HOW WILL IT ALL END?
Eschatology in Science and Religion

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In retrospect, eschatology has been part of my theological agenda since I began to reflect on theology, some fifty years ago. I recently came upon the essays I wrote for admission to Rabbinical School back in the spring of 1954. To my amazement—I was then a rank undergraduate at McGill University—they were suffused with the issue of messianism. When I arrived at the Jewish Theological Seminary, one of my mentors, Professor Gerson Cohen later to become Chancellor of the Seminary, made an off-hand remark to the effect that every significant Jewish movement had an eschatological impulse at its core. That remark stuck with me and remained one of many issues that I wish I would have been able to explore with Gerson before his untimely death.

Eventually, that impulse culminated in my book-length study of Jewish thinking on the afterlife, *The Death of Death: Resurrection and Immortality in Jewish Thought* (Jewish Lights Publishing, 1997). My original plan had been to write a book on eschatology in general, but I soon realized that it was impossible to embrace the topic in one book. I then focused on what, to me, was the most interesting of the sub-topics involved in Jewish eschatology—what happens to us when we die?

At the same time, I remained puzzled as to why eschatology was so signifi-

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cantly absent from the writings of my contemporaries in the field of Jewish theology. I recall with particular pain my late teacher Abraham Joshua Heschel’s comments in a television interview that he gave just weeks before he died in 1972. Carl Stern, of NBC, asked him—Heschel didn’t know that he was about to die—what do you think is going to happen to you after you die? Heschel responded, “I have so many things to worry about while I’m alive, I’ll let God worry about what happens to me after I die.” How could Heschel not think about what was going to happen to him after he died?

Interestingly, the one exception to this pattern was a book published in 1952 by Will Herberg, Judaism and Modern Man. It is probably not accidental that this was the book that brought me back to Judaism when I was at McGill. Herberg was a disenchanted Marxist which explains why he was interested in eschatology and why he saw Marxist eschatology as an echo of the biblical model.

Equally puzzling to me is why Christian theologians are so preoccupied with eschatology. Why is it everywhere in contemporary Christian theology and so strikingly absent from the writings of 20th century Jewish thinkers? Still more puzzling to me, is why our cosmologists and astronomers are so preoccupied with the question of how it all will end. It’s almost as omnipresent in the writings of astronomers and cosmologists as it is in Christian theologians and has produced a new school of scientists/theologians like Ian Barbour and John Polkinghorne who try to graft a Christian eschatology onto their science.

Why do they care? Why is so much scientific money and energy poured into trying to understand how it will all end in trillions and trillions of years from now?

**Why eschatology?**

The term eschatology refers to that sub-field of theology devoted to the discussion (logos) of the last things (eschatos). It was located within the field of theology because of the assumption that the “last things” would represent God’s ultimate intervention in history. Today, we talk of secular eschatologies—Marxism, for example—and scientific eschatologies. Some would argue that Marxist eschatology is part of what makes Marxism a religion. So, perhaps, the term “secular eschatology” is an oxymoron after all.

But, why the impulse to discuss the last things? Why are we curious as to what will happen at the end of time, or “after” the end of time, as if it is even possible to think of an “after” to the end of time? Why does all of this preoccupy us?
Speaking anthropologically, my sense is that it comes out of the human need to bring cosmos out of chaos, order out of anarchy. Human beings are structuring animals. We need structure. We structure space and we structure time. We create seconds, minutes, hours, days, weeks, months, years, what Heschel so felicitously named, “the architecture of time.” These structures bring order out of anarchy. Homogenized, structure–less time would be chaotic.

Recently, as I was looking for a new academic calendar, I came across one that was comprised of completely blank pages except for the date listed at the top. I said to myself, “what am I going to do with this?” I want a book that says—“7:30, 7:45, 8, 8:15, 8:30, etc.”—because if I have this blank page and I have to make an appointment, let’s say for 8 A.M., where do I put it on the page? And, worse yet, what happens if I put it near the top and I end up having to make a 7:30 appointment? Do I put the 7:30 appointment below the 8 A.M. one with an arrow circling around?

