

Story as a First Principle and First Value of Reality

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We often speak of three great questions of CosmoErotic Humanism.

The **first** is *Who*—as in *Who am I? Who are You? Who are We?* This is the great question of identity.

The **second** question is *What*—*What do I really want? What is my deepest heart desire?* These inquiries are closely linked to the great question of normativity. *What is there for me to do? What is there for you to do? What is there for us to do? What ought I do? What ought we do?*

The **third** question, the one which we want to focus on here is *Where*—*Where am I? Where are You? Where are We?* This is the question of Universe Story. In CosmoErotic Humanism, we respond to the *Where* question with the following series of brief, precisely formulated sentences:

Reality is not merely a fact.

Reality is also a story.

Reality is not an ordinary story.

Reality is a love story.

Reality is not an ordinary love story.

Reality is an Outrageous Love Story, or what we might also call an Evolutionary Love Story.

An Outrageous Love Story is not a pollyannish love story. Rather, an Outrageous Love Story embraces the full ecstasy and agony of life.

“Reality is a Love Story” applies to the narrative arc of the Whole—all of Reality, in its sequenced movement, contingency, and freedom in the context of telos and plotline.

YOUR love story is chapter and verse of the Universe: A Love Story.

Your Unique Self intimately participates in the Love Story of Reality.

One of the key purposes of the writings of CosmoErotic Humanism is to validate every phrase in these sentences, based on the validated insights at the frontiers of human *gnosis* as

found in the exterior and interior sciences across space and time. More specifically, we are engaged in synergizing traditional (premodern), modern, and postmodern Principles and Stories of Value into a new grammar and Story of Value that is greater than the sum of all previous stories or plotlines.

Here we will focus particularly on the elements and dimensions of Story. The series of sentences featured above points towards what we are calling *the narrative arc of Reality*.

Our point is that *Story* is not a mere human contrivance that developed and survived because of its adaptive power. Rather, *the adaptive power of Story is rooted in its fundamental, ontological status*. Reality itself is stories all the way down the evolutionary chain. Said differently, *Story* is a First Principle and First Value of Reality. Human beings think and feel in stories because this first Value of Reality lives in us, as us, and through us. And here we are referring to the anthro-ontological Principle that lies at the very heart of the epistemological method of CosmoErotic Humanism.

The First Principle and First Value of Story is implicit in both the interior and the exterior sciences. To approach this First Principle, we need to pause and briefly unpack four implicit elements that apply to every manner of *Story* all the way down and all the way up the evolutionary chain, through all levels of matter, life, and the depths of the self-reflective human mind. It will then become apparent that these core elements of *Story* are at play throughout all of Reality, across space and time.

The Four Elements of Story

The **first** element of Story is a thread of action, in which events and dynamics are causally connected to each other.

The **second** element of Story is an implicit set of desired outcomes of value and meaning held explicitly or innately by all participants in the story. In other words, there is an implicit *telos*, driven by the desire for a particular set of values that is inherent or coded in the participants by Reality itself. The desire for a certain set of outcomes is thus a given structure of the story.

We might recapitulate these first two elements by simply saying: Reality has *inherent telos* and plotline, all the way up and down.

Third, there is a degree of freedom that exists in the participants that creates multiple possibilities (or at least more than one) for the unfolding of the plotline. If this did not exist, Reality would not be a Story, but a technical manual describing the mechanistic functioning of a computer program.

There is also—often but not always—a **fourth** element. This is *the arc of crisis and evolution*. There is a crisis, which is resolved through the new action of the story.

Six Dimensions of the Contemporary Evolution of Story: Conscious Evolution Revised

Clearly, of course, the nature of Story, like all of Reality, evolves. Story itself is part of an Evolutionary Story. And in the great Story of evolution, there is continuity: some elements of story are constant across the evolutionary spiral—from matter to life to mind. And at the same time, there is naturally discontinuity: At every new emergent level of Reality, there is an evolution of the Story Principle. Indeed, one dimension of this evolution is simply that Reality moves from less conscious to more conscious stories.

The emergence of Conscious Evolution is the contemporary expression of the evolution of story. In other words, Conscious Evolution itself is a new realization of the nature of Reality as a Love Story, and of our participation as crucial players in the Story. This is true in multiple dimensions.

First, Conscious Evolution is a recently emergent capacity, at the leading edge, for envisioning and feeling the *larger Story* of Cosmic Reality—in other words, we realize that *evolution is a story*. We are able to actually discern the narrative arc of Reality, from matter to life to mind, through all of its stages.

Second, we realize that evolution is a story of Eros, a Love Story, or what we have called *Evolution: The Love Story of the Universe*. Alternatively, in the

grammar of CosmoErotic Humanism, we also deploy the terms *the Universe: A Love Story*, *the CosmoErotic Universe*, *the Amorous Cosmos*, and *the Intimate Universe*.

Third, we have the capacity to individually locate ourselves within the Story and begin to experience our own Eros as omni-considerate for the sake of the Whole.

Fourth, we not only locate ourselves within the Story but as *expressions* of the Story. We *are* the Story incarnate. We *are* the Story in person.

Fifth, not only *are* we the Story in person, but we are also the storytellers of the Story (and of our own lives as chapters and verses in *the Universe: A Love Story*).

And finally, the **sixth** and most dramatic emergent evolutionary capacity is that we are not only the Story in person, not only do we tell the Story, but we also have a much more activist role: our own life stories participate in and change parts of the great Story of Reality itself.

All of this is, of course, different than the common, simplistic, confused understanding of *Conscious Evolution*, as evolution merely becoming conscious of itself as us. As we have pointed out in multiple writings on CosmoErotic Humanism, evolution has, of course, always been *inherently* conscious. The notion that an *unconscious* world, long before there was a neocortex, generated photosynthesis, *mitosis*, or *meiosis* is manifestly absurd to any genuinely honest empirical observer.

And of course, consciousness, in the manifest world, self-evidently evolves—much like Story. *Conscious Evolution* may thus be taken to accurately mean that *we human beings awaken to the scientifically validated realization that we are Conscious Evolution in person*. And that we have the capacity, in this moment of the Anthropocene, to write the new Story of Reality. Or to end it. But while the story evolves, Story itself is also, at its core, a First Principle and First Value that goes all the way up and all the way down the evolutionary chain.

