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There Goes the Universe

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“It would help my shaky nerves if I could dismiss what I now have to think of the air and the sky about and above me.”

—H. P. Lovecraft, “From Beyond”¹

On an ordinary day in Brooklyn during World War II, an ordinary Jewish mother takes her extraordinarily dysphoric son to see a psychologist. —“He’s been depressed,” she tells the analyst. “All of a sudden he can’t do anything.” —“Why’re you depressed, Alvie?” asks the therapist. —“TELL Dr. Flicker,” mom commands her 10 year-old, dull-eyed and slumped on a sofa. —“The universe is expanding,” says the kid. —“The universe is expanding,” says the therapist, tapping his cigarette. —“Well, the universe is everything, and if it’s expanding, someday it will break apart and that will be the end of everything.” —Mom can’t bear it. “What is that your business?” Turning to the therapist: “He’s stopped doing his homework!” —“What’s the point?” says kid, and mom goes apoplectic: —“What has the universe got to do with it? You’re here in Brooklyn. Brooklyn is not expanding!”²

¹ Cited in Thacker, In the Dust of this Planet, 76.
“Nihilism,” writes Adi Ophir, is “the negation of the value...of differences within a given...world, for example...between voting and not-voting, between moving and not-moving, living and not living.”3 For Ophir, this nihilistic stance can be the product either of the installation or the dissolution of a transcendent referent, which renders every ordinary distinction useless. In the case of Annie Hall’s Alvie Singer, it is the expansion and ultimate unraveling of the universe that renders unimportant the distinction between homework and not-homework. Seriously, what’s the point. What’s the difference.

The universe is expanding. Edwin Hubble figured this out in 1924. Until then, everyone who was anyone believed the universe consisted of just the Milky Way: a single, eternally existing island surrounded by an infinite void. Then Hubble, armed with a powerful telescope, a diligent assistant, and a willingness to be horrified, determined that the so-called nebulae—hazy cloud formations scattered through the sky—were not just space dust and not even stars, but rather galaxies. Hubble estimated there were “hundreds of thousands” of them. These days, we can count billions, but what’s the difference. Somewhere between hundreds of thousands of galaxies and billions of galaxies and, Hubble went on to discover, they’re all moving away from each other.

From this insight, all we need to do is play the film backwards to deduce the big bang hypothesis. If galaxies are moving away from each other now, then

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ten years ago, they were a little closer together. A billion years before that, they were closer still. “Oh hey,” a physicist and Roman Catholic priest named Georges Lemaître ventured in 1927, “what if the whole universe, with all its billions of galaxies, were once upon a time crammed into one point?” He brings the idea to Einstein. All that is in nothing at all and then suddenly something, and light from light and this from that and planets from stars and waters from waters and us from not-us…” no, not that,” quips Einstein, “that sounds too much like Creation.”

For decades, physicists tried to find a less biblical story, but eventually they relented, and by the end of the 20th Century, they knew everything there was to know about the birth and constitution of the universe. Well, everything after $10^{-34}$ seconds—the only real problem with the big bang hypothesis was that it couldn’t explain what banged. Or how. Oh, and also, there was this stuff called dark matter, discovered in the 1970s, that seemed to be taking up 25% of the universe—nobody knew what that was, either. But apart from the beginning of the universe and about a quarter of all the mass-energy in it, we were doing great. All we needed to figure out was the “deceleration parameter.” You see, what Alvie Singer didn’t understand was that, while the universe is expanding, it is expanding more and more slowly over time, losing momentum from the initial

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bang. So no need to panic, back to your homework; the universe is expanding, but it’s slowing down—all we need to know is how fast it’s slowing down.

And then in 1998, two independent teams of researchers discovered to their mutual horror that the expansion isn’t slowing down—it’s speeding up. Distant galaxies are moving away from us faster and faster with each passing moment, which is to say the space between them is growing exponentially—faster, in fact, than the speed of light. And the culprit, a subtly racialized placeholder for something unknown, sinister, and destructive, is what physicists call “dark energy.” According to the now-standard model, dark energy will take over more and more of the universe as time goes by, the expanding space ripping galaxies out of our view. Eventually, galaxies themselves will be pulled apart, solar systems will unravel, and all the matter in the universe will dissolve into a lifeless, ever-growing, dark-energetic void. In other words, the universe that began with the big bang will end with what cosmologists call “the big whimper.”

So this is the way the world ends, not with a bang but a whimper, and the physicists are frankly horrified. Robert Kirshner calls the final scene “lonely, cold, dull, and dark.” Brian Greene calls it “vast, empty, and lonely.” Seth Shostak likens it to “an eternity of hell, without the fire,” and Brian Schmidt, who discovered the stuff in the first place, calls it “the coldest, most horrible end to the universe I can think of. I don’t know,” he says. “It’s creepy.”

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Following the lead of Eugene Thacker, we might connect this creepy, pervasive, indifferent, and auto-compounding force of dark energy to Schopenhauer’s *Wille*, which it both resembles and exceeds. “‘To those in whom the Will has turned and denied itself,’” Thacker quotes Schopenhauer, “‘this very real world of ours with all its suns and galaxies is—nothing.’” What we confront in dark energy is a *Wille* that annihilates the world for us, which is to say without us—a Will so demonic that it unravels the “very real world with all its suns and galaxies,” regardless of how we react to it.

