, “There is nothing outside the text.” The notion has faded that there is nothing real outside of the world of images, words, and concepts in which human consciousness is enmeshed. And there is something tired about continuing to insist with Emmanuel Levinas that “first philosophy” is always constituted as ethics. Most of his critics find this position one-sided and limiting.
- Influenced by Lacanian psychoanalysis, the Slovenian philosopher Slavoj Žižek and the French social theorist Alain Badiou have taken a renewed interest in what art historian Hal Foster has called “the return of the real.”² Recent work in Affect Theory by Catherine Malabou and Ray Brassier are examples of recent scholars who have taken up the banner of “speculative realism” and pursued continental philosophy into contemporary brain science and astrophysics.³ While I would not necessarily recommend any of the conclusions advanced by these theorists or their political stances, I consider the direction they propose to be remarkably fruitful.
- In popular culture, the so-called atheist wars led by scientists such as Richard Dawkins, Daniel Dennett, and Sam Harris testify in a negative way to the importance of religion in the

Jewish Philosophy, the Sciences, and the Humanities

Zachary Braiterman

The challenge of modern science to Jewish faith as presented here by Norbert Samuelson provides a welcome occasion for all of us interested in modern and contemporary Jewish thought and theology to reconsider the foundational prejudice against science in twentieth century Jewish philosophy. Indeed, it is nothing short of amazing that so few of us have thought so little about the vast potentials for theological rumination opened up by scientific study. Nor is it a coincidence that within the small and isolated world of Jewish philosophy, only a scholar such as Samuelson, steeped in the medieval science of Maimonides and Gersonides, would have thought to call us back to this all-important source for philosophical and theological reflection.

In response to Samuelson’s essay, I will say from the start that among Jewish philosophers it is Samuelson’s almost unique understanding that the separation between science and the humanities is a modern imposition. Its roots go back to the start of the twentieth century when scholars in the humanities sought to preserve a special domain for the study of history and the arts vis-à-vis the physical sciences. I agree with Samuelson that a hard version of this distinction is an invidious one that has outlived whatever usefulness it may have once offered religious practice and belief. I would maintain, nonetheless, that a soft version of this distinction is inescapable, and that our only option is to stay with and think through it. My own suspicion is that stubborn, irresolvable dualities between brain and mind, matter and spirit will continue to bedevil the convergence between science and the humanities, especially in relation to religion.

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world today and for the need to think about religion in a serious, scientific way.

- Terrence Malick's recent award-winning, critically acclaimed film, *Tree of Life*, represents an important moment in the convergence of science, religion, and art. The movie begins in the beginning at the chaos and creation of the cosmos and the evolution of life on earth; it wends through the quotidian pathos and pain shaping the life-story of a single family in postwar Texas. Its climax is nothing less than a luminous vision of life after death after which a central protagonist, bewildered and buffeted, is thrown back into life. Malick's lushly shot film seamlessly blends nonhuman and human elements, affectlessness and affect. The afterlife is promised without any obvious presence of a god or God; any sense of the divine within the film spools internal to the world-system pictured on screen.
- The indirect impact of science on *popular* religious life and thought is also seen in the works of Jewish authors. I see it in the turn to immanence among authors such as Arthur Green and Jay Michaelson as well as trends going back to the 1970s in Jewish Renewal Movement, eco-Judaism, and the interest in Buddhism and in Kabbalah.⁴ The same can be said about the earlier thought of Mordecai Kaplan, albeit without the attraction to mysticism. The causal relation between an interest in science and immanence in theology is most likely simple. In both instances, attention is riveted upon enlarged pictures and conceptions of physical and mental dynamics and values whose locus is this world.

What science has always brought to religion is a sense of scale more vast than both the anthropocentrism and the relatively bounded world-pictures in biblical and Rabbinic religion. Of course, one sees a non-anthropocentric conception of the natural world in Maimonides, for whom the world proceeds according to a logic irrespective of human desires and projects (*ha'olam k'minhago noheig*). The modern and contemporary world-picture of the natural world is still more vast. In fact, "picture" may not even be the right word for it. Radically "acentric" (that is, without a clear, single center) and non-imagistic, it beggars the medieval worldview presumed by Maimonides. The world is too large and too small even to be pictured. Entire stretches and strata of the natural world lie beyond

the limits of the human imagination. In this, God is not uniquely unrepresentable, as might have once been thought.