Microscopically, we structure time. We need to know what time it is because otherwise we would be lost, we would be in a state of chaos. Macroscopically, we begin with creation and we end with the age to come, “age to come,” note well, not “world to come.” The Hebrew term Olam ha–bah, strictly speaking, is not the world to come but the eon to come. The word Olam in Hebrew is ambiguous. It can mean “time” and it can mean “world.” But when we refer to Olam ha–bah, as contrasted with Olam ha–zeh, we refer to the age to come as opposed to this current age, the age of history. Or, speaking from the perspective of science, from the Big Bang at the beginning to however the universe will end.

The Middle
One of the more mysterious claims I like to make that if there is no beginning and there is no end then there is no middle. And, if there is no middle then we don’t know where we are; we can’t locate ourselves in time. We are literally lost in a state of anarchy.

The attempt to wrest cosmos out of chaos is one of the classic definitions of religion. Clifford Geertz defines religion as “a system of symbols which acts to establish powerful, pervasive and long lasting moods and motivations in men by formulating conceptions of a general order of existence.” By this definition then, all eschatological definitions become, ipso facto, religious because they are ordering devices. They help us structure our experience. They provide the broadest possible frame for where we are in history, in nature and in society. If we are preoccupied with creation then we must, in a similar manner and for a similar

40 • CROSSCURRENTS
reason, talk about eschatology. If we talk about the beginning, we have to define the end. Otherwise we don’t know where we are.

On the other hand, stemming from a different impulse are what have come to be called utopian eschatologies, visions of an ideal state of affairs. These visions are impelled by the sense that the world in which we currently live is inherently flawed, and that human life as lived in this familiar world, is never totally fulfilled. Contributing to this sense, and speaking not out of logic but out of my very personal gut feeling, is the reality of death.

I’ve always felt that death is the ultimate absurdity, the ultimate eruption of chaos into a human life. I am aware that this is not a popular view and that there are many people who feel that any kind of death is a thoroughly natural and blessed event. It is the way nature revives itself and the way freshness and novelty enter into the world. When I read these descriptions of death, I feel like the tenured professor who has all of these untenured assistant professors waiting for him to move on so that they can become tenured professors as well. Death is natural, welcome and blessed to these assistant professors.

If our lives are inherently flawed and unfulfilled, then it is thoroughly understandable for us to dream of an Eden. Now, we are no longer speaking of a beginning and an end, we are speaking of a specific kind of beginning and a specific kind of end, an Eden at the beginning and an Eden at the end. Time and history are cyclical. We always return to the beginning.

**Beginnings and Endings**

In the Biblical account, creation in Genesis 1 is not *ex nihilo*. It is not something out of nothing, but rather, something out of something. In Genesis 1:1, there were a lot of somethings around out of which God fashioned the world: there was water, there was darkness, there was wind, and there was *Tohu va-Vohu*—what my colleague Yochanan Muffs translates as “chaos shmaos.” Therefore, God’s initial creation was not *ex nihilo* but rather bringing order out of anarchy.

The whole account of creation, the whole Genesis 1 creation myth is a structuring myth: God divides, God separates waters above and waters below, earth and sea, night and day, light and darkness, animals, vegetation, fish, birds, human beings. Everything is ordered. And, at the end, the climax of creation is the Sabbath. On the Sabbath, the 7th day, God rested and the world was perfected. This is interrupted of course, by the two-fold story of rebellion—Adam and Eve and then Cain. Structurally they are one story or two version of the same story. Both are displacement stories: Adam and Eve wanted to be God, Cain
wanted to be his brother. God responds by saying, “If you want chaos, I’ll give you chaos,” whereupon exile and death enter into creation and history begins its course, a course that will end with the restoration of an eternal Sabbath at the end of days. Every Sabbath that we enjoy in history is a recollection of the cosmos that was, and an anticipation of the cosmos that will be. It is both a reminder of God’s creation—Zekher le–ma–aseh berashit—and a foretaste of the age to come—Me–Eim Olam Ha–Bah.