The Four Elements of Story: A Second Look

With this broad context in mind, let's take a somewhat deeper look at the four elements of *Story*. These elements of Story are present in Reality, from the levels of matter to life to mind, in ever-increasing expressions of consciousness—with both radical continuity and discontinuity between all of the levels, and in the way that story shows up in them. ***We will see in this review that implicit in the First Principle and First Value of Story is the First Principle and First Value of Information, or what we might also call Meaning, Value, or even Consciousness.***

The First Element of Story: Threaded Causal Action

The first element is what we refer to as *threaded causal action*. Not only is there, to borrow a phrase from David Hume, *constant conjunction between events*. There is also a sense of *necessary* connection. The threads of events are causal to each other with one action occasion leading to the next action occasion. There is an interior sense in which events and unfoldings are related to each other, a sense of threaded woven action, causally connected.

The Second Element of Story: Action Is Woven by the Information—Meaning or Values or Consciousness—at Play in the System

The second element of Story, as we unpacked it above, is that the threaded action is driven by desire, and desire is always a desire for value. Value, however, is part of a larger cluster of words that includes *meaning, consciousness, and information*—and of course *story*. These are all inter-included aspects of the same phenomenology.

The First Principle and First Value of Information, Meaning, and Consciousness (or Value)

The following several paragraphs are drawn from the formulation of the First Principle and First Value of Information, Meaning, and Consciousness (or Value), which we will discuss more deeply in other writings on First Values and First Principles.

The *action is woven by the information at play in the system*. By adducing *information* as a virtual synonym for *meaning* and *value*, or at least as part of an intimately entwined *semiotic*¹ field, we do not mean *information as bits and bytes*, in the sense that Claude Shannon used the term in what was later to be called *information theory*. As Howard Bloom points out, *Shannon got the math right but the metaphor wrong*.² Rather, we refer to *information*, as Warren Weaver defined it, in a 1949 book with Shannon, as *meaning*.³ As Bloom explains, expanding on Shannon:

...the information theorists are right about one thing: at bottom this is an informational universe. It is a conversational cosmos. This is a cosmos of constant communication. A gossiping, whispering, and shouting cosmos. A cosmos in which it's not enough to shift a fortune cookie from your right hand

¹ The *Oxford Dictionary* defines *semiotic* as *relating to signs and symbols*. The science of semiotics studies the use of symbolic communication, which includes both sign processes and the communication of meaning—with a *sign* being defined as anything that communicates intentional and unintentional meaning, or feelings, to the sign's interpreter.

² Bloom writes in his book *The God Problem*: Shannon “called his math ‘information theory.’ But beware. Do not get your math right and your metaphor wrong. What was the problem? What was the big mistake? Claude Shannon saw communication as a form of juggling. ‘The fundamental problem of communication,’ he wrote, ‘is reproducing at one point either exactly or approximately the message selected at another point.’ [Quoted in Steve Jones, ed., *Encyclopedia of New Media: An Essential Reference to Communication and Technology* (Thousand Oaks, CA: Sage, 2003), p. 406.]” Bloom, Howard, *The God Problem: How a Godless Cosmos Creates*, Prometheus Books (2012).

³ The so-called Shannon-Weaver model was first proposed in a 1948-article named as “A Mathematical Theory of Communication” in *The Bell System Technical Journal* by Claude Shannon, Vol. 27, pp. 379–423, 623–656, July, October, 1948. See <https://people.math.harvard.edu/~ctm/home/text/others/shannon/entropy/entropy.pdf>, retrieved April 13, 2023. The essay was republished in 1949 as a book titled *The Mathematical Theory of Communication*, containing an additional article by Warren Weaver, which provided an overview of the theory for a more general audience. Shannon and Weaver were both involved in different fields of study—Shannon as a mathematician, Weaver as a scientist. Weaver was the director of natural sciences for the Rockefeller Foundation. In this book, he warns us that “the word information, in this theory, is used in a special sense,” that it “must not be confused with its ordinary usage” and “in particular, information must not be confused with meaning.”

to your left hand. A cosmos in which opening the fortune cookie and reading the message is the meat of the matter. Or, to put it in Claude Shannon terms, this is a cosmos in which meaning means everything.

Meaning? Surely this is lunacy. Surely this is anthropomorphism on a binge. Surely there is no such thing as meaning until more than thirteen billion years into the evolutionary process when the cosmos coughs out humans, humans with curiosity, suspicions, and IQs. Humans who can talk on telephones and read.

But restricting communication and meaning to humans is a big mistake. Meaning has been here since the first flick of the cosmos. Yes, we've had communication since the cosmos first twitched. And it's been communication in which meaning has meant everything.⁴

Said only slightly differently in the language of CosmoErotic Humanism, Reality is information, in the sense of meaning and value, all the way down and all the way up the evolutionary chain. In other words, *meaning*, or *value*, drives the movement of evolution.

Reality is—as B.F. Skinner observed from a purely exterior perspective—*stimulus and response*.⁵ But as Chomsky noted in his critique of Skinner, the stimulus and response of Reality is not exhausted by exterior values.⁶ There are interior values that shape our desire and either allure us or repel us, and thus arouse us to retain our autonomy.

Indeed, *Reality is attraction and repulsion*, or what we call *allurement and autonomy*, all the way down and all the way up the evolutionary chain. We move towards value, or we are moved by another value to move away. These movements of allurement and autonomy are core to the plotline of Evolution: The Love Story of the Universe.

⁴ Bloom, Howard. *The God Problem: How a Godless Cosmos Creates*. “8. The Amazing Repetition Machine,” subsection “The Case of the Conversational Cosmos.” Prometheus Books. Kindle Edition.

⁵ Skinner, Science and Human Behavior, pp. 48, 54, 65, 117, 121, 124. Quoted in: *The God Problem: How a Godless Cosmos Creates*. Footnote 52. Prometheus Books. Kindle Edition.

⁶ See Chomsky, Noam, “A Review of B. F. Skinner’s Verbal Behavior” in *Language*, 35, No. 1 (1959), 26-58—<https://web-archive.southampton.ac.uk/cogprints.org/1148/1/chomsky.htm> retrieved February 2024.