In spring 2011 the continental philosopher, John Caputo, delivered a speech at Syracuse University entitled, "The Future of Continental Philosophy of Religion." The conclusion of the lecture was that modern and contemporary physics has got religion and philosophy beat even where religion and philosophy might have once been able to entertain bragging rights—at the level of the imagination. It is hard not to agree with this conclusion. One might have thought that the fundamental reconceptualization of order presented by quantum physics, string theory, dark holes, and dark matter would require at least a cursory look. However, one cannot find such reflection in the Jewish philosophy as practiced by most university professors (my own included).

The resistance to science in the humanities is not, however, purely arbitrary. What I will call "the problem of different strata" is so extreme, methodologically, that it could very well undermine the "integrated view of total reality"⁵ for which Samuelson hopes. The ontological gap between strata relevant to quantum mechanics and strata relative to the domain of human consciousness might be too large for any human thought to bridge; and how to figure God into this gap is hard to imagine. It would seem impossible to make any direct and complete inference from (1) physics, chemistry, and biology to (2) the conscious plane of human experience, and from there to (3) metaphysics. If we cannot be sure about the exact interaction between chemical dynamics and human consciousness, how much more vexed will be any attempt to interpret the physical world and mental image-work in theological terms? The classical dualism between body and soul, matter and mind has been surpassed. In effect, the challenge posed by Samuelson is to think across a vexing intersection defined by *three* irreducible strata.

I understand why Samuelson privileges the microscopic world-picture in his essay here. Solid objects dissolve into "a sea of fluid beings constantly flowing past, through, and into each other, ultimately coalescing to form new actual entities."⁶ This picture provides an aesthetically appealing purchase on material dimensions that transcend the limits of the optical eye. But this purchase is only heuristic, as it is in fact given to the naked eye by means of a technological apparatus. It is anybody's guess what an "infinite repository of an idealized universe" might have to do with what Samuelson

citing Whitehead calls "the primordial nature of God" or the "consequent nature of God."⁷ It is not the internal coherence of the concept that I fail to understand as much as the hermeneutical decision to refer anything having to do with physical properties back to God. Maybe this repository has something to do with the nature of God or maybe it relates more simply to the nature of nature. I do not see any way to resolve this aporia one way or the other.

Related to the problem of different strata is the problem of data. Before this rabbit hole, I would certainly pause, confident that I will never understand the formulas, equations, and arguments that constitute inquiries and debates in the sciences. From the other side of things, I see no reason to commit theology to a dataset with a shelf life of three, five, ten, or twenty-five years. I would maintain, then, that the impact of science on religion and theology will not occur at the granular level or scale pursued by scientists. My guess is that the general impact of science is more diffuse. It works at the level of larger paradigms that reflect the consensus in this or that scientific community and then mediated through technological innovations, popular scientific writing, journalism, literature, and the visual arts.

I for one do not believe that science is self-interpreting. In relation to science, the purpose of all the human arts, including the practice of religion, is to make it possible for us to scratch out a place on the surface of our planet, and to stay committed to the strata of lived life and conscious human perception. In religion, this means to delimit a place in this world before God, and to do so rationally with philosophy. It used to be said that physics has nothing to do with this level of meaning-making, that a physicist cannot tell us how to live or how to pray to God. I am no longer sure this is true, not entirely.

The problems of different strata and data notwithstanding, Samuelson is right to say that it is "not sufficient to simply say 'science speaks about one kind of universe and Judaism about another kind of universe.'"⁸ It would be nice if religion could learn how to take its place in the world with the modesty and skepticism with which the best practitioners of science approach data and theory. As Samuelson understands, religion requires the sound and realistic understanding of the physical world that only science can provide, even though I hazard to think that the religious interest in science is affective and existential, not primarily scientific.

Scientists routinely claim that there is nothing outside the physical universe. I do not understand how to adjudicate this kind of claim. At most, scientists writing in a popular idiom will offer up as ersatz spirituality or ersatz poetry a kind of pious awe before the physical world. When they do so, they often sound naïve, at least to scholars trained in the humanities who themselves have also learned to distrust attempts to draw a clear line between facts and values. While these almost apologetic attempts to share their enthusiasm with others are admirable, there are limits beyond which science cannot probe without ceasing to be science. Samuelson is right to argue that theology needs science insofar as religion is understood to have deep roots in the physical world. Nevertheless, I cannot see what science as such might want from religion and theology.

