Three Universe Stories: Beyond Creationism and Scientism: CosmoErotic Humanism

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The Evolution of Conscious Evolution

CosmoErotic Humanism, as we are describing it here and in other writings, is the next step after what has been described as *Conscious Evolution*. My (Marc's) dear friend and evolutionary partner (and co-author of this short book), Barbara Marx Hubbard, has been called the *mother of Conscious Evolution*.

In our collaboration, she shared so much that was of value and wonder, and we were also able to evolve together the presentation of Conscious Evolution. In the old presentation, as Barbara articulated it over the years, *unconscious evolution* meant two things:

First, evolution until now has been unaware of itself.

And *second*, evolution until now has been a primarily random process, or what Barbara called *evolution by chance*.

In this early articulation, these two points reverse themselves in Conscious Evolution:

First, evolution has only now become conscious of itself through human awareness of evolutionary processes.

And *second*, we can now move from what Barbara called, *evolution by chance* to *evolution by choice*.

This early understanding is important, inspiring in certain ways, and true, but, as we together realized over many conversations, only partial.

So, we must *evolve* our understanding of Conscious Evolution.

In our new understanding, by Conscious Evolution we do *not* mean that evolution becomes conscious of itself for the first time through us.

Rather, the new vision expresses itself in at least five distinct ways:

First, from the beginning, evolution possesses its own intrinsic consciousness. In other words, evolution is inherently—at some level of depth—intelligent or conscious.

Second, the consciousness that inheres in evolution is itself evolving. This process has evolved through several stages:

from matter to life to mind —and through each of their sub-stages e.g., within matter, the evolution from elementary particles to atoms to molecules.

At each state, as Reality dances into novel becoming, consciousness itself is clearly evolving.

This does not mean that evolution is a linear movement of ever-greater consciousness in all regards, in which the earlier is always lower and the latter always higher.¹ According to a vast literature based on empirical observation, various forms such as bacteria, anthills, and beehives seem to have depths of superorganism consciousness that human beings have not (yet) cultivated.

Indeed, the simple exercise of epistemic humility² reminds us that we do not have interior access to the quality of consciousness of any dimension of Reality other than our own.

At the same time, there are dimensions of consciousness that most definitely seem to evolve in some genuine fashion.

For example, there seems to be a clear evolution of the potential for ever-deeper goodness, truth, and beauty. To the best of our knowledge, there are no hospitals caring for the

¹ In Hebrew wisdom texts, for example, thinkers and evolutionary mystics point to the dialectic between what is called *Yeridat Hadorot*, the *descent of the generations*, as history moves away from the original revelations of Sinai (1200 BCE) and the evolutionary movement of ever-clearer discernments of Reality in both its interiors and exteriors. Historians David Graeber and David Wengrow, writing in their opus *The Dawn of Everything*, similarly complexify the simple linear view of evolutionary emergence.

² See the short section on "Epistemic Humility" as part of this essay below.

vulnerable animals in the wild, nor is there a general felt sense of kindness, care, or sacrifice for the sake of a stranger who is not of one's kind.³

Moreover, in the worlds of matter and life, there do not seem to be creations of art, drama, music, literature, or the like, as we know them in the human world of value, including the classic triad of goodness, truth, and beauty. There also does not seem to be a process that transmits and evolves truth through bodies of knowledge, like science or moral philosophy.

It is therefore fair to say that not only does evolution possess innate consciousness at the cellular level,⁴ but there is also an evolution of consciousness. These first two features significantly evolve the original version of Conscious Evolution, which suggested that evolution suddenly awakens only through human consciousness.

Third, in the evolutionary process, human beings eventually emerge. In specific ways,⁵ we are more evolved or advanced expressions of consciousness than anything preceding. As such, we have the capacity to become aware of the entire evolutionary process. Significantly and beautifully, the human being is now, for the first time in history, aware of the entire evolutionary story, with the capacity to tell that great story. Humans are awakening to the realization that we are Conscious Evolution in person. Evolution may have always been intelligent or conscious, but until now, we had no sense that the evolutionary story was being told.⁶

Fourth, as part of that process, human beings have become self-aware to the extent that we consciously realize that we are part of the process. Humans at the leading edge of

³ The cute videos of animals nursing babies of another species are exactly so adorable because they are clearly exceptional, and we don't know the mechanism behind that phenomenon. And yet, they point to the first sparks of this sort of behavior in the animal world. In general, as we point out in our writings on value, there is both continuity and discontinuity between matter, life, and mind. See, for example, Marc Gafni & Zachary Stein with Ken Wilber, *First Principles and First Values: Towards an Evolving Perennialism: Introducing the Anthro-Ontological Method* (forthcoming 2022).

⁴ And even, perhaps, the molecular level. On this topic, see Gafni and Hubbard with Stein, the five-volume series *The Universe: A Love Story—First Meditations on CosmoErotic Humanism in Response to the Meta-Crisis*—all of these published by World Philosophy and Religion Press, in Conjunction with Waterside Press and Integral Publishers, 2023.

⁵ There are also unique qualities of depth consciousness that might be available in the non-human world, which the human being can neither discern nor access.

⁶ It is of course possible that the evolutionary story was and is being told in non-human forms that we cannot access or discern.

consciousness self-identify *as* evolution. And more particularly, as we examine in other writings on CosmoErotic Humanism, we each realize individually that *I am an irreducibly unique expression of evolutionary intelligence, desire, and intimacy.* In other words, I am not just evolution generically; rather, *I am the personal face of the evolutionary impulse.*

Fifth, all these uniquely human qualities have together generated the Anthropocene, a global civilization with exponential technologies, in which human choice has virtually unlimited impact on the course of evolution. And humans are becoming increasingly conscious of the power of choice.

This is clearly a new level of Conscious Evolution that is just coming alive in this period of human history. In that sense, it is accurate to say that evolution is becoming aware of itself in what may be a qualitatively different way than ever before.⁷

But this is the emergence *not* of Conscious Evolution itself, but of a qualitatively new *stage* of Conscious Evolution, in which human choice can either create a more beautiful future than we have ever known... or destroy the future itself.

This next iteration of Conscious Evolution is infinitely more hopeful (and accurate) than the old view of Conscious Evolution. For in the old view, human consciousness was alone in the Cosmos, alienated from the evolutionary process, which was said to be *unconscious*. In the newer vision, human consciousness is rather the *next* stage of ongoing emergence in a fundamentally conscious universe.

Human consciousness both participates in and emerges from the larger Field of Cosmic Consciousness. Thus, human consciousness can align with, and be supported by, the inherent consciousness of Cosmos. The human being becomes not the inventor of the Good, the True, and the Beautiful, disassociated from the larger Field of Cosmos, but rather the evolutionary expression of the next stage of value, unfolding in, as, and through human consciousness. This is the realization that we are *participating* in Cosmos, not alienated from it.

⁷ Of course, as pointed out earlier, we do not have absolute clarity on this claim, because we do not know the interior consciousness of, let's say, cells at an earlier stage. It is true that cells do not seem to be writing poetry, but they *are* rewriting their own genetic code when in crisis, and the quality of consciousness required for that is unclear to us, as we have no direct access to it. On cells and their implicit consciousness, see James Shapiro, *Evolution: A View from the 21st Century Evolution*, 2011, FT Press.

Let's recapitulate this vision of Conscious Evolution.⁸

While there is a methodology of evolution, which includes a dimension of contingency and chance, a dimension of non-randomness is also built into the Heart of Cosmos.⁹ We speak here not of a cosmic vending-machine God who is outside the world, waving a wand and creating fixed structures and determining all events in advance. This is rather an evolutionary understanding of the Divine, whose Face is the innate, inherent, ceaselessly creative intelligence of the evolving Cosmos—which, in much of its significant expression, is highly conscious and therefore non-random in the extreme.

Here is but one of countless possible examples of this:

Millions of years ago, the force of evolution generated *mitosis* and *meiosis*,¹⁰ the two forms of cellular reproduction that are the true evolutionary drivers of basic biological lifeforms. These are fundamental processes of life that came into play long before there was a human neocortex anywhere on the horizon. The generator of *mitosis* and *meiosis* was clearly not merely blind chance, without any interior dimension of consciousness. No, these processes are so dazzlingly precise and sophisticated that even our most powerful supercomputers have not been able to even come close to generating them.

Like the entire evolutionary process itself, *mitosis* and *meiosis* disclose levels of selfevident, elegantly resplendent, and complex symmetry and beauty, at which one cannot but gasp

⁸ This important evolution of Conscious Evolution was formulated in a recent internal memo/white paper (2017) on Conscious Evolution written for the members of our activist think tank, The Center for Integral Wisdom (now being renamed to Center for World Philosophy and Religion, and our Foundation for Conscious Evolution. Here is a portion of that writing, which we will cite at some length because of its relevance. We will expand these ideas in future work, but this section will be enough to convey what we think is a more evolved understanding of Conscious Evolution. For now, suffice it to say that processes like mutation, which are dogmatically considered to be somehow random, are in fact not merely the blind chance of exterior mechanisms. Rather, mutations are exterior expressions of a deeper interior Eros—intimate plays of creativity seeking ever-new qualities and depths of intimacy. On this understanding of mutation, see the extended essay in the prologue to, Gafni and Hubbard, *The Future of Relationships, From Role Mate to Soul Mate to Whole Mate,* World Philosophy and Religion Press, in Conjunction with Waterside Press and Integral Publishers, 2023.

⁹ We use the word *Cosmos*, following the ancient Greek meaning of the term, to indicate not only the physical universe, but also Reality in all its interior and exterior dimensions.

¹⁰ *Mitosis* is the process of cell division. All the different types of cells in a body can undergo *mitosis*. *Meiosis* is the process of producing eggs and sperm in sexual reproduction.

with awe. Paraphrasing physicist David Bohm, *mitosis* and *meiosis* make no sense independent of the innate in-formational intelligence of evolution's implicate order.¹¹

The attempt to dismiss the inherent intelligence of Cosmos as mere chance, by what the epic mathematician and philosopher of science Alfred North Whitehead identified as the *blind faith* of dogmatic materialism, defies both simple and statistical facts—and has nothing to do with genuine science.¹² It is not the result of investigation, nor the fruit of the scientific method. This kind of dogmatic claim is an expression of *scientism*, not real science, and is no less a fundamentalist dogma than that asserted by the premodern religions in their most distressing modern disguises, including the creationist claim of a non-evolutionary, *de facto* intelligent design of Reality from a God who is utterly transcendent to Cosmos.

Moreover, the denial of the self-evident *telos* of Cosmos, driven by its own inherent evolutionary attractors, flies in the face of *Occam's Razor*, as expressed in the Latin motto,

¹¹ As noted in the fn. above, on the 2017 internal memo/white paper, an interior intelligence is not, in any formal sense, in opposition to mutation and selection as exterior mechanisms of evolution.

¹² See Whitehead's Critique of Scientific Materialism, e.g., in his Science and the Modern World, New York: The Macmillan Company, 1925, New York: The Free Press, 1967. See also leading Whitehead Scholar, David Ray Griffin, Religion and Scientific Naturalism: Overcoming the Conflicts (Albany, NY: State University Press, 2000). See also Sheldrake's important book critiquing the dogmatic materialism of science, The Science Delusion, by R. Sheldrake, 2012, First Edition, Coronet. See also, for example, Rolston, Holmes. "F/Actual Knowing: Putting Facts and Values in Place." Ethics and the Environment 10, no. 2 (2005): 137-74. http://www.jstor.org/stable/40339107. See also III, Holmes Rolston. 2012. A New Environmental Ethics. Abingdon, Oxon: Routledge. See also Thomas Nagel, Mind and Cosmos: Why the Materialist Neo-Darwinian Conception of Nature Is Almost Certainly False (Oxford University Press, 2012). See also Clayton, Philip. "Unsolved Dilemmas: the Concept of Matter in the History of Philosophy and in Contemporary Physics." Information and the Nature of Reality, n.d., 38-62. doi:10.1017/CBO9780511778759.003. See also Street, Sharon. "A Darwinian dilemma for realist theories of value." Philosophical studies (2006): 109-166. See also Jaworski, W. (2016). "Why Materialism Is False, and Why It Has Nothing To Do with the Mind." Philosophy, 91(2), 183-213. doi:10.1017/S0031819116000036. See also Pandora, Passia. (2019). "Tearing the Fabric: a Critique of Materialism." The Arbutus Review. 10. 52-65. 10.18357/tar101201918931. See also Wallace, B. Alan, "Confusing Scientific Materialism with Science," The Taboo of Subjectivity: Towards a New Science of Consciousness (New York, 2004; online edn, Oxford Academic, 3 Oct. 2011), https://doi.org/10.1093/acprof:oso/9780195173109.003.0008, accessed 29 Nov. 2022.

simplex sigillum veri (The simple is the seal of the true), inscribed in large letters in the physics auditorium of the University of Göttingen.¹³

Science appropriately rebelled against the medieval God. It was and is a crucial battle for the sake of the Good, the True, and the Beautiful. Evolutionary mystic Abraham Kook beautifully described this holy rebellion of science against the corruption of truth in the premodern religions as *Heresy which is Faith*.¹⁴

But science itself now needs to evolve.

We need to say to science:

The God you don't believe in doesn't exist. But beware, men and women of science, of becoming the new oppressor, who downloads depression and malaise into the Heart of Reality by claiming that Cosmos is driven by pure chance and ignoring the self-evident inherent creative erotic intelligence which animates the self-actualizing Cosmos with inherent evolving design.

As we have often discussed with our colleague and philosopher of science Howard Bloom, Reality is not only moved by the causal push of the past. Cosmos is drawn forward by the causal pull of the future.

There is a self-evident *telos*, or direction, inherent to Reality, and it is time for science to disambiguate the battle against fundamentalist religion from its own fundamentalist claim that rejects the obvious, innate *telos* of Cosmos.

¹³ This is a paraphrase of Werner Heisenberg, who made similar points in much of his writing. See *Across the Frontiers*, by W. Heisenberg, 1974, Harper & Row. On Heisenberg's understanding of the revelatory power of simplicity and beauty, see also *Physics and Beyond: Encounters and Conversations*, by W. Heisenberg, 1971, Harper & Row. The German title of the book conveys more of its content, *Der Teil und das Ganze = The Part and the Whole*. This citation is from a conversation between Heisenberg ad Einstein: "I [Heisenberg] *believe, just like you* [Einstein], *that the simplicity of natural laws has an objective character, that it is not just the result of thought economy*. *If nature leads us to mathematical forms of great simplicity and beauty—by forms I am referring to coherent systems of hypotheses, axioms, etc.—to forms that no one has previously encountered, we cannot help thinking that they are 'true,' that they reveal a genuine feature of nature*. [...] You may object that by speaking of *simplicity and beauty of mathematical schemes which nature presents us.* You must have felt this too: the almost frightening simplicity and wholeness of the relationships which nature suddenly spreads out before us." [I (Marc) thank my student and colleague Kerstin Tuschik for this reference.]

¹⁴ See Orot Ha'Emuna, 25, by Rav Abraham Kook, 1995, Jerusalem.

Science brilliantly describes some of the ways that matter, energy, and life operate in the exterior Cosmos, deploying its unique methods of measurement, including mathematical abstractions and instrumentation. But as complexity theorist Stuart Kauffman has progressively demonstrated, mathematics by itself is insufficient to explain the world of life.^{15 16}

As the leading edges of evolutionary thought, particularly in microbiology, such as Barbara McClintock, Lynn Margulis, Denis Noble, James Shapiro,¹⁷ have made clear, the sorting mechanism of natural selection and random variation by themselves (without any interior consciousness) are insufficient to account for life.

We will return to this important strand of thought, but for now, suffice it to say that only a non-scientific dogmatic materialism that is willing to fly in the face of incontrovertible evidence would suggest that Reality is *not* inherently self-organizing or self-designing to ever deeper and higher levels of dazzling depth, complexity, and consciousness.

¹⁵ Reinventing the Sacred: A New View of Science and Reason, by S. Kauffman, 2008, Basic Books, reviewed in Science 320 (5883), pp. 1590-1591, by Denis Noble, on 20 June 2008, DOI: 10.1126/science.1159912. See also Kauffman's next steps in this direction in his later work, A World Beyond Physics: The Emergence and the Evolution of Life, by S. Kauffman, 2019, Oxford University Press.

¹⁶ Pure mathematics is pure philosophy invented by humans. That mathematics is useful at all in physics and other natural sciences is a miracle and can only be explained by Anthro-Ontology. No animal (or other being) is consciously calculating, even if it appears to be so from a human perspective (for example, in the measurements of an anthill). So, why can mathematics explain or predict anything in the natural world? Why is it useful? Because the human being, anthro-ontologically, has access to the way the world functions and can express that in language—for example, in the language of mathematics. By Anthro-Ontology we mean that the ontology of Reality, some dimension of *gnosis* about the true nature and value of things, resides in human beings. Because human beings are not alienated guests in Reality but rather participants in the Field of Reality. We not only live *in* the universe, but the universe also lives in us. On Anthro-Ontology, see Marc Gafni & Zachary Stein with Ken Wilber, *First Principles and First Values: Towards an Evolving Perennialism: Introducing the Anthro-Ontological Method*, 2023. See also, Gafni and Stein, *From TechnoFeudalism to Thanos: Designing Reality as a Skinner Box—The Surreptitious Triumph of Society's Hidden Architects B.F. Skinner and Alex Pentland*, 2023. See also, the five-volume series *The Universe: A Love Story—First Meditations on CosmoErotic Humanism in Response to the Meta-Crisis*—all of these published by World Philosophy and Religion Press, in Conjunction with Waterside Press and Integral Publishers, 2023.

¹⁷See Perry Marshall's excellent academic bibliography on this research and more at the end of his *Evolution 2.0: Breaking the Deadlock Between Darwin and Evolution*. See especially his important appendix on randomness and non-randomness.

Pulled by the Future: Emergence Theory and the *Telos* of Reality Moving Toward Greater Wholeness and Consciousness

As Alfred North Whitehead continually reminds us, each new level of emergent evolution is clearly not only the result of prior causes, but of the inherent evolutionary attractor toward tomorrow.¹⁸

This notion of synergistic emergence is the current backbone of leading-edge evolutionary science. By definition, emergence is inexplicable without a larger inherently selforganizing movement toward ever-deeper patterns of complexity, coherence, relationship, and elegant order. Each new whole is, at every level of Reality's emergence, greater than the sum of the previous parts. The qualities of the whole cannot be fully explained by the qualities of its parts. The very nature of evolutionary emergence is that yesterday contains insufficient

¹⁸ See for example the excellent series of essays by leading Whitehead scholar, David Ray Griffin, *Religion and* Scientific Naturalism: Overcoming the Conflicts, 2000, SUNY Press, especially Chapters One, Four, and Eight. There are, of course, also exterior mechanisms for this pull. For example, soon after the first emergence of living cells on the planet, during what was later called the oxygen crisis, which we have mentioned in other writings, e.g., in the section "Single-Celled to Multicellular Life-The Evolution of Relationship" of Prologue to Gafni and Hubbard, The Future of Relationships, From Role Mate to Soul Mate to Whole Mate, World Philosophy and Religion Press, in Conjunction with Waterside Press and Integral Publishers, 2023, about 95% of all life was destroyed. Only the few cells that learned to survive in the oxygen-poisoned environment-and later learned to breathe the oxygen-survived and created that next level of evolution... The pull of the past was strong and wasn't easy to overcome-all the cells that were still best suited for the earlier environment didn't survive. At the same time, mutations that have always been (creatively) at play-new intimate connections between the parts always creating new wholes—were now selected for (in this new environment), and both, the new environment, the already existing mutations, and the selection process together, pulled the surviving cells towards the future... As we said elsewhere, in the Prologue to Gafni and Hubbard, The Future of Relationships, From Role Mate to Soul Mate to Whole Mate, World Philosophy and Religion Press, in Conjunction with Waterside Press and Integral Publishers, 2023, science and culture incorrectly rate a mutation as successful or not, in retrospect, through the lens of our win/lose success metrics. In truth, every mutation is an intimate play of the involved molecules in the genes. Indeed, every mutation is an expression of a new configuration of intimacy—a new piece of art. Even a cancer cell. But then, in a system that is fully alive and whole in its Eros, the wondrous immune system seeks, desires, is inherently allured, to interweave the cancer cell in the larger whole. It is when that larger intimate interweaving fails that the destructive cancer cell is unleashed. This, of course, is a very specific window into cancer. For a deeper dive into the root causes of cancer, see Perry Marshall in Evolution 2.0: Breaking the Deadlock between Darwin and Design. Dallas TX: BenBella Books; 2015, pp. 226-228. Marshall integrates key research which understands that cancer is an expression of the pathological autonomy of the evolutionary impulse in cancer cells, an autonomy that disassociates from the larger will of the total body organism. What happens in the immune system of the body also happens in any kind of ecosystem. But then, the ecosystem changes-and with it, the environment for our mutated cells-and all of a sudden, other kinds of mutations (pieces of art) survive and reproduce. Indeed, the process of mutation is not only not at odds with, but fully congruent with an intimate, erotic, and intelligent Cosmos.

ingredients in its prior parts to explain the wholeness of today. Nevertheless, that new wholeness is generated.

Reality is drawn forth by its own inherent *telos* toward ever-deeper and ever-wider wholes. In that precise sense, the interior experience of every human life is both evidence and expression of the entire evolutionary process.¹⁹ We human beings, like all of evolution, are defined not only by the memory of our past but by the memory of our future. Both materialist psychology and evolutionary science are just now, at their leading edges, beginning to correct their shared pivotal mistake, the notion that today is determined only by yesterday, instead of also being drawn toward transformation by the call of tomorrow.²⁰

This, of course, does not mean that previous stages derive their value only as instrumental handmaidens to later stages. To borrow Holmes Rolston's distinction, plants and animals have not only instrumental value but *intrinsic* value.

As well, this view does not suggest a kind of Pollyannaish notion of progress of the kind so often evinced by the likes of Peter Diamandis and the techno-optimists.

Every new level of emergence brings with it new potential pathologies. That is what we mean when we say that exponential tech creates potential exponential suffering and even extinction. Nuclear drones are more destructive than bows and arrows.

And yet, the inherent *telos* of evolution is clear. Reality moves from elementary particles to bacteria to Bach, from mud to Mozart, from matter to life to mind, drawn forward by a self-evident inherent *telos* toward ever-increasing levels of wholeness. This is not merely the result of yesterday's causation but the pull of the future.

¹⁹ For more on this core notion that clarified human interiors disclose some of the interior face of the Cosmos, see the section "The Interior Sciences: Anthro-Ontology," in the five-volume series *The Universe: A Love Story—First Meditations on CosmoErotic Humanism in Response to the Meta-Crisis*, by Gafni and Hubbard with Stein, World Philosophy and Religion Press, in Conjunction with Waterside Press and Integral Publishers, 2023.

²⁰ In psychology, see for example, Martin E. P. Seligman, Peter Railton, Roy F. Baumeister), Chandra Sripada, *Homo Prospectus*, Oxford University Press Inc; 1st edition (2016). In evolutionary science, see for example, Stuart Kauffman, *A World Beyond Physics: The Emergence and Evolution of Life*, Oxford University Press; 1. Edition, 2019.

In this light, we argue that neo-Darwinian theories are fatally limited in their explanatory power, but not entirely wrong.

The picture painted by this view has been exploded in the last few decades of scientific research, particularly in the realm of microbiology, information theory, systems theory, and its daughters—complexity and chaos theory. We will just touch for a moment on microbiology and information theory to offer a fragrance of the worldview-transforming significance that the shift away from the old neo-Darwinian synthesis²¹ implies.

Darwin was absolutely correct about the fact of evolution and its role as a natural and inherent process in Cosmos. But the neo-Darwinian materialist synthesis, which for a hundred years has served as cover for reductive materialism, is now officially dead for anyone who is seriously following the developments in evolutionary sciences, where the old synthesis is seen as insufficient to explain the mysteries of consciousness.²²

It is quite clear that the core context and trajectory of evolution is animated by the *ceaseless creativity* of Cosmos,²³ with its inherent *telos* and inherent Eros, that we live in what we might call a *Telerotic Universe*, and that consciousness is the very Heart of Cosmos.

²¹ By *neo-Darwinian synthesis*, we are referring to *neo-Darwinism*, which has also been called the *modern evolutionary synthesis*, which generally denotes the integration of Charles Darwin's theory of evolution by natural selection, Gregor Mendel's theory of genetics as the basis for biological inheritance, and mathematical population genetics. As such, it is deeply materialist, as it leaves out all interior dimensions, as seen through what we have called *the Eye of Consciousness*.

²² On non-randomness at the core of Cosmos, see *The God Problem; How a Godless Universe Creates*, (p.1-42), by Howard Bloom, 2016, Prometheus. See also bacterial geneticist at the University of Chicago, James A Shapiro, *Evolution; A View from the 21st Century*, 2011, Pearson Education. See Perry Marshall, *Evolution 2.0: Breaking the Deadlock Between Darwin and Design*, 2015, BenBella Books, which is a more popular restatement of James's work integrating many other key voices from within the sciences who have roundly refuted the standard narrative of the random Cosmos. See also *Information Theory, Evolution, and the Origin of Life*, Hubert Hockey, 2005, Cambridge University Press. See also *Dance to the Tune of Life: Biological Relativity*, by Denis Noble, 2016, Cambridge University Press. Noble built the first computer model of the human heart and, based on his heart research, definitively refutes the standard Neo-Darwinian narrative. Finally, see "Appendix One, All About Randomness," in Perry Marshall's aforementioned, *Evolution 2.0.* The presentation below of what Marshall called *The Five Blades of the Evolution 2.0.* Swiss Army Knife is directly drawn from Marshall (*Evolution 2.0*, p.144).

²³ See, in this regard, the important works of Stuart Kauffman, in his *The Origins of Order: Self Organization and Selection in Evolution*, 1993, Oxford University Press, and *At Home in the Universe: The Search for Laws of Self-Organization and Complexity*, 1995, Oxford University Press, as well as many elaborations and deepening of these core realizations in his later works, including *Reinventing the Sacred: A New View of Science and Reason*, by S. Kauffman, 2008, Basic Books, *Humanity in a Creative Universe*, 2016, Oxford University Press and, finally, *A World Beyond Physics: The Emergence and the Evolution of Life*, 2019, Oxford University Press.

Mechanisms that support those forms of Eros include:

- \circ Transposition (cells rearranging their own DNA)²⁴
- Horizontal gene transfer (cells exchanging DNA)²⁵
- Epigenetics (cells switching DNA sequences on and off, through which organisms are passing acquired traits to offspring)²⁶
- Symbiogenesis (organisms merging together)²⁷ and
- \circ Genome duplication (two species merging to form a third).²⁸

²⁵ See, for example, Yandell, K. (2013, July 9). "Bacterial Gene Transfer Gets Sexier." *The Scientist*. Retrieved from http://www.the-scientist.com/?articles.view/articleNo/36410/title/Bacterial-Gene-Transfer-Gets-Sexier/—quoted from Marshall, Perry. *Evolution 2.0* (p.356). BenBella Books. Kindle-Version.