In other words, meaning structures do not begin within the human being. They do not even begin with life. *Meaning*, or what we might also call *logos*, *information*, or *larger patterns of content and value*, are coded in Cosmos from the beginning.

We are not talking about formal, legal, or abstract philosophical postulates or logical proofs of meaning. While those all have a place, they are not how we live our life. Rather, we live our lives embedded in an activated living Field of Value and Meaning:

Meaning, or value, tells me that the core context of Reality is not merely random.

Meaning tells us that the event is part of a larger essential pattern.

Meaning gives us direct access to the larger essential pattern.

It was Alfred North Whitehead, whom we invoked above, who famously said,

The misconception which has haunted philosophic literature throughout the centuries is the notion of “independent existence.” There is no such mode of existence...⁷

As Whitehead continues,

every entity is only to be understood in terms of the way it is interwoven with the rest of the Universe.⁸

Meaning implies *content*. The content is not isolated but woven into a larger pattern. *Content* and *context* are entwined. The *fortune cookies* are meaningful when you open the message and read the content. *Meaning* is at the core of what we call *information*. But *information* is not merely *bytes and bits*. Rather, *information*, at its core, is *meaning*. *Meaning* is *content and value* that are aligned with the structure of Reality itself. Or, inverting the sentence from the perspective of value, *value* is *content and meaning* that is aligned with the structure of Reality itself.

⁷ Alfred North Whitehead, *Science and Philosophy*, in “Part II: Philosophy,” the section called “Immortality.” ed. Open Road Media, 2014. (Original copyright 1948 by Philosophical Library, Inc.)

⁸ Ibid.

As we noted above, *meaning*, *value*, *information*, and *consciousness* are virtual synonyms but are not quite isomorphic. As we have pointed out in our discussions of “Allurement Is Primary: Nothing Underneath” above—it is hard to get underneath these primary and primal words. These words express something fundamental and are not reducible to a more primary word that lives linguistically underneath it. In other words, we have pointed towards a cluster of words that are inter-included, inter-texted if you will, each conveying a different fragrance or sense of the same shared Field of Meaning.

One way to access the different fragrances, or different dimensions, of the Field that these words imply, is to think in terms of first-, second-, and third-person perspectives on Reality. *Information* implies something close to the **third-person syntax** of Reality. *Meaning* implies a configuration of intimacy, which itself describes a certain thread of I-Thou relationship between Reality parts and dimensions, which disclose the intimate coherence of Reality’s complex interconnectivity—**second-person perspective**. Reality is *not* heaps but wholes. *Consciousness*, or *value*, implies the fragrance of a **first-person experience** of Reality. Value and consciousness are our direct **first-person experience** of Self.

We need to be careful here, however, to not limit any of these terms *only* to a first-, second-, or third-person perspective. Rather, each one evokes a fragrance of these three elements. And all three terms, of course, can each be understood and deployed in first, second, and third person—and often *are* by a wide variety of writers.

To get a sense of what meaning, information, and value mean, at the beginning of the Universe, think about the gazillions of quarks that flood Reality right after the Big Bang. Instead of having virtually infinite numbers of configurations, quarks configure in only several very specific fundamental patterns. No quark survives alone. Only quarks that establish a stable relationship as a triad of intimate coherence hold together and have continuity. Science tells us that at some point—within the first second after the Big Bang—there is introduced into reality what we might term *a particular configuration or pattern of intimacy*, in the form of two up quarks to one down quark, and *a second pattern of intimacy*, two down quarks and one up quark. What is the result of that ostensibly mechanical arrangement?

Do you get just three quarks? Just three times as much quarkdom? Far from it...⁹

Rather, you get *radical transformation*. You get *something with impossible properties and inconceivable future possibilities*. Three quarks come together to form a new value—a new configuration of intimacy—a new pattern of meaning.

The intimate configuration of two up quarks and one down quark is called a *proton*.

The intimate configuration of two down quarks and one up quark is called a *neutron*.

A proton and a neutron are entirely different beings and becomings, an entirely different structure of Reality than the three quarks that constitute them. That something that draws them together is the true nature of *information*. It is *information as meaning*. It is *intrinsic meaning* or *value* in Cosmos that transforms three quarks into something else entirely. In this sense, it is hard to distinguish between *information* and what some call *value* or even *consciousness*.

When you put the three quarks together, you get something that

will someday make the solidity of my hand, the substance of my brain, and the churning hearts of the stars above my head...

The three bunch so tightly that it's impossible to tell they were ever three individual quarks at all. And the result is something so galumphulous that this cosmos has never seen its like before. ...the three quarks... have transformed into... a proton. This is downright weird. It's the equivalent of laying out three apples on your dinner plate and getting a woolly mammoth.

Or let's take another way that three quarks show up together. You might have one up quark to two down quarks. This time the quarks

rush toward each other and entwine, making yet another absurd abruptness

[which generates something equally fantastical that] *this cosmos has never seen*

⁹ This and the following quotes are cited in Bloom, Howard. *The God Problem, How a Godless Cosmos Creates*. (Prometheus, 2016), pp. 39-40.

before... it's called a neutron. That's like putting three pats of butter on a bread plate and ending up with a dancing whale.

What the hell is going on here? [Eros.] Cosmic creativity. Raw and unadorned cosmic creativity...

which generates new value and meaning, new structures of in-formation. This simple empirical contemplation tells us that—in the language of “The Sound of Music”—*the hills are alive*—with cosmic creativity. But it is not just the hills. It is the very basic structure of matter itself.

Davar: Word and Thing—Information and Matter

It is not by accident that the Hebrew word for *thing* and the word for *meaning* and *logos*—*Davar*—is the same word. Material is infused with *value* that expresses itself as creative *logos*. That is not myth or metaphor. It is rather empirical contemplation. Creativity is animated by an interior Eros that is suffused with what can only be called *meaning*.

Our friend Howard Bloom, who somewhat delights in his self-portrayal as a stone-cold atheist,¹⁰ describes the emergence of things at the beginning of time.