Gerson Cohen used to refer to the Sabbath as a surrogate eschatology; a whiff, in historical time, of what the perfectly ordered world, at the end, might be like. There are other surrogate eschatologies in the Jewish tradition. For example, the last second of the liturgy at wedding service when Jeremiah 33 is invoked. Here too, there is a messianic whiff in the air because those verses were uttered when Jeremiah was in jail and the Babylonians were at the gates, ready to destroy Jerusalem. God reassures the prophet: “Don’t worry, people are going to get married again in the streets of Jerusalem.” Marriage then becomes a surrogate eschatology and the breaking of the glass at the end of the marriage ritual is a return to history. It reintroduces the chaotic element and the couple turns and goes back into the congregation to face history once again.

The same thing happens at the climax of the Passover seder when we bring Elijah, the messenger of redemption, the herald of the Messiah, into our homes. The story of redemption has been told, and we have come out of Egypt once again. Eschatology is alive and well in our dining rooms. Then we open the door and look outside to see that the world is not yet redeemed. This again marks our return to history. This back and forth continues throughout our liturgical year.

Biblical eschatology combines these two impulses. It stems from a need to define a beginning and an end to our experience of time, and it possess a utopian quality. It corrects the flawed nature of our lives in the here and now and permits us to dream of an age when the flaws will disappear.

**Cosmology**

According to cosmologists, the world will end ten thousand trillion, trillion, trillion, trillion years after the big bang (which occurred, roughly, 15 billion years ago). According to one account, after the epoch of proton decay, the only large objects remaining are black holes which eventually evaporate into photons and other types of radiation. At this point, only waste products will remain; mostly photons, neutrinos, electrons and positrons wandering through a universe bigger than the mind can conceive. Occasionally, electrons and
positrons meet and form atoms larger than the visible universe is today. From here, into the infinite future the universe remains cold, dark, and dismal (Time, June 25, 2001). That forecast is based on the assumption that the universe will continue to expand which is, I believe, the reigning assumption today.

However, up until about 10 years ago, the assumption was that gravity would eventually overtake the expanding universe, and the forces unleashed by the big bang, causing the universe to fall back upon itself, end with the “big crunch” and a return to the point of singularity. This may set the stage for another big bang starting the process all over again. This is cyclical time with a vengeance.

There are even less optimistic scientific eschatologies concerning our own planet. We could be hit by an asteroid as we were 65 million years ago when the dinosaurs became extinct. Or, there could be a supernova explosion in our galaxy which would bombard our planet with highly damaging radiation. And, of course, there is the mounting concern over global warming, the evidence for which is now “unequivocal,” as well as all the possible pandemics that we are told might still be unleashed. However, the very processes of cultural evolution, which may bring some of these to pass, also has the potential to provide us with the resources to intervene and limit their effects.

What strikes me about these forecasts is that most deal with inanimate matter—stars, planets and the sun. This is appropriate for physicists and cosmologists because these are the subject matter of their disciplines. Humans are irrelevant to these eschatologies; from the cosmic perspective the presence of humanity in the universe is trivial.

**Jewish Eschatology**

There is no underestimating the influence of classical Jewish eschatology. It effectively shaped Christian and Muslim eschatologies, its two daughter religions, as well as much of the thinking in the west, Marxism, for example. Jewish eschatology was an evolving process. In its most highly developed form, probably during the first few centuries of the common era, it had three dimensions: a universal dimension, a national dimension, and an individual dimension. What is the ultimate destiny of the world? What is the ultimate destiny of the Jewish people? And, what is the ultimate destiny of the individual human being?

The universal dimension is the oldest and the most enduring. Isaiah’s vision, from the 8th century B.C.E., is of a world at peace, with social justice, uni-
universal recognition of the one God, the God of Israel, with people streaming to Zion to learn Torah from Israel. Despite the changes that have characterized all of Jewish thought from antiquity to this day, and despite the denominationalism that has shaped Jewish life throughout the ages, this dream has remained at the center of Jewish eschatology to this very day.

The other two dimensions have not had the same good fortune. On the national level, in the early rabbinic period after the destruction of the Second Temple in 70 C.E., the vision was that Israel would eventually return from exile, as it did after the destruction of the First Temple. Israel would become the master of its own destiny, rebuilding Jerusalem and the Temple, reinstituting the sacrificial ritual, and teaching Torah to the other nations of the world. That vision has died except among circles of religious Zionists, largely the victim of the emancipation and the enlightenment in the early 19th century. Exile is no longer considered to be a punishment and the restoration of the Temple, if prayed for, is a dream deferred to the indefinite future. We’ll let the messiah worry about that one.