²⁶ See, for example, Heijmans, B. T., Tobi, E. W., Stein, A. D., Putter, H., Blauw, G. J., Susser, E. S., ... Lumey, L. H. (2008). "Persistent Epigenetic Differences Associated with Prenatal Exposure to Famine in Humans." *Proceedings of the National Academy of Sciences of the United States of America*, 105, 17046–17049—quoted from Marshall, Perry. *Evolution 2.0* (p.349). BenBella Books. Kindle-Version. See also, Rapp, R. A., & Wendel, J. F. (2005). "Epigenetics and Plant Evolution." *New Phytologist*, 168, 81–91—quoted from Marshall, Perry. *Evolution 2.0* (p.355). BenBella Books. Kindle-Version.

²⁷ See, for example, Acquiring Genomes: A Theory of the Origins of Species by Lynn Margulis and Dorion Sagan, Basic Books, 2002. As Perry Marshall writes: "The authors are Darwinists but not Neo-Darwinists. They lambast the 'randomness' mutation theory and extreme overemphasis on natural selection. They present solid evidence for Margulis' beautiful theory of Symbiogenesis. Margulis was a true pioneer in our modern understanding of evolution." Ibid, Marshall, Perry. Evolution 2.0 (p.333-334). BenBella Books (2015). Kindle-Version. See also, Sapp, J., Carrapico, F., & Zolotonosov, M. (2002). "Symbiogenesis: The Hidden Face of Constantin Merezhkowsky." History and Philosophy of the Life Sciences, 24, 413–440—quoted from Marshall, Perry. Evolution 2.0 (p.355). BenBella Books. Kindle-Version.

²⁴ Barbara McClintock discovered transposition in 1950 (McClintock, B. (1950). "The Origin and Behavior of Mutable Loci in Maize." *Proceedings of the National Academy of Sciences of the United States of America*, 36, 344– 355) and first presented it in 1951 to a symposium at Cold Spring Harbor in New York, where it was received, according to her biographer, with "puzzlement, even hostility" (Keller, E. F. (1984). *A Feeling for the Organism: The Life and Work of Barbara McClintock*. St. Martins Press-3PL; Anniversary edition). In 1968, McClintock's colleague James Shapiro confirmed that bacteria could also transpose elements in DNA. In the 1970s, her work received wider recognition and was confirmed by more and more scientists. In 1983, she finally received the Nobel Prize for her discovery. See, for example, "Nobel Lecture: The Significance of Responses of the Genome to Challenge." Retrieved from https://www.nobelprize.org/uploads/2018/06/mcclintock-lecture.pdf. See also *Evolution: A View from the 21st Century* by James A. Shapiro, Ft Pr; 1. Edition (2011). According to Perry Marshall, "Shapiro is a bacterial geneticist at the University of Chicago. He describes the evolutionary mechanisms *I outline in this book, and many others, in exhaustive detail. Highly technical, not for the uneducated reader. The eminent biologist Carl Woese went so far as to call it 'the best book on basic modern biology I have ever seen.' Superb, earns my highest recommendation.*"—quoted from Perry Marshall, *Evolution 2.0: Breaking the Deadlock Between Darwin and Design*, p.335, 2015, BenBella Books. Kindle-Version.

²⁸ See, for example, Ohno, S., et al. (1970). *Evolution by Gene Duplication*. London: George Allen & Unwin—quoted from Marshall, Perry. *Evolution 2.0* (p.355). BenBella Books. Kindle-Version.

In *Evolution 2.0*, Perry Marshall calls these the "Five Blades of the Evolution 2.0 Swiss Army Knife," processes that have been all but ignored in the mainstream dogmatic retellings of evolution that constitute the neo-Darwinian synthesis.²⁹

The dogmatic materialist faith claim that the world is governed by chance alone is also undermined by emergence theory, systems theory, complexity theory, and chaos theory.

None of these, of course, has much to do with a *grandfather god in the sky* owned by a particular religion, who lives wholly outside of Cosmos and directs events, *not* through the laws of science, but through a kind of divine puppeteering, which decides anew what to do every moment according to an unknowable divine plan.

We are talking, rather, about the innate nature of the Intimate Universe animated by Eros and *telos*, a self-evident LoveIntelligence, LoveDesire, LoveBeauty, and LoveWisdom animating the four fundamental forces of Cosmos and more—within whose larger context, dimensions of contingency are naturally part of the story.

Those seriously tracking the evolution conversation in academic sciences have elegantly distinguished between evolution 1.0 and 2.0, based on fresh understanding. The neo-Darwinian synthesis, evolution 1.0, is so often blithely cited by writers like Harari who are not actually tracking the science. The science of the last few decades clearly shows that there are inherently intelligent-design processes built into the very structure of Cosmos.

Neo-Darwinism suggests in essence that *Random Mutation* + *Natural Selection* + *Time* = *Evolution*. As evolution 2.0 theorists like Perry Marshall summarize the evidence, we now understand that *Adaptive Mutation* + *Natural Selection* + *Time* = *Evolution* 2.0.³⁰

According to the best of the sciences, particularly in microbiology, evolution tells us that cells themselves are defined by an intelligent capacity to "*adapt and to generate new features and new species by engineering its own genetics in real time*."³¹

²⁹ See, for example, Denis Noble, *Dance to the Tune of Life: Biological Relativity* (Cambridge UP, 2016).

³⁰ See Perry Marshall, *Evolution 2.0: Breaking the Deadlock Between Darwin and Design* (BenBella, 2015), p. 148.

³¹ Ibid, p. 146, Kindle-Version.

This implies a level of *inherent naturalistic design* in Cosmos that is profoundly nonrandom, or what we have called, over the last decade, the *Telerotic Universe*. This is what Stuart Kauffman is alluding to when he talks of the inherent *ceaseless creativity* of Cosmos.³²

Nature is not smart. Nature is genius.

Cells are not merely intelligent; they are iconic geniuses—every single one of them.

That is straight science. The notion that cells evolve *solely* through a random process of mutation is no longer true but partial. It is simply scientific ignorance.

None of this necessarily entails fundamentalist notions of intelligent design, which are equally as flawed as fundamentalist neo-Darwinist understandings—they both ignore, omit, sideline, and downplay this entire set of scientific data from microbiology.

But we will return to this in a moment.

First, let's at least allude to the science itself in a few short sentences.

One of microbiology's early stars, Barbara McClintock, unpacks the cellular mechanism of transposition, in which *cells rearrange segments of DNA* according to precise rules that are self-evidently intelligent to the Eye of Consciousness.³³ Microbiology, then, discloses the process of horizontal gene transfer, in which *cells exchange DNA with other cells*, a process which *shuttles DNA between cells*.

According to Marshall,

Cells communicate with each other and edit their own genomes with incredibly sophisticated [intelligent] *language.*³⁴

³² In *Reinventing the Sacred*, Kauffman writes, for example: "In the new scientific worldview I'm describing, we live in an emergent universe of ceaseless creativity in which life, agency, meaning, consciousness and ethics have emerged." Stuart Kauffman, *Reinventing the Sacred: A New View of Science and Reason* (Basic Books, 2008), 231. ³³ The Eye of Consciousness is one of the three Eyes that reveal Reality to us: the Eye of the Senses, the Eye of the Mind, and the Eye of Consciousness in its four expressions (with their injunctions/practices): the Eye of Contemplation (Meditative Practices), the Eye of the Heart (Practices of Loving), the Eye of Value (Practices of Ethical Discernment), and the Eye of Spirit (Practices of Rituals, Ceremony, & Sacred Text). See also, Gafni, Stein, and Hubbard, the five-volume series *The Universe: A Love Story—First Meditations on CosmoErotic Humanism in Response to the Meta-Crisis*, World Philosophy and Religion Press, in Conjunction with Waterside Press and Integral Publishers, 2023.

³⁴ From Marshall, Perry. *Evolution 2.0* (p.113). BenBella Books. Kindle-Version.

Epigenetics switches genes, or codes, on and off,

allowing acquired adaptions to be passed to offspring.³⁵

Lynn Margulis's work around *symbiogenesis*—the scientific realization that *cells merge* and cooperate—as well as hybridization, or genome duplication—which doubles chromosomes—is showing how "*two species form* [a larger union or whole to create] a new species"³⁶ and how "[r]etroviruses inject new DNA sequences into hosts."³⁷

All of these processes take place before *natural selection*; none are what the old neo-Darwinian synthesis calls *random mutation*. Instead, they are expressions of what has been called *adaptive mutation*, expressions of the *Telerotic Universe*, animated by inherent naturalistic design. *Telos*, or purpose, and Eros are the core qualities of what we and our colleague, Howard Bloom, call the *Amorous Cosmos*.

All of this is part of what James Shapiro, one of the most important voices in contemporary evolutionary theory has called *natural genetic engineering*—organized not accidental, adaptive not purposeless, a *telerotic force* in the great play of evolution.

Oxford Professor Denis Noble, president of the International Union of Physiological Sciences, describes life as a *kind of music*, a symphonic interplay *between genes, cells, organs, body, and environment.*³⁸

Noble argues persuasively, based purely on the empirical sciences, that "all the central assumptions of the Modern Synthesis (often also called neo-Darwinism) have been disproved. Moreover, they have been disproved in a way that raises the tantalizing prospect of a totally new synthesis."³⁹

³⁵ Ibid (p.146).

³⁶ Ibid (p.135).

³⁷ Ibid (p.146).

³⁸ From the cover of the hardcover version of Denis Noble, *The Music of Life: Biology beyond the Genome*, Oxford University Press, 2006.

³⁹ Noble D. "Physiology is rocking the foundations of evolutionary biology." *Exp Physiol.* 2013 Aug;98(8):1235-43. doi: 10.1113/expphysiol.2012.071134. Epub 2013 Apr 12. PMID: 23585325. Retrieved from https://physoc.onlinelibrary.wiley.com/doi/pdf/10.1113/expphysiol.2012.071134.

Natural selection, as Margulis reminded us, is only the last step in the symphony, a process that selects the most robust expression of life, formed by all of these exponentially intelligent living processes, for continuity.

Our colleague and friend Perry Marshall—working in close communication with Stuart Kauffman, Denis Noble, James Shapiro, and dozens of other evolutionary theorists in the growing mainstream of the evolutionary conversation—makes a second point that emerges from the matrix of contemporary information theory.

Information theory has developed a very clear understanding of what constitutes a code. As we will expand on later in this essay,⁴⁰ without exception, all codes are a product of design. It is absolutely clear that DNA, by any standard of valid information theory, is not only like a code but is in fact a *bona fide code*, which, according to everything we know about science, cannot be generated without an inherent design.

However, this notion of inherency refutes both the fundamentalism of Intelligent Design—design by a purely external creator—and the fundamentalism of pure chance touted in the name of materialist dogma masquerading as science.⁴¹

Marshall's understanding asserts that DNA is a naturalistic process subject to investigation, even as it is animated by telerotic intelligence. To date, there has been no refutation of Marshall's assertions from information theory.⁴²

Evolution 2.0 essentially tells us that the neo-Darwinian synthesis, laden with materialist dogma and implying that evolution is a "*blind bloody battle of luck and selection*," is no longer a valid scientific claim. Instead, evolution is inherently directional, intelligent, and always seeking

⁴⁰ See, for example, the section in this essay called "The Omnipresence of Codes and Consciousness in Biology: Intention and Presence."

⁴¹ For more on these two, see below, in the section of this essay called "Three Universe Stories: Creationism, Scientism, and CosmoErotic Humanism."

⁴² Ibid, Marshall, *Evolution 2.0* (pp. 40-71), on information theory and DNA, and see also the critical appendix (pp. 281-306) on the nature and meaning of randomness in the sciences. It is worth noting that Marshall has created a ten-million-dollar prize, with judges from Harvard, Oxford, and MIT, see https://www.herox.com/evolution2.0, which is to be awarded to any validated scientific information that demonstrates how code can emerge without some dimension of intentional design.

the emergence of greater depths of life, interconnectivity, and intimacy. Evolution 2.0 is well understood using Marshall's image of a Swiss Army Knife containing multiple engineered systems.

It is no accident that both fundamentalist neo-Darwinists, like the brilliant Richard Dawkins, and fundamentalist Intelligent Design proponents, like the equally brilliant Stephen Meyer, in what Marshall calls an "*identical set of omissions*,"⁴³ either downplay or omit the key evolutionary process of what we call in CosmoErotic Humanism *intentional adaptive mutation*. For these new findings of the sciences make it clear that Reality is inherently intelligent and inherently telerotic—i.e., designed, but from within.

Supported in part by new discoveries in microbiology and other sciences, as well as by realizations of the classic interior sciences, CosmoErotic Humanism stresses the limits of outdated evolutionary explanations in order to propose a more coherent overall evolutionary worldview.

Scientific theories and findings about the nature of evolution too often claim to be theories of everything when in fact they are really just theories of one type of thing.

No single theory can explain everything, which is why we need *metatheories* that orient us in light of truths gleaned from many diverse areas of knowledge.

In the next section, we discuss these more expansive frameworks for understanding evolution in its full multi-dimensionality.

The Need for Metatheories: CosmoErotic Humanism Integrates the Interior Dimensions of Cosmos—Consciousness, Knowledge, and Value

In this section, we discuss the limits of specific theories, such as the explanatory gaps that need to be bridged by the neo-Darwinists. In general, it is good practice for someone explaining

⁴³ Ibid, Marshall, *Evolution 2.0*, p. 150.

something to take note of the limits of their explanation. This is part of what makes an explanation as accurate and true as possible.

In this way, what we are doing here is not at all *anti-science* or *postmodern critique*; rather, we are undertaking philosophy in the interest of science to clarify what science is offering, in order to pave the way for newer and better science.

There is, in fact, a long-standing set of issues at the heart of human life that cannot be dealt with adequately by traditional neo-Darwinian evolutionary theory—the three most important of which are consciousness, knowledge, and value.

We discuss each in turn below. Taken together these represent the *interior Face* of the Cosmos, which is to say the *animating force of Eros* that must be accounted for by an evolutionary worldview. Beyond mechanism and chance, the universe works through beings that are demonstrably conscious, knowing, and desiring.

CosmoErotic Humanism argues for the *non-reducible* existence of *conscious* life, which entails that evolutionary theories must abandon the assumption that the universe is driven only by material and physical causality. We are in many ways aligned with contemporary philosophers of science, who argues that keeping consciousness in the picture requires "*finding an integrated naturalistic explanation of a new kind*."⁴⁴

Taking consciousness seriously means seeing nature, through the *Eye of Consciousness*, as involving teleological processes, in which evolutionary outcomes are the result of *conscious intention*. Nagel argues that theories involving teleological laws governing the development of evolution over time remain the most reasonable alternative to materialism.

Moreover, everything we know about the non-teleological laws of current modern science show conclusively that these laws are *not* entirely deterministic, and thus they leave the door open for other forms of explanation.

⁴⁴ Nagel, *Mind and Cosmos: Why the Materialist Neo Darwinian Conception of Nature is Almost Certainly False* (Oxford UP, 2012), 68.

This is all just to say that, if your evolutionary theory cannot account for consciousness, knowledge, and value, then you are missing some of the most vital aspects of what took evolution billions of years to create.

The Evolution of Consciousness & The Pursuit of Value: The Re-Enchantment of the World

Consciousness is the first-person experience of being. Going under various names such as *sentience, awareness*, and *interiority*, it is found throughout nature in varying degrees. In organisms like mammals—and especially humans—consciousness is one of the most prominent features that characterizes species traits and behaviors. You cannot adequately understand primates, dogs, and humans without accounting for the role consciousness plays in their survival strategies and behavior. Yet, interior experience or consciousness has no place in most evolutionary explanations, which only involve physical matter and causality.

Indeed, the whole world-shattering impact of Darwin's work was due to the fact that he had found a way to explain evolution *without* an appeal to teleology. Darwin's contemporary Lamarck attempted to argue that the giraffe's neck is long because of the intentions of generations of giraffes to have longer necks. Driven by Eros, by their desire for sustenance, they chose to stretch their necks upward again and again, ultimately resulting in their unique anatomy. Darwin was able to show that the neck of the giraffe could just as well be due to a blind mechanism, *not* conscious intention. Natural selection appeared to explain through chance and causality alone what could previously only be explained by teleological or theological concepts.⁴⁵

⁴⁵ In CosmoErotic Humanism, we see this as a brilliant example, how one doesn't exclude the other. The following is a bit speculative, but maybe it went something like this: Of course, the giraffes wanted to reach higher, in order to get the sweetest fruits—in other words, intention and consciousness. That intention (and the constant stretching) may have, at first epigenetically, changed their DNA, which they then passed on to the next generations. That changed DNA then gave them an evolutionary advantage. In some of them, the epigenetic change may then have become hardwired (through mutations). Over many generations, that may account for the emergence of the long necks we see in giraffes today.

During the early days of biology, there was a heated struggle as scientists stood against oppression based on superstition, to claim space for their new knowledge. The knee-jerk aversion of modem scientists to anything that even seems remotely teleological or determined by conscious choice is a natural, understandable remnant of this much older fight. The earliest scientists sought to remove all hints that nature was in any way populated by *spirits* who guided natural events with awareness and intention. Where the workings of nature (and human nature) used to be attributed to divine decree or animistic forces, the first biologists sought—for good reason—to remove any such *explanation* from their accounts. Modern science largely began as a project of disenchantment.

CosmoErotic Humanism argues that this important phase of science has served its function. The time for the sciences of disenchantment has passed; scientific endeavor must now help re-enchant both the world and humanity. This is *not* a return to the animism of theological dogma, but a move forward into a more complex science that can deal with the deeper reality of consciousness—a reality that includes intention, purpose, and *telos*.

The rejection of consciousness from the realm of evolutionary explanation set off a cascade of other problems for the neo-Darwinians.

The biggest problem is that human self-consciousness is also deemed an illusion or an epiphenomenon. But humans are not just conscious; we are *conscious of our consciousness*. As far as we know, this type of self-consciousness is unique to humans.

This means that beyond the problem of *sentience* is the problem of *sapience*.

Consciousness in general gives way to self-consciousness, which gives way to unique forms of human knowledge and value. With self-consciousness come claims to know both what is true and what is valuable. These realms of knowledge and value are also a problem for neo-Darwinian accounts.

Human cognition involves a great deal more than what is needed for mere survival. This seeming excess of knowledge is exemplified by the claims of science.

The practice of science involves a process of discovering truths that transcend the context of their discovery. This has led to the creation of knowledge above and beyond anything needed to succeed biologically, i.e., what we need to know to eat, reproduce, and compete.

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From one perspective, the vast world of *useless* human knowledge is an evolutionary extravagance. Science also depends upon the use of our evolved human senses, especially sight, to reveal *patterns* and *facts*. Yet, some ways of explaining the evolution of the human senses and brain would suggest that it is anything but in tune with Reality.⁴⁶

Everyone knows that whole ranges of light and sound are invisible and inaudible to humans. There is a wide range of physical phenomena that human senses simply were not evolved to perceive.

According to a strict neo-Darwinian account, we perceive only those aspects of the physical world that were useful in order to survive. All kinds of cognitive and perceptual biases show this to be true. Just like other animals—maybe more so, given our big brains—we *see* patterns that are *not* there and also *miss* many patterns that are. All of these biases can be explained, from a New-Darwinian evolutionary perspective, as having served our survival at one point in evolution. However, skepticism and doubt concerning the veracity of our sensemaking apparatus follows from consistently applying the neo-Darwinian view.

This skepticism becomes a real problem when it begins to undermine science itself.

The more of human self-understanding that science disenchants, the less science itself seems possible as an endeavor. If each individual human is understood as an adaptive algorithm seeking advantage in replicating its genetic code, then what does that make a team of scientists?

The disenchantment of science itself—and thus the undermining of its truth claims—is an inevitable outcome of the materialist and neo-Darwinian narratives when taken to their extreme.

⁴⁶ See Donald Hoffman, *The Case Against Reality: Why Evolution Hid Reality from Our Eyes* (New York: WW Norton, 2019).

This reveals the performative contradiction at the heart of all reductive science: scientists explain away the very human capabilities they are using to do their science.⁴⁷

If human free will, consciousness, and rationality are all illusionary, then science itself is also an illusion. And again, it should be stressed that we are *not* saying that scientific evolutionary explanations of human behavior are *wrong*, just that the limits of these explanations are often misunderstood or ignored.

CosmoErotic Humanism argues that the human mind is both the result of evolutionary processes and capable of plumbing the depths and hidden truths of the universe. This requires that evolutionary explanations drop their assumptions about the universe being entirely material and determined by causality.

When discussing consciousness above, for example, it was clear that some form of teleology needed to be introduced into the picture. Indeed, the scientific method itself is a teleological process, the opposite of a random, chance, material occurrence. An experiment happens because of ideas and intentions held in the consciousness of the scientists.

This is profoundly unnatural if you understand nature as non-teleological, as *not* driven by choice and intention at all.

Science also involves cooperation and trust, insights and abstraction, all qualities that defy explanation in terms of many neo-Darwinian accounts of how nature works.

⁴⁷ It should be noted that the performative contradictions that beset materialist science are different from those that plague radical forms of postmodernism, although they lead to basically the same self-contradictory conclusion. Postmodernism argues that there are no universal truths because all truth is bound by context, culture, and subjectivity. Of course, this very claim is offered as universal and applies to all contexts. That is a problem. The postmodernists become incoherent when their critiques of knowledge and culture become so radical that they undermine themselves. How seriously can one take the words of a tenured academic who claims to destroy the foundations of academic knowledge and does so through books published by traditional academic publishers and classes taught in a university? Very seriously, apparently. And, unfortunately, they are taken just as seriously as scientists who claim that human consciousness is an illusion, even as they speak this from their first-person experience trying to communicate it to others as if they were conscious. Both, scientists and postmodernists, end up saying incoherently that there is no truth. But they say this in different ways. The scientist takes one kind of truth and blows it out of proportion. The contradictions of materialism come from a failure to recognize the limits of these forms of explanation, whereas postmodernist contradictions fail to recognize the limits of critique.

As we saw in our discussion of Harari,⁴⁸ the emerging dogma of reductive science is that humans can be understood as self-interested algorithms, executing programs evolved to selfreplicate; humans only *seem* to make choices and have intentions.⁴⁹

If taken as a comprehensive and sufficient explanation, this would rule out anything even remotely like scientific practice. Scientists think and act in terms of a self-understanding in which humans are endowed with certain capacities, such as reason, choice, and trust. When these conditions are violated, for instance, when a fellow scientist acts self-interestedly or incompetently, it is clear that science is actually no longer being done, and steps must be taken to return to proper practice. Here, scientific practice is clearly driven by an idea and intention about what constitutes success. This a radically teleological process.

Likewise, science uses things like measurement instruments and mathematical techniques to correct the built-in errors and limitations of the evolved human nervous system. This is more behavior indicative of self-reflection and sapience, above and beyond the sentience provided by the senses.

Our ears did not evolve to hear sounds billions of miles away; yet with the help of satellites, we are listening to star systems light-years away.⁵⁰

Our eyes did not evolve to be able to see molecules; yet with the help of microscopes, we can see them.

⁴⁸ See, for example, the sections "A Note on the Great Reconstructive Project of the New Dharma as the Evolution of Intimacy" and "The Interior Sciences: Anthro-Ontology and the Anthro-Ontological Method" (Sub-Sections "The Three Forms of Empiricism: How Do We Know Love Is Real?—Brief Notes on the Anthro-Ontological Method in Relation to Love and Eros" and "Wake Up, Grow Up, and Show Up: The Evolution of Love and the Anthro-Ontological Method: The Four Songs of Abraham Kook" in Gafni, Stein, Hubbard, the five-volume series *The Universe: A Love Story—First Meditations on CosmoErotic Humanism in Response to the Meta-Crisis*, World Philosophy and Religion Press, in Conjunction with Waterside Press and Integral Publishers, 2023.

⁴⁹ See, for example, Stuart Kauffman, "Can Mathematics Explain Biology," a short presentation on *Closer to Truth*, https://www.closertotruth.com/interviews/78883. A more in-depth analysis is in Kauffman's *A World Beyond Physics, The Emergence and Evolution of Life* (Oxford: Oxford university Press, 2019). See also Perry Marshall, "Biology Transcends the Limits of Computation," *Progress in Biophysics and Molecular Biology* 165 (October 2021): 88–101. See also Antonio Damasio, "We Must Not Accept an Algorithmic Account of Human Life" in *New Perspectives Quarterly*, Volume 33, Issue 3, July 2016, pp. 59-62.

⁵⁰ See, for example, "Symphony of stars: The science of stellar sound waves—Exoplanet Exploration: Planets Beyond our Solar System" (*nasa.gov*), https://exoplanets.nasa.gov/news/1516/symphony-of-stars-the-science-of-stellar-sound-waves/.

Computers allow us to make calculations more complex than the brain is capable of, while fMRI machines allow us to actually see our brain in action.

The more you look at what science entails and reveals, the harder it is to explain human behavior in merely materialistic and reductive terms. Scientific practice exemplifies the selfconsciousness and self-correcting telos of human reason. Science is a practice in which organization, intelligence, and value are made real in the material world.

Indeed, a certain *ethos* has always been an essential aspect of science as a practice: Science pursues the value of truth. It shows the intensity of the human desire to know. This is a desire for intimacy with Reality. Massive institutions have been built and dedicated to the value of truth and its pursuit in science. Modern societies have radically empowered scientists to pursue their desires for truth. This has been done in part because of the technical benefits that have followed from science. Yet, science has never been merely about increasing human survival and power. The value humans have placed on truth as something to be desired and pursued for its own sake has transformed the world.

This is an account of science as a practice characterized by a certain kind of ethical culture.

CosmoErotic Humanism places science in league with ethics, philosophy, and artistic endeavors as all revealing the ability of the human mind to be *in touch* with realties beyond its creation.

We evolved to be in intimate relation with the realities of the universe, and not merely survive.

When explaining human behavior—when understanding what it means to be human these realms of value, knowledge, and consciousness must be seen as the major species-specific traits that require attention.

CosmoErotic Humanism includes an evolutionary metatheory that transcends and includes important aspects of the old neo-Darwinian account, such that it recognizes contingency and naturalistic causality as *one* dimension of Cosmos within a larger context of *telos* and meaning.

But the new story of self and universe put forward as part of CosmoErotic Humanism also includes the sciences of interiority—the fields that deal directly with the evolution of consciousness, knowledge, and value.

And of course, consciousness, knowledge, and value are only some of the qualities of Eros that constitute the *telos* of evolution and the interior face of the universe.