Imagine that:

You and I are seated at a café table in the nothingness before the big bang. You are a wildly imaginative visionary and I am a crusty conservative. You have extraordinary visions, and I am a stick-in-the-mud, a crust of toast committed to logic and to common sense. You and I have nothing better to do, so we've

¹⁰ Howard Bloom, who is a senior scholar at our think tank, The Center for World Philosophy and Religion, and has been in intense dialogue with us for the last several years, holds atheism in a complex form which evokes the statement of evolutionary interior scientist Abraham Kook's comment of “*faith which is heresy and heresy which is faith.*” The actual Hebrew word for *faith*, which Kook deploys, is *emunah*, which is better translated as *trust*, a more accurate word in Howard's worldview, a worldview that we share with him in many regards. Howard's atheism often veers over to a kind of pantheism, and, on occasional days, which are particularly vulnerable days, into more of a panentheism. The following is quoted in Bloom, Howard. *The God Problem, How a Godless Cosmos Creates.* (Prometheus, 2016), pp. 13-15.

been sitting here at our outdoor table sipping one coffee after another ever since the nothingness began.

Absolutely nothing is happening, right? Why? Because there is nothing, no thing, no action, no space, no time, no form, no substance, no shadow, no sunshine, no squirrels, no trees, no planets, no sticks, no stones, no bones, not a single solitary thing. And there never has been.

Suddenly you perk up. You have a nutty vision, an insane daydream. You point to a spot in the blackness a few feet away from our table. And you tell me that if I watch very carefully, I will see a pinprick infinitely smaller than a pinprick smash abruptly from the nothingness, then expand at superspeed. Blowing up like a hyperkinetic balloon. A speed-rush sheet, a manifold, of raw space and time.

The boredom must have gotten to you, I tell you. What you're claiming is loony. What's more, it's impossible. And it defies the laws of logic. I've been sitting here across the table from you for a good long time. I've kept my eyes peeled. And there has never been a pinprick of any kind. What's more, this wacky stuff you call space and time has never existed either. Nor will it ever exist. Why? Because nothing comes from nothing. Zero plus zero equals zero. The idea that this basic fact could ever change is wild-eyed fantasy. And it defies the first law of thermodynamics, the law of conservation of matter and energy, a law so basic that every respectable twenty-first-century scientist will someday declare it thoroughly and completely right.

While I, in exasperation, am trying to get simple logic across to you, wham, a pinprick infinitely smaller than a pinprick suddenly shows its head. It's what physicists like Stephen Hawking and Roger Penrose will someday call a singularity.¹¹ I am stunned. This simply does not make sense. But you stay cool and act as if nothing is happening. Meanwhile, that pinprick blows up so fast

¹¹ Stephen W. Hawking and Roger Penrose, *The Nature of Space and Time* (Princeton, NJ: Princeton University Press, 1996), pp. 3, 15, 33.

that it makes me dizzy. And sure enough, it has three properties that have never existed before. Three properties that, if common sense prevailed, should not exist. Those properties are time, space, and speed—time, space, and energy. How in the world did you know this would happen? And how in the nonexistent world did the nothingness pull this off?

The pinprick whooshes outward like the rubber sheet of a trampoline on a growth binge, unfurling as a superspeed space-time manifold. I am stunned. What the heck is space? What in the world is time? And what is powering all this speed? Who in the world invented these peculiar things? And if they weren't invented, how the hell did the utter emptiness burp them out?

While I'm sitting there with my jaw dropping, you are as cool as a scoop of gelato in a block of ice. Finally you open your mouth again. And you make another of your wacky predictions. That unfurling sheet, that giant sail of space and time, you say, is about to produce something called "things." And those things are going to precipitate from the sheet of space, time and speed the way that raindrops precipitate from a storm cloud.

Now I know you've lost it. You got me with your prediction about the pinprick. But that was beginner's luck—and dumb luck of that kind does not strike twice. Now listen to me very carefully, I tell you. There is no such thing as "things." There have never been things. And there never will be things. That sheet speeding open a few feet away from us has only three properties: space, time, and energy. And those are bizarre enough all on their own. Let's get logical. Everyone knows that one plus one equals two. Add space, time, and speed and what do you get? You get space, time, and speed—period!

Then, far less than a second into the existence of your blasted space-time-speed manifold, there comes a rain, a hail storm, a blizzard. Of what? Of things. Gazillions of them. Roughly 10^{87} to be a bit more precise. What are they? They're elementary particles—quarks. All popping simultaneously from a

mere whoosh.¹² And it makes no sense. In fact, it is impossible. So why in the world have you been right twice? And why is my down-to-earth logic, my sturdy and sober rationality, my clear and sensible thinking, all wrong?

Things will soon get worse. This peculiar rule-breaking and massively innovating cosmos that you and I have been watching from our café table will churn out galaxies, stars, molecules, cells, and DNA. Not to mention thinkers, talkers, lollypops, common sense, croissants, cannibals, café tables, and you and me.

This innate meaning-infused creativity is at the very Heart of the Evolutionary Story. The Cosmos self-actualizes towards ever wider and deeper levels of unique meaning and value. But, as we have just noted, meaning and value are present from the beginning. To recapitulate as we conclude this section: **The Cosmos erupts from *nothing***. It, then, generates gazillions of quarks, which are themselves patterns of coherent intimacy, allured to each other—animated by desire—and then, it reconfigures these quarks into new patterns of intimacy, which generate new information and meaning—protons and neutrons—with all of these *things* self-evidently embodying nonrandom value and meaning. In light of the paragraphs above, we formulate a First Values and First Principles Equation on Eros, Meaning, and Value.

Reality is meaning, value, and information all the way down and all the way up the evolutionary chain.

Meaning, or value, is what is also called *information*.

Information means a particular coherent pattern of order—a unique configuration of intimacy—that has novel value and Eros, which can be communicated, and which catalyzes the formation of new depth and new wholeness—that is to say new communion.

The First Principle and First Value of Value, Meaning, or Information begins in the first moment of the Big Bang, which generates time, space, and matter.

¹² Neil F. Comins, *Discovering the Universe: From the Stars to the Planets* (New York: W. H. Freeman, 2008), p. 345.