Perhaps this is the place to settle the matter. I doubt it is possible to resolve by means of any integrated, scientific theory the basic quandaries riddling religious life and thought about the transcendence or immanence of God, the absolute or relative reality of material substance, and the moral meaning of life. Unlike Samuelson, I do not think that the Rabbis ever sought to "determine what they mean when they [said] that God is the creator of the universe."⁹ As I read them, their theological thinking is more loose and associative. While I do not think that science can answer any of these theological questions in terms of definite contents, I am in complete agreement with Samuelson that science will enlarge in a formal way the sense and conception we bring to those questions.

Samuelson opens his essay noting the fear and anxiety with which the Jews in antiquity met the dominant force of Greek wisdom and Hellenistic culture. Their cultural universe was defined by the volatile, super-colliding smashup of civilizations and the transformative impact of new ideas and methodologies on religion and religious experience. With his own immersion in Jewish intellectual history, especially in the medieval period, Samuelson has a pretty good vantage point from which to consider how this all worked out. I get the sense that, having seen it before, Samuelson suffers from no anxiety whatsoever. His approach to the brave new world of contemporary science is recommended for being fearless. The complaint against early modern science in its classical, mechanistic age was that it makes everything "determinate." In contrast, modern and contemporary science tends to make the world less

determinate, fixed, and stable, more de-substantialized, pixilated, and “dematerialized.”

As I see it, the encounter with science encouraged by Samuelson will *not* make religious belief more rational. The opposite outcome is more likely. My guess is that the encounter with science will underscore just how quirky religious thought really is at heart. What is the relation between spirit, on the one hand, and matter, anti-matter, and dark matter, on the other hand? Is God, as Samuelson avers, indeed the God of particles? What does it mean to include particle physics and quantum mechanics into God’s creation and the Kingdom of God? Science provides religion heightened levels of high-order fancy at the crossover of disjointed perceptual and conceptual strata. Perhaps we will all come to the conclusion that matter is spirit or spiritual; and that spirit is matter or material, and to finally square religion with Spinoza’s famous dictum, “god or nature.” My bet, though, is that the view of the world provided for in contemporary science will itself explain or determine nothing. Increasingly, its vision is the vision of a world made more strange and eccentric, not less. The presence of God can only contribute to an intensified sense of strangeness persisting just outside the frame of any scientific world-picture.

Notes

1. See Martin Heidegger, “The Question of Technology,” in Martin Heidegger, *Basic Writings* (New York: Harper & Row, 1977). Remarkably, Heidegger’s critique of technology is shared by no less than Abraham Joshua Heschel, albeit coming to it from Judaic rather than philosophical perspective. See Abraham Joshua Heschel, *The Sabbath: Its Meaning for Modern Man* (New York: Farrar, Straus and Young, 1951).
2. Hal Foster, *The Return of the Real* (Cambridge: The MIT Press, 1996). The writings of Žižek are two voluminous to list here. For readers interested in religion a good place to start is *The Fragile Absolute: Or, Why Is the Christian Legacy Worth Fighting For?* (New York: Verso Books, 2000). The key work of Alain Badiou, *Being and Event*, may be too difficult for general readers, but a good place to start is his *Manifesto for Philosophy* (Albany: State University of New York Press, 1999).
3. Catherine Malabou, *What Should We Do with Our Brain?* (New York: Fordham University Press, 2008); Ray Braisier, *Nihil Unbound: Enlightenment and Extinction* (New York: Pelgrave, 2010). These titles are indicative of a broad interest in science among

practitioners of contemporary continental philosophy, a field that used to have considerable influence on contemporary Jewish philosophy.

4. See Arthur Green, *Radical Judaism: Rethinking God and Tradition* (New Haven: Yale University Press, 2010); Jay Michaelson, *Everything Is God: The Radical Path of Nonidol Judaism* (Boston: Trumeter, 2009).
5. Norbert M. Samuelson, “The Challenges of the Modern Sciences for Jewish Faith,” *CCAR Journal* (Winter 2012): 23.
6. *Ibid.*, 24.
7. *Ibid.*, 24.
8. *Ibid.*, 23.
9. *Ibid.*, 22 (emphasis is mine).