CosmoErotic Humanism as a Response to the Two Outdated Universe Stories that Dominate Culture

The Universe: A Love Story is the universe story that we are unpacking in CosmoErotic Humanism. We begin to tell that story in the five-volume *The Universe: A Love Story*—*First Meditations on CosmoErotic Humanism in Response to the Meta-Crisis.*

The tentative titles of the five volumes are:

- 1. A New Story of Value in Response to the Meta-Crisis
- 2. The Greatest Story Ever Told
- 3. The Evolution of Love & Intimacy: A New Vision of Evolutionary Intimacy
- 4. The Universe: A Love Story & Your Unique Self
- 5. The Great Reconstructive Project: Anthro-Ontology and the New Dharma

We began telling this story in earlier writings,⁵¹ but this is the first full rendition of the story that we are writing together under the banner of CosmoErotic Humanism, a new educational, intellectual, spiritual, social movement (akin to Romanticism, Existentialism,

⁵¹ See the essay "Evolutionary Love," by Dr. M. Gafni and K. Wilber, published as an appendix to *Your Unique Self*, by M. Gafni, 2012, Integral Publishers. See also *A Return to Eros: The Radical Experience of Being Fully Alive*, by Dr. M. Gafni and Dr. K. Kincaid, BenBella Books, and "Love in a Time Between Worlds: On the Metamodern 'Return' to a Metaphysics of Eros," by Dr. Z. Stein, 2018, *Integral Review: A Transdisciplinary & Transcultural Journal for New Thought, Research, & Praxis*, 14(1). This essay itself is an updated version and integration of two pieces of writing that originally appeared in our early book, Marc Gafni, Zachary Stein, and Barbara Marx Hubbard, *Homo Amor and CosmoErotic Humanism, First Thoughts*, 2018 [forthcoming]. Barbara is there listed as a co-author, while here she is referred to as a collaborator, as Barbara passed right after our completion of the first draft of *First Thoughts*. Barbara could be appropriately listed as co-author in this essay as well, as most of the material is reprised from that original book. But given the updates we made after Barbara passing, we refrained from attributing co-authorship in this piece to avoid confusion.

Psychology, et al.) that we, together with many colleagues, are writing and teaching into existence with all of the depth, passion, and integrity that we can muster.

CosmoErotic Humanism is a direct response to the overwhelming needs of our time, both in terms of the collapse of value and its implications for existential and catastrophic risk, coupled with the *ordinary* outrageous pain that suffuses the planets, side by side with all of the outrageous beauty. CosmoErotic Humanism is not a political movement, but has far-reaching economic and political implications, particularly in terms of moving us beyond the polarizations that threaten our very existence and *enacting a shared universal grammar of value as the context for our diversity*.⁵²

We therefore thought that, in this early writing, it is worth framing CosmoErotic Humanism at the very outset in contradistinction to the two other major worldviews, or universe stories, most commonly held in public culture, in relation to the origin story of the world, its meaning and direction. The first two worldviews, especially in their caricatured forms, are poised against each other in culture.

The first is *creationism* (or what we might call *dogmatic religion*), including many but not all forms of *Intelligent Design*.

The second is *scientism* (or what we might call *dogmatic science*).

As we will note below, the first is almost always based on some form of implicit philosophical dualism.

The second is almost always based on some form of implicit philosophical materialism.

Each of these two worldviews contains genuine truths, yet those truths are partial and ignore important other truths. Each adopts a form of narrow empiricism to support their conclusions. Said differently, they each stand against the integrity of radical empiricism in that they each bypass what are, at this point, self-evident validated empirical truths.

⁵² We discuss this fully in our work [in preparation] *First Principles and First Values: Towards an Evolving Perennialism: Introducing the Anthro-Ontological Method.* There we unpack the core notions of *enacting value and a universal grammar of value.*

The third worldview is what we call *CosmoErotic Humanism*, which is based *not* on the old and philosophically largely discredited *dualism* or *materialism* but, rather, on what we term *pan-interiority*. All of Reality is constituted by exteriors and interiors, all the way up and all the way down the evolutionary chain.⁵³

We will return to these terms—*dualism*, *materialism*, and *pan-interiority*—and their implications later. CosmoErotic Humanism is *not* a conjecture, a claim, or a declaration. Rather, it represents an integration of the leading edge of validated wisdom in the premodern, modern, and postmodern periods, including the evolving understanding of both the classical exterior and interior sciences, as well as the important and true but partial intuitions of both creationism and materialism.

In this essay, we will focus on the relation to the origin story, the universe story, which is the source for our narratives of *ethos*, identity, Eros, desire, power, politics, economics, governance, spirit, and just about everything else.

This is not an extended essay on the core CosmoErotic Humanism, but an initial foray into the New Story and the ways of knowing, being, and acting that emerge from it.

CosmoErotic Humanism, as we also noted in our in the short essay *CosmoErotic Humanism: Philosophy in a Time Between Worlds*,⁵⁴ is at once a new emergent and, at the same time, as with all authentic new emergents, firmly rooted in all that preceded it.

It weaves the validated insights of the leading edges of wisdom—premodern, modern, and postmodern—into the fabric of what we refer to as *a New Story of Value rooted in First Principles and First Values*, which has the capacity to respond to the meta-crisis of our time, rooted as we have diagnosed it, in what we are calling a *Global Intimacy Disorder*. The Global Intimacy Disorder itself is ultimately rooted in the failure to articulate a shared global Story of Value.

⁵³ Interiors—and consciousness—are fundamental. They do however evolve and appear differently on different levels of Reality. Clearly, there is both fundamental continuity and discontinuity all through the unfolding of evolution's levels and stages. Words like *consciousness*, *intelligence*, *choice*, *intimacy*, *desire*, and *Eros* have both a common core meaning and a radically distinct evolving expression at every step of Reality's progressive unveiling.

⁵⁴ https://worldphilosophyandreligion/dr-marc-gafni-dr-zachary-stein-cosmoerotic-humanism-philosophy-in-a-time-between-worlds/.

And that begins with a universe story.

Below, we hope to establish something of the larger framework for this, our initial writing on *Evolution: The Love Story of the Universe*, or what we sometimes simply call *The Universe: A Love Story*.

Three Universe Stories: Creationism, Scientism, and CosmoErotic Humanism

Before we go further, it is also necessary to say that our characterizations of the two first positions—dogmatic creationism and dogmatic scientism—are broad and somewhat of a caricature. In fact, neither of them, at their leading edges, are populated by crude thinkers and, of course, both have vast differences in nuance and substance. Indeed, there are intelligent, even brilliant, spokespersons for each of these sides. Think, for example, Richard Dawkins for scientism and Stephen Meyer for creationism. Each holds an important intuition. Nonetheless, each position is true but partial—ignoring key opposing truths—as well as polarizing and ultimately destructive.

Ignorance is not altogether wrongly defined as *taking a part and turning it into a whole*. We can become so avidly committed to our partial truth that we turn it into a whole and ignore the important insight and often self-evident truth that stands against it. Plato was not mistaken when he established ignorance as the primary source of evil.

CosmoErotic Humanism integrates the partial truths of the above two positions, while offering a new vision of origins, again based on an in-depth integration of the leading-edge, validated insights of the premodern, modern, and postmodern periods, woven into a new shared global story of our shared reality that is greater than the sum of any of its parts. The New Story of CosmoErotic Humanism honors the mystery, both in the universe and in the sciences—and in the scientists who participate (in first, second, and third person) in the CosmoErotic Universe.⁵⁵

Thesis, Antithesis, & Synthesis: The Three Words-God, Nature, & Human

We need to integrate the best truths of each of the previous positions, which are like *thesis* and *antithesis* synergizing towards a CosmoErotic *synthesis*.

The *thesis* is *dogmatic religion* and its expression in *creationism*. Creationism, in multiple forms, dominates premodernity, both historically, up to the Renaissance and Western enlightenment, and in its myriad expressions in the modern and postmodern world.

The *antithesis* is *dogmatic science* expressed as *scientism*. Scientism, in various expressions, dominates modernity and dimensions of postmodernity.

We desperately—personally and collectively—yearn for and need a synthesis.

It is the urgent need of this post-postmodern moment, the only thing that can be the ground of the New Shared Universe Story, which is, in turn, the necessary ground for our capacity to enact a coordinated and coherent global response to the urgent crises of this moment.

⁵⁵ First, second, and third person have been referred to, in different wisdom traditions of the interior sciences, by many different names, e.g., God, Torah, and Israel or Buddha, Sangha, and Dharma. We are using an evolutionary adaption of these terms in our writings. See, for example, the 19th-century interior scientist Tzadok HaCohen from Lublin, who writes clearly that Divinity has three Faces, Ani (I), Atah (You), Hu (Him). In other words, first, second, and third person. Tzadok writes in this regardin one of his key works, Tzidkat HaTzadik, Section 247. See also a parallel text in Tzadok, Machshevet Charutz, Chapter 8. Tzadok, in the first source, cites the Zohar as his source. However, in an earlier edition of Tzadok, he cites instead Shaarei Orah of Joseph Gikattilia. The general sense in Tzadok is that Ani (I, first person) corresponds to the Sefira (divine quality or lumination) of Malchut, while Ata (You, second person) corresponds to the Sefira of Tiferet, and Hu (Him, third person) corresponds to either Keter or Bina. On Tzadok's writing, see Gafni, Marc, Radical Kabbalah Book 2 (Vol. 2 and 3), Integral Publishers, 2010. It is also noteworthy that Tzadok says about this tripartite distinction between first, second, and third person— *KeYadua—as is well known*—meaning, this was a known distinction in the lineage. Finally, it worth mentioning only briefly at this point that the famous distinction between God, Torah, and Israel (that scholars like Tishbi and Heschel wrote about in important ways) also corresponds to first, second, and third person. In that structure, God is first Person, Israel is second person, and Torah is third person. Thanks to Ohad Ezrahi for his collaboration in this footnote.

There are three major words that orient each of the three views. They are *God*, *nature*, and *human being*.

All three of these words—and worlds—can be viewed through all three Eyes:⁵⁶

- The Eye of the Senses
- The Eye of the Mind
- The Eye of Consciousness in its four expressions (with their injunctions/practices):
 - The Eye of Contemplation (Meditative Practices)
 - The Eye of the Heart (Practices of Loving)
 - The Eye of Value (Practices of Ethical Discernment)
 - The Eye of Spirit (Practices of Rituals, Ceremony, & Sacred Text)

Each position chooses one (or two) of the three words as its primary text—and one (or two) of these Eyes, which are not distinguished but dissociated, as its primary mode of perception. But not only that, each reads its preferred word in a particular way and re-reads the other two in a particular way. That is the nature of a *thesis* and *antithesis* position.

The *synthesis* position must read all three words together as part of a larger coherent sentence and give each word its highest meaning, as understood by the integration of all available information from both the interior and exterior sciences.

To do so, the *synthesis* must reject *narrow empiricisms* and embrace *radical empiricism*, which considers and integrates *all* sources of *information* and *meaning*.

With all of that in mind, let's begin.

⁵⁶ See the section "The Empiricism of Love: The Three Eyes of Knowing—The Three Eyes of Eros—The Three Forms of Gnosis—The Three Eyes That Are One" and the Appendix "Anthro-Ontology and the Three Eyes" in Gafni, Stein, Hubbard, the five-volume series *The Universe: A Love Story—First Meditations on CosmoErotic Humanism in Response to the Meta-Crisis*, World Philosophy and Religion Press, in Conjunction with Waterside Press and Integral Publishers, 2023.

The First View: Dogmatic Religion-or Creationism

The dogmatic religious view chooses the word *God* and a particular reading of that word. At the same time, it gives a weak reading to the words *nature* and *human being*. This view asserts that a *classical Creator God* is present at every step of Reality's evolution.

But it then takes the next step in asserting that it is either impossible or ultimately irrelevant to view this process through a naturalistic lens. In other words, the dogmatic religious view expressed in creationism prioritizes *the second-person experience of Spirit holding us*—particularly *Spirit as the Creator God*—and rejects or downplays the *third-person sense of Spirit*, what we refer to as *Eros*, invested, animating, and incarnating as a third-person process that can be understood and approached in a relatively autonomous fashion through the epistemologies of what we now call *the scientific method*.

Creationism is virtually always an expression of what is classically called *dualism*. That is to say, there is a sharp split between Spirit and matter.

Imagine Spirit as the top half of a circle and matter as the bottom half. Spirit is aliveness in action. Matter is dead, inert. Spirit enters into the world of matter, enlivening and moving it.

In some sense, the top half of the circle creates and guides the bottom half. It might be through a one-time, perfectly executed *Divine Download*—after all, *God is perfection*—of all of the variables needed to manifest a world. All of the variables are stacked in the perfect, delayed sequence of *Divine Causation*, in which one cause kicks a chain of events into motion that carry on throughout all of time.

Spirit Matter

But either God is no longer actively involved (deism, dualism, and creationism together), or God is constantly reaching into the world and ordering events (supernatural theism, dualism, and creationism), or there is some middle position, in which there is neither a one-time download nor constant intervention but, rather, some version of intermittent *Divine Involvement* that guides Reality.

The key is that dualism plus creationism is the core model. Spirit is Spirit, and the world of matter, including the material human being, is fallen or degraded in some essential sense. And the human being can only be saved by a particular set of faith commitments to doctrinal beliefs or religious affiliations. At best, Divinity invests the fallen human with a soul that has the capacity to hear Spirit's commands and to propitiate Spirit through prayer, or praising Spirit's presence, which guides humanity beyond depravity and sin (mortal and material), to some version of rapture and redemption.

Now, let's be careful. It is not that dogmatic creationism does not study science. It does and has produced some excellent work. For example, much of the work done by Intelligent Design theorists can be considered as creationist. But although the work is filled with the details of a scientifically explained physical process—God bracketed for a moment—it is always God stepping in and making it happen in one way or another.

Dogmatic religion—creationism—refuses to recognize the relative autonomy of the naturalistic process and insists on one form or other of constant Divine Intervention. Its radical refusal is based on confusing *relative autonomy* with *absolute autonomy*—or *disassociation*—from God. Thus, creationism rejects the self-evident truth of the relative autonomy of naturalistic processes, either explicitly or implicitly.

The interior science principle of *Ha-Teva*, literally translated as *The Nature*, which, for Hebrew mystics, was said to be identical with *Ha-Elohim*, literally translated as *The God*,⁵⁷ are rejected by creationism. Similarly, the Talmudic principles of *Olam Ke-Minhago Noheg*, meaning, *the world operates according to its inherent laws*—all positions that express *relative autonomy* of the natural world—are rejected by creationism.

Another way this *relative autonomy* position appears, in various forms, is in interior science's core distinction between *Keli* and *Or—vessel* and *light*. Although vessel and light are indivisible in absolute terms, in relative terms they are distinct and must be approached as such. The creationist rejection of this understanding—the relative autonomy of a naturalistic process that operates according to its own built-in sets of laws and principles—self-evidently flies in the

⁵⁷ Letters have numerical equivalents in the Hebrew alphabet. The numerical equivalents of both *Ha-Teva*—*The Nature*—and *Ha-Elohim*—*The God*—are the same.

face of what is quite clearly an inherent evolutionary process, which is at least partly explicable in its own terms.

The laws of science are real, and there is value in investigating them autonomously, on their own terms. The failure to do so is the result of a very narrow empiricism that ultimately accepts only the findings of the Eye of Consciousness.

A *God of the gaps* has no place in science, and thus no place in CosmoErotic Humanism.⁵⁸

The Mood of Creationism

The mood of the creationist position embraces the Eternal and rejects the dignity of the evolutionary. It is paradoxically a core cause for the collapse of value in the modern world system.

Why is this so?

Because the value assertions of dogmatic religion are forms of regressive modern medievalism, which claims that value is eternal, unchanging, and *not evolving* in any substantive way. But we have known since modernity that value is not (only) eternal, but it also evolves. For example, the values of love and intimacy might be expressed one way in the fifth century BCE and another way in nineteenth-century France. In other words, the value of love evolves.

The rejection of the two-tiered dialectical nature of value—*eternal* and *evolving*—to which dogmatic religion (seeing value as pre-ordained and eternal) virtually always adheres—is why any *intrinsic value in Cosmos* was rejected (and correctly so) by modernity, and then, with even more scathing force, by postmodernity.

⁵⁸ *God of the gaps* is a perspective in dogmatic religion, in which gaps in scientific knowledge are taken as evidence for God's existence.

The only response to the collapse of shared value, which is the root cause for our incapacity to coordinate and coherently respond to existential risk, is the articulation of a new post-postmodern vision of value.⁵⁹

To briefly recapitulate creationism:

In this view, God is limited to a very narrow conception of the Divine, nature is downgraded from Spirit to pure matter (in which God intervenes), and human dignity is effaced, other than through obedience to an often-inscrutable Divine Will that to some degree usually prefers one religion or tribe above all others.

For creationism, everything is a miracle, run by an act of an exclusively supernatural God imposing His/Her Will by grace on the otherwise inert world of matter. The world, in this view, is *not* necessarily inherently meaningful. Rather, all meaning, or at least the deepest meaning— ultimate meaning, in the form of right and wrong, and the sacred—is disclosed by the revelation of the Creator God, often focused exclusively on one religion or faith community.

The Second View: Dogmatic Science-or Scientism

If creationism declares that *everything is a miracle*, scientism declares that *nothing is a miracle*.

As we will see below, CosmoErotic Humanism dialectically understands that nothing is a miracle *and* everything is a miracle—and crucially, that the *miraculous* is not a *quality imposed on nature* but, rather, an *implicit quality of nature*. CosmoErotic Humanism looks at nature not only with the empirical Eye of the Senses and the rational Eye of the Mind, but also with a developed Eye of Consciousness. That is what infuses us with a sense of awe and revelation when looking at nature or the human being.

⁵⁹ The issue of value, and the presentation of a new theory of value, is explored in greater depth in our forthcoming books: Marc Gafni & Zachary Stein, *Sixty Propositions on First Principles and First Values: Notes Taken During the Construction of CosmoErotic Humanism* (forthcoming 2023). See also the fuller conversation in Marc Gafni & Zachary Stein with Ken Wilber, *First Principles and First Values: Towards an Evolving Perennialism: Introducing the Anthro-Ontological Method.*

Scientism rejects God in any form as being a player in the world or human story. Random, non-purposeful nature is said to be the central fact of Cosmos, and the human being is an expression and reflection of nature. As expressed by one of the *high priests of scientism*, Nobel-laurate Steven Weinberg, the world is presented as *pointless* or *meaningless* (Weinberg later expressed regret for this).⁶⁰

Like Stephen Hawking, who spoke similarly, Weinberg was naturally and wisely rejecting naïve supernatural creationism as we conceived it above. But neither Weinberg nor Hawking ever conceived of the potential for an integrated view like CosmoErotic Humanism.

However, many of the twentieth-century's leading lights of science, like Ervin Schrödinger, Max Planck, Wolfgang Pauli, Niels Bohr, and later David Bohm, and dozens of other physicists who were core to the quantum revolution, were able to include and transcend science's necessary rejection of dogmatic religion, and articulate visions that supported the overarching vision of CosmoErotic Humanism in multiple ways.

To be clear, this assertion has no commonality with various new-age distortions of the sciences, which tend to confuse the objective, third-person, or *it* world of physics, which describes the most fundamental levels of the exterior world, with the subjective, interior worlds of Spirit.⁶¹

For what became the mainstream position of scientism, however, the only meaning that exists is the meaning we make up as social constructions of reality. We ourselves are ultimately *meaningless* and *pointless*—accidents unintended by any ultimate source of intentionality, and certainly by any source of *loving* intentionality.

⁶⁰ See *The First Three Minutes: A Modern View of the Origin of the Universe* (2nd ed.), by Steven Weinberg, 1997, Basic Books.

⁶¹ For two excellent critiques of that kind of new-age sloppiness, see our colleague Ken Wilber in his *Introduction to Quantum Questions: Mystical Writings of the World's Great Physicists*, 2001, Shambhala, and his related essay in "Reflections on the new-age paradigm," which is Chapter 10 in a volume called *The Holographic Paradigm and Other Paradoxes*, edited by K. Wilber, 1982, Shambhala. It is, however of course, ontologically true in the interior sciences—for example, in our writings on CosmoErotic Humanism or in the work of the likes of Abraham Kook or Alfred North Whitehead—that the "it" worlds themselves have genuine interiors. But the assertion that Reality is, in some sense, sentient all the way down, or much farther down the evolutionary chain than modernity has claimed, does not suggest that the ostensibly inanimate and animate worlds can be sloppily collapsed into one another, as both historical premodernity and the postmodern medievalism of new-age tracts so often do.

This second view, that of dogmatic science or scientism, is *not* necessarily dualist, but it is virtually always materialist. It asserts that reality is purely material and that any notion of purpose, *telos*, intrinsic meaning, or value in the cosmos is therefore, by definition, absurd. The trinity of *meaning*, *value*, and *consciousness* are merely a product of evolution that emerges in its relatively late stages, as part of the survival mechanism of humanity. For scientism, value, consciousness, and meaning are *not* in any way inherent in the structure of Cosmos.

The overwhelming preponderance *not* of Darwinism, but of neo-Darwinism,⁶² asserts this position and is itself a primary source of the collapse of value in the global system. According to figures like historian Yuval Harari, a popular proponent of the postmodern view, everything, including all ethical value, is said to be but a *social construction of reality*, a *fiction*, or *figment of our imagination*.

Neo-Darwinism's origin story, as expressed, for example, by Richard Dawkins, is that life is a *happy chemical accident*. It did not matter that his epic lifework was the study of the dazzling, structured intimacies of DNA and genetics that display virtually unimaginable coherences, *telos*, and precise symmetries of a kind that all of reality's supercomputers cannot even begin to generate.

Neo-Darwinism holds that *only* random mutation and natural selection, without any interiority, cause variation. Chance and necessity, devoid of inherent *telos*, are the classic formulations presented by neo-Darwinism, as it refuses to deploy the Eye of Consciousness, together with the Eyes of the Senses and the Mind, to see the miracles of creative and intimate play that is *even* present in so-called *random mutations* and the selections for the most good, true, and beautiful—or most erotic—in *natural selection*. Even these simple mechanisms applied again and again are filled with the most dazzling mystery and Eros. To miss that miracle is to be blind.

⁶² On the co-opting of Darwin, see Robert Richards in his (1987) classical work on Darwin, *Darwin and the Emergence of Evolutionary Theories of Mind and Behavior*, University of Chicago Press. See also, *Darwin's Second Revolution*, by D. Loye, 2010, Benjamin Franklin Press. Darwin's original theory—we see it in *Origin of Species* and later in *Descent*—was important and relatively accurate in multiple dimensions. Evolutionary theory, however, made a major regressive move after Darwin's death with the Weismann Barrier, and with what is called *the modern synthesis*. On the Weisman Barrier, see, for example, "Weisman Barrier, What is Left of It?" Dr. Chantal Wicky [Guest Editor], 2021, Special Issue of *Journal of Developmental Biology*, DOI: 10.3390/jdb8040035.

Like creationism, scientism is a narrow empiricism, as partial and self-evidently flawed as dogmatic religion. Neo-Darwinism ignores the self-evident empirical truth, as seen through the integrated deployment of all three Eyes, that Reality is seeded with inherent structures of meaning and patterns of intrinsic order, from the values of mathematics to microbiology, to music, to human meaning itself.

Scientism also ignores or bypasses the driving energy and *telos* of the entire natural system. It has dissociated from the Eye of Consciousness, which—as deployed together with the other two Eyes—reveals these intrinsic patterns of Eros and *telos*.

Instead, scientism often invests words with a materialist energy that seeks to deflect, downgrade, or deny the self-evidently empirical truth of Reality's intrinsic patterns of order and *telos*. For example, the term *chemical reactions* almost blandly covers over a seething process of Eros that is unimaginable in its depth, beauty, and inherently choreographed intimate sequences.

The Third View: CosmoErotic Humanism

The third view transcends and includes these two limited views, acknowledging both the wisdom and the downsides of each, to focus on these intimately choreographed sequences of meaning coded in matter. Indeed, the movement from chemicals to code, even before the emergence of the cellular world, is impossible to imagine without turning to intrinsic values and meaning that is—intentionally, through the intrinsic consciousness of Cosmos itself—coded, or seeded, in the universe.

We have referred to this quality of the Cosmos as the *Telerotic Universe*: *telos* animated by inherent Eros.

CosmoErotic Humanism notices that every part of the spacetime continuum that we call the *universe* is suffused with intrinsic patterns, unique possibilities, and intimate configurations of order. These patterns are coded patterns of information—what can only be referred as *meaning*—that seed Reality.

These new configurations of intimacy, patterns of inherent information and meaning, remain invisible; intimacy is yearning to emerge, drawn forth by the yearning for wholeness that

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is one of the foundational qualities of Eros itself. As Berry and Swimme describe, these new configurations are disclosed only, when the "*material structures and free energy of the region reach that particular complexity and intensity capable of drawing such patterns forth.*"⁶³

It is the intensification of intimacy that generates ever-deeper levels of coherence, new emergent orders with their new configurations of intimacy. In one example among dozens, biological complexity theorist Stuart Kauffman understands "*the origin of life as a set of molecules*" whose intensifications of intimacy "*mutually catalyzed one another's formation*."⁶⁴ CosmoErotic Humanism understands that *information—not* only mechanical bits and bytes, but also *meaning*, which implies value preferences—goes all the way down the evolutionary chain.

Elsewhere, together with our colleague Howard Bloom, we unpack the meaning structure of Reality, as it expresses itself both at the universe's inception and throughout its evolutionary development.⁶⁵ Of course, meaning structures also self-evidently evolve, and we have already noted, the evolving stages of Reality are marked by continuities and discontinuities. Bloom, who is both scientist and philosopher of science, has insightfully noted that Claude Shannon, the father of modern information theory, got the "*math right but the metaphor wrong*."⁶⁶ Information, at the core of Cosmos, is *not* just neutral bits and bytes but, rather, intrinsic meaning and value all the way up and all the way down the evolutionary chain.

Meaning is content and value that is aligned with the structure of Reality itself. And meaning, or what we might also describe as value, inheres in evolution in ever-evolving levels and expressions in every chapter of the great Evolutionary Love Story. And Love, or what we

⁶³ Thomas Berry, Brian Swimme, *The Universe Story: From the Primordial Flaring Forth to the Ecozoic Era--A Celebration of the Unfolding of the Cosmos*, Reprint edition, HarperCollins, 1994—originally published 1992.

⁶⁴ See *Reinventing the Sacred: A New View of Science and Reason*, by Stuart Kauffman, 2008, Basic Books, reviewed in *Science* 320 (5883), pp. 1590-1591, by Denis Noble, on 20 June 2008, DOI: 10.1126/science.1159912. See also Kauffman's next steps in this direction in his later work, *A World Beyond Physics: The Emergence and the Evolution of Life*, by S. Kauffman, 2019, Oxford University Press.

⁶⁵ See Gafni, Stein, and Bloom, "Information, Matter, and Meaning," appendix to Gafni, Stein, and Hubbard, the five-volume series *The Universe: A Love Story—First Meditations on CosmoErotic Humanism in Response to the Meta-Crisis*, World Philosophy and Religion Press, in Conjunction with Waterside Press and Integral Publishers, 2023.