Finally, for the individual, in the Pentateuch itself, death is final. Later, at the very end of the biblical period, two doctrines emerge. The first, found in only two biblical texts, Daniel 12 and Isaiah 25–26, is the resurrection of bodies from the earth. The other, the eternity of the soul, is straight out of Plato and not found in Jewish sources until the early rabbinic period. It states that when we die our bodies are buried, but our souls survive in God's company. At end of days, when the messiah will come, God will lift our bodies from the earth, reunite them with our souls. We will be reconstituted as we were during our lifetime on earth, and will come before God for judgment. That conflated notion, spiritual immortality together with bodily resurrection, remained canonical until the 19th century with some significant exceptions, notably Maimonides, who was too good of an Aristotelian to accept the idea of resurrected bodies. However, it too was killed by the enlightenment. Today bodily resurrection is pretty much ignored whereas spiritual immortality remains very much in fashion.

This complex scenario, all three dimensions together, will be brought about by the advent of the messiah, literally “the anointed one.” Either an idealized human being or a semi–divine being, the messiah arrives either by God’s will or by the inherent processes of an increasingly devoted spiritual humanity.

There are two striking contrasts between these two eschatological visions. The first is that the human factor, ignored in the scientific eschatologies, and
properly so, is at the very heart of the Jewish vision. It is in the dream of a world at peace, the end of exile, and the ultimate conquest of death. At the same time, it has no interest in the fate of stars and moons, or photons and neutrinos. And, if it does, it is interesting to note how marginalized it is. There are apocalyptic visions in some of the prophets. Amos 5 and Zechariah 14 speak of a "Day of the Lord," a cosmic catastrophe where day becomes night and night becomes day and the entire cosmos is overturned. These apocalyptic scenarios portray a cosmic revolution that will touch both nature and history.

But these scenarios are marginal to the preeminent eschatological vision in Jewish sources. These sources echo the second creation story, found in Genesis 2 and 3. This creation myth, in contrast to the first in Genesis 1, emphasizes God’s creation of the human person and places the rest of creation—the garden, the animals, and the vegetables—at the service of the human person. Jewish eschatology echoes this second creation story. It tries to recapture, at the end of time, the Eden that God created before the fall. As in Genesis 2–3 where God creates the world to serve humanity, so the dominant eschatological vision locates the human dimension at the heart of this age to come.

The second major difference is that the scientific eschatology, at the cosmic level, is totally predetermined. It is set in motion by the Big Bang and will run its course come what may. Whereas in the biblical account, the end–time will be determined by the will of God, either when the world will have sunk into a state of abominable evil, or, as in a different tradition, when the world will have achieved a level of sanctity. God will then send the messiah to put the divine seal on a world now perfected. Still a third tradition, the kabbalistic myth of the 16th century mystic Rabbi Isaac Luria, assigns the task of redemption to Israel. Now, the performance of the commandments with the proper mystical intent will repair the flaws in creation thus redeeming the world and even redeeming God. The path to redemption is human, though the resources, the commandments, are God’s gift to us.

My major theological argument for an afterlife, whether as resurrection or spiritual immortality, is based on the assumption that God must be more powerful than death. If at the end, death wins out, then death is God and we should worship death. My text is that popular folk song with which we end the Passover seder, Had Gadya. It is the story where my father buys a goat for two zuzim; the cat bites the goat and the dog bites the cat and the stick hits the dog and the fire burns the stick and the water douses the fire and the cow drinks the water and the slaughterer slaughters the cow and the angel of death slaughters the slaugh-
ter. But the author knew not to end it there. He has one last verse in which God slaughters the angel of death. In the hierarchy of power, God is even more powerful than the angel of death and, at the end, death too shall die.

**The Emotional Dimension**

The scientific description of how it will all end, quoted above, provides a precise, clear, and coherent description of the end-time: “cold, dark, and dismal.” “Cold and dark” can be taken as a literal descriptions; cold because it will be physically cold, and dark because of the absence of light. But, dismal? Dismal is a feeling and, likely, reflected how the author felt upon reading or contemplating what these cosmologists said.