Unique patterns of value and meaning continue in the formation of quarks, with quarks coming together to form protons and neutrons, and protons, neutrons, and electrons coming together to form atoms,¹³ and atoms coming together to form molecules, molecules to form cells, and so on.

Each new emergent—from quarks to protons to atoms to molecule to cells—is a new emergent order of value, meaning, or information.

The *Telerotic* Universe

In essence, what the first and second elements are saying, as we already noted above, is that *a story has a plotline*. And as we have also noted, another word for *plotline* is *telos*. *Telos* in a system implies directionality. We are deploying the word *telos* in the sense of *meaning* and *value*, which points towards *purpose*, *goal*, or *direction*.¹⁴

Of course, as noted in our essay “Three Universe Stories,”¹⁵ we are not suggesting a super-imposed *telos* that external to the system itself, or a sense of a pre-ordained plan that undermines freedom, contingency, and evolution. Rather, we are talking about value and meaning—purpose—*telos* and direction—as core, *inherent* qualities of Eros—the unfolding plotline of Cosmos. Reality’s Story, like all stories, has a plotline. The Cosmos is animated by *telos* and *Eros*; in other words, we live in a *Telerotic Universe*.

¹³ Neutrons and protons would already come together for the first time within the first 15 minutes of the Universe, while it would take the electrons another 380,000 years of the Universe cooling off to join them and form the first complete atoms.

¹⁴ See, for example, the paper “Technological Approach to Mind Everywhere (TAME): an experimentally grounded framework for understanding diverse bodies and minds” by biology professor Dr. Michael Levin for an example of how the hard, exterior sciences, in this case biology, reclaim the notion of teleology. See also, this brief easy-to-understand summary of the paper on *John Templeton Foundation: Inspiring Awe & Wonder* from January 2024: “Intelligence Without a Brain” by Maggie Ciskanik—<https://www.templeton.org/news/intelligence-without-a-brain>—retrieved January 2024. From that article: “Essentially, Levin reclaims the common sense view that teleology or ‘goal directedness’ is a real phenomenon in biological systems, engineered or natural.”

¹⁵ See our essay “Three Universe Stories: Beyond Scientism and Creationism: CosmoErotic Humanism,” <https://worldphilosophyandreligion.org/three-universe-stories-beyond-creationism-and-scientism-cosmoerotic-humanism/>, which also appears as an appendix to volume 5 of *The Universe: A Love Story* series.

The Third Element of Story: Freedom

With all of this mind, we can move to the third element of Story: Freedom. Freedom, like Information and Meaning, is another entry on our short list of evolving First Principles and First Values of Cosmos. We discuss freedom in depth in the two books mentioned above that engage values.¹⁶ At the core, it is freedom that tells us that what we are viewing is *not* a tech manual but a Story. Naturally, as we have already pointed out, there is *continuity* and *discontinuity* in the expression of a value, all the way down and all the way up the evolutionary chain.¹⁷

As the interior sciences recapitulated by the likes of Abraham Kook have already written, there is a dimension of *ratzon*, of *will*, even in the world of matter.¹⁸ Kook is joined by the likes of physicist John Archibald Wheeler,¹⁹ who collaborated with Einstein at Princeton and taught physics legend Richard Feynman, and Stuart Kauffman,²⁰ who come to a similar conclusion from the perspective of the exterior sciences, and by those like Alfred North Whitehead,²¹ who came to the same conclusion through his own philosophical process of insight, integrated, in his case, from both the exterior and interior sciences.

¹⁶ See Marc Gafni & Zachary Stein, *First Principles & First Values: Forty-Two Propositions on CosmoErotic Humanism, the Meta-Crisis, and the World to Come*, 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*.

¹⁷ See the section in this Volume called “Continuities and Discontinuities at Every New Level of Evolution.”

¹⁸ See the section in this Volume called “A Note on Eros and Will.”

¹⁹ Wheeler calls the Cosmos a *participatory universe*. See John Archibald Wheeler, *At Home in the Universe* (Melville, NY: American Institute of Physics, 1996), pp. 25, 291–92. Quoted in Bloom, Howard. *The God Problem: How a Godless Cosmos Creates*. Footnote 60. Prometheus Books. Kindle Edition.

²⁰ See Stuart Kauffman, “Physics and Five Problems in the Philosophy of Mind,” July 15, 2009, arXiv.org, (accessed September 30, 2011); Stuart A. Kauffman, “Five Problems in the Philosophy of Mind,” Edge.org, August 7, 2009, (accessed September 7, 2011); Robert Kane, *The Oxford Handbook of Free Will* (New York: Oxford University Press, 2011)—quoted in Bloom, Howard, *The God Problem, How a Godless Cosmos Creates*, (Prometheus, 2016). According to Howard Bloom, “Five Problems in the Philosophy of Mind” is “an essay that appears on one of the most prominent websites for advanced physicists and mathematicians,” arxiv.org.

²¹ See Whitehead, Alfred North, CHAPTER I FACT AND FORM in *Process and Reality (Gifford Lectures Delivered in the University of Edinburgh During the Session 1927-28)*, Corrected Edition, Edited by David Ray Griffin and Donald W. Sherburne, 2nd Edition 2010.

Story and Conscious Evolution

Just to veer from our own narrative thread for a moment, to note the obvious, and add a key point about *Story* and *Conscious Evolution*, which we already engaged initially above. We are of course *not* saying that quarks are telling stories. Rather, we are saying that *Story*, the narrative arc of Reality, is not a contrived human invention but rather a fundamental property of Cosmos.

Story, in that sense, is not entirely dis-similar from time and space. We perceive time and space, *not* because we contrive them but because they are *there* in some *real* sense. The same is true for Story. This, of course, inverts the postmodern sensibility, which we introduced at the outset, which deconstructs Reality as *merely* story, and then interprets story as being but a *social construct, figment of our imagination, or fiction*. This is, for example, how popular historian Yuval Harari—who, like most of his generation, was nursed by the milk of postmodernity—describes story. He deploys this set of words to describe all human stories, including our contemporary liberal stories of universal human rights. Harari parrots postmodernism, when he smugly mocks notions that value, meaning, or story—or what we have termed a *Story of Value*—might be intrinsic structures of Cosmos.