⁶⁶ Bloom, Howard, The God Problem: How a Godless Cosmos Creates, Prometheus Books (2012).

have termed *Eros* and its corollaries, *intimacy* and *desire*, are core evolving values of evolution.⁶⁷

God, Nature, & Human in All Three Views

Nature & Human in Neo-Darwinism & Creationism vs. CosmoErotic Humanism

All of this is regularly denied, deflected, or obfuscated by classical presentations of scientism, particularly those adopting the standard narrative of neo-Darwinism—which increasing numbers of scientific, empirical writers have declared obsolete, each in their unique declarative forms (Stephen Jay Gould, for example, and later, Denis Noble and James Shapiro).

As we have shown above, cutting-edge research from the fields of cell biology (including the work of Noble and Shapiro), as well as statistics, zoology, and genomics over the past fifty years is showing that random mutation and natural selection by themselves do not adequately explain the origin of species,⁶⁸ let alone the origin of self-replicating lifeforms.

New data emerging from studies in epigenetics, symbiosis, hybridization, quantum biology, topo biology, and the sugar code also hold promise for revealing the inherent process of speciation in ways that are deeply aligned with CosmoErotic Humanism.⁶⁹

⁶⁷ We have written about this notion of evolving value, and particularly Eros, intimacy, and desire as evolving values, in great depth. It is one of the linchpins of CosmoErotic Humanism as described above in the preface. See Marc Gafni and Zachary Stein, *First Principles and First Values, Towards an Evolving Perennialism, Introducing the Anthro-Ontological Method* (forthcoming 2022).

⁶⁸ Even on the mechanistic level, there is always more to it—classical mechanics is only a special form of quantum mechanics, etc. At the same time, all of the exterior dimensions of Reality cannot explain the interior dimensions— nor the other way around. They do not simply cause each other; they co-arise. Eros, intimacy, consciousness, even *telos* are all expressions of the interiors—that also have exterior expressions; all scientific mechanisms are exterior expressions—that also have interiors.

⁶⁹ As we noted earlier, even mutation and selection are totally in alignment with these other mechanisms and the interior drives, both pointed towards by CosmoErotic Humanism. And self-organization happens through ALL these mechanisms. The inherent intelligence of Cosmos is visible for all with Eyes to see. On Eyes, see the Section "The Empiricism of Love: The Three Eyes of Knowing—The Three Eyes of Eros—The Three Forms of Gnosis—The Three Eyes That Are One" in Gafni, Stein, Hubbard, the five-volume series *The Universe: A Love Story—First Meditations on CosmoErotic Humanism in Response to the Meta-Crisis*, World Philosophy and Religion Press, in Conjunction with Waterside Press and Integral Publishers, 2023, on the Eye of Consciousness (in all of its expressions as the Eye of Value, the Eye of Contemplation, the Eye of the Heart, and the Eye of the Spirit), which dances together with the Eye of the Mind and the Eye of the Senses.

All of these point to an inherent, self-organizing intelligence that, as Stuart Kauffman and his collaborators have pointed out, is not only subject to measurement (through the extended Eye of the Senses) and computation or mathematical prediction (through the Eye of the Mind) but also to interior awareness (through the different dimensions of the Eye of Consciousness). That inherent intelligence self-actualizes Reality to ever-deeper levels of intimacy, expressed as the evolutionary chain of being and becoming.

Obviously, only viewing all these mechanisms of evolution through the integrated Eye of Consciousness (in all of its dimensions—the Eye of Contemplation, the Eye of the Heart, the Eye of the Spirit, and the Eye of Value) can reveal their deeper nature from the inside out.

As we have said in other writings,⁷⁰ to look at mutations purely from the perspective of whether a mutation was *successful* in terms of it leading to a new, useful feature for the living

From Success Story to Love Story

Every age has its own cognitive bias. The cognitive bias of modernity is success. The core goal is to be successful.⁷⁰

Success, in the modern world, is understood as a process of engagement that produces measurable commodities that enhance the human quality of life, with emphasis being on the exterior measurable dimension of human life including, prosperity, security, and medical health—and to some extent, social and personal stability as expressed in meeting the social norms for relationship and family. The modern age of science is defined as the scientific movement from classification to measurement. If you put those two strands together, you get the cognitive bias of modernity: *measurable success*—as defined by various forms of social and material prosperity.

This, of course, links up with three other social narratives, a narrow Neo-Darwinism, focused exclusively on survival of the fittest, a dogmatic and reductionism scientism that denies interiors, and postmodernism that denies existence of any form of narrative or directionality to the Cosmos. In such a world, *measurable prosperity* is the best measure of *success*.

This standard is then retrojected on Reality itself. Mutations, for example, are *successful* if they produce a *successful* result. A *successful* result is viewed as the *successful* production of some dimension of the human machine that allows for higher functionality and effectiveness in accomplishing what has been declared as the implicit goals of humanity—measurable success. And so, the disqualifying loop of the *success* measurement goes round and round.

All of this blinded the standard narrative from feeling into the ostensibly random production of millions of new communication configurations—new versions of protein molecules in our case—all of which preceded the production of cytochrome c—from a deeper perspective. That deeper perspective requires accessing the interior of the molecule from its own perspective as a theoretical sensual exercise."

⁷⁰ See, for example, in the Prologue of our forthcoming book, Gafni and Hubbard, *The Future of Relationships*, *From Role Mate to Soul Mate to Whole Mate*, World Philosophy and Religion Press, in Conjunction with Waterside Press and Integral Publishers, 2023. This is what we said there:

[&]quot;What we understand from the self-organizing universe is that the nature of the universe is moving towards deeper and more profound forms of intimacy.

It is also important to realize how the notion of a *successful mutation*, which ignored the natural process of the Cosmos deepening in love—through the articulation of new configurations of communication—*love notes*—came about.

being, is based on a narrow human success story. Looking at these same mutations from the firstperson perspective of the molecules in the DNA, all mutations are intricate plays of intimate creativity, works of art deriving from the intimate engagement of the molecules with each other—Reality self-actualizing to ever-deeper levels of intimacy and Eros.

It is also worth noting that the neo-Darwinian model of random mutations and natural selection by themselves leading to variation and new species is a hypothesis that not only flies against the evidence that we mentioned above, but whose scientific standing is purely contrived. It, itself, has never been tested via the methods of materialistic science (math, chemistry, physics).

Neo-Darwinism with its dogmatic distortion of randomness,⁷¹ ignores or denies the inherent evolving creativity of an inherently intelligent Reality, which itself reveals Eros and its implicit sense of inherent *telos*—its drive towards ever-deeper contact and ever-greater wholeness. Neo-Darwinism dogmatically asserts that the physical world came about randomly, without interiority and purpose, that all purpose is contrived, and that design itself is, in an ultimate sense, accidental.

In the deeper view of CosmoErotic Humanism, all mechanisms of the exterior sciences are the vectors through which Eros plays out in the exterior world, the means by which Cosmos self-organizes and self-actualizes. So, indeed, there is no contradiction between any of the everdeeper structural mechanisms of cosmos that science discloses and the interiority of Cosmos that the wisdom traditions disclose. Our understanding of these inter-included movements of Cosmos needs to deepen immensely.

However, because old school neo-Darwinism rejects the Eye of Consciousness, it is not able to sense the interiors of the physical world. That also makes it blind to see all the mechanisms of the exterior sciences as ways of Eros playing out in the exterior world, and of the entire Cosmos constantly self-organizing and self-actualizing through the intimate and cocreative play of its parts.

⁷¹ For a brilliant essay that undermines the notion of randomness as being a core construct of Cosmos, in the way it is presented by Neo Darwinism, see Perry Marshall, *Evolution 2.0*, "Appendix 1: All About Randomness," pp. 281-306.

Moreover, the slope from neo-Darwinism to social Darwinism, the political statement based on the belief that there is a superior group of people who should rule everyone else, is slippery indeed.

Neo-Darwinism portrays a caricature of God who is unsurprisingly not dissimilar from the caricature of God portrayed by creationism. In both views, God is seen in highly limiting terms. But paradoxically, in both positions, the same is true for nature and the human being.

In dualist creationism, the human being is seen as matter, animated by some spirit substance called *soul*, whose purpose is *faith*. In that worldview, God loves you as an expression of Divine Grace, but *not* because you are intrinsically lovable, or because you are of God's very Essence, or because Divine Creativity animates your essence, or because your desire participates in Divine Desire, as suggested in CosmoErotic Humanism. In materialist neo-Darwinism, nature is seen as inert, lifeless, and intrinsically neutral, while in creationist dualism, nature is seen as materialist, and therefore flawed at its core.

In terms of nature, neo-Darwinism asserts that the majority of our DNA is *junk* DNA—or that the world is completely accidental and random. But since math seems to make that assertion impossible, a multiverse—with trillions of empty universes—is posited to make the mathematics plausible, suggesting that we live in one of the few lucky ones. All of the other universes then become part of a process of random natural selection, *garbage* universes, like *garbage* DNA. Not exactly an elegant scientific theory.⁷²

Authentic science—not scientism—is, as philosophers of science have long pointed out, invariably elegant. Indeed, the elegance of equations is understood by many to be one of the signals of truth.⁷³

⁷² And since we cannot even explain why there is ONE universe, explaining trillions of them doesn't make it any easier...

⁷³ See our earlier reference to a conversation between Heisenberg and Einstein, where Heisenberg said: "You may object that by speaking of simplicity and beauty I am introducing aesthetic criteria of truth, and I frankly admit that I am strongly attracted by the simplicity and beauty of mathematical schemes which nature presents us. You must have felt this too: the almost frightening simplicity and wholeness of the relationships which nature suddenly spreads out before us."—*Physics and Beyond: Encounters and Conversations*, by W. Heisenberg, 1971, Harper & Row.

Neo-Darwinism is constantly *dumbing down nature*, commenting on the sloppy design of the eye or retina, how certain aspects of the natural world are obviously random accidents.

Somewhat paradoxically perhaps, creationism also bypasses nature, saying there is irreducible complexity, which is taken by many to mean that nature is *infinitely* complex, and we can never hope to plumb its depths, which itself hinders the scientific enterprise. To simply say that it is intelligently designed and walk away—an implicit God-of-the-gaps argument—is no better than saying that it is all *chance and necessity*, purposeless and random at its core, and that we have not yet worked out how that is possible, but eventually will (i.e., *evolution of the gaps*).

Neo-Darwinism also finds itself in an inherent confusion from which it cannot free itself. Reality is indeed confusing, and there must be some degree of ambiguity and self-contradiction in any intelligent take on Reality. But contradiction must give way to paradox. Paradox emerges when we bring a contradiction into the open and realize that we need to hold both sides of the dialectic—the thesis and the antithesis—and find our way to a larger truth—the synthesis.

Here is the rough outline of the contradiction:

Science loves truth. Science sees the elegance and beauty in scientific truth and is struck in radical amazement and wonder before the Infinity of the universe. Science senses the mystery and the numinous.

Indeed, science is in itself a religious endeavor, in the sense of *re-ligare*, or reconnecting the parts into a larger whole.

This can be seen in the perennial yearning of science for theories that unify Reality, which assumes an ordered Cosmos. This is based on, what we call in CosmoErotic Humanism, *anthro-ontological truth*, or our strange human capacity to grasp something of Cosmos and its contours in the depths of our own mysterious minds. We will return to this core epistemological frame of Anthro-Ontology below.

Science venerates the drive to explode superstitions and dogmas of the kind that appear in the surface structures of premodern religions, in favor of a higher, deeper, and more *good and beautiful* truth.

In scientism, however, none of this can be clearly named. Indeed, any sense of this implicitly assumed sacred order, beauty, and wonder must be debunked of its self-evidently

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inspired quality. Of course, the dogmatic materialist, neo-Darwinian reductionist is caught in *a set of performative contradictions*.

For example, existentialism merges with dogmatic scientism—both in its original and modern forms—nobly asserting all sorts of liberal values, even as they deny that any intrinsic value exists. Sartre, for example, asserts the value of the first-person voice, even as he, the apostle of cosmic meaninglessness, utterly denies that any intrinsic or real sense of meaning and value exists in Cosmos at all—and, indeed, calls the fearless embrace of this denial the essence of human freedom.⁷⁴

Such is the performative contradiction that plagues the materialism of the neo-Darwinian synthesis.

Because scientism cannot locate its own Eros, it is suffused with what we have called *pseudo-eros*.

We might say that Eros is the experience of being on the inside. One of the core threads of CosmoErotic Humanism is the realization that Reality itself is animated and driven by Eros, whose features include interiority, radical presence, wholeness, and desire.

In splitting off the mystery, scientism experiences a failure of Eros—a failure of wholeness, presence, yearning, and interiority. When one cannot find their way inside—a core quality of Eros—there is a desperate need to cover the emptiness with pseudo-eros. One form of pseudo-Eros is placing someone else, an individual or group, outside the circle to give oneself the illusory experience of being on the inside.

Scientism—the religion of science—does not claim its own Eros, part of which is its own religious impulse. It does not claim the depth of its own commitment to higher elegance, beauty, and order—and thus winds up rejecting true empiricism and attacking any information that has traces of transcendence.

Scientism is left *not* with *radical empiricism*, of which William James wrote, but rather a castrated ontology that confines the Real into the narrowest straitjacket of materialism,

⁷⁴ See, for example, Jean-Paul Sartre, *Being and Nothingness*, first published in French in 1943, first published in English in 1956 by Routledge, and Irvin Yalom, *Existential Psychotherapy*, Basic Books, 1980.

generating its own insanity. For sanity is nothing but knowing something of the wholeness of our own identity.

There is a truth in creationism that speaks to what Intelligent-Design scientist Michael Behe refers to as "*the irreducible complexity of it all*." This should not discourage real science, even though it may discourage naive creationism and even scientism; rather, it should animate science with the sense of mystery that is present in every nanosecond and Planck-length of Reality. Instead of honoring the mystery, however, scientism is alienated from its own Eros and locates its identity in pseudo-eros, willfully seeking to blot out any rumors of angels or traces of transcendence from the public heart and mind.

Creationism falls prey to its own version of pseudo-eros in failing to understand that the ostensible heresies of science are, in fact, *holy* heresies, or what evolutionary mystic Abraham Kook called the "*Heresy which is Faith*."⁷⁵

Science is firm in rejecting medieval impulses in modern garb that stand against the human dignity implicit in the search for truth that originally animated, and still animates, the scientific method. Science correctly understands that dogmatic religion is a form of blindness, and that we must reach for the amazing grace of science, where we realize that "*I once was blind but now I see, the chains are gone, I've been set free.*"

Science intuits the great truth—expressed by Nachman of Breslov, an early nineteenthcentury Hassidic master—that materialism is a Divine Creation to call human beings to their full dignity. "When you see injustice in the world," writes Nachman, "you must feel that there is no God, and only you, human being, have the capacity to right the wrong."⁷⁶

In this sense, science is repulsed by what it experiences as the irresponsibility of faith in the caricatured Creator God. And, with its often-caricatured reputation of an ethnocentric deity demanding doctrinal allegiance in exchange for salvation, creationism makes for an easy target.

Finally, science senses the sacred obligation to change the motivational architecture of Cosmos from one that worships a Creator God of one nation or religion—to the exclusion of all

⁷⁵ Kook, Orot HaEmunah, 25.

⁷⁶ See Nachman of Breslov, in his *Likkutei Moharan*, Sec. 64.

others—to the veneration of universal rights of every human joined together in search for truth, in a covenant of fate and destiny, the dignity of our common humanity and finitude.

All of these noble insights of true science are also still at play in a lot of what we call *scientism*—the dogmatic religion of science asserting that only materials are real, and interiors are but illusions.

Standing for true values, therefore, poses the performative contradiction at the core of scientism, for to claim these values as real would itself be to claim value as more than just a social construction, as ontologically real, something that scientism refuses to do.

Instead, scientism continues to deny the intrinsic Eros of value itself.

God in Relation to Nature and Humans in Creationism & Scientism vs. CosmoErotic Humanism

When creationism seeks to address the origin story, it has one answer-God.

How did mitosis and meiosis originate? God.

What guides biology at the molecular and cellular level? God.

What organized biochemistry? God.

Bacterial colonies? God.

Of course, this hypothesis would never pass peer review in a scientific journal (*thank God*). God as the source of order and value might very well be a good answer, but only if God is considered in some dialectical relationship to a relatively, but not absolutely, autonomous nature.

CosmoErotic Humanism makes two simple but crucial points in this regard, both of which decry *narrow* empiricisms that admit only one form of empirical information, or honor only one method of information gathering, and no others. Instead, Reality demands a more *radical* empiricism that refuses to dogmatically split off or deny any part of the Real. To perceive truth, goodness, or beauty in their fullest senses demands just such empirical integrity.

The first point is that it does *not* contradict radical empiricism to understand Nature as identical with God in an ultimate ontological sense. It does not violate any empirical principles

of the exterior sciences to realize, via the equally empirical methods of the interior sciences, a hidden ground of absolute identity between Divinity and Nature.

The second point is that it *does* contradict radical empiricism to deny the *relative* autonomy of the naturalistic process. There does not only *appear* to be a naturalistic process—there *is* a naturalistic process.

The God described in the dualism of creationism lives outside of the naturalistic process and supernaturally manifests and directs it. But this itself is a degradation of the Divine. Divinity is infinitely wider and deeper than the small-minded conception of the *King God*, who is ultimately distinct, ontologically alien to Cosmos and man, but who nonetheless loves the human being, demands obedience, and grants grace.

Not only is God exiled by dogmatic religion to this narrow vision of the caricatured Creator God, but the Creator God is also almost always uniquely related to a particular ethnocentric religion that ultimately sees all nonmembers as inferior, at best, and seems disturbingly similar to some cross between a tyrannical king and a cosmic vending machine, a Divine Dictator, in which the human's role is pure obedience.

From this perspective, there is little point in exploring the depths of the naturalistic process, other than for the sake of the pragmatic purpose of facilitating nature's service to man. Anything unclear is answered by a God-of-the-gaps-type argument, and the dignity of human curiosity and investigation—i.e., the scientific method—is exiled to the realm of the pragmatic.

The response to this is one of the ways in which CosmoErotic Humanism is distinguished from scientism.

First, unlike scientism, which mocks the notion of creation, CosmoErotic Humanism does not entirely reject the notion of a Creator God *per se*. The experience of a Creative Divine Force that expresses the Personal Face of the Infinite and manifests Reality is a compelling vision in terms of both the interior and exterior sciences.

CosmoErotic Humanism *does* however reject the vision of this Divine Creative Force as S/He is presented in most versions of religious theism and expressed in so many presentations of creationism—as being purely external to Cosmos. Simultaneously, CosmoErotic Humanism rejects the strands in scientism (and Eastern thought) that mock the notion of a Personal Face of Infinity.

CosmoErotic Humanism affirms the First Principle and First Value of Cosmos that we call the *three primordial perspectives* (first, second, and third person) that are structural to Cosmos.

The second-person perspective expresses the face-to-face interaction that is core to the interior sciences of Sufism, Kashmir Shaivism, Sikhism, and Hebrew wisdom, and in some form also appears in other schools of the interior sciences.

The suggestion that personhood begins in the human world violates the sense of a participatory Cosmos, which is core to the evolutionary sciences. Human personhood, and the face-to-face dimension of the human I-Thou experience, participates in this larger quality of Cosmos.

Second, unlike scientism, CosmoErotic Humanism does *not* reject the notion of a unique intimacy between Divinity and a particular ethnocentric or sociocentric grouping. Indeed, it seems almost self-evident that Infinity meets the human being and invests itself in human finitudes through unique intimacies. Each nation, each religion, has what we have called a *Unique Self*, a unique quality to its participation in Divinity, which is both internal and external to Cosmos.

God, Nature, & Human in CosmoErotic Humanism:⁷⁷ A Deeper Look

One way to describe CosmoErotic Humanism in the context of this discussion is to say that it integrates the true but partial insights of creationism and scientism into a wider and deeper

⁷⁷ One word, however, is in order before we proceed. Although we have named CosmoErotic Humanism and have originally articulated many of its key tenets in the course of our study over decades, we also realize that we are no less inheritors of a distinguished lineage upon whose shoulders we also stand. These include, in the modern period, polymaths like James Mark Baldwin and Charles Sanders Peirce, later the likes of Alfred North Whitehead, and still later, Jürgen Habermas. At the same time, we are rooted directly in the interior sciences of the great traditions, whose sense of Reality is far more subtle, inclusive, and paradoxical than the writings of their exoteric counterparts, often in the same tradition. We are, of course, also joined by our colleagues at the Center, Ken Wilber, Howard Bloom, and others who have collectively engaged with us in the clarification of CosmoErotic Humanism in multiple forums over the last two decades.

truth. Another way is to say that it has the highest possible view of all three words, and worlds— *God, human being,* and *nature*.

CosmoErotic Humanism understands that Reality is animated *not* by a caricature of a supernatural Creator God that intervenes in the world of inert matter but, rather, by the irreducible mystery—what we refer to as *Eros*—that is present at every step of evolution's unfolding.

CosmoErotic Humanism realizes that Reality is Eros, filled with intrinsic aliveness, value, and *telos*, all the way down and all the way up the evolutionary chain. Reality is not merely a fact; it is a story—a Story of Value embedded in evolving First Principles and First Values.

In the language of science, Reality is animated by attraction and repulsion, which, in their dialectical balance, express as Eros—the generative force animating all of the forces of Reality described by science.

The God you don't believe in does not exist, declares CosmoErotic Humanism. Rather, on the one hand, Divinity is—what has been called in the West *via negativa*, and in the East *neti neti (not this and not that)*—indescribable and unspeakable, the mystery of mysteries beyond all contradictions and holding all paradoxes. On the other hand, Reality is filled with immanent transcendence.

This is what we have called *Eros*.

We live in a CosmoErotic Universe, an Amorous Cosmos, a world—in the words of one ancient interior scientist⁷⁸—whose *insides are lined with love*.

Reality seeks ever-more Eros, contact, and wholeness and reaches for ever-deeper and wider intimacies—new wholes—new shared identities with mutualities of recognition, *pathos*, value, and purpose.

⁷⁸ King Solomon, *Song of Songs*.

Three Common Features of Creationism and Scientism in Contrast to CosmoErotic Humanism

In some profound sense, we might say that creationism and scientism share three common features.

The first is that they do not believe in (the Real) God. Or, said more clearly, they argue about a caricatured, small version of the Divine, which shrinks the inherently good, true, and beautiful proportions of both the human being and nature. They both mistake that caricature for the Real God. And while creationism believes in that caricature, scientism rejects it. If they would each give God more credit and liberate the Divine from the constraints of what an evolutionary mystic and Orthodox rabbinic scholar, Abraham Kook, called "*small-minded, petty conceptions of Divinity*," genuine conversation could begin.

The second common feature of scientism and creationism is that, in some profound and paradoxical way, neither believes in nature. Both the materialism of scientism and the dualism of creationism degrade it. Indeed, as Whiteheadian scholar David Ray Griffin has pointed out, the dualism of the seventeenth-century proto-creationists quickly became the materialism of nineteenth-century scientism.⁷⁹ For both positions, the world of matter was inert, dead, and lifeless, and could only be activated by blind chance and necessity (scientism) or a simplistic supernatural intervention (creationism).

CosmoErotic Humanism speaks instead of a Nature that is self-organizing and selfactualizing—as it is described and experienced empirically in the sciences—by scientists who look at Nature from their integrated Eyes of the Senses, the Mind, and Consciousness, even if they may not fully distinguish these Eyes. This is the actual empirical description of Reality from the perspective of the new sciences as expressed in systems theory, complexity science, and chaos theory, as well as in quantum theory, general relativity, and other theories in physics, as well as microbiology and the evolutionary sciences.

⁷⁹ See David Ray Griffin, Unsnarling the World-Knot: Consciousness, Freedom, and the Mind-Body Problem, Wipf and Stock (March 25, 2008).

CosmoErotic Humanism rejects both materialism and dualism, instead placing at the center of Reality what we have called *pan-interiority*. Reality is exteriors and interiors all the way down and all the way up the evolutionary chain. In one classic text of the interior sciences, the *Zohar*,⁸⁰ pan-interiority is expressed by the phrase *leit atar panuy minei*—*No place is void of Him*. In another set of texts that appear in various forms of Hebrew wisdom, as well as Kashmir Shaivism, Sufism, and Christianity, all of Reality is constituted of *Names of God*—the hidden code that defines Cosmos. In but one example, in the original Hebrew the world is called *olam*, literally meaning *the place whose essence is hidden*.

Clearly, as we distinguish in other writings,⁸¹ there is both fundamental continuity and discontinuity all through the unfolding of evolution's levels and stages. Words describing phenomenological realities like *consciousness*, *intelligence*, *choice*, *intimacy*, *desire*, and *Eros* have both a common core meaning and a radically distinct evolving expression at every step of Reality's progressive unveiling. Nature is constituted both by exterior and interior natures; both are part of the living universe, and both evolve through time.

Indeed, one of the core tenets of CosmoErotic Humanism is that *Reality is evolution*, and *evolution is the Evolution of Intimacy*. This means that nature, both exterior and interior, is possessed of inherent ceaseless creativity animated by Eros, potentially moving toward ever wider and deeper wholeness.

Nature is much bigger and wider and deeper than either scientism or creationism can conceive of. Both views devalue nature and all but ignore its inherently self-organizing and self-actualizing architecture.

We now know that nature is potent, active, and alive.

⁸⁰ See, for example, in *Tikkunei ha-Zohar* 122b—quoted from https://kupdf.net/download/kabbalah-today_5aad07fbe2b6f51b048d041d_pdf.

⁸¹ See, for example, Gafni, Stein, Hubbard, the five-volume series *The Universe: A Love Story—First Meditations* on *CosmoErotic Humanism in Response to the Meta-Crisis*, World Philosophy and Religion Press, in Conjunction with Waterside Press and Integral Publishers, 2023.

We inhabit a living universe, that must be approached through what Howard Gardner called *multiple intelligences*, with only one of those crucial intelligences being the cognitive mind with its scientific method.

The third common feature is that neither scientism and creationism truly believes in the human.

For scientism, the human being is but the result of a *happy chemical accident*—that possesses no innate value or dignity, other than that which is socially constructed for survival reasons, with values being fictions or figments of our imagination—that is inexplicably unsatisfied with its own materialism. In the image of Shakespeare, later echoed by existentialist William Faulkner, human life is in the end, simply "*a tale told by an idiot, full of sound and fury signifying nothing.*"

For creationism, the human being is similarly of no intrinsic value—without *either* human submission in obedience to a particular sociocentric doctrinal version of faith *or* the Infinite Compassion of God who is so great that He loves the inherently unlovable human. For if the human being was inherently lovable, Divine Love would speak neither of Divine Grace nor Greatness.

One example of this shared view of humanity held by scientism and creationism might be their common negative view of human desire.

In scientism, human desires are reduced to paper-thin explanations of evolutionary psychology. All desire is an expression of what is implicitly presented as a selfish survival drive.