Recently, I was struck by something I found in the traditional liturgy, in the Kedusha of the morning service for Sabbath and Festivals. It can be translated as follows:

> O our sovereign. Please manifest yourself from your abode and reign over us because we are longing for you. When will you reign over Zion? Soon, in our own day, for ever and ever. May our eyes see your kingdom as it is expressed in the song of David, your anointed one. God will reign forever from generation to generation, Hallelujah.

This was one of those things I’ve been saying since I was a kid, but only recently was I struck by its poignancy; by the plaintive quality of a community that is waiting for God. Where are you? When are you coming? We’re longing for you.

**Hope**

I first discovered the theological valence of hope in the work of the Christian existentialist philosopher Gabriel Marcel, on whom I wrote my doctoral dissertation. Since then, I have discovered hope everywhere in Christian sources. But, interestingly enough, despite Hatikvah—which is not exactly a rousing religious theological statement—it is nowhere in contemporary Jewish writings. Hope is not wishful thinking, it is not easy optimism. Marcel calls it hope against hope. Hope when the tests results are all positive, when the statistics are all against you. When everybody around you says—“Stop denying.” I portray this in medical terms because existentially, in our lives, it’s precisely in those situations when we find swelling from within us; a yearning, a hope, from some indeterminate
source that somehow we’ll make it. Where does that hope come from? Why is that inbred in us? To me, this is a theological/metaphysical statement about something deeply rooted in the human person. Part of my guess about its origins comes from the rush to label it denial: “Face the reality,” “it’s finished,” “give up hope.” The rush to deny it is the best testimony to its weight and gravity. On a cosmic scale, it is in confronting all of the imperfections in this world, all of the flaws that challenge us on a day to day basis and all of the unfulfilled dimensions of our personal lives, we hope. The ultimate hope is eschatological hope. Somehow, somewhere, there will be an age when these flaws disappear.

**Three Concluding Points**

First, why the difference in emphasis Christian and Jewish eschatology? Why is it omnipresent in Christianity and so subdued in Judaism? I remain puzzled, but, and this is an imperfect answer, perhaps it is because *Halakha*, the system of commandments which the religious Jew is committed to perform, provides the Jew with a realized eschatology. If the goal of an eschatological description is to describe a structured world, then it seems to me that *Halakha* provides that structure in the here and now. It is something that cannot be appreciated by reading a book. The only way one can appreciate it is by living it. And, in doing so, one is provided with a very powerful sense of how the commandments lend structure to every moment of your waking life. As close at it is possible, it eliminates the unpredictable. And, that’s a gift.

That is the reason why, when I talk about eschatology, people say to me: “forget about it, Judaism is a this–worldly religion. We’re not concerned about what is going to happen afterwards, we’re just concerned with what happens in the here and now.” And, of course, it is very much a this–worldly religion. But, we can say that it is a this–worldly religion because Judaism has this very powerful structure at hand. My sense is that Judaism has this realized eschatology in the here and now.

I’m aware of the fact that Christianity also has a realized eschatology, and that “Christ is risen.” Not *has* risen but *is* risen and is present in the life of the Church and in the life of the believing Christian. This is also a realized eschatology. However, my sense remains that there is a qualitative difference in the day–to–day life experience of the Jew.

Second, all eschatological language is inherently and invariably mythic in the academic sense of myth. Rarely has there been a time when science and reli-
gion have had so much in common. The ancient conflict between science and religion is properly behind us. Both disciplines now realize that they deal with realities way beyond the very possibility of any form of human experience. And, both are doing the same thing—trying to explain the world we see by referring to a world we do not see. Both find the ultimate explanation for the immediately visible by postulating a world that is invisible and accounts for why things are the way they are. That’s what myths do, they deal with the invisible to explain the visible.