For him, and the postmodern consensus that he echoes, neither value nor meaning are real, in the sense of being intrinsic structures of a meaningful or value-laden Cosmos. No less important, Harari misses both the possibility of the evolution of value and the evolution of story, which we pointed towards above. The realization of the ontology of Story reshapes our understanding of Conscious Evolution as well.

We have already pointed out that Conscious Evolution does not mean that evolution is now, for the first time, awakening to some dimension of consciousness and meaning through human awareness. As we have pointed out, earlier in this series of volumes, and revisited and deepened just above, information, meaning, value, and story [and consciousness] are themselves evolving First Principles and First Values of Cosmos. Our new capacity to see evolution and tell the Evolutionary Story is the first expression we have, from a human perspective, of Conscious Evolution. In other words, we awaken to our own nature as Conscious Evolution in person.

There are three distinct dimensions of being Conscious Evolution in person that are valuable to recapitulate at this juncture:

First, as just noted above, is our capacity to see the entirety of the evolutionary spiral and to tell the Evolutionary Story.

Second is the awakening of our self-reflexivity around our storytelling. We are telling the stories we are living in. But that does not mean, as postmodernity concludes, that stories are mere fictions. But they *are* figments of our imagination. God is *also* a figment of our imagination. However, as the interior sciences remind us, our imagination is also a figment of God. In other words, our discernment of story, and our storytelling capacity, is a reflection of the structure of Cosmos itself.

Conscious Evolution further means—and this is the **third** dimension—that we participate in the evolution of story and meaning, or what we might refer to as the *evolution of consciousness*. We are not only actors in the Universe: A Love Story or Evolution: The Love Story of the Universe. We are storytellers of Evolution: The Love Story of the Universe. But we are not only the storytellers. We are co-authors of the Story itself.

The Fourth Element of Story: The Arc of the Story

With all of this in mind, we now turn to a fourth element of Story, what we might call *the arc of the Story*. This element appears somewhat differently in all stories. In many stories, there is a *conflict* or a *challenge*—a *crisis* that needs to be engaged. This is the sense of what we mean when we declare that *crisis is an evolutionary driver* or that *emergency drives emergence*. This is the sense that Hegel draws on when he speaks in terms of *thesis*, *antithesis*, and *synthesis*. **The antithesis is the crisis that generates the evolutionary emergence of the synthesis.**

Whether we are talking about the journey of quarks, or sperms, or the dramas of our own lives, there is a sense of struggle. Struggle then births emergence, a sense of resolution and triumph, which marks the *creative advance into evolutionary novelty*.

There is, however, a second form of Story, when this element of struggle is not at play in the same fashion. The drive of evolution is not limited to emergence through crisis as an evolutionary driver. That is, in fact, a secondary driver of evolution. **The primary drive of evolution, which is the context for this secondary drive, is in fact the incessant ceaseless creativity of Reality itself—what we have called *Eros*.**

We remind ourselves of the Eros equation, with which we began.

Eros = the experience of Reality’s pulsing aliveness, always desiring, seeking, moving towards ever-deeper contact and ever-greater wholeness

The First Principle and First Value of Story in the Interior Sciences—But One Brief Example

This same notion of Story as a First Principle and First Value of Cosmos appears in the interior sciences in multiple expressions. Of course, the interior sciences, like the exterior sciences, speak in their own jargon and code.

One expression of this appears in Hebrew wisdom. One interior scientist in that lineage, summarizing the First Principle and First Value of Story in mythopoetic ontological terms, simply said, *God loves stories*.²² In the interior sciences of the Hebrew lineage tradition, the two major topics are called *An Account of the Chariot*²³ and *An Account of Creation*, in Hebrew, *Maaseh Merkavah* and *Maaseh Berishet*.²⁴ But the word for *Account*, *Maaseh*, means *not* merely a functional technical accounting. Rather, *Maaseh* is understood by the lineage to mean no less than *Story*.²⁵ In the language of the Baal Shem Tov, interior scientist par excellence and founder of the Hasidic movement, “Whoever tells stories [of *ethos* and *Eros*] praising the tzaddikim [the

²² *Shivhei ha- Baal Shem Tov*, pp. 233 sec. 160, or in an English version of the text, *In Praise of the Baal Shem Tov*, pp. 199 sec. 194.

²³ The account of the chariot is sourced in *Ezekiel*, Chapter One, and *Isaiah*, Chapter Six.

²⁴ *Babylonian Talmud*, Tractate *Sukkah*, 28a and Tractate *Chagigah* 14b, 15a.

²⁵ The tales of the masters, holding esoteric teachings, are called by Nachman of Breslov *Sippurei Maasiyot*, literally translated as *Tales of Stories*. *Ma’aseh* literally means *deed*. *La’asot*, a verb form, means *to do or enact*, but not merely technically, rather, it is the *story of doing*, the *story of the chariot*, the *story of creation*.

Great Masters] is as if engaged in the mystic study of the [Account of the] Divine Chariot (*Maaseh Merkavah*).”²⁶ Menachem Mendel of Rimanov, an iconic interior scientist and master in the tradition of the Hasidism writes, “The stories of the tzaddikim [of *ethos* and *Eros*] are *Maaseh Merkavah* [the Account of the Chariot] because the tzaddikim [masters] *are* the Chariot [*Merkavah*].”²⁷

Maaseh Merkavah—the Account of the Chariot—as we noted above and unpacked in some depth in the volume in the Great Library of CosmoErotic Humanism, which relates to the lineage sources for the Universe: A Love Story,²⁸ is the vision of Ezekiel.

Ezekiel visions a Divine Vehicle—a Chariot—moved by four hybrid beings—on which was enthroned the enflamed majesty of the radical Presence of the Divine.

This vision is called *Maaseh Merkava*, as noted, *the Account of the Chariot*.

The Hasidic realization, sourced in early *Midrashim*,²⁹ was that the *Maaseh Merkavah*, which is understood to be the account of the First Principles and First Values of Reality, is itself, in some real sense, a story. For Story itself is a First Principle and First Value of Reality. In *Maaseh Merkavah*, the form, or the medium, and the message are the same. It is an account of

²⁶ See, for example, *Shivhei ha-Baal Shem Tov*, p. 233, #130; *In Praise of the Baal Shem Tov*, p. 199, # 194—Cited in: Buxbaum, Y., *Storytelling and Spirituality in Judaism*. Northvale N.J: Jason Aronson; 1994.