Desire is similarly seen in a degraded light by creationism—as somehow opposed to spirit.

In contradistinction, CosmoErotic Humanism asserts not only the highest vision of *God*, but of *Nature* and the *human being* as well, unpacking the dignity—and even Divinity—of desire. Desire includes the human desire to know truth and beauty that lies at the very heart of the scientific enterprise, both collectively and personally for every scientist.

At the very core of CosmoErotic Humanism is a realization about human identity: *I am evolution* articulates human nature accurately. In other words, each individual's *deepest heart's desire* participates in the wider evolutionary desire. One's inconsolable longings for goodness,

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truth, and beauty in all its forms—and even for transcendence itself—must be taken seriously. In other words, human phenomenology participates in the ontology of Cosmos, which itself is participatory in the ontology of Divinity. And by Divinity we mean *the evolving, creative Divine Ground of being and becoming* or what we sometimes call *the eternal Tao, which is the evolving Tao*.

The Anthro-Ontological Method

This is what we have called *Anthro-Ontology*—a concept that comes from *anthro* in the sense of *human*, and *ontology* in the sense of the teaching of what is ultimately *real* and not merely a fiction or social construction. In other words, genuine ontology, genuine *gnosis* of what is real, lives in the human being.

CosmoErotic Humanism is, as its name states, *humanistic*—but not in the sense of a secular humanism that views the human as a separate being in an alienated reality. Rather, we take seriously the exterior and interior sciences in affirming that *we live in a CosmoErotic Universe*, and *the CosmoErotic Universe lives in us*.

In the language of physicist John Archibald Wheeler, we live in *a participatory universe*. That is why the scientist can access the full breadth of Reality from the beginning of time and into the future—because the intelligence of the scientist participates in the intelligence of Reality.

For example, the values in a mathematics equations are inherent, both in the universe and in the mathematician, but remain invisible until they are evoked by the intensification of intimacy between the two.⁸²

In a similar way, the values in an *ethos* equation live in the Cosmos, in which the human being participates, thus giving her access to value. As in a mathematical equation, those values remain invisible until they are evoked by an intensification of intimacy. For example, the value

⁸² Interestingly, the pure mathematician, who is a philosopher, doesn't even care about the universe... It is the physicist and other natural scientists who then apply mathematics and find it useful in describing the exterior cosmos.

of universal human rights is evoked by the movement, at the leading edges of human consciousness, from egocentric to ethnocentric to worldcentric to cosmocentric intimacy.

This is a description of the Evolution of Value.

Intimacy is a value of Cosmos.

We have defined intimacy very precisely in what we call the *Intimacy Equation*. The first set of values in the equation reads:

Intimacy = shared identity in the context of otherness.⁸³

But this intimacy is not static in its expression. Rather, intimacy is mediated through every person's social, developmental, cultural, and psychological prism. As such, value is intrinsic to Cosmos, an expression of Eternity; and at the same time, value evolves over time.

We access the cosmic value of intimacy *not* by looking at nature, but by going inside. Both, the core of mathematics and ethics, with their respective values, may be said to be revealed anthro-ontologically. In other words, *the mysteries*, be they of the exterior or interior sciences, *are within us*.

CosmoErotic Humanism affirms the fullness of Nature, Divinity, and Humanity as three mutually participatory and inter-included dimensions of Reality. This does not reduce Divinity to Spinoza's pantheism, which, as Schopenhauer already noted, might well be but a polite form of atheism.

Instead, Divinity is experienced via the evolving First Principles and First Values of Reality, which include the three primordial perspectives, through which the Eros of Cosmos can be experienced as

- a first-person Eros that is alive in us and as us
- a second-person Eros, or the Infinity of Intimacy that knows our name

⁸³ For a fuller unpacking of what we have termed the *Intimacy Equation*, see Gafni, Stein, Hubbard, the five-volume series *The Universe: A Love Story*—*First Meditations on CosmoErotic Humanism in Response to the Meta-Crisis* all of these published by World Philosophy and Religion Press, in Conjunction with Waterside Press and Integral Publishers, 2023.

a third-person Eros animating the four fundamental forces of Reality, the inherent self-organizing and self-actualizing creativity of Cosmos, which is *turtles*⁸⁴ virtually all the way down and must be investigated and approached on its own terms through the scientific method

All three dimensions are mutually interdigitated and part of the larger single weave of Cosmos, which quantum physicist Ervin Schrödinger once referred to as the "*singular of which the plural is unknown*."⁸⁵

CosmoErotic Humanism is thus radically empirical.

Again, this is in marked contrast to the *narrow empiricisms* of both creationism, which ignores the mounting evidence pointing to Reality's self-organizing properties, and scientism, which ignores everything but the exteriors of the third-person perspectives of the Eye of the Senses and the Eye of the Mind.

The Three Primordial Perspectives: First, Second, and Third-Person Empiricism

By contrast, the *radical empiricism* of CosmoErotic Humanism embraces the first, second, and third-person perspectives on Reality, all three of which live as core structures of the human interior.

They have been designated by many words throughout history: *I*, *You*, and *It* (or *I*, *We*, and *It*); *Buddha*, *Sangha*, and *Dharma*; or, in the language of Evolutionary Spirituality, talking *about* evolution and its third-person forces, talking *to* the personal Face of Cosmos (second

⁸⁴ *Turtles all the way down* is a saying alluding to the problem of *infinite regress*. It also alludes to the mythological idea of a World Turtle that supports a flat Earth on its back. This turtle rests on the back of an even larger turtle, which rests on the back of an even larger turtle—*all the way down*. The exact origin of the phrase is uncertain. In the form *rocks all the way down*, the saying appears in "Unwritten Philosophy," *New-York Mirror*. Vol. 16, no. 12. September 15, 1838. p. 91. The linguist John R. Ross, in *Constraints on Variables in Syntax*, Massachusetts Institute of Technology. Dept. of Modern Languages and Linguistics. Thesis. 1967. Ph.D., retrieved from https://dspace.mit.edu/handle/1721.1/15166, associates William James with the phrase by telling a story about him.

⁸⁵ See Ervin Schrödinger, What Is Life? The Physical Aspect of the Living Cell, Cambridge University Press (1944).

person) that knows our name, and talking *as* the face of the evolutionary impulse (first person) disclosed through your irreducibly Unique Self—in you, as you, and through you.

All three primordial perspectives are part of the irreducible human experience across space and time, and our experience of all three evolves and clarifies across our personal lives and across the collective life of the evolution of consciousness and culture.

The curiosity of the scientist deploying the scientific method is an anthro-ontological pursuit: the first person of the scientist moved to search for truth through a third-person approach to Reality. It is an expression of the will of the universe, the will of Infinity, disclosed in finitude. The scientist, however, gathers data anthro-ontologically through her own experiences. The honoring of this impulse, one of whose key modern expressions is the scientific method, is core to the humanism in CosmoErotic Humanism.

The Three Eyes of Knowing

The human search for truth, however, is not limited to the scientific method. Rather, it anthro-ontologically includes what we call the *three Eyes of Knowing*.

There is the Eye of the Senses, which relies on the physical senses and their amplifiers (think fMRI machine).

There is the Eye of the Mind, which is rational and deductive, performing a range of epistemological actions from math to moral reasoning. The Eye of the Senses and the Eye of the Mind animate the classical sciences.

Thirdly, there is the Eye of Consciousness which knows Reality through its intuition of value, wonder, the Good, and the Beautiful.⁸⁶

⁸⁶ As we have described in the main body of the book Gafni, Stein, Hubbard, the five-volume series *The Universe: A Love Story—First Meditations on CosmoErotic Humanism in Response to the Meta-Crisis*, World Philosophy and Religion Press, in Conjunction with Waterside Press and Integral Publishers, 2023, the Eye of Consciousness has four expressions: the Eye of Contemplation, the Eye of the Heart, the Eye of Value, and the Eye of Spirit.

All three Eyes are essential for a complete worldview. They disclose different, yet interincluded, qualities of the Real.

The Eye of Consciousness in all of its dimensions animates the interior sciences, which are further deepened by the contributions of the Eye of the Mind and the Eye of the Senses.

All three Eyes express themselves in first, second, and third person in the scientific method.

The scientist using the Hubble telescope, for example, deploys all three Eyes from all three perspectives.

For example, first, and most obviously, the Eye of the Senses is amplified through the powerful capacities of the telescope, giving us a wildly enhanced third-person view of Reality.

The Eye of the Mind, deployed in the scientific method of the Hubble telescope, also gives us a third-person view of Reality, enacted through the mathematical calculations taking place in the scientist, which are part of the first person of the scientist participating in the mathematical values of the universe. The dazzling complexity, subtlety, and sheer beauty of both the data and images generated might well arouse, not only *third-person knowing*, but also a sense of *second-person wonder*, as one meets the unimaginably intricate and intimate design of Cosmos.

The same would be true of the Eye of Consciousness, which animates the first-person erotic LoveDesire in the scientist to receive the carnal knowledge of Reality, in both a secondand third-person encounter. But not only that, for in a deeper sense, we are constituted by Cosmos. All Cosmos lives in us. We live in a CosmoErotic Universe, even as the CosmoErotic Universe lives in us—in our first person.

For example, the human yearning to know expressed in the mathematician and scientist, to which we referred above, cannot be explained away as mere personal striving and desire. Instead, it is part of the strivings and desires—or what Whitehead called the *appetites*—of Cosmos.

CosmoErotic Humanism understands that Cosmos is coded with values of all forms, both in its interiors and exteriors, and that these are all part of the same story of *Evolution: The Love*

Story of the Universe. We call these isomorphic patterns—or First Values and First Principles of both the interior and exterior sciences *the Tenets of Intimacy*.⁸⁷

Naturally, the three Eyes, deployed in all three perspectives, generate not only the exterior values of the scientific method but the values of what we call, in CosmoErotic Humanism, the *interior sciences*.

The Eros of goodness, truth, and beauty, the depth of consciousness, intimacy, and desire, the Eros of value itself, and the experience of the Personhood of the Cosmos incarnate in the Infinity of Intimacy in all of Her disguises, to name but a few, are the revelations of the three Eyes mediated by the three perspectives.

All of these disclosures are non-dogmatic expressions of what we might call *the wide or radical empiricism* that characterizes our universe story with its correlative narratives of identity and desire.

A radical empiricism, for example, must take into account the Eye of Consciousness in all of its expressions. This includes but is not limited to the psychical data of parapsychology, which have been meticulously gathered for over a century. It also includes the extensive data concerning the evolution of consciousness into its higher depth dimensions—which validate parallel claims in the interior sciences—that have been incrementally gathered by leading-edge developmentalists, such as Gebser, Maslow, Graves, Loevinger, Cook-Greuter, Keegan, Wade, Fowler, Torbett, et al.

All of these forms of sensemaking define the meta-worldview of CosmoErotic Humanism, including the vision of the Amorous Cosmos, the Universe: A Love Story, or Evolution: The Love Story of the Universe.

⁸⁷ See CosmoErotic Humanism—Toward the New Human and the New Humanity: Homo Amor—The Tenets of Intimacy and the Social Miracles, by M. Gafni, Z. Stein, and B. M. Hubbard—in Preparation. For an early statement of the Tenets of Intimacy, see Gafni, Stein, and Hubbard, *The Intimate Universe: Intimacy as First Principle and First Value of Cosmos: First Meditations—First Steps in CosmoErotic Humanism: A New Story of Value in Response to the Meta-Crisis Volume 3*, World Philosophy and Religion Press, in Conjunction with Waterside Press and Integral Publishers, 2023.

Clarified Interiority: Avoiding the Myth of the Given-Evolving Values

All three of these Eyes, mediated through first-, second-, and third-person perspectives or experiences, disclose crucial anthro-ontological data about the interior nature of Reality. Anthro-Ontology, at its core, suggests that *clarified* human interiors participate in the interior Face of Cosmos and thus disclose crucial *gnosis* about Reality's inner nature. In other words, anthro-ontological realization understands that clarified human experience discloses valid *gnosis* about the nature of Reality. That might be sensory knowing, disclosed by the clarified Eye of the Senses, the values of mathematics or microbiology in the classical sciences revealed by the clarified Eye of the Mind, or the moral aesthetics of Cosmos as disclosed by the clarified Eye of Consciousness.

All three Eyes mediated through all three persons are values of Cosmos. In all cases, we must cleanse the doors of perception in order to disclose the depth of Reality's truths. This is necessary to rehabilitate values, which we have allowed to be exiled to their measurable and therefore commodifiable forms.⁸⁸

It is critical to note, however, that when we talk about the three Eyes of any dimension of the human experience—or interiority—we are talking about the clarified eye of experience—or clarified interiority—and not the ordinary eye that is habitually deployed in what Daniel Kahneman called *fast thinking*, which dominates most of our *untrained*, *habitual*, or *automatic* perceptions.⁸⁹ But crucially it is also based on perception that is not clarified.

Clarifying our perception also includes clarifying the prisms through which perceptions occur. These include the psychological, personal, cultural, economic, physical, and—of course—developmental prisms, through which all *knowing* is mediated.

Said differently, we must avoid what has been called *the myth of the given*. This is the old episteme, which characterized pre-modernity in its pre-evolutionary *gnosis* and assumed that

⁸⁸ See for example, *The Value of Everything: Making and Taking in the Global Economy*, by Marianna Mazucatto, 2018, Public Affairs Publishing.

⁸⁹ See Kahneman, Daniel, *Thinking, Fast and Slow*, New York: Farrar, Straus and Giroux, 2011.

when we perceive Reality, we are seeing it exactly as it—the given Reality, unchanging and eternal—failing to note all of the mediating prisms between our perception and Reality itself.

For example, the value of intimacy will appear one way if mediated through a medieval ethnocentric prism, which denies the universal equality of human beings as well as the equal dignity of the feminine, and another way through a modern pluralistic prism, which embraces universal human rights and the equal dignity of the feminine.

Value is not static, but evolves through intensifications of intimacies, which in turn help to clarify the doors of perception—the interior and exterior prisms of knowing—through which we view Reality.

All of this is considered by CosmoErotic Humanism and routinely ignored by the narrow empiricisms of scientism and creationism.

Scientism, for example, locates itself in modernity but rejects the Eye of Consciousness that characterized premodernity. This rejection is based on an ethnocentric—and often anti-body, anti-human-rights, anti-human-autonomy, and anti-feminine—nature of some of the meaning structures disclosed by the Eye of Consciousness as deployed through the premodern prism. Mediate the Eye of Consciousness through a modern prism, and the meaning structure—e.g., the vision of love and its emerging values—will have dramatically evolved and clarified.

Creationism, on the other hand, locates itself in the revelations of premodernity, but alltoo-often does not recognize the religious implications of the evolution of consciousness that has taken place—at least in certain sectors of Reality (democracy, universal human rights, the feminine) —since the formative medieval or ancient periods. Their universe stories, as outlined above, reflect the unclarified prisms of their narrow empiricisms.

By contrast, *CosmoErotic Humanism*, at least in aspiration, stands for radical empiricism and increasingly clarified prisms across all three Eyes of Perception and all three perspectives.

Scientism, Creationism, and CosmoErotic Humanism on the Problem of Pain, Suffering, and Evil

So how does CosmoErotic Humanism engage with and understand *pain*, *evil*, and *suffering*? Each of these terms is, of course, distinct, but engaging the distinctions and the depth of these essential issues is beyond the scope of this text.⁹⁰ We are turning to this issue here simply to point to the distinct approaches of the three views and elucidate the distinctions between them.

CosmoErotic Humanism does not engage these issues as *theo-logical* problems as they are understood by the creationist.

Creationism feels the need to engage in a *theo-logical* attempt to justify suffering in a world supposed to be run by a loving God. This enterprise of theism has been called *theodicy* and is driven by *theo-logic*—the attempt to address the existential questions of pain, suffering, and evil by means of *logic*, rather than Eros—silence, song, compassion, and intimate communion. How God can be omnipotent, omniscient, *and* kind is the *theo-logical* problem faced by creationism, which it variously solves by rejecting one of the three premises: either God is not all-powerful, not all-good, or not all-knowing. They seem to *theo-logically* contradict each other.

Scientism, by contrast, is intuitively outraged by pain, suffering, and evil, but struggles to justify its outrage. Bertrand Russel, for example, is caught in an impossible contradiction as he realizes,

*"I cannot see how to refute the arguments for the subjectivity of ethical values, but I find myself incapable of believing that all that is wrong with wanton cruelty is that I don't like it."*⁹¹

⁹⁰ See, for example, the section "The Great Problem of Pain in the Universe: A Love Story—The Dance of Certainty and Uncertainty" in the main body of the book Gafni, Stein, Hubbard, the five-volume series *The Universe: A Love Story—First Meditations on CosmoErotic Humanism in Response to the Meta-Crisis*, World Philosophy and Religion Press, in Conjunction with Waterside Press and Integral Publishers, 2023.

⁹¹ See citation of Russel, in Germain Bree, *Camus and Sartre*, Dell, 1972, pp. 15. Russel is the co-author, with Alfred North Whitehead, of *Principia Mathematica*, 3 vols., Cambridge University Press, 1910–1913.

In other words, Russel understands that the great tragedy of his scientism is that he has no ground to challenge evil and suffering as wrong or even unfair. For without a larger ground of intrinsic value—the valiant attempt to the contrary by Derek Parfit and his students notwithstanding⁹²—nothing is ultimately right or wrong, fair or unfair.

CosmoErotic Humanism: The Anthro-Ontological Experience of the Infinity of Intimacy

By contrast, CosmoErotic Humanism has a clear ground for value, meaning, and the rejection of evil and suffering. We feel the integrity of outrage due to unjust suffering, pain, or evil, as we anthro-ontologically know Reality to be intimate and amorous, valuing harmony and goodness. Simply put, evil is a failure of intimacy and a violation of each of these cosmic values.

There are, of course, multiple streams of empirical data arising from our clarified interiors, which, for CosmoErotic Humanism, stand *not* as a *theo-logical* answer to the problem of evil, pain and suffering, but as a contrast to the breakdown of intimacy that seems to be represented by them.

One dimension of data is our interior experience of and yearning for goodness, meaning, and purpose—ultimately Real Values of Cosmos—universal data that live in the depths of human Anthro-Ontology, in every space and time of human existence. It is our own anthro-ontological experience, mediated through the three Eyes in first, second, and third person, that informs us that the elegant ordering Force of Cosmos is *not* only *not* a malevolent force—or even an indifferent Infinity of Power—but the Infinity of Intimacy that knows our name.

The second-person sense of being held in the arms of the Beloved is a core experience of Reality. The Beloved is *not*, as Rudolf Otto wrote, *all sweetness and light*. Evolution: The Love Story of the Universe is replete with agony and ecstasy.

⁹² See, for example, Sam Harris in his *The Moral Landscape*, Black Swan, 2012, which is heavily influenced by Parfit and consequentialism, or Peter Singer in his many writings on the subject, who is similarly informed.

Both co-authors know real suffering as, we are sure, so many of our readers do in their own way. I (Marc) grew up in the shadows of the holocaust, my mother a survivor, who saw a baby ripped apart in front of her eyes. She—and I can barely write this sentence—was buried alive at age five and later that year faced a firing squad, which she miraculously escaped.

One Hasidic philosopher and master, Kalonymus Kalman Shapira of Piacenza, the last scion of Polish Hassidism, who died in Treblinka and fought in the Warsaw Ghetto uprising, wrote of the Infinity of Divine Pain and of the mysterious human capacity to participate in the Tears of Divinity.⁹³ Indeed, we must acknowledge both the horrors and the beauty of our human participation in Cosmos.

In the interior sciences of CosmoErotic Humanism, we speak of God not merely as the *Infinity of Power* but as the *Infinity of Intimacy*.

When we are challenged,

how can you believe in a God who cries?

We respond,

how can we trust a God who does not?

What we are evoking is *not* anthropomorphism but Anthro-Ontology.

As we formulate it in our writings on CosmoErotic Humanism,

the mysteries are within us.

We live in an Intimate Universe, and the Intimate Universe lives in us.

The entire Intimate Universe, with its exteriors and interiors, lives inside us.

Our pain participates in the Infinity of Intimacy—intimacy not merely as a social construction but *the very fabric of Cosmos*.

⁹³ See the book by my colleague Nehemia Polen, *The Holy Fire: The Teachings of Rabbi Kalonymus Kalman Shapira, the Rebbe of the Warsaw Ghetto*, Jason Aronson, Inc. (1994).

And as we stated above,⁹⁴ evil is a failure of intimacy.

Crucially the ethical impulse of CosmoErotic Humanism states that failure of justice must be met with human action. In a participatory universe, we realize that human action itself is literally Divine Love—Evolutionary Love in Action. The universe is intimately, erotically intertwined in us—God incarnate in human form—or in other words: CosmoErotic Humanism.

CosmoErotic Humanism: Beyond the False Binary Between Darwin and Design Suggested by Both Creationism and Scientism

We now turn briefly to one other dimension that is intimately related to our sense of being held in an intentional Cosmos—a key issue that is directly related to the contrast between CosmoErotic Humanism, scientism, and creationism: the issue of *design*.

First, the tired either-or choice between Darwin and Design, suggested both by scientism in its Neo-Darwinist form and by creationism, is simply a false binary. It is empirically clear that nonrandom design is an inherent feature of Cosmos. The narrow empiricism of scientism, looking only at exteriors through the Eyes of the Senses and the Mind, ignores the overwhelming empirical data, seen through the integrated Eye of Consciousness—revealing and validating the virtually self-evident truth that not only is there design, but there is intentionality behind the design. At least, it becomes self-evident once we open the Eye of Consciousness and integrate it with the other Eyes.

Indeed, CosmoErotic Humanism demonstrates beyond the shadow of a reasonable doubt, through the work of dozens of thinkers in the exterior and interior sciences, that an unimaginably subtle, beautiful, dazzling, and complex *design*—beyond what all our supercomputers can even begin to manifest—is a core feature of Cosmos at all of its levels.

⁹⁴ See also Gafni, Stein, Hubbard, the five-volume series *The Universe: A Love Story—First Meditations on CosmoErotic Humanism in Response to the Meta-Crisis*, World Philosophy and Religion Press, in Conjunction with Waterside Press and Integral Publishers, 2023.

This design, however, is not imposed on Cosmos from the outside, but is an inherent structure of the self-actualizing Cosmos—the self-organizing universe. CosmoErotic Reality is an expression of the Love Story of Cosmos.

Design implies intention. One of the core experiences of Eros—Love in all of its forms is the experience of intending and being intended.

At the human level, as we discuss in other writings, to be intended and to intend is one of seven core human needs. That human beings need to intend and be intended is an expression of the anthro-ontological structure of Reality. The Eye of Consciousness, which lives anthro-ontologically in each human being, participates in and discloses the interior Face of Cosmos. Every human being is able to feel what Cosmos feels. And after enough anthro-ontological attunement to this, it becomes clear that the universe feels, and that the universe feels Love.

Yes, Love—or what we refer to as *Eros*—evolves at every level of evolution. But the core quality of Eros lives in Cosmos all the way down and all the way up the evolutionary chain.

And Love, or Eros, intends—that is one of its core qualities.

Eros implies *telos*.

Eros implies intention.

A Cosmos that welcomes human life is correctly, *inherently*, experienced by the human being as the embrace of Reality. The experience of an *inherently* designed, *inherently* intentional Cosmos is a *welcome sign* in the universe.

Eros and design show up, for example, in the codes of DNA, to which we will return below, as well as in the sixty or so constants of Cosmos that are precisely finetuned to welcome life, in which a slight variation of any of them would disallow life. Eros and design are part of the experience of Eros that characterizes the awake human being's experience of the universe.

The narrow empiricism of creationism rehashes the same false binary of scientism, asserting that design is an externally imposed quality—against Darwin, or *true* evolutionary thought in general, that understands design as being intrinsic or inherent to Cosmos.

For CosmoErotic Humanism and *true* evolutionary science, it is empirically clear that design is *not* imposed by a Creator God-Force, who lives wholly outside of the material cosmos, as the dualist views of creationism so often assert.

The narrow empiricism of creationism all but ignores this virtually self-evident truth that is precisely the assertion of evolutionary science, which correctly fuels the noble dimension of the true scientific impulse—the necessary rebellion against the exoteric presentations of the great religions that projected God as exterior to cosmos, a benevolent king who had no shared identity with her subjects whatsoever.

This truth is also no less than the near-universal realization of the interior sciences' *nondual* expressions, as they appear in virtually all of the great traditions. *Divinity, Eros, the implicate Order, Atman as Brahman, Matt, Geist, the Great Mother, the Unmanifest, Elohim*, or whatever term one uses—with their implicit, inherent quality of design—is directly experienced, in all the great interior science traditions, by the most subtle and speculative minds and hearts, each an expression of the universe's self-knowing, as being both, the Ground of Reality and its inner Core, at all levels of manifest expression. One expression of the realization of this Ground is what Kashmir Shaivism referred to as *Shiva* and *Shakti—consciousness* and *Eros*—ground, substance, and potential design of all of Reality.

The Intentional Cosmos: An Anthro-Ontological Knowing

We have already elaborated in depth above on the meaning of the term *Conscious Evolution* and on the core notion of CosmoErotic Humanism that the fabric of the universe itself is Eros—the *inherent, ceaseless creativity, seeking, moving toward, desiring ever-deeper contact and ever-greater wholeness.*

Eros is inherent to Cosmos.

And Eros intends design.

For the awake human being, that is the cosmological experience of what the interior sciences call the *Inside of the Inside* of Reality.

When we talk about *design*, we are *not* talking about a discredited version of the cosmological proof of a God that some medieval schoolmen attempted. We are instead talking about the simple truth that the level of design is not credibly understood as being governed only by exterior necessity or chance. Inherent design is an interior quality of Eros that animates and drives Cosmos. Design is not only governed by chance and necessity or generated by random mutation. *Intention, non-randomness*, or what has been called *intelligence* or *consciousness*, are at the very Heart of the Cosmos.

Even as we continue to reject the contradiction and instead hold the wholeness of the paradox that expresses as interiors and exteriors, there is intentionality on the inside and (seemingly) random forms of creativity on the outside. The interior intention manifests itself in the exteriors as wild, creative experimentation, leading to awesome expressions of creativity that almost mock the creativity of the best human designers of the world. We access that experience in our own interior nature, which is not alien but rather participatory in Cosmos.

Our need to intend and to be intended *participates* in the bi-directional intentionality of Cosmos. Intention is an anthro-ontological truth. CosmoErotic Humanism, emergent from the rich traditions of the interior sciences, notices the obvious.

We need to intend and to be intended.

We need to be loved and adored. And we need to love and adore.

We need to be recognized and to recognize.

We need to choose and be chosen.

We need to be desired and to desire.

We need to be needed and to need.

We need to grow and to be grown.⁹⁵

⁹⁵ Or, said slightly differently, to transform ourselves and be drawn by the inherent will of Cosmos towards transformation.

