Life is a process, not a substance, and it is necessarily temporary.

For a long time, there has been a shared view that there is some meaning, out there somewhere, waiting to be discovered and acknowledged. There is a point to all this; things happen for a reason. [...] Gradually, our confidence in this view has begun to erode.

"Life" and "consciousness" do not denote essences distinct from matter; they are ways of talking about phenomena that emerge from the interplay of extraordinarily complex systems.

At a fundamental level, there aren't separate "living things" and "nonliving things," "things here on Earth" and "thinks up in the sky," "matter" and "spirit." There is just the basic stuff of reality, appearing to us in many different forms. [...] We will ultimately understand the world as a single, unified reality, not caused or sustained or influenced by anything outside itself. That's a big deal.

The only reliable way of learning about the world is by observing it.

The world is just the world, unfolding according to the patterns of nature, free of any judgmental attributes. The world exists; beauty and goodness are things that we bring to it.

(The) answer to the question "What determines what will happen next?" is "The state of the universe right now." [...] The entirety of both the past and the future history are utterly determined by the present.

The universe is something like a computer. You enter input (the state of the universe right now), it does a calculation (the laws of physics) and gives you an output (the state of the universe one moment later).

*Conservation of Information* - implies that each moment contains precisely the right amount of information to determine every other moment.

Realistically, there never will be and never can be an intelligence vast and knowledgeable enough to predict the future of the universe from its present state. [...] To simulate the entire universe with good accuracy, you basically have to *be* the universe. [...] The future may be determined by the present, but literally nobody knows what it will be.

We don't know any way to predict what a person will do based on what we can readily observe about their current state.

The Principle of Sufficient Reason: For any true fact, there is a reason why it is so, and why something else is not so instead.

Just as there is no reference to "causes" in the fundamental laws of physics, there isn't an arrow of time, either.

There are over 100 billion stars in the Milky Way and at least 100 billion galaxies. By coincidence, the number 100 billion is also a very rough count of the number of neurons in a human brain.

The Big Bang itself, as predicted by general relativity, is a moment in time, not a location in space. It would be the moment prior to which there were no moments: no space, no time.

Information about the precise state of the universe is conserved over time; there is no fundamental difference between the past and the future.

Different moments in time in the history of the universe follow each other, according to some pattern, but no one moment causes any other.

Belief (is) anything we think is true regardless of whether we have a good reason for it. [...] The beliefs we choose to adopt are shaped as much, if not more, by the beliefs we already have than by correspondence with external reality.

The universe evolves by marching from one moment to the next in a way that depends only on its present state. It neither ames toward future goals nor relies on its previous history.

Most of the interesting things it is possible to know are not things we could ever hope to "prove," in the strong sense. [...] Math is all about proving things, but the things that math proves are not true facts about the external world.

Science has a simple goal: to figure out what the world actually is. Not all the possible ways it could be, nor the particular way it should be. Just what it is.

All of the things you've ever seen or experienced in your life -- objects, plants, animals, people -- are made of a small number of particles, interacting with one another through a small number of forces.

What we see when we look at the world is quite different from how we describe the world when we're not looking at it. (the fundamental feature of quantum mechanics)

There seems to be no obstacle in principle to a universe like ours simply beginning to exist.

To a *poetic naturalist*, "mind" is simply a way of talking about the behavior of certain collections of physical matter, just as "heaviness" is.

To imagine that the soul pushes around the electrons and protons and neutrons in our bodies in a way that we haven't yet detected is certainly conceivable, but it implies that modern physics is profoundly wrong in a way that has so far eluded every controlled experiment ever performed.

Life is a way of talking about a particular sequence of events taking place among atoms and molecules arranged in the right way. [...] What is "life" anyway? Nobody knows. There is not a single agreed-upon definition that clearly separates things that are "alive" from those that are not.

Our brains construct models of their surroundings, with the goal of not being surprised very often by new information. Subconsciously, the brain carries with it a set of possible things that could happen next, and updates the likelihood of each of them as new data comes in.

We are all just complicated collections of matter moving in patterns, obeying impersonal laws of physics in an environment with an arrow of time. Wants and purposes and desires are the kinds of things that naturally develop along the way.

What you can see has a dramatic effect on how you think.

Episodic memory and imagination engage the same neural machinery.

What we call a "thought" corresponds directly and unmistakably to the motion of certain charged particles inside my head.

The human brain contains roughly 85 billion neurons, each of which is connected to a thousand or more other neurons, so we're talking about a hundred trillion or more connections in total.

Memories are physical things located in your brain.

Like "entropy" and "heat," the concepts of "consciousness" and "understanding" are ones that we *invent* in order to give ourselves more useful and efficient descriptions of the world.

Who "you" are is defined by the pattern that your atoms form and the actions that they collectively take, not their specific identities as individual particles. It seems reasonable that consciousness would have the same property.

Our mental experiences or qualia are not actually separate *things*, but instead are useful parts of certain *stories we tell* about ordinary physical things.

If consciousness were something over and above the physical properties of matter, there would be a puzzle: what was it doing for all those billions of years before life came along? [...] Some things just come into being as the universe evolves and entropy and complexity grow: galaxies, planets, organisms, consciousness.

(Meaning, morality, and purpose) aren't built into the architecture of the universe; they emerge as ways of talking about our human-scale environment. https://www.amazon.com/Big-Picture-Origins-Meaning-Universe/dp/0525954821