²⁷ See *Gan Hadasim*, part two of *Sifran Shel Tzaddikim* [published separately], pp. 2b, 3. See *Gan Hadasim*. Edited by Eleazar Dov, son of Rabbi Aaron of Koznitz. See *Sifran Shel Tzaddikim* (1959). Edited by Eleazar Dov, son of Rabbi Aaron. Jerusalem—Cited in: Buxbaum, Y., *Storytelling and Spirituality in Judaism*. Northvale N.J: Jason Aronson; 1994.

²⁸ See Marc Gafni: *The Wisdom of Solomon Matrix of CosmoErotic Humanism: Early Ontologies of the Universe: A Love Story and Evolution: The Love Story of the Universe in the Interior Sciences of Hebrew Wisdom* [forthcoming, Waterside Press].

²⁹ Here is one Midrashic statement: “The Avot, the Fathers [and Mothers], are themselves the chariot.” *Genesis Rabbah*, Sec. Forty-Seven, subsection Six. The stories of the founding fathers and mothers of the lineage, Abraham, Isaac, and Jacob, and Sarah, Rebecca, Rachel, and Leah, are understood, in the interior sciences, to be representative of the stories of all the masters. One Midrashic saying in the name of *Rav Acha* [See commentary of *Rashi* to *Genesis* 24:42 citing *Midrash Rabbah*], says that “God prefers the conversations of the servants of the Patriarchs [founding fathers] to the complex *torah* of their descendants.” The intent is understood by the interior scientists of Hasidism as echoing the centrality of story as an expression of the Account of the Chariot, which is considered the most exalted form of sacred practice. This preference is sourced in a Talmudic passage, cited above, *Babylonian Talmud Sukkah* 28a, which states that *Raban Yochana Ben Zakai* was master of both of the *great* and *small* dimension of *Torah*, explaining that *great* refers to the *Account of the Chariot* and *small* refers to the *details of the law in the Talmud itself*. The Account of the Chariot, like the conversation of even the servants of the founding fathers, are part of what we call, in CosmoErotic Humanism, the *human Story of Value*, which incarnates the First Values and First Principles, of which Story itself is one.

First Values and First Principles, and its form—Story—is itself a First Principle and First Value. This notion of Story in the interior sciences, as it expresses itself in the Baal Shem Tov and in the Account of the Chariot, is sourced in the first source code text of the Hebrew interior sciences.

The first recorded document of the Hebrew interior sciences is called *Sefer Yetzirah: The Book of Creation*. The core structure of the book, which is only several hundred words, revolves around a linguistic play between the words *Sefer* [*Book* or *Text*], *Sippur* [*Story*], *Safar* [*Boundary*], and *Sapir* [*Sapphire/Light*]. The implicit axiom and explicitly formulated realization of the Hebrew interior sciences is that language is the core ontological structure of Reality.³⁰ In other words, Reality itself is language, at its very core. This is reflected in the Zoharic statement in the introduction to the *Book of Genesis*:

Istakel Be'Orayta u-Vara Alma.

*God looked into the Torah and created the world.*³¹

Language is not an expression of Reality but rather the ontological source of Reality. Language, or what is sometimes also referred to as *semiotics*, is but another way of saying *meaning, value, consciousness, or information*. The point is encapsulated in the word *Davar*, which we adduced above. *Davar* is a *thing*, but that *thing* is not merely random and meaningless, rather, all *things*, from the beginning, are lined with meaning. This kind of work in the interior science is, of course, a key precursor to the kind of semiotic vision of the Evolutionary Story motivated by Evolutionary Love, which is core to CosmoErotic Humanism and found also in Peirce, as we adduced him above.

³⁰ See Joseph Dan, the four-volume set of books on *Jewish Mysticism*, Jason Aronson Inc. Publishers, 1998-1999. See also Joseph Dan, *The Ancient Jewish Mysticism*, Gefen Books, 1990. And see Joseph Dan, *Kabbalah: A Very Short Introduction*, Oxford University Press, 2005. See also Dan, Joseph. "Three Phases of the History of the Sefer Yetzira." *FJB (Gesellschaft zur Förderung judaistischer Studien in Frankfurt am Main e.V.)* Volume 21 (1994): pp. 7-29.

³¹ *Berishet Rabbah 1.1.*

On the Emergence of a New Story: Information and Meaning as the Structure of the Universe: A Love Story and the Evolution of Love from Matter to Life to Mind

For those who orient most easily to the integral domain of science and consciousness, we turn for a moment to our colleague and friend, systems theorist and philosopher of science, Ervin Laszlo.³² If this kind of scientific information is somewhat confusing to you, feel free to pick up with the following section on “The Narrative Thread of Cosmos.” Rest assured that, even if you skip this short section, you can still grasp the core vision of the new Story of the Universe: A Love Story and its derivative narratives of identity, together with their immense implications at this juncture in our history.

Laszlo’s lifework is the formulation of the inherent structure of Reality from the perspective of the new, emergent science. He has written some ten volumes, in which he unfolds, in various levels of depth, the core of the emergent scientific vision. We cite here a series of short snippets drawn from what we view as one of his most succinct formulations of the structure of Cosmos.³³ Underneath their scientific language, this leading-edge scientific picture of Reality is articulating precisely the core structure of the Universe: A Love Story and the evolution of intimacy that we are unfolding here.

*The ground state of the cosmos is vibration centered at the zero point of that state. It is pure potential that, when realized, creates the coordinated vibration that constitutes the universe.*³⁴

The vibration that Laszlo speaks of in terms of the exterior sciences is not entirely different from what the Eastern interior science of Kashmir Shaivism, one of the most important

³² On Laszlo, see *ibid*, *The Self-Actualizing Cosmos* (pp. 27-29; 37-40), by E. Laszlo, 2014, Inner Traditions. For Laszlo on systems theory, see his classic, *Introduction to Systems Philosophy*, by E. Laszlo, 1972, Gordon and Breach. For the best single volume of Laszlo on new possible scientific narratives, see *Science and the Akashic Field: An Integral Theory of Everything*, by E. Laszlo, 2007, Inner Traditions.