These are the seven core human needs, anthro-ontological expressions of the Nature of Reality. We are—along with everything that is—intended, loved/adored, recognized, chosen, desired, needed, and called to growth and transformation by all of Reality.

Kenosis, Rumors of Angels, and Traces of Transcendence

There is some sense in which, when we decide to love, we withdraw and redefine our most essential identity in order to meet our beloved. In that sense, in CosmoErotic Humanism we talk of a sense of *Divine Kenosis—a self-emptying*. *Kenosis* is rooted in the interior sciences of Hebrew wisdom, which called it *Tzimtzum*, the apparent withdrawal of Infinity to manifest a void, out of which form can manifest.

Tzimtzum, however, is *apparent*, *ostensible*, even *real*, but *not Real*. Or said slightly differently, it is real but not *true*. For the void is ultimately filled with Infinity—rumors of angels and traces of transcendence.

Eros, intimacy, desire, goodness, truth, beauty, devotion, radical amazement, wonder, the Eternity of the now moment, creativity, laughter, tears, integrity, value, personhood, choice, Love, and *heroism* are but some of the names we evoke to point toward the traces of transcendence. But, like all poetry, they often stretch the boundary of words into the awestruck silence of presence.

These traces of transcendence appear all the way up and all the way down the evolutionary chain, encompassing the biosphere (the realm of life) and the physiosphere (the world of matter), each in their own manner, with fundamental continuities and profound discontinuities, as we make the momentous leaps from matter, to life, to the depth of the human self-reflective mind, and through all the sub-levels of each.

Design as an Anthro-Ontological Experience

What Anthro-Ontology tells us is that the depth of clarified human experience tells us something of the Nature of Reality, because all of Reality, interior and exterior, lives in us, from

muons to quarks, to atoms, to molecules, to cells, to the entire range of interiors. We are constituted by all of this, so when we encounter design, we feel the *intention* of Cosmos.

The feeling of being held in the intentional LoveIntelligence and LoveBeauty of Cosmos disclosed in the experience of design is not a theological or scientific truth, but an anthroontological truth. In this way, we experience what has been called *the fine-tuning of the universe* as an expression of *Evolution: The Love Story of the Universe*.

The denial of this cosmic fine-tuning is another of the many areas where scientism tilts to the absurd. For example, there are approximately sixty parameters, which, were they different by even an infinitesimally small margin, would prevent life from emerging on the planet. Not one parameter or two, but upwards of sixty.

To get a deeper sense of this, let's take a look at a broad, popular overview of *fine-tuning*, from Wikipedia. Even though there are some well-known flaws with the Wikipedia site, especially in articles that relate to living persons, a lot of the information (including the information on science) is certainly reliably.⁹⁶

Before you read, however, just notice that, in this public culture document, scientificmaterialist editors, known to be strongly biased against other worldviews, cite information related to the unimaginable fine-tuning of Cosmos, all the while seeking to understate and obfuscate the actual implications for *The Universe: A Love Story*.

Excerpts from the Wikipedia article called *Fine-tuned universe*, including footnotes:⁹⁷

The characterization of the universe as finely tuned suggests that the occurrence of life in the universe is very sensitive to the values of certain fundamental physical constants and that the observed values are, for some reason, improbable.⁹⁸ If the values of any of certain free parameters in contemporary physical theories had differed only slightly from those observed,

⁹⁶ See https://en.wikipedia.org/wiki/Wikipedia:Scientific_peer_review.

⁹⁷ See https://en.wikipedia.org/wiki/Fine-tuned_universe, retrieved June 13, 2022.

⁹⁸ See "Fine-Tuning," from *The Stanford Encyclopedia of Philosophy*. Center for the Study of Language and Information (CSLI), Stanford University. 12 November 2021. https://plato.stanford.edu/entries/fine-tuning/.

the evolution of the Universe would have proceeded very differently and life as it is understood may not have been possible.^{99, 100, 101, 102} ...

In 1961, physicist Robert H. Dicke claimed that certain forces in physics, such as gravity and electromagnetism, must be perfectly fine-tuned for life to exist in the universe.^{103, 104}

Fred Hoyle also argued for a fine-tuned universe in his 1984 book, The Intelligent Universe: "The list of anthropic properties, apparent accidents of a non-biological nature without which carbon-based and hence human life could not exist, is large and impressive," Hoyle wrote.¹⁰⁵ ...

Physicist Paul Davies has said, "There is now broad agreement among physicists and cosmologists that the Universe is in several respects 'fine-tuned' for life." However, he continued, "the conclusion is not so much that the Universe is fine-tuned for life; rather it is fine-tuned for the building blocks and environments that life requires."¹⁰⁶

He has also said that "'anthropic' reasoning fails to distinguish between minimally biophilic universes, in which life is permitted, but only marginally

¹⁰⁵ Profile of Fred Hoyle:

⁹⁹ Just Six Numbers: The Deep Forces That Shape The Universe, (p. 4), by Martin Rees, 2001, Basic Books.

¹⁰⁰ See *Cosmic Coincidences: Dark Matter, Mankind, and Anthropic Cosmology*, (pp. 7, 269), by J. Gribbin and M. Rees, 1989, Bantam Books.

¹⁰¹ See *Cosmic Jackpot: Why Our Universe Is Just Right for Life*, by P. Davies, 2007, Houghton Mifflin Harcourt.

¹⁰² See A Brief History of Time, (pp. 7, 125), by S. W. Hawking, 1988, Bantam Books.

¹⁰³ "Dirac's Principle and Cosmology," by R.H. Dicke, 1961, *Nature*, 192 (1), 440.

¹⁰⁴ *The Oxford guide to the history of physics and astronomy*, by J.L. Heilbron, J. L. (Ed.), 2005, Oxford University Press.

https://web.archive.org/web/20120406200054/http://www.optcorp.com/edu/articleDetailEDU.aspx?aid=1530.

¹⁰⁶ *Eco-Phenomenology: Life, Human Life, Post-Human Life in the Harmony of the Cosmos* 121 (1), pp. 131-32, by W.S. Smith, J.S. Smith, & D. Verducci (Eds.), 2018, Springer.

possible, and optimally biophilic universes, in which life flourishes because biogenesis occurs frequently."^{107, 108}...

The premise of the fine-tuned universe assertion is that a small change in several of the physical constants would make the universe radically different.

As Stephen Hawking has noted, "The laws of science, as we know them at present, contain many fundamental numbers, like the size of the electric charge of the electron and the ratio of the masses of the proton and the electron.... The remarkable fact is that the values of these numbers seem to have been very finely adjusted to make possible the development of life."^{109, 110, 111}

The experience of the fine-tuning of the universe is but one of the many dimensions of design that evokes the experience of being intended. Another way of saying it is that the experience of design is the (anthro-ontological) experience of finding a *welcome sign* in Cosmos and knowing that it's always been there.

¹⁰⁷ "How bio-friendly is the universe," by P. Davies, 2003, International Journal of Astrobiology 2(115), p. 115. DOI:10.1017/S1473550403001514.

¹⁰⁸ On Wikipedia, this is part of the main article: "Among scientists who find the evidence persuasive, a variety of natural explanations have been proposed, such as the existence of multiple universes introducing a survivorship bias under the anthropic principle." Meaning the positing of trillions of universes to ignore the experience of fine-tuning, that is to say Eros, in the very fabric of our universe. See "Fine-Tuning," from *The Stanford Encyclopedia of Philosophy, Center for the Study of Language and Information* (CSLI), Stanford University. 12 November 2021. https://plato.stanford.edu/entries/fine-tuning/. Of course, trillions of universes do not *contradict* the fine-tuning argument.

¹⁰⁹ See A Brief History of Time, (pp. 7, 125), by S. W. Hawking, 1988, Bantam Books.

¹¹⁰ See *The Accidental Universe*, (pp. 70-71), by P. Davies, 1993, Cambridge University Press. On Wikipedia, this is part of the main article: "*If, for example, the strong nuclear force were 2% stronger than it is (i.e. if the coupling constant representing its strength were 2% larger) while the other constants were left unchanged, diprotons would be stable; according to Davies, hydrogen would fuse into them instead of deuterium and helium. This would drastically alter the physics of stars, and presumably preclude the existence of life similar to what we observe on Earth. The diproton's existence would short-circuit the slow fusion of hydrogen into deuterium. Hydrogen would fuse so easily that it is likely that all the universe's hydrogen would be consumed in the first few minutes after the Big Bang. This "diproton argument" is disputed by other physicists, who calculate that as long as the increase in strength is less than 50%, stellar fusion could occur despite the existence of stable diprotons.*"

¹¹¹ "Big Bang nucleosynthesis: The strong nuclear force meets the weak anthropic principle," by J. MacDonald and D. J. Mullan, 2009, *Physical Review D*. 80(4), 043507. DOI:10.1103/physrevd.80.043507. "Contrary to a common argument that a small increase in the strength of the strong force would lead to destruction of all hydrogen in the Big Bang due to binding of the diproton and the dineutron with a catastrophic impact on life as we know it, we show that provided the increase in strong force coupling constant is less than about 50% substantial amounts of hydrogen remain."

The Omnipresence of Codes and Consciousness in Biology: Intention and Presence

A second experience of design is the radical omnipresence of *codes* (for example, in DNA) and *consciousness*, or what we might call *inherent intelligence*, in biology. We don't know of any way of getting codes and intelligence without starting with intelligence or, perhaps more simply, with *intention*. Everything we know about the evolution of Reality tells us that nothing evolves in a meaningful way without intention. Human beings cannot generate what we understand to be design without acknowledging that, at some point, something was done with a degree of intentionality. It simply never happens.

Of course, we are limited to our own human experience. So, from one particular vantage point, we can only say that we as humans cannot generate design without intentionality. Naturally, we can see expressions of design in the animal world, for example, in ant colonies, beaver dams, birds' nests, etc. This is commonly said to come only from *instinct*. However, what is instinct but an expression of intentionality? It is a different form of intentionality than the way it appears in the human world, and yet there is LoveIntelligence, or LoveTelos, structured into Cosmos. This Cosmos clearly values life and the perpetuation of life, and it understands that beauty attracts and allures to life, etc.

In other words, there is an entire series of intrinsic values that make up the matrix of instinct. Instinct doesn't make sense unless it operates within a field of shared value. Thus, while animals operate from instinct—that is to say, from our perspective they don't *seem* to have a conscious experience of making decisions grounded in value—from another perspective, it is also explicitly clear that they are operating *within* a field of value that emerges from the intrinsic nature of Cosmos, which is *not* accidental or random—it is *intentional*. There is an *implicit intention*—a direction, a *telos*, a value structure in Cosmos. So, instinct itself also implies *inherent intention*.

We want to be careful to call it *inherent intention*, and not (only) *prior intention*, which would imply an exterior Creator God who lives outside of Reality intending the structures of Cosmos in one moment. And while there are many reasons to assume that there *is* prior intentionality, it cannot be fruitfully split from inherent intentionality. That is to say, intelligence is both transcendent and immanent at the same time—we are speaking not about theism or pantheism here, but about a panentheist cosmic logic, or intentionality, that works all the way up and all the way down the evolutionary chain.

Plants, for example, are beautiful, and they emit fragrance. That fragrance, and beauty, attracts bees—the entire process of what we call *the birds and the bees* emerges from this play. Does this come from a conscious intention of the plants operating in the same way that human intentionality operates? From a human perspective, this does not seem to be the case, as popular writers like Michael Pollan and others have pointed out.¹¹² However, the birds and the bees do operate within a Field of Eros. Indeed, when we refer to *the field of the sexual*, we call it *the birds and the bees*. And that Field of Eros has value. Indeed, its primary value is Eros. We begin to sense that Eros and value are two expressions of the same phenomenology and the same ontology.

And *Eros* itself, as we have articulated in our Eros Equation, *equals the experience of radical aliveness seeking, moving towards, desiring ever-deeper contact and ever-greater wholeness.* The overarching point is that there is a First Value and First Principle of direction, *telos*, or intentionality that lives all the way up and all the way down the evolutionary chain. In that sense, we might say that there is a continuity of consciousness, a continuity of intention—of *telos*—of direction—that lives all the way up and all the way down the evolutionary chain.

However, as we have also pointed out in our writings on First Principles and First Values,¹¹³ there is both radical continuity and radical discontinuity all the way up and all the way down the chain. Thus, intentionality appears distinctly in the world of matter, in the world of life, and in the world of the self-reflective human mind. It will appear distinctly again in what we have called the *Fourth Big Bang*, as the self-reflective human mind transforms into a higher

¹¹² See, for example, Michael Pollan, *The Botany of Desire: A Plant's-Eye View of the World*, Random House; 1st edition (2001).

¹¹³ See Marc Gafni & Zachary Stein, *Sixty Propositions on First Principles and First Values: Notes Taken During the Construction of CosmoErotic Humanism* (forthcoming 2023), and see also the fuller conversation in Marc Gafni & Zachary Stein with Ken Wilber, *First Principles and First Values: Towards an Evolving Perennialism: Introducing the Anthro-Ontological Method.*

expression of itself. That higher expression is what has been referred to as *choicelessness*, a place in which choice and no choice synergize into a higher experience.¹¹⁴

To that point, as Denis Noble has pointed out, we know of no process that takes us from chemicals to code—without an indwelling consciousness, intelligence, intention, or presence. A code is even more fundamental than a cell, clearly connoting intention—which is but another word for the *presence of consciousness*. That *presence*, as seen through the Eye of Consciousness, clearly invests Reality with life. And the creation of unique life, with its capacity for joy, love, depth, music, poetry, kindness, intimacy, and communion, is an expression of the Eros of Cosmos. Human life, in all its depth, is emergent from this implicit Eros-animated intention, incarnate as the movement from chemicals to code, which defines the entire world of life.

Richard Dawkins' assertion of code and life emerging from a *happy chemical accident* defies both statistics and anthro-ontology. Moreover, as we have shown above, the suggestion that *millions of life forms that are generated by the code are explicable by variation and selection only* is much closer to dogma than science. Natural selection is, as Lynn Margulis reminded us, not less than but also not more than the *sorting mechanism* of evolution.¹¹⁵ It is *not* its driving force. Random variation and selection are by themselves simply insufficient to explain the evolution of life. Organisms evolve but we have no sense whatsoever that this level of self-organization or self-actualization can happen without interior intention—or what we might call *telos* and *Eros*—the *Telerotic Universe*.

We know that purposeless processes—those devoid of *telos*—do not generate great design and complexity. We have no record of random mutation being used to design anything in

¹¹⁴ On choicelessness, see Gafni, *Radical Kabbalah*, Book One, Part Five, and see, for example, Jiddu Krishnamurti, *Choiceless Awareness: A Selection of Passages for the Study of the Teachings of J. Krishnamurti*, K PUBN; Revised edition (1992).

¹¹⁵ "*Natural selection eliminates and maybe maintains, but it doesn't create.*" (Lynn Margulis https://bwo.life/bk/ns1.htm#margulis_2011 [2011, "Discover Interview: Lynn Margulis Says She's Not Controversial, She's Right", *Discover* (April). Available online at https://www.discovermagazine.com/the-sciences/discover-interview-lynn-margulis-says-shes-not-controversial-shes-right], microbiologist and botanist, pioneer in exploring the role of symbiosis in evolution, and co-developer of the Gaia hypothesis).

the human word. The rose window in Chartres Cathedral did not randomly come into being. Bill Gates and the team at Microsoft did not use random mutation to design *Windows*.¹¹⁶

Darwin focused on random variation as the engine of evolution, but we now know that symbiogenesis¹¹⁷ and hybridization,¹¹⁸ self-evidently intelligent processes, which we already mentioned above, are another important engine of variation—what we might call *intentional* or *adaptive*, as opposed to random, *variation*.

This is a more significant recognition than the important assertion, conceded by even the ostensibly materialist writers of Big History, that energy flows drive the entire process.¹¹⁹ Without these energy flows, nothing of significance happens. Big History works hard to neutralize these energy flows from any suggestion they might have intention or intelligence.

It is true that the self-actualizing Cosmos is animated by energy flows in every nanosecond. But the processes these energy flows generate are not merely mechanical, resulting purely from necessity and chance; they are expressions of an inherently intelligent, conscious Cosmos suffused with mystery. And yet, these energy flows and the more dramatic processes of intentional variation should be understood to have relative autonomy. They deserve the dignity and require the rapture—at every level—to be subject to investigation governed by the scientific method.

CosmoErotic Humanism understands that we don't yet even begin to fully understand the self-actualizing processes of biology, which are suffused at every step with design and mystery.

¹¹⁶ They do, however, use what is called *Evolutionary Project Management*, where the product is developed in close touch with its stakeholders and customers, who give feedback along the way, which gets applied in an iterative fashion. For the different *Windows* versions, for example, these are the different security patches and updates. This is pretty close to how evolution works—but not random evolution. Rather, evolution that is guided by its own inherent intelligence and seeks to fulfill a set of inherent values. This is what we have called *the synergy of telos and Eros* or *the Telerotic Universe*.

¹¹⁷ *Symbiogenesis* means literally *becoming by living together* and refers to the crucial role of symbiosis in major evolutionary innovations. It is also the leading evolutionary theory of the origin of eukaryotic cells from prokaryotic organisms.

¹¹⁸ In biology, *hybridization* refers to the process of combining different varieties of organisms to create a hybrid.

¹¹⁹ See, for example, here:

https://www.sociostudies.org/almanac/articles/how_big_history_works_energy_flows_and_the_rise_and_demise_of _complexity/.

And within the *mystery of design* and the *design of the mystery*, we experience the processes of life as direct expressions of intention, presence, and Eros.

Random Mutation + Natural Selection = Design?

The Neo-Darwinian equation of *random mutation* + *natural selection* = *design*—without any interior dimensions as seen through the Eye of Consciousness—does *not* survive scientific scrutiny. We have no indication that *random mutations plus natural selection* by themselves, even if we add the more advanced mechanisms of what has been called *adaptive mutation* (e.g., through symbiogenesis and hybridization) that we mentioned earlier, generate design—without the interior dimensions of consciousness, intelligence, creativity, and intention. And every indication—from everything we know about the interior and exterior makeup of Cosmos at every level of evolution—is that they do *not*.

As Perry Marshall reminds us, any engineer will tell you that random mutation *never* generates code—at least in the human world. We might generalize that exterior code *always* co-arises with, and is an expression of, an interior intelligence and intention. That is the essence of what Denis Noble and dozens of others, over the last several decades, some of whom we already turned to above, have demonstrated in the languages of science.

That does not mean that the creationist *Hand of God* reaches into inert dead reality and fashions eyes, for example—that would be dualism. However, the dogmatic desire of scientism to violate our anthro-ontological and scientific sensibilities and explain the most intricate patterns of new emergence in a way that could be called *evolution of the gaps* is in direct response to the equally inappropriate, *God-of-the-gaps arguments* made by so many versions of creationism.

As we have already noted, both creationism and scientism operate with narrow empiricisms. Scientism bypasses the self-evident existence of myriad expressions of intelligence, consciousness, and Eros, just as creationism bypasses the relative autonomy of a Cosmos that operates according to its own inherent laws governed largely by the classical laws of science as we understand them today.¹²⁰

The Inherent Drivers of the Amorous Cosmos

The inherent ceaseless creativity—and nonrandom design—of Cosmos is an empirical reality that cannot be denied. It is accurately aligned with our anthro-ontological—and scientific (both exterior and interior sciences)—knowledge of *design as an inherent fractal-like process in Cosmos that has exterior and interior dimensions and mechanisms*. The hand was not designed all at once. It is an expression of the mystery of Eros in action, or what we refer to as *Evolution: The Love Story of the Universe*.

But who designs the unimaginable elegance of a hand that all of our supercomputers invested with all of our intention cannot replicate?

Is it the blind watchmaker?

Materialism and scientism?

Self-evidently not, as we can empirically see.

¹²⁰ But of course, we need a more expansive science to accommodate the masses of data we have both from the field of quantum physics and parapsychology on the nature of the non-local universe. Dean Radin has done important work in this regard correlating parapsychological phenomenon with quantum principles. What is clear is that our current scientific model does not account for the mounds of carefully researched scientific data that make up the credible core of parapsychology. That credible core challenges the old materialism beyond the point of no return. It is for that reason that writers like Richard Dawkins refuse to engage the empirical realities. [On Dawkins in this regard, see Rupert Sheldrake, Science Set Free, 1972.] One must of course be highly skeptical of people who correlate anything psychic or spiritual to the quantum realm. The quantum realm can be a metaphor for a lot-as it is the lowest level of Reality, so, we could say that, when a principle is even visible on the quantum level, it makes sense that it operates (in a different way) on the higher levels as well (First Principles of Cosmos). But to somehow equate the quantum world with the spiritual or psychic worlds is simply nonsense. As is the often-cited idea that the mind of the observer somehow influences the outcome of an experiment (other than through creating the experimental setup). Radin avoids most but not all these traps and deserves a careful reading. Radin deploys quantum physics as a kind of parallel structure—showing that the same principles are at play but on a higher, more evolved level. There is more to say about how to read the exterior sciences in a way that honors its integrity and, at the same time, expands its own inherent scope and allows it to-when appropriate-support the meaning structure of the interior sciences. See also Stuart Kauffman & Dean Radin, "Quantum aspects of the brain-mind relationship: A hypothesis with supporting evidence," Biosystems, Volume 223, January 2023, https://www.sciencedirect.com/science/article/abs/pii/S0303264722002015.

Is it the Hand of God reaching into Cosmos from the heavens and manifesting a human hand?

Dualism and creationism?

Again, self-evidently not.

CosmoErotic Humanism points out that it is, in some sense, more accurate to say that *the organism designs itself*. In other words, there is an inherently intelligent process, an expression of the conscious universe, which operates according to two distinct vectors:

The first, which Darwin long recognized, is the inherent drive within life to evolve—the innate creativity of the LoveIntelligence of Cosmos operating through all of its forces, invested with inherent *telos—not* according to a preordained plan, but rather through the inherent simple First Principles and First Values of Cosmos that are applied again and again, both in the exteriors and the interiors as well as on all levels of Reality.

The second is crisis.

Crisis as Evolutionary Driver

As I (Barbara Marx Hubbard) expressed for decades:

Crisis is an evolutionary driver.

Crisis implies contingency and surprise, even as it evokes direction and purpose.

Crisis evokes the *telos* of Cosmos, which moves toward, seeks, and desires to fulfill its own First Principles and First Values—not according to a detailed preordained design, but in ever-new and surprising ways that fulfill the meta-*telos* of Reality's Eros.

A Crisis of Intimacy Generates New Configurations of Intimacy

We add to the principle of *crisis as an evolutionary driver* a second principle:

All crisis, at its core, is a crisis of intimacy, a crisis of relationship.

The crisis of relationship between different parts generates breakdown.

The response to the crisis is always the generation of a new configuration of intimacy.

Here is one simple example of bacteria in antibiotics—they experience crisis, and immediately move to reconfigure their DNA. And some of the DNA, in their new forms of intimate coherence, are able to perpetuate their life. They will do so through what Nobel laureate Barbara McClintock referred to as *mobile genetic elements—transposition*¹²¹—or *horizontal gene transfer*.

A new configuration of intimacy between the parts is generated. There is clearly inherent intelligence in cells that is evoked when a crisis that challenges their intimate patterns of configuration threatens their life.

The creationist, however, would claim that this is because God originally wrote the genetic code in much the same way that a computer programmer would write code, and it all flowed from there. Or that the original event of the Big Bang set into motion a chain of inexorable dominoes that eventually generated the genetic code and, later, the first cell and all that followed. While this *is* an expression of the fine-tuned Cosmos—and the universe certainly is fine-tuned—neither of these views seem to fit the empirical evidence of both the exterior sciences and the understanding of the interior sciences of Hebrew wisdom, Kashmir Shaivism, and others, which indicate that Cosmos is *inherently* creative.

There is a level of creative consciousness embodied at the very core of the universe.

Matter, or what the interior sciences call *vessel*, is animated by this *intelligence*, or *consciousness*, and operates in relative autonomy according to the self-actualizing *telos* of its own inherent nature.

¹²¹ According to Merriam-Webster, the transfer of a segment of DNA from one site to another in the genome.

The Entrepreneurial Universe

Another way to say this is that we live in, what we sometimes refer to in CosmoErotic Humanism as, an *entrepreneurial universe*. Howard Bloom similarly describes the Cosmos as a *great search engine*, but that search engine is not random. It is animated, both in its exteriors and interiors, by what we refer to as *a set of evolving First Principles and First Values embedded in a Story of Value*—and what Bloom, referring to the same empirical reality, calls *ur patterns*—which are the interior and exterior mechanisms of the animating *telos* of the CosmoErotic Universe Story.

The sense of inherent intelligence in Cosmos is universally recognized and called by many names. Some materialists simply call it *Nature* and leave it at that. Others, like Richard Dawkins, invest the gene with inherently Divine-like qualities without naming it as such.¹²²

Even avowed materialist Daniel Dennett writes,

*Earlier organisms and life have competence without comprehension, they do a lot of things good. That's not to say they know what they're doing.*¹²³

¹²² See, for example, Dawkins, Richard. *The Selfish Gene:* 40th Anniversary Edition (Oxford Landmark Science), p.43, OUP Oxford, Kindle-Version, 2016 (first published in 1976): "Another aspect of the particulateness of the gene is that it does not grow senile; it is no more likely to die when it is a million years old than when it is only a hundred. It leaps from body to body down the generations, manipulating body after body in its own way and for its own ends, abandoning a succession of mortal bodies before they sink in senility and death. The genes are the immortals, or rather, they are defined as genetic entities that come close to deserving the title. We, the individual survival machines in the world, can expect to live a few more decades. But the genes in the world have an expectation of life that must be measured not in decades but in thousands and millions of years."

¹²³ I (Marc) jotted down this text of Dennett's but cannot find the source in my own notes. Our apologies to the reader. If you have read this text, please send us the citation, and we will correct it in the next edition. There are similar quotes, however, in his Dennett's book, *From Bacteria to Bach and Back: The Evolution of Minds*, where he talks a lot about the concept of competence without comprehension. E.g.: "Our skepticism about competence without comprehension has causes, not reasons. It doesn't 'stand to reason' that there cannot be competence without comprehension; it just feels right, and it feels right because our minds have been shaped to think that way. It took Darwin to break the spell cast by that way of thinking, and Turing shortly thereafter came along and broke it again, opening up the novel idea that we might invert the traditional order and build comprehension out of a cascade of competences in much the way evolution by natural selection builds ever more brilliant internal arrangements, organs, and instincts without having to comprehend what it is doing." (Dennett, Daniel C., From Bacteria to Bach and Back: The Evolution of Minds (p.58). W. W. Norton & Company. Reprint Edition, 2017, Kindle-Version.) A little later, in the same book, (p. 75): "Darwin's 'strange inversion of reasoning' and Turing's equally revolutionary inversion were aspects of a single discovery: competence without comprehension. Comprehension, far from being a Godlike talent from which all design must flow, is an emergent effect of systems of uncomprehending competence: natural selection on the one hand, and mindless computation on the other."