So at the risk of playing the familiar game of nihilistic one-upsmanship (that macho-man pile-on from Fichte to Hegel through Nietzsche and Heidegger), I’d like to suggest that the dark-energetic whimper presents us neither with the world-for-us nor with the world-in-itself, nor with the world-without-us. It’s a world-without-world, a world without the spatial or temporal differentiations that would make a world a world. To Thacker’s crucial question, then, “how does one rethink the world as unthinkable,”? I would like to *add* the question—not as a replacement, but a dangerous supplement—“and how does one think the world as unworlded?” Specifically, does this scene of astrophysical nihilism open the kind of revolutionary possibilities that Ophir, Nitzan Lebovic, and Roy Ben-Shai attribute to *political* nihilism, or does it end up reaffirming

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7 Thacker, 48.
scientific business as usual? Does the dark-energetic *nihil* transform what is
called thinking, or entrench it as it is?

In order to examine these possibilities, let’s fast-forward to a moment not
at the end of the world but *near* it, a moment maybe “one or two trillion years
from now”\(^8\) (what’s the *difference*), when our sun is long gone, the Milky Way
has collided with Andromeda and a few other neighbors, and all other galaxies
have disappeared from view. If there were any observers like us left, all they
would see would be their own supercluster, suspended in an endless sea of empty
sky. With no other galaxies in the observable universe, physicists in this “placid
island of ignorance”\(^9\) will be back where we were at the turn of the 20th century,
believing themselves to be the only galaxy in existence. Moreover, they will
believe their universe to be eternal—after all, if you can’t see other galaxies, then
you can’t see they’re receding, so you can’t reason your way back to the big bang.

Dark energy therefore confronts us not only with the unknown, but with
the unknowable, radicalizing Schopenhauer’s genre of cosmic pessimism. It
foretells a future in which we will have lost the past, a future in which the past
for all intents and purposes will not *have been*, a future, that is, with no future—
just an eternal here/now of stasis, suspension, and...not learned ignorance, just
plain *ignorant* ignorance. No matter how powerful our telescopes and
spectrometers, observation and experiment will confirm again and again that we

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\(^9\) Schopenhauer in Thacker, 20.
are a singular, eternally existing galaxy, even though that won’t be true. Trillions of years of being lonely and wrong, and then even that will unravel and okay, Alvie Singer was right after all: “that’ll be the end of everything.”

So what do we do in the face of this imminent world-without-world? Possibility #1: the consolations of philosophy. Enter Lawrence Krauss, cosmologist and Director of the Origins Project at Arizona State University, who assures himself and his readers in the face of the forthcoming scene of cosmic ignorance that “we live at a very special time—the only time when we can observationally verify that we live at a very special time!” Lawrence Krauss, *A Universe from Nothing: Why There Is Something Rather than Nothing* (Atria, 2013), 118. Why is this time different from all other times? Because it’s the only time when we are sufficiently free from the clutches of dark energy to know the truth, which is to say the big bang and subsequent stages of cosmic development. Krauss’s strategy, in short, is to glimpse the nihil in order to reaffirm the astrophysical “norms and conventions”11 that led him there in the first place. A bracing dose of nihilism to shore up the exceptionalism of the human and the sovereignty of science.

Possibility #2: the horror of philosophy, which an older idiom might call the wonder of philosophy. Enter Marcelo Gleiser, cosmologist at Dartmouth University and regular NPR blogger, who proceeds from his own vision of the unworlded, ignorant world to confront what Eugene calls the “limitations and

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constraints” of thinking itself.\textsuperscript{12} If those future physicists could produce observationally coherent visions of the cosmos that \textit{we} know to be wrong, then what might be doing the same thing to us? What is it we’re not able to know by virtue of the very \textit{conditions} under which we know? “The lesson here is distressing,” Gleiser writes. “Not only are there causal and technological limits to how much we can know of the cosmos, but [the] information we \textit{do} manage to gather may be tricking us into constructing an entirely false worldview.”\textsuperscript{13}

In the face of the cosmic \textit{nihil}, the strategy \textit{here} would be, not to return to the human and his science, but to rethink the scope and practices of thinking—in this case, the norms and conventions of purportedly fundamental physics, with its purportedly post-religious and ethically neutral access to the World As It Actually Is. For Gleiser, thinking into this nihilism might even lead to a kind of “joy” in what we \textit{are} able to know, whether or not such knowledge corresponds to a cosmic Real. Such joy would exist not \textit{against} what Eugene calls the horror of philosophy, but right in the midst of it, in and through it—and in this sense, it might bring us back to that old terrified wonder philosophers tell us we feel when the ordinary becomes strange. The horrified awe that nothing can be, yet things somehow are; that we can’t know a thing, and yet some things we know. Facing the world-without-world, it seems that the world-in-itself might be nothing more than the world-for-us, and the world-for-us—we \textit{know} this—is

\begin{enumerate}
\item Thacker, 2.
\item Gleiser, 92.
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rapidly becoming a world-without-us. So the only possible question is not what the world is, but what it might yet be, what we might yet make of it, what even the physicist might value, revere, and create.