³³ See, *What Is Reality? The New Map of Cosmos and Consciousness*, by Chopra, Deepak; Laszlo, Ph.D., Ervin; Grof, Stanislav, 2016, SelectBooks.

³⁴ *Ibid*, p. 10. SelectBooks, Kindle Edition.

sources for Hinduism, refers to as *Shakti*. Indeed, one of the primary texts of Kashmir Shaivism is called *the Doctrine of Vibration*. This vibration is what we refer to as *Eros*. Vibration is a pulsation of Eros animated by particular qualities of allurements, desire, and intimacy. Each vibration is unique in its pattern, form, and quality. Each vibratory pulsation has its own quality of interior feeling and exterior structure.

Eros is the fundamental vibratory pulsation of the Cosmos, which is both its immutable *being* as well as its *becoming*. The vibration of becoming is the movement of Cosmos toward ever-deeper contact and ever-greater wholes and wholeness. Each new whole is woven together from, and yet greater than, the sum of all the previous parts. Each new whole, in the terms of evolutionary science and systems theory, is a unique synergistic emergent. But we are ahead of ourselves in terms of the science.

*The vibration of the ground state in-forms the resulting clusters of vibration...Its excitation produces the manifest universe...The cosmos entered the excited state where it is a universal field of vibration producing waves of diverse amplitude, phase and frequency. The interaction [or, relationship] of the waves creates patterns of interference, of which the clusters and higher-order superclusters are the matter-like entities of the universe.*³⁵

There is no longer matter, in the old sense of atoms as hard tiny things, but rather matter-like entities, which are in fact *clusters of coordinated vibration*. In the new understanding at the leading edges of science, the old notion of matter as *thing* is transcended.

*The material things we consider elements of the real world are bits and clusters of vibration, oscillating standing waves at various scales of size and complexity. Planck-size bits configure into clusters of coordinated vibration, and their interaction creates the manifest world.*³⁶

³⁵ Ibid, p. 10. SelectBooks, Kindle Edition.

³⁶ Ibid, p. 8. SelectBooks, Kindle Edition.

Another word for *coordinated* is *patterned*. Laszlo is describing *patterns of coordinated vibration*—what we have called *configurations of intimacy*. The core structure of Cosmos is ever-evolving configurations of intimacy. Or in scientific language, the core structure of Cosmos is

clusters, superclusters, and hyperclusters [that] compose the particles, atoms and molecules; the organisms and ecologies; and the stars, stellar systems, and galaxies that are the furnishings—the “matter content”—of the world. They constitute individually distinguishable but not categorically separate entities. They are intrinsic elements of the field of vibration in which they appear.

The vibrations that furnish the world appear in the “excited” (as contrasted with the “ground”) state of the cosmos. Our universe can be defined as a[n intimate] coherence domain in the general wave field of the excited state of cosmos.³⁷

Reality, which subtends the entire spacetime continuum, is made up of highly coordinated, elegant *patterns of interfering waves*—that is to say, *ever-evolving configurations of intimacy*.

The coordination of the clusters of vibration indicates nonrandomness at the heart of reality.³⁸

In Laszlo’s view, echoing Max Planck, David Bohm, and the implicit or explicit view of many other leading physicists,

The clusters are “in-formed” by...an underlying cosmic intelligence.³⁹

Laszlo continues,

The excitation of the ground state produces multifold patterns and clusters of patterns of coordinated vibration. It produces propagating waves such as streams of photons (EM waves), short-range attraction and repulsion waves (nuclear forces), and waves of long-range attraction (gravitational waves).

³⁷ Ibid, pp. 8-9. SelectBooks, Kindle Edition.

³⁸ Ibid, p. 9. SelectBooks, Kindle Edition.

³⁹ Ibid, p. 9. SelectBooks, Kindle Edition.

*Their coordinated vibration appears as quarks and particles constituted of quarks, including leptons, hadrons, baryons, bosons, fermions, and a variety of short-lived virtual particles. The interference of nucleons and electrons creates more complex coordinated vibrations: the atoms of the elements. The coordinated vibration of atoms in turn produces molecules and multimolecular systems...Some standing wave interference patterns comprise waves of coordinated frequency.*⁴⁰

This *phase coordination* is an intrinsic phenomenon in the Eros of complex wave fields and but one of myriad expressions of the universe self-organizing to ever-deeper and wider intimacies and wholes. It would not be inaccurate to say that the manifest entities of the universe are, in their essential nature, not *things* or objects but rather *subjects*.

*The manifest entities of the universe are clusters of long-range coordinated in-phase standing waves.*⁴¹

Said differently, they are genuine Gestalt patterns of intimacy and coherence that

*stand out against the “ground” of chaotic, less coordinated wave configurations.*⁴²

These *patterns and clusters of patterns of coordinated vibration* are unique configurations of Eros and intimacy which “constitute a *domain of coherence* [italics ours] in the excited-state wave field: our universe.”⁴³

Coherence is another word that describes the evolving intimate patterns and clusters of intimate patterns that define Reality. The coherent intimacy between parts that form the wholes of manifest entities is caused by in-formation. The ground state and the excited state, each in their own fashion, in-form the pattern of vibratory pulsation.

⁴⁰ Ibid, pp. 10-11. SelectBooks, Kindle Edition.

⁴¹ Ibid, p. 11. SelectBooks, Kindle Edition.

⁴² Ibid, p. 11. SelectBooks, Kindle Edition.

⁴³ Ibid, p. 11. SelectBooks, Kindle Edition.

In the view of frontier science, as expressed by Laszlo and many colleagues, and reflected as well in the language of the interior sciences, both the physical and mind phenomena in the Universe are part of the same continuum of Reality. Both are constituted by fairly stable wave interference patterns in the wavefield of the excited-state Cosmos, even as each operates on a different frequency of vibration. *In-formation* is simply the configuration of Eros and intimacy that constitutes Reality's various patterns of pulsation. This in-formation resonates with the inherent intelligence of Cosmos. *In-formation* has been called by many names, but implicitly included in all of them is the evolving patterns of Eros and intimacy that eternally in-form Cosmos.