But, of course, in CosmoErotic Humanism, we are also obviously *not* reprojecting human intelligence on either the atomic or the cellular world.

Continuities and Discontinuities

We have already pointed out one of the core tenets of CosmoErotic Humanism—that there is both *continuity* and *discontinuity* between different levels of matter, life, mind, and the most advanced depths of the human self-reflective mind. In other writings, we refer to this evolutionary vector of continuity and discontinuity as the *Four Big Bangs*. The continuity dimension of the vector is substantive and real.¹²⁴ To cite an example, both *Eros* and *intimacy* mean something substantive, and the continuity of that meaning can be traced from *matter* to *life* to *mind*. In other words, we can—and, therefore, must—speak meaningfully of the *Evolution of Love and Intimacy* from matter to life to mind.

We have articulated formulas for each, what we call the *Eros Equation* and the *Intimacy Equation*, which we unpack throughout our writings on CosmoErotic Humanism. Eros, intimacy, and its implied principles and values of desire, goodness, awareness, and consciousness are evolving First Principles and First Values that drive and animate Cosmos.

There is both continuity and discontinuity in their appearance in the world of matter, life, and the depth of the self-reflective human mind—as well as, to a lesser but not at all insignificant degree, in-between the respective sub-levels of matter (e.g., between atoms and molecules), life (e.g., between single-celled and multicellular organisms or between reptiles and mammals), and mind (e.g., between different cultures, from tribal to mythic to modern cultures).

For example, it is patently obvious that *Tiger*, our dear friend Lori's cat, for whom we have a special affection, is self-aware. But clearly, the nature of that self-awareness is

¹²⁴ See our bullet-point essay: Marc Gafni & Zachary Stein, Sixty Propositions on First Principles and First Values: Notes Taken During the Construction of CosmoErotic Humanism (2023). See also the fuller conversation in Marc Gafni & Zachary Stein with Ken Wilber, First Principles and First Values: Towards an Evolving Perennialism: Introducing the Anthro-Ontological Method.

qualitatively different than our own.¹²⁵ There is both continuity and discontinuity between our awareness and Tiger's awareness.

A second example: The dialectic between allurement and autonomy (attraction and repulsion) that brings subatomic particles together is distinct in quality from the dialectical allurement and autonomy that brought us, the co-authors, together to write this essay, or the dialectical allurement and autonomy that moved us to engage with our respective romantic partners. But there is also some level of continuity between allurement and autonomy as they animate the subatomic world, and the allurement and autonomy that animate our human lives.

The Feeling of Life: From Bacteria to Bach

At the core, consciousness itself is fundamental to Reality, and it has evolved with continuities and discontinuities between matter, life, and mind. Physicist Max Planck, who coined the term *quantum*, said in an interview,

I regard consciousness as fundamental, I regard matter as derivative from consciousness. We cannot get behind consciousness. Everything we talk about, everything we regard as existing, postulates consciousness.¹²⁶

Christof Koch, one of Francis Crick's colleagues, wrote an important book of hard science, albeit one limned with Eros and intimacy, called *The Feeling of Life Itself: Why Consciousness Is Widespread but Can't Be Computed*.¹²⁷ Among other important accomplishments, Koch joins the ranks of scientists who explode the myth that consciousness is limited to only the higher levels of the evolutionary chain.

The same may be said to be true for choice, love, goodness, value, and much more.

¹²⁵ For example, he is not aware that he is aware.

¹²⁶ *The Observer*, Jan. 25, 1931.

¹²⁷ Koch, Christof (2019), *The Feeling of Life Itself: Why Consciousness Is Widespread but Can't Be Computed*, Cambridge, MA: MIT Press.

In an earlier work, Koch talks eloquently about the consciousness of bees, understanding them as fundamentally conscious beings.¹²⁸

Myriad thinkers in biology, including, for example, biological complexity theorist Stuart Kauffman, understand consciousness as core in biology, for example, in bacteria.

It would appear to be the case, from the human perspective, that there is a profound evolution of consciousness from bacteria to the depth of the human self-reflective mind. We have never seen bacteria compose like Mozart or build hospitals for the vulnerable—like human beings universally agree we should do when we are at our most human. We have not read literature or seen social activism movements in bacteria.

So, we reasonably assume an evolution of consciousness from bacteria to Bach and from mud to Mozart. In this evolution, there are many stages that deploy the inherent physical process of Reality, as expressed in biology and physics, even as the entire process is animated by the First Principles and First Values of Eros, or what we might call the consciousness inherent in matter.

There is no ultimate split between meaning and matter.

Matter matters.

And matter evolves to ever-higher levels of meaning, which is the evolution of consciousness, or—as we put it—*Evolution: The Love Story of the Universe*.

Epistemic Humility

At the same time, some level of epistemic humility is in order. We are dealing with the quality of mystery in biology and evolution.

Let's say that we understand *consciousness*, as Koch does, for example, as *the feeling of life*, and perhaps we could add *my feeling of agency*, however limited. It nonetheless remains mysteriously true that my experience of consciousness is limited to myself.

¹²⁸ Consciousness: Confessions of a Romantic Reductionist, by C. Koch, 2012, MIT Press.

As Descartes pointed out, I cannot even be fully sure, from one perspective, that you are having a conscious experience inside of your being.¹²⁹ As such, our knowing of the interior of the bacteria's experience of consciousness itself is self-evidently limited. What is clear, however, returning to our key thread, is that we cannot talk about inherent design without talking about consciousness or intelligence in some form.

Indeed, as Planck, Koch, Kauffman, and others point out, each in their own way, there is consciousness, the feeling of being, life, and some degree of agency across the lifeworld, and some would say—Whitehead, for example—even in the world of matter.

Moreover, we can assume some level of continuity and discontinuity up and down the evolutionary chain. But when we talk about the precise nature of that continuity and discontinuity, we encounter the mystery of not knowing—the mystery that we are committed to exploring and unraveling, even as we know that new mystery will surely present itself to be engaged.

Let's unpack this a little further.

Gödel's Incompleteness Theorem

What we may say is that the original intentional animation of Cosmos with consciousness invests the entire process with *telos* and Eros. There are layers and layers of this nature that can, and must, be unpacked according to the scientific method. But at the core of the entire process is

¹²⁹ We can, however, share experiences between us and feel like we are both describing the same interior experience of consciousness. That capacity, however, might also become available to machine intelligence in human form that passes the Turing test. But of course, what will be shared is not genuine interiority but rather something that appears like interiority but is in fact massive computational power that capacitates the machine intelligence to act *as if* it possessed genuine interiority. Even if a computer or machine intelligence passes the Turing test, it does not mean it has interiority. Rather, it means, it has the capacity to simulate interiority. However, as we are increasingly drawn into a digitally mediated world, we lose access to our own interior sense of our own consciousness. This is a key topic, which we discuss in the context of what we have called *TechnoFeudalism*, which we suggest is a direct result of the collapse of First Principles and First Values. See *The Global Intimacy Disorder: Eight Links Between Existential Risk and the Collapse of First Values and First Principles Embedded in a Story of Value*, by Drs. M. Gafni and Z. Stein, 2023. See also, Gafni and Stein, *From TechnoFeudalism to Thanos: Designing Reality as a Skinner Box—The Surreptitious Triumph of Society's Hidden Architects B.F. Skinner and Alex Pentland*, 2023, and *TechnoFeudalism as Thanos, Volume Two: From Skinner to TechnoFeudalism—A Deeper Dive*—all of these published by World Philosophy and Religion Press, in Conjunction with Waterside Press and Integral Publishers, 2023.

an Original Face, an Original Presence, an Original Intention, the Desire for and Design of an ever-evolving Life and Lifeforce, a Cosmos reaching for ever-deeper Value, an ever-wider and more profound expression of the Good, the True, and the Beautiful. An almost infinitely large Cosmos is both inherently animated by consciousness and intelligence, even as it is held by purpose, *telos*, and presence beyond itself.

This is, of course, also what Kurt Gödel's *Incompleteness Theorem* demands. Gödel tells us that *all logical systems rely on something outside the system*. One must assume something outside the system even though it cannot be *proved*, because, if there is nothing outside the system, the system is incoherent, uncoordinated, illogical, inconsistent. To posit a Cosmos that exists with nothing outside itself is, according to Gödel's Incompleteness Theorem, simply irrational.¹³⁰

The Living Universe Is Drawn Forth by an Original Future: Not Reducible to Mechanics or Mathematics

All of this is to say that we cannot predict the future in advance based on the present laws of either physics or biology. There is a genuine dimension of contingency—creative freedom in Cosmos within particular constraints, but there is also radical agency, animated by creative consciousness and intelligence that is animated, both in terms of exteriors and interiors, by evolving First Principles and First Values embedded in a Cosmos Story of Value.

The Design of Cosmos is not merely reducible to a mechanical process that can be described by mathematics.

In a set of paradigm-changing papers and books over the last twenty years, Stuart Kauffman has been one of the leaders in demonstrating that, while Newton, and Pythagoras before him, clearly got a lot right, the hegemony of numbers or measurement that is attributed to them is simply not true. That mathematics can, to some real extent, create predictions in physics

¹³⁰ We are happily indebted to our dear friend and frequent interlocutor Daniel Schmachtenberger for this insight, which arose in one of our regular dialogues in the spring of 2022.

and probabilistic predictions in quantum physics is a miracle that can only be explained by Anthro-Ontology,¹³¹ but mathematics cannot explain or predict the biosphere.¹³² The biosphere, at its core, as Kauffman points out, from a somewhat different perspective,¹³³ is in the realm of the immeasurable and the incomputable.

Kauffman is overturning the assumption, that goes back at least to the pre-Socratics in ancient Greece, that the world is subject to analysis, which, for Pythagoras, meant measurement. Modernity adopted the primary of measurement with a savage passion that, as Lewis Mumford pointed to, *disqualified*, or *devalued*, all that could not be measured.

The new physics began to point toward the limits of absolute prediction. It turns out that it is simply not true that, if one could measure everything with enough precision, the world would be completely predictable, and science will have tamed and ordered Reality. Reality, it turns out, is far more fundamental than even the beauty of numbers, math, and prediction.

Kauffman takes this a momentous step further and points out that biology is—even far more fundamentally than physics—the realm of the immeasurable. He asserts that it is only in the realm of deduction that mathematics reigns. As he points out, the biosphere is *not* about deduction, but construction.

Cells construct themselves.

We can apply mathematics to what is already constructed, but *not* on the future, on what *will be* constructed.

In terms of CosmoErotic Humanism, the image we deploy is a Unique Self Jazz Symphony. Irreducibly unique dimensions of Reality play the music of life, and the result is

¹³¹ Pure mathematics is pure philosophy invented by humans. No animal (or other being) is calculating, even if it appears to be so (for example, in an ant hill). So, why can mathematics explain or predict anything in the natural world? Why is it useful? Because the human being, anthro-ontologically, has access to the way the world functions and can express that in language—for example, in the language of mathematics...

¹³² Reinventing the Sacred: A New View of Science and Reason, by S. Kauffman, 2008, Basic Books, reviewed in Science 320 (5883), pp. 1590-1591, by Denis Noble, on 20 June 2008, DOI: 10.1126/science.1159912. See also Kauffman's next steps in this direction in his later work, A World Beyond Physics: The Emergence and the Evolution of Life, by S. Kauffman, 2019, Oxford University Press.

¹³³ See Kauffman, ibid.

Symphony—but Jazz Symphony—filled with contingency and surprise, always within the context of the First Principles and First Values of music.

In physics, chemistry, and already emergent life, we can apply measurement.

But to the process of becoming, Kauffman writes,

living systems construct themselves, and construction is not deduction.

In other words, the inherent incessant creativity of apparent design is not a mechanical process that can be predicted. Rather, design participates in the devotional mystery of Cosmos madly in love with life.

Do We Impact Reality in an Ultimately Significant Sense?

The response to this question is significantly different in scientism, creationism, and CosmoErotic Humanism.

The question of impact or significance concerns how we experience ourselves and understand our place in the Cosmos.

Are we and our actions necessary in the Cosmos in some essential way?

If we, or I, ceased to exist, would the basic plotline of history remain the same or somehow change in significant ways?

Said differently, do your decisions in this moment of time, do your particular sets of actions actually make a difference?

This is a question of identity, which—like all questions of identity—is rooted in a larger universe story.

There have been two main popular universe stories, which compete with each other.

One universe story—let's call it *the religious universe story*, or *creationism*—runs on the software of an all-powerful God. Whether that deity is exterior to Reality in a classical theistic way, or whether that God is also, or only, immanent to Reality, in a pantheistic or panentheistic

way—expressing a kind of all-embracing intelligence—there is a controlling God, an omniscient force driving and controlling Reality.

Paradoxically, both versions of the religious universe story—the exterior intelligence or the inherent intelligence version—respond in roughly the same way to our question:

In the end, even if you were not alive, or if you fail in your life, Reality is going to come to the same result anyways.

This is a crucial check, both on human narcissism and death-dealing anxiety.

Relax on the hubris and self-involvement,

says this universe story.

God has many angels, many messengers. There are infinite vectors of divine action and play, infinite possibilities with infinite ostensible detours, all leading to the same destination. So, even if you weren't here, or fail in realizing your life's purpose and contribution, Reality is going to find another way to arrive at the same destination.

There is some great depth in this story—some truth, some beauty, some metaphysical compulsion.

There is, however, a second position, or story, that tells a precisely opposite tale. This is the universe story of scientism (not science). This is the story that Sartre tells in *Being and Nothingness*, the existentialist view that prioritized existence over essence. And yet, although the existentialists rebel against the materialist sciences, protest against the academic philosophy, and flee from the *iron cage* of reason, they are paradoxically aligned with materialist science and assume the same plotline of Reality.

This story also had enormous influence on Derek Parfit, who died only a few years ago. This story also largely defines Parfit's students, like Nick Bostrom and Sam Harris, as well as his younger colleagues, like Toby Ord and William MacAskill. You are all that is. There is nothing or no one else in Cosmos that is going to do it, other than you. So, if you don't do it, with all of your lifeforce, potency, and passion, then it remains dead and impotent. It is all on you.

There is awesome responsibility in this story, and existentialism struggles valiantly to turn that responsibility into dignity.

Because if you don't do it, it's not going to happen. You are the whole story.

But at the same time, in myriad expressions of this both sartrean and scientistic story, intrinsic value is completely deconstructed, completely denied. There is no genuine ontology of consciousness that can serve as the ground of Reality. In other words, if the physical world as we know it disappeared so would consciousness. Moreover, in such a world, which is understood not to be an expression of the intrinsic coherence and *telos* of a Cosmos imbued with consciousness and value, the assumption is that there is no meaningful sense of human choice.

The *experience* of human choice is honored; we should act *as if* choice were real, for that is a key part of our self-conditioning. But from this perspective, choice is ultimately an illusion. We cannot choose any differently than we have. And because value is not real, because value has no ground—value, meaning, consciousness, and Eros being essentially inter-included terms, though not entirely isomorphic—nothing we do truly matters anyways.

There is of course a self-evident, implicit or explicit, reductive materialism that drives this second version of the universe story.

Both of these stories are rooted in a true but partial intuition of the nature of Reality.

The first, religious universe story senses the inexplicable order of the Cosmos, which is of such depth, such unimaginable elegance and precision, together with nearly unbearable meaning, depth, and value lining all our experience—expressed variously as goodness, truth, and beauty—that a notion of a merely random cosmos is both objectively and subjectively absurd.

The second universe story—existentialism, scientific materialism, or scientism—senses the gravitas of human existence and places human responsibility and value creation as the only meaning that exists in an otherwise meaningless and value-free cosmos. Both universe stories, as we have already shown above, suffer from fatal flaws, even as each of their intuitions must be honored and synergized into a new universe story, which evokes a deeper realization of the nature of Reality and our place in it.

In this third story—CosmoErotic Humanism—we reach for a new world philosophy, a new *world religion as a context for a diversity*, or what we often call a *new universal grammar of value as a context for our diversity*.

How does CosmoErotic Humanism speak of this question?

Let's bring to bear seven distinct strands, each quite briefly, not in order to weave a hardcore metaphysical position, but rather, to evoke to evoke the fragrance—with all of its potential and necessity—of this new story of man and God.

The First Strand: The Void Is Real—There Is Only You

For the first strand, we will adduce a famous source among a small group of perhaps five hundred people for whom it is referred to as *Section 64*, very important to major teachers and artists, such as Franz Kafka. It comes from the writings of Nachman of Breslov, number 64 in his series of mystical essays called *Likutey Moharan*. In that essay, he essentially says, *I am going to take the void seriously*. But what did he mean by that?

The brief answer to that question is rooted in the writings of Isaac Luria, whose influence animated the mysteries schools that birthed the Renaissance and much of the best strands of modernity.¹³⁴ Luria's teaching describes the process of Reality's manifestation *not* as Divinity bursting forth and overflowing, which was the more classical position. Rather, he describes what he calls *Tzimtzum*, a kind of Divine Contraction or Withdrawal, a type of *Divine Kenosis*, a stepping back, an emptying out of the Divine, to allow room for the world to be. That position—elaborated in modern scholarship by the likes of Gershom Scholem, Moshe Idel, and dozens of

¹³⁴ On the influence of the Hebrew interior sciences on the Renaissance, both directly and indirectly, see Moshe Idel, *Kabbalah in Italy, 1280-1510: A Survey*, Yale University Press, 2011. For the broader issue of the Neoplatonic schools and their relationship to Kabbalah, see, for example, Idel's "Metamorphoses of a Platonic Theme in Jewish Mysticism," in *Jewish Studies at the Central European University 3* (2002-2003) pp. 67-86.

others—helped both to define the Renaissance and influenced Scholem's dear friend Walter Benjamin.

Tzimtzum addresses the overwhelming Reality of the Divine that leaves room for nothing else. When we say, for example, *God is not physical*, we do not mean that *God is less than physical*. We mean that the category of physicality is not sufficiently Real to even begin to exhaust the Reality of the Divine.

We obviously know that when there is a concrete, physical object in a space, there is room for little else in that space. If there is one brick, there is no room for another brick in that same space. Although, for example, there might be room for air, which is, self-evidently, less dense than a brick.

But the interior sciences understand Divinity to be so ultimately *Real* that it leaves room for no other Reality.

How, then, do we exist?

How is there any experience of any sort of Reality?

The Reality of the Divine should preclude all other Reality.

The response of the Hebrew wisdom lineage crystalizes in the Lurianic realization of *Tzimtzum*—the divine withdrawal or stepping back to allow room for Reality.

All realizations of the interior sciences—esoteric and mystical truths—live directly in us, for we participate in and are constituted by the Field of the Real.

The realization of *Tzimtzum* is no different.

Tzimtzum lives, for example, in the experience of the parent who steps back to allow the child room to exist, to choose—even if that means choosing against the parent.

I (Marc) remember teaching my own children to walk. There is a moment, where the parent stands behind the child, holding both arms, teaching the child to walk. And in that general moment, there is a very specific moment where the parent lets go of the child's hands to allow for the first step on their own. The child often falls—multiple times—until they can walk by

themselves. At that moment, when the parent lets go, the parent is not farther away, but closer than close—closer to the child than ever.¹³⁵

The masters debated, based on the contours of their own direct realizations—as they interfaced with the records of the interior sciences emergent from the realizations of previous masters—asking the following question:

Is Tzimtzum real?

Or said differently, in the language of scholarship:

Is the Divine Withdrawal ontological or epistemological?¹³⁶

The overriding consensus of the interior scientists was that *Tzimtzum* can only be understood to be epistemological—meaning there is no *real* Divine Withdrawal—which is, as they write, *naturally impossible*. Rather, it appears to our episteme, in our mind-body experience, *as if* there is a Divine Withdrawal. *Tzimtzum* is—as they write—*a mashal*—an epistemological allegory, not an ontological reality.

There are multiple readings of what this might mean.

By allegory, we might mean that even though all is an expression of the Divine Intelligence, there is a withdrawal that gives us a felt sense of our own freedom and impact on Reality. Or we might follow the dominant position and say that our freedom and impact is real, even as, paradoxically, there is no *real* Divine Withdrawal. Ontologically, there is some ultimately real sense in which Divinity is always everywhere and everything—and cannot ever *not* be everywhere, in everything and every person—because that is quite simply the very nature of the Infinite Divine.

¹³⁵ In alternative education methods (e.g., Emmi Pikler), parents and caretakers are asked not to *help* or *teach* the child to walk at all, before they get up by themselves (often pulling themselves up on chairs and tables). The reason for this is that all the crawling on the floor prior to walking actually strengthens the child's backs and muscles, making it much easier for them to walk by themselves with elegance and ease. In addition, the children feel their own autonomy and are self-confident about their own skills and capabilities. So, even in this case, the parent not helping is a stepping back out of love, not indifference. The parent is allowing space for the child.

¹³⁶ See Tamar Ross's excellent essay, contrasting the mystical lineages of the Vilna Gaon and Hasidism: "Two Interpretations of the Doctrine of Tzimtzum: Hayim of Volozhin and Shneur Zalman of Lyadi," *Mehkarei Yerushalayim B'machshevet Yisrael* (Hebrew) 2, Jerusalem, 1981, pp. 153-169.

In other words, in the realization of *Tzimtzum*, God withdraws and creates a void. Then Divinity penetrates that void, manifesting worlds, which can only exist because there was momentarily a void. But for all of the masters, the void was always only epistemological and *not* ontological. In other words, the void was never an ultimate Ontological Reality.

Along comes Nachman of Breslov and says, we must take the void seriously as an ontological possibility, even if it is not an ontological Reality. It is only then—after sitting deeply in the void—that we attain the realization that the void is real but not Real. Or said slightly differently, the void is real but not true. Nachman demands our capacity to live in the radical-ness of paradox. We must take—radically—seriously our own human experience that tells us, at our most painful and devastating of times, that *the void is real*. And only then do we realize that the void is not Real, and that Divinity suffuses everything and every person.

The only two responses—two that are in fact one—to the realization that *the void is real*, writes Nachman, are *silence* and *song*. The reality of the void can only be traversed in silence or song: the song that comes from silence, or the silence that follows the depth of the song.

There are only questions in the void, for which there can only be *responses*, not *answers*. And the only response is silence or song.

There is no conversation in the void that is not preceded by silence.

It is a *speaking silence*.

In the void, words that come from the silence are the only signal.

All else is noise.

The conversations about freedom, human significance, choice, and impact, must all take place in silence.

In this context, Nachman writes a powerful sentence, particularly startling coming from the heart of a radical Hasidic master in the nondual tradition of the Baal Shem Tov:

The reason God created the void was to manifest atheism. And atheism is critical so that, when a human being encounters suffering, they realize that it is utterly and totally dependent on them to fix it. There is only you and no one else. That is why Reality, or God, manifested the void. God created the void, so, in that moment, you realize you are a complete atheist. In other words, it is your radical joy, dignity, and responsibility to respond to suffering.

Because the void is real, there is no God who is going to take care of the suffering through other vectors, or messengers, or means. You have to internalize the truth of the realization that *it all depends on you*. So, you have to go straight into the ontology of the void and act with responsibility, from the consciousness of Sartre's *Being and Nothingness*.

This is the first dimension of what is also called Nachman's Torah 64.

We want to add one more dimension before we move to the second strand. To ignore the void is to be seduced into what we call *pseudo-eros*. We cover up the void with all forms of *a-void-dance*.¹³⁷ The full Eros of Reality can only be realized by fully entering and walking through the void—treating the void in all its terrifying agony as real.

When we avoid this move on a personal level, we act out in myriad forms of addiction and abuse. When we avoid this move on a collective, ideological, or spiritual level, we generate entire philosophies that reject the mystery, refuse to embrace uncertainty, and instead adopt false certainties—forms of pseudo-eros—that cover up the void. Thus, there can be no full Eros without paradoxically embracing the anti-Eros of the void.

The Second Strand: The Ontic Identity of Wills-One Love, One Heart

The second part of *Section 64* invokes our second strand in the warp and weave of the third story of CosmoErotic Humanism. In it, Nachman also reclaims the realization that all—everything, every place, and every person—is a manifestation of Divine Potency. He realizes again that the void is *not* Real, and that there is an *ontic identity of wills* between the human being and God. He realizes the lived goodness, beauty, and truth of *apotheosis*—the human being as participatory in the Divine Field.

¹³⁷ See Gafni, Marc, *The Mystery of Love*, Atria, 2003, Chapter Two, and Gafni, Marc and Kincaid, Kristina, *A Return to Eros: The Radical Experience of Being Fully Alive*, BenBella Books, Inc, 2017, Chapter Ten.

In this vision, there are not two circles—one circle of God who creates the circle of man. Rather, there is but *one* circle—and in that circle, there is a triangle, or manifest Reality.

When the human being awakens to the realization of what Einstein articulated as *the optical delusion of separation*, then, the human being realizes that Reality is a triangle inside the circle.

In this reality, we realize the *ontic identity of wills*. The human being realizes that she is the verb of God, that

Reality is One Will, One Love, One Heart, One Action, One Desire, and One Need.

And there is no ultimate split between the human and the Divine.

Having passed through the first strand, here human action is again clearly seen as ultimately impactful and significant—not because Reality is empty, and there is only man—but because Reality is overflowing with fullness, and the human being is an expression of that Field of Fullness.

But, one might ask: If Nachman affirms the ontology of the void only for a moment—as a stage along the way—why does it matter so much? And what does it mean to affirm the ontology of the void, if that affirmation is only to be absorbed into the larger Field of the utter immanence of the Divine Force, about which Nachman (and the *Zohar*) declares that there is no place devoid of the Divine?

This is where Section 64 becomes so crucial.

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Nachman is not merely talking about the natural experience of faith and doubt, but a far deeper reality: The reality of the void, where all seems to be dead matter, and nothing ultimately matters. It is what Sartre discusses in *Being and Nothingness* and his novel *Nausea*, a kind of nihilism, a confrontation with the possibility of a fundamental absurdity, from which there appears to be no exit. Nachman demands that we enter the void and refuse the path of *a-void-dance*.

Between the Rejector and the Realizer

To grasp Nachman, we need to think, for a moment, about why realizers are not at all moved by the superficial rejections of Spirit by classical atheism or agnosticism. And by *realizer* we refer to those who have had a direct experience in which the intrinsic LoveIntelligence of Cosmos is disclosed. The reason we do not take these rejections of Spirit seriously, as they often emerge from the desiccated halls of the academy, is because the rejectors have simply not had an experience of *satori*—or realization.

If one has never tasted strawberry ice cream, then, all claims as to its taste and quality fall short in transmitting its reality. It is in this same sense that Aquinas notes his love of this verse from *Psalms*, "*Taste and See that God is Good*." We know God by tasting—in the language of other mystics, *Derech Yenika*—by sucking at the Divine Breast.

However, in the same way the classical atheist—the armchair rejector—is not credible to the realizer because he has not tasted the direct experience of Spirt, the realizer will never be credible to the rejector, *unless* he has had a direct realization of the void. We have to *first* kill the small God—the God unable encompass the experience of the void—before we become a trustworthy witness for Spirit.