A number of years ago, the Jewish Theological Seminary gave an honorary degree to an Israeli astronomer. As the faculty was roaming around prior to the procession, I walked over to him and said: “Can I ask you a question? It’s the first time I’ve ever been able to talk to an astronomer. Was the big bang loud?” “Of course not,” he replied, “there was no air so there was no sound.” Then he asked, “Who are you?” After I told him I was a professor, he asked what I taught. I said “theology.” At this point, he smiled and said “You know what? Big bang is much more theology than it is science. Both are poetry.”

I subsequently discovered that an airplane’s black box is not black. This is obvious, if it were black, you wouldn’t be able to find it after a crash. It’s orange. So black boxes are not black, and big bangs are not loud.

Finally, Professor Bob Pollack, in his review of John Polkinghorne’s book, suggests four possible models for the interrelationship of science and theology: either the neutral acceptance of both science and theology; or, the presumption that one of the two holds the more important reality; or, lastly, the active acceptance of both at once. Pollack favors the last of these as does Polkinghorne and most of the representatives of this relatively new school of scientists/theologians which is largely made up of Christian thinkers.

I must confess, however, that I favor the first. My sense is that these are two equally valuable master stories dealing with equally significant realities that, for the most part, do not intersect. The reason for this is hope. There is no room for hope in contemporary cosmology. And, if there is no room for hope, then my life has become absurd. Absurdity is the final verdict. Therefore, it is my conviction that eschatology has to serve as the cornerstone of all theology. Without hope, human life is meaningless. Without hope, creation is meaningless.

The evidence of history is very ambiguous. On one hand, I have that incredible violin solo in the Benedictus of Beethoven’s Missa Solemnis which I can hear daily and cry each time. Or, the creativity that I feel dwelling within me as I
write and the sheer joy that I experience when I teach.

But then, there is that incredible incident when a tree fell on a car speeding down the Saw Mill River Parkway on a beautiful, warm, spring day. No thunder, no lightening, no storm, no winds. Yet, a tree falls as the car drives underneath it. The tree hits the front of the car and two parents are killed while the young child strapped into the back seat survives. Or, the 12–year–old I visit at Memorial Sloan Kettering who is dying of leukemia. Or hurricanes, or holocausts, or our unbelievable inability to prevent famine and mass killings in Africa. Will it all end in a whimper or with a bang? Is it all pointless?

Are we, as Lear says near his death, “like flies to wanton boys that kill us for their sport”? Or, perhaps his final words, which my teacher back at McGill said was the greatest line in all of English poetry: “Nothing, nothing, nothing, nothing, nothing.”

Polkinghorne understands this. He writes that:

If [the universe] simply ends with a bang or collapse or the whimper of decay, it runs into incompleteness. Is the cosmos, after all, as pointless as Stephen Weinberg believes, so that its story is really a tale of chaos? Are the deep order of the world, and the fruitfulness of its history, hints of its being a creation, or are they just happy accidents in a meaningless process? Are human intuitions of hope windows into a divine reality, or are they comforting illusions that offer us delusive support as we battle to survive? If the universe really is God’s creation, the ambiguity of its past history and present prospects will have to be resolved in its final end. In the “Four Quartets,” T.S. Elliot struggled with how meaning is to be found in the co–inherence of beginning and ending. “In my beginning is my end.” The reason that eschatology is such an indispensable element in theological thinking is that it responds to the question of the total meaningfulness of the present creation, a meaning that can only be found beyond science’s extrapolation of contemporary history.3

Notes
1. Clifford Geertz, “Religion as a Cultural System,” in The Interpretation of Cultures, Basic Books, 1973, p.90. Geertz also quotes Susan Langer, who writes that “[Man] can adapt himself somehow to anything his imagination can cope with but he cannot deal with Chaos. Because his characteristic function and highest asset is conception, his greatest fright is to meet with what he cannot construe—the ‘uncanny’ as it is popularly called. It need not be a new object; we do meet new things,
and ‘understand’ them promptly, if tentatively, by nearest analogy, when our minds are functioning freely; but under mental stress even perfectly familiar things may become suddenly disorganized and give us the horrors. Therefore our most important asserts are always the symbols of our general orientation in nature, on the earth, in society, and in what we are doing . . .” Ibid. p. 99.


“A warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global average sea level.”

A summary of the report can be found online at http://www.ipcc.ch/SPM2feb07.pdf.