It is not by accident that, for example, in the lineage of Solomon, Solomon writes two contradictory books. First, he writes *Ecclesiastes*, which begins, "*Vanity of vanities! All is vanity*." In this book, all attempts to affirm meaning are rejected. The writer tastes directly and fully the utter despair and futility of the meaningless void.

But it is only because we experience Solomon in *Ecclesiastes* that we then trust him in the *Song of Songs*. The *Song of Songs* is the direct realization that Reality is Eros, that *its insides*

are lined with Love, that Divine Eros animates and drives Cosmos, that in its deepest dimension All of Reality is a Love Story—not a pollyannish love story that ignores the void, but an Outrageous Love Story.

From Pre-Tragic to Tragic to Post-Tragic

Here we can distinguish between the pre-tragic, the tragic, and the post-tragic, a distinction that lies at the very core of CosmoErotic Humanism.

The pre-tragic realizer never encounters the void—all is clear in the superficiality of her realization.

The tragic rejector encounters and is destroyed in the void. All is dead in the void, and she cannot taste the ultimate goodness of life.

It is only the post-tragic realizer, dancing straight through the void again and again to the fullness of Reality's Goodness, who is a trustworthy witness.

In this post-tragic consciousness, she realizes that there is no place devoid of Spirit *and* that Spirit can and must act through her, that her action is not at all extra, or easily replicable, but rather, all of her actions and decisions are ultimately significant and impactful in a way that is irreducible and irreplicable.

The only way to be a trustworthy witness is to live in this paradox.

It is only when we kill (the pre-tragic) God—and walk through the tragic (the void)—that we come to the post-tragic realizations that we are held in every moment, that we are ultimately necessary, and that there is a larger play—an Infinite Mystery and Ultimate Goodness—to Reality, even as we still experience the void as real.

We generally think of realizers as those who reside in unblemished faith or *gnosis*. But CosmoErotic Humanism draws on a more subtle strand in the interior sciences—the realizers who protest against the Divine *as* the Divine.

Abraham is chosen as the founder of the Hebrew wisdom lineage, specifically because he *argues* with the Divine—crying out in radical protest:

Will the judge of the entire world not do justice?¹³⁸

Moses is initiated into the ultimate state of realization, the highest rung of prophecy, when he protests against the Divine and cries out against what he experiences as ultimate injustice. In the language of this lineage:

Why do the wicked prosper and righteous suffer?¹³⁹

Luria speaks of the *Tree of Life* with ten rungs of illumination. The bottom seven are dimensions of Divinity that are realized by the human being, when we are *lived as Love* in all of the classical modes of human existence. The highest three rungs of illumination, however, writes Luria, are *never* accessible to the human being other than in *one* circumstance: when the human being protests against God and cries out from the depth of the void:

Ayeh—Where is God?¹⁴⁰

Nachman follows his lineage source Luria and speaks often of the highest rung of human realization as being *Ayeh*—the realization of the Divine attained only after deep and sustained experiences of the void, the consciousness of *Ayeh*.¹⁴¹

The Third Strand: Irreducible Uniqueness

The third strand in CosmoErotic Humanism is the crucial reality of uniqueness, a core evolving value of Cosmos, as we have pointed out in greater depth in our work on First Principles and First Values.¹⁴²

¹³⁸ All of these sources are discussed in depth in Gafni, Marc, *Safek (Uncertainty)*, Modan Press, Tel Aviv, 2000, and in Gafni, Marc, "The Commandment to Question" (*Azure*, Summer 5756/1996).

¹³⁹ Ibid.

¹⁴⁰ Ibid.

¹⁴¹ Nachman of Breslov, Likutey Moharan,

¹⁴² See Marc Gafni & Zachary Stein, Sixty Propositions on First Principles and First Values: Notes Taken During the Construction of CosmoErotic Humanism (2023), and see also the fuller conversation in Marc Gafni & Zachary Stein with Ken Wilber, First Principles and First Values: Towards an Evolving Perennialism: Introducing the Anthro-Ontological Method.

Reality evolves through what Herbert Spencer correctly named *the First Principle of Differentiation and Integration*. Reality differentiates—meaning, *it moves toward ever-greater uniqueness*. And then Reality integrates—meaning, *uniqueness is a currency of connection moving Reality toward ever-deeper and wider erotic unions*.

Uniqueness itself is one of the First Principles and First Values of Cosmos, which together comprise the plotline of the universe story.

In this sense, we may say that the movement toward ever-greater uniqueness is a plotline of Cosmos. This plotline deepens—as Reality moves from matter to life to the depth of the self-reflective human mind, at every stage unfolding an ever-more profound level of consciousness. Uniqueness reaches its contemporary zenith in what we have called *Unique Self*, the realization that each person is an irreducibly unique expression of the wider Field of Consciousness and Desire, which we often refer to as *True Self*.

Uniqueness, at this level of realization, is noted as well in developmental research.¹⁴³

The realization of Unique Self is, of course, crucial in disclosing the ontological dignity—via the irreducible uniqueness—of the individual. But it is *not only* the realization that you are a unique piece of art to be seen and appreciated, a unique flavor to be tasted and savored, or even a unique quality of intimacy to be experienced with Eros and delight—this is all true but insufficient.

As Unique Self, you are *not* only a unique being—a unique incarnation of the *Being* quality of the Field of Consciousness and Desire—but you are also no less the incarnation of a unique quality of *Becoming* of the said Field.

You are Infinity in Action.

You are Divine Love in Action.

¹⁴³ See Gafni, Marc, *Your Unique Self: The Radical Path to Personal Enlightenment*, with Introduction and Afterword by Ken Wilber, Integral Publishers, 2012. See also Gafni, Marc [Guest Ed.], *Journal of Integral Theory and Practice* 6:1, Special Scholarly Issue on Unique Self, Ed. Sean Esbjörn Hargens. See also the chapter on Unique Self in Stein, Zak, *Education in a Time Between Worlds: Essays on the Future of Schools, Technology, and Society.* Bright Alliance, 2019. See also Stein, Zak (2011), On spiritual teachers and teachings, *Journal of Integral Theory and Practice*. 6(1), pp. 57-77.

And there is a unique set of actions that simply do not and cannot take place other than through you.

You are God's verb.

You are God's dangling modifier.

You are God's action.

Evolution—the Evolutionary God—speaks and moves in the manifest world through you. There is something that *you* can *uniquely* do that can't be done without you.

Therefore, you matter.

Your very *matter*—your incarnated form—matters infinitely.

So, part of the notion of Unique Self is this notion of irreducibility and impact.

Uniqueness, as it discloses itself on the human level, as realized in the interior sciences, implies the ontological dignity of being needed.

Abraham Joshua Heschel was not wrong when he recapitulated the realization of the interior science lineage of Hebrew wisdom as "*Your Deed is God's Need*." Heschel was echoing the statement of Meir Ibn Gabbai in the sixteenth century, which echoes throughout the sacred literature of realization,

Avodah Tzorech Gaboha—God Needs Your Service.

This third strand naturally leans closer to the Sartre-Parfit-Bostrom side of the ledger, which insists on the ultimate necessity and impact of human action. But of course—and this is the change that changes everything—the quality of consciousness, the story of humanity, is fundamentally distinct. Unique Self expresses *not* a world devoid of meaning but a world that is always already overflowing with a plenum of meaning.

Unique Self is an expression of nondual humanism, another way to say *CosmoErotic Humanism*. In other words, you are part of the seamless coat of the universe, which is seamless but not featureless, and you are its unique feature.

So therefore, you need to act as God.

You are God acting.

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The Fourth Strand: The Evolutionary Nature of Reality

The fourth strand in CosmoErotic Humanism, which rejects both the deficiencies of classical religions and the reductive materialism of Sartre, Parfit, Bostrom, and company, is the realization of the Evolutionary Nature of Reality itself.

Not only is evolution real from a typical materialist perspective, but the on-going series of ever-deeper transformations is also itself a First Principle and First Value of Cosmos. Value itself is not only a static expression of eternal being but a dynamic expression of incessant becoming. Being and becoming are two inextricable dimensions, two qualities or tastes of Cosmos. Value is both eternal and evolving. Thus, if value evolves, and evolution is a value, then *evolution itself evolves*, both in our understanding of evolution and in the way it inherently functions. The emergence of Conscious Evolution, which we will turn toward (again) in the paragraphs below, is an expression of precisely this: The evolution of evolution itself.

Much traditional Buddhist and Vedanta teaching tells us that the fundamental Nature of Reality is that there is only One, and that One is found in the bliss of timeless *Being*, the realization of nonduality as pure Being—aka enlightenment. But the ancients didn't know what we know today: that we are all participating in a developmental process that had a beginning in time and is going somewhere *new*.

Like the material cosmos and the biological world, our own consciousness is evolving and the extraordinary truth that we discover when we begin to look deeply enough is that enlightenment is evolving, too. It is no longer found only in the bliss of timeless *Being*; it is found also in the ecstatic urgency of evolutionary *Becoming*.

From the perspective of the Eternal and Timeless Ground, the highest truth is that *nothing ever happened*: We were never born, and the universe was never created—that's liberation, *samadhi*, enlightenment.

But from the perspective of evolution, the entire picture changes. We are participating in a dynamic, forward-moving process, and 14 billion years of development have produced all of

manifestation—the entirety of the known universe, including one of its greatest mysteries: the uniquely human capacity for self-reflective awareness.

Looking at the vast creative arc of evolution as a whole, we realize that it is One Process. The forms evolution gives rise to come into being and eventually pass away, but the impulse itself is singular, immortal, and infinite—and if we look deeply into our own experience, we discover that our own desire for spiritual freedom is not separate from this very same primordial impulse driving the entire process.

So, it is *not merely* you, or any one of us individually, that is personally struggling to come to terms with ultimate meaning. Rather, the Impersonal Energy and Intelligence that created the universe is striving to awaken to *Itself*—to become more conscious *through you*.

We refer to this coursing energy as the *evolutionary impulse*, and when we awaken to it, we discover something miraculous: *This dynamic and ever-evolving creative principle is none other than our own Unique Self*.

Indeed, the new physical sciences, together with the shared truths of the interior sciences, tell us that natural selection is, as the eminent biologist Lynn Margulis has put it, but a sorting mechanism for what we call the *deeper and wider Eros of evolution*. *Evolutionary Love*, or *Eros*, is both the ground and the goal—the method and the destination—of this process.

At this moment in history, we have reached a new stage of *Conscious Evolution*. This is not to say that evolution until now has been unconscious. *Evolution* was always *conscious*. It is we who are becoming conscious of our identity as the leading edge of evolution itself.

We are awakening as Conscious Evolution itself.

We are increasingly becoming aware of the entire evolutionary process that came before us—of which we are an expression—that is taking place in us, as us, and through us. We understand, not intellectually but as our core identity, that we *are* a unique expression of the *Evolutionary Eros* that allures and animates the evolutionary spiral of unfolding—from *no-thing* to matter to life to the depths of the self-reflective human mind.

The core insight of the interior and exterior sciences, expressed as Conscious Evolution, is the realization that *evolution* is *love in action*. *The New Human and the New Humanity* become aware of this truth and its implications—both personally and collectively. To awaken

to Conscious Evolution is to realize that you are not merely *Homo sapiens*. You are *Homo amor*—the LoveIntelligence of Reality disclosed personally as you.

The emergence of Conscious Evolution is itself an expression of the Evolution of Love. For it is Love, or Eros, that drives the whole process. The Evolution of Love is the direction of Cosmos, the hidden impulse of Evolutionary Eros, moving toward ever-greater good, true, and beautiful expressions of its own nature. It is the impulse of our very own lives.

From quarks to culture, there is a narrative arc to Cosmos, a pattern etched on the walls of spacetime—and each of us is a unique expression of that pattern. All of Reality is personal. We are personally intended, recognized, chosen, loved/adored, desired, and needed by the entire process of evolution itself. Each of us is a personal face of the evolutionary impulse—the CosmoErotic Universe in person. That is the truth of what we might call *the great New Story of CosmoErotic Humanism*. The implication of narrative arc of Reality is that *you matter*.

When we bring together Unique Self and Conscious Evolution as interwoven strands in the new Story of Value—CosmoErotic Humanism—we understand that humanity is, quite literally, Divinity in Motion Screaming the Name of God—and that the name of the human being and the Name of God are not ultimately distinguishable from each other.

The Fifth Strand: The Eternal Tao Is the Evolving Tao

The fifth strand in CosmoErotic Humanism, which again rejects both scientism and creationism, is the affirmation of the Eternal Tao, which is also the evolving Tao, in which the human being directly participates. We have already referred to this at the beginning of strand four in our distinction between being and becoming and our pointing toward evolving value and the evolution of evolution. But we will now unpack this pivotal realization in somewhat more depth.

For Sartre, Harris, Bostrom et al., value is ultimately a construction, a fiction, a figment of our imagination. That is indeed the entire point of *Being and Nothingness*. Sartre is noble in this claim. He does not use it to abandon responsibility, but rather, albeit engaging in a performative contradiction, he uses the absence of any real meaning in Cosmos to call the human being to the great task of meaning-making. For there is nothing and no one else available to do the job. Without the human being, there would be *no* value in the Cosmos, claim Sartre, Bostrom, and company.

But of course, if value itself is not real, then why would that in any sense be problematic? If value is not real, then there is no reason to create value and no ultimate distinction between good and evil, between nobility and degradation, between suckling and murdering a child. It is only the intrinsic value of life, for example, that makes the murder of a child a heinous violation, instead of the mere violation of a social construct.

The human being does not just recognize value, however. Once we begin to understand the evolutionary process, we realize that *not only do we live in an Evolutionary Love Story, but that the Evolutionary Love Story quite literally lives in us*. From muons to leptons and hadrons, all the way up the evolutionary chain, from the self-organizing nature of matter to life to the human mind in all of its levels of unfolding, all of it quite literally lives in us.

In other words, one can quite literally speak the accurate and embodied I statement declaring with full passion and potency—*I am evolution*. Or more precisely, *I am evolutionary value* or *Evolutionary Love in action*.

In this fifth dimension of CosmoErotic Humanism, the human being is an irreducibly incarnation of the evolutionary impulse moving toward ever deeper and wider Eros, or value. And in the end, Eros and value are but two faces of the One. Eros is value itself. And value, reaching for ever wider and deeper expressions of itself, is Eros.

In this sense as well, Eros and value are precisely *not* static. Rather, value is evolving.

If we can evoke the Eternal Tao from the great traditions of interior science, we might say that the Eternal Tao is the Field of Value. But the Eternal Tao does not disclose pre-ordained and unchanging value. Rather, value itself is both eternal and evolving. Or said differently, the Eternal Tao *is* the evolving Tao.

Here, all of the strands of CosmoErotic Humanism merge together. The irreducibly unique human being is the unique Eros of Value that participates as the leading edge of the evolutionary process—through his or her own process of being and becoming—of thinking, feeling, and action. In all of these ways, human action is ultimately necessary and dignified, ultimately having lasting and meaningful effects on the nature and outcome of the cosmic story.

The Sixth Strand: In Its Time, I will Hasten It—Isaiah 60:22

The sixth strand, in this third view of man as expressed in CosmoErotic Humanism, is encapsulated in the writings of the great interior scientist Isaiah, who lived sometime in the axial age, roughly contemporaneous with Lao Tse or Confucius.

Isaiah 60:22 reads:

Be'Itah Achishena.

In its time, I will hasten it.

There is a crucial set of interior science conversations around the *eschaton* that appear in great fifth-century work knowns as *Talmud*. The *eschaton* is what is described in the texts of interior sciences as *the end of days*. In multiple sets of literature within the Hebrew wisdom traditions, as well as those of other interior science traditions, this period has two potential qualities: utopian and dystopian. There is a sense of potential apocalypse, breakdown, collapse, or *Armageddon*. At the same time, there is a sense of utopian possibility, known in the Western interior sciences as the *return to the Garden*, the *rebuilding of the New Jerusalem*, *Messianic consciousness*, and myriad other names.

A careful reading of these engenders the following—nearly self-evident—realizations.

All of the dystopian outcomes refer to what we have described as the *Meta-Crisis*, or what is often referred to as *existential risk*.

All of the utopian outcomes refer to what we have referred to as the emergence a New Human and a New Humanity, the fulfillment of *Homo sapiens* in *Homo amor*, or the Fourth Big

Bang.¹⁴⁴ In other words, the texts of the interior sciences—across space and time—had a core intuition of both existential risk and the necessary response to existential risk, as the emergence of a New Human and a New Humanity.¹⁴⁵

As was often the case, the core intuitions were then mediated by the public traditions of the interior sciences through their own local tribal historical prisms. More directly stated, these core intuitions were ethnocentrically hijacked, at particular moments in history, by particular religions, to support the visions of their own ethnocentric triumph. In other words, Messianic consciousness became—in exoteric (public) and often also esoteric (secret) writings—deployed in the service of a particular local religion; alternatively, apocalypse meant the destruction of their enemies, or their enemies' submission to the superiority of their truth and power.

So, with this context as our backdrop, we turn to a set of *eschaton* sources in the Talmud.¹⁴⁶ In one passage, Isaiah writes *B'eta Achishana*, that in the end times, redemption or liberation will manifest.

B'eta literally means *in its time*, and *achishana* is taken to mean *at a quickened pace*, or *before its time*.

¹⁴⁵ See, for example, this transcript of talks from our virtual board conclave in 2021: https://worldphilosophyandreligion.org/first-principles-and-first-values-a-global-ethos-for-a-global-civilization/.

¹⁴⁴ On the Four Big Bangs, see the section "The Narrative Thread of Cosmos: The Evolution of Intimacy Through the Four Big Bangs" in Gafni, Stein, Hubbard, the five-volume series The Universe: A Love Story-First Meditations on CosmoErotic Humanism in Response to the Meta-Crisis, World Philosophy and Religion Press, in Conjunction with Waterside Press and Integral Publishers, 2023. The First Big Bang initiated cosmological evolution. It is the momentous leap from the unmanifest to the manifest. The First Big Bang is the explosion of the original singularity into matter and the laws of the Cosmos, including all of mathematics and physics. This is the birth of the physiosphere. Matter, after evolving through many stages, then triumphs as life. This is the Second Big Bang, initiating biological evolution, the momentous leap from matter to life and all the laws of classical biology and microbiology. This is the birth of the biosphere. Life moves through many stages of evolutionary development ultimately triumphing in the emergence of the depth of the self-reflective human mind. This is the Third Big Bang, the birth of the Noosphere-Nous in the Greek sense of interior mind. After the Third Big Bang, the human mind, personally and collectively, culturally goes through many stages of evolutionary development, driven in part by the awareness of individual death. The human mind, too, seeks its unique triumph. This is what we have called the Fourth Big Bang, the fulfillment of Homo Sapiens in what we might call Homo amorError! Bookmark not defined., the birth of the New Human and the New Humanity. The birth of Homo amor, and the necessary catalysts for its emergence as well, is a major topic of CosmoErotic HumanismError! Bookmark not defined.

¹⁴⁶ See Tractate Sanhedrin 98a and see a close reading of this Talmudic passage by the great 19th-century interior scientist Schneur Zalman of Liadi in his *Or Torah, Bereieshis* (Genesis).

The interior scientists of the *Talmud* understand this to be referring to two possibilities one dystopian and the other utopian. The utopian possibility is ushered in by significant human action that changes the course of history. The dystopian possibility emerges precisely because of the failure of such human action.

A good example of this form of human action is the abolition of slavery.

One key figure in this story is Benjamin Lay, an early abolitionist, who was born in England in the late seventeenth century and moved to Philadelphia in the early eighteenth century. Lay was a Quaker who, through a lifetime of controversial radicalism, helped force the issue of slavery into the very center of Quaker—and ultimately broader social—consciousness.

One famous protest of Lay's involved him attending the annual meeting of the Quakers in a military uniform and carrying a sword, both hidden by a large coat, which also hid a hollowedout book filled with fake blood. During the meeting, he is reported to have come to his feet, dramatically throwing off the coat, and proclaiming:

"Thus shall God shed the blood of those persons who enslave their fellow creatures." He pulled out the sword, raised the book above his head, and plunged the sword through it. The people in the room gasped as the red liquid gushed down his arm; several women swooned at the sight. To the shock of all, he spattered "blood" on the heads and bodies of the slave keepers. Benjamin prophesied a dark, violent future: Quakers who failed to heed the prophet's call must expect physical, moral, and spiritual death.¹⁴⁷

The Talmud is, in other words, alluding to an early version of this third position of CosmoErotic Humanism that we are here articulating.

When we link together the realizations of Nachman and the holy atheism of the void, Unique Self, the human being as evolution in person, and this Talmudic eschatological view of human impact, we have the necessary fabric to weave a new vision of human dignity. This new understanding of human dignity, and even divinity, weaves the next evolutionary pattern of Man

¹⁴⁷ See Marcus Rediker, *The Fearless Benjamin Lay: The Quaker Dwarf Who Became the First Revolutionary Abolitionist*, p.2, Beacon Press, 2017, Kindle-Version.

and God, picking up on the articulations that defined the Renaissance era. These are crucial sources for this new pattern of Evolutionary Intimacy we call CosmoErotic Humanism.

This new vision is a new emergent of intimacy that synergizes the deepest intuitions of classical mysticism, or interior science, the sense of being an inextricable part of a larger Field, and the radical authenticity of the void of Sartre, Parfit, Bostrom, and other atheists. This is then woven together with the realization of Evolutionary Unique Self, which then births the Evolutionary Intimacy of *Homo amor*, who participates and partners with the Infinite Divine.

In some sense, we might say that CosmoErotic Humanism is the celebration of finitude that simultaneously heals the shame of finitude, even as it rests the human being in the arms of the Divine. The human being lives in the larger Field of Reality—not only a Field of True Self as the One Consciousness, but also True Self as the One Desire, One Love, One Heart of Cosmos. But it is even more. True Self is no less the interpenetrations, inter-inclusions, and interdigitations that are the fabric of the entire seamless but not featureless planetary stack of Reality.

The human knows that she is both the Field itself in her quality and substance, and at the very same time, an irreducibly unique expression of the Field, playing her own instrument in the larger score of Unique Self Symphonies.

The Seventh Strand of CosmoErotic Humanism: Paradox

The seventh strand or quality of CosmoErotic Humanism, and its realization of the human place in the world, is *paradox*. There is a contradiction in human experience that is transformed into paradox. The human being is fragile and mortal, a wisp of finitude, and yet also potent, divine, and infinite. The human being is both never alone—we are always held—and yet there is a way in which loneliness is the authentic expression of the void, described in *Genesis* both as *not good* and as the very quality of the human situation.

Man lives with his closest friend—the master of the universe. That closest friend, the lover of the *Songs of Songs*, not only holds him but lives within him and needs his service. And yet, man is broken and fragile and alone. Both experiences live side by side, often in the same

life, and even in the same day, same hour, same breath. The void is *real*, but it is *not* true. The void is *not* true, but it is *real*. Whatever way we express it, we cannot escape the paradox of our holy and broken *hallelujah*.

There is an oft-told joke, which is not funny but quietly heart stopping, which had circulated for some decades, which captures the impossibility of the paradox, not in a sweet way but rather, in the sharp impossibility of it all. It is, of course, about suffering and the utter insanity and absurdity of holding together the Infinitely Loving God, who breathes life into the infinite and dazzling complexity and beauty of all, shimmering with goodness, truth, and beauty—with the depth of human depravity and pain.

It is the story of an old man who dies. The old man is said to be very righteous. As such, he is gathered by the angels for a special audience with the Divine. The angels tell him that he has earned a full hour with God. During that time, he may bask in the Divine Radiance or otherwise be in intimate communion with the Divine in any way that is pleasing to him.

He responds to the angels by saying that he does not require an hour—indeed, five minutes will suffice. The angels are somewhat surprised, but after all, he is a righteous man and so, they bring him to God.

So, God says, what would you like to do with me?

To which the man replies, *I just want to tell you a joke*.

God is surprised as well but, after all, this a very righteous man. And so, God assents. The man tells God a particularly weird and painful joke—a holocaust joke—where the plot and punchline involve the horrors of genocide, gas chambers, and dead babies.

God looks at him in horror, both shocked by the joke and not getting it at the same time. The only words God can muster are, *I don't get it...*

To which the righteous man replied, well, I guess you had to be there.

The joke is, of course, impossible. The point of the righteous man: *God, you were not there in the holocaust*—in which case the void is real. There is a place where God is *not*—in which case God is *not* God, or at least *not* the God we thought God to be in our deepest realization. At the same time, the man is in heaven, and the apex of his righteous life is intimate communion—he is talking to God—even though he is not in the mystical ecstasy of *unio mystica*, rather, he is telling God a joke—a holocaust joke—to which God says, *I don't get it*, to which he replies, *you had to be there*…

The void is *not* true, but it is real. The void is real, but it is *not* true. A vital paradox at the heart of the new vision of CosmoErotic Humanism.

Conclusion

This description of the human being we have here evoked is *Homo amor*. That's the third position. That's the New Human and the New Humanity. Stepping into the lived identity of this New Human and New Humanity is what we call *the Crossing*. We cross over, as it were, to the other side. In the great lineages, there is a term of speech: *Our side and God's side*. In the crossing, we cross to the other side. We no longer see only as separate-self humans, lost in the grasping of the lonely and traumatized ego. Rather, we cross over.

We begin to see Reality with God's Eyes.

We not only love but we are lived as love.

And to be a lover is to see with God's Eyes.

We are not merely separate parts seeking our own good.

But we become omni-considerate for the sake of the whole.

In the language of one lineage—and every lineage has their own unique intimate language that alludes to the crossing—we re-enact, in an evolutionary context, the story of Abraham, of Ibrahim, the Hebrew. The word *Hebrew* means: the one who crosses over to the other side. The experience of the Crossing is the awakening to this Fourth Big Bang, in which I experience the Field of LoveIntelligence, LoveBeauty, and LoveDesire holding me in every moment. And at the same time, I experience all of the Field in me—irreducibly and uniquely in me—and I realize,

I matter. I impact Reality. For Real. I am not an extra on the set but am fundamentally and poignantly needed by All-That-Is.

This is, in some very deep sense, precisely the ancient teaching of *Hineni*. When the Divine Voice calls Abraham, he responds with this one word.

Hineni—Here I am.

There are, of course, two ways to interpret that response. The first is an expression of utter obedience and submission. *Here I am, Thy Will be done*.

But the other way, which appears in the hidden texts of Nondual Humanism, and all the great interior sciences that are in part sources for our CosmoErotic Humanism, is that it's *not* that I am completely obliterating my selfness to become an empty vessel for the Divine. It's rather, that I'm so in my selfness—so in my depth, so in my uniqueness—that my radical subjectivity merges with the Divine. My unique individuated configuration of matter is alive with Divinity. I ultimately matter.

And when I say *Hineni—Here I am*, I realize that *I am found*.