

Einstein's God

... if by God one means the set of physical laws that govern the universe, then clearly there is such a God.

Carl Sagan

Einstein sometimes used the word “God.” In this chapter I am going to describe and elaborate on “Einstein’s God.” I think you might find it interesting. So let’s first look at some of his books and letters. Perhaps his most famous letter is called the “God Letter” which was auctioned in 2018 for \$2,892,500. In it, he writes,

The word God is for me nothing more than the expression and product of human weaknesses, the Bible a collection of honorable, but still primitive legends which are nevertheless pretty childish. No interpretation no matter how subtle can (for me) change this.¹

When you examine his other letters and books you find a man, one of the most famous scientists of all time, who is very humble when viewing the universe:

I believe in Spinoza's God, who reveals himself in the harmony of all that exists, not in a God who concerns himself with the fate and the doings of mankind.²

My views are near those of Spinoza: admiration for the beauty of and belief in the logical simplicity of the order which we can grasp humbly and only imperfectly. I believe that we have to content ourselves with our imperfect knowledge and understanding...³

Although in one letter he referred to himself as an atheist, sometimes he preferred the term agnostic and was a bit disparaging toward atheists:

...fanatical atheists...are like slaves who are still feeling the weight of their chains which they have thrown off after hard struggle. They are creatures who—in their grudge against the traditional ‘opium of the people’—cannot hear the music of the spheres.⁴

You may call me an agnostic, but I do not share the crusading spirit of the professional atheist whose fervor is mostly due to a painful act of liberation from the fetters of religious indoctrination received in youth. I prefer an attitude of humility corresponding to the weakness of our intellectual understanding of nature and of our own being.⁵

However, Einstein lived in the USA at a time when we still had a mostly a secular government as the founders of the country intended. Even though Einstein was mostly apolitical, he did get involved in politics when it was necessary to do so; hence his famous letter to President Roosevelt urging the building of the atomic bomb. I think that if he still had been living in the United States

¹ <https://www.christies.com/lotfinder/books-manuscripts/einstein-albert-autograph-letter-signed-a-6167096-details.aspx?from=salesummery&intobjectid=6167096>.

² Isaacson, Walter (2008). *Einstein: His Life and Universe*. New York: Simon and Schuster, pp. 388-389.

³ Holton, G. J. and Yehuda Elkana (1997). *Albert Einstein: Historical and Cultural Perspectives*. New York: Dover Publications, p. 309.

⁴ <https://books.google.com/books?id=58HQXmp1ESwC&pg=PA97#v=onepage&q&f=false>

⁵ https://i.dailymail.co.uk/i/pix/2015/06/11/11/6ZCNTH5HT-HSK1-3119437-For_sale_This_undated_image_provided_by_Profiles_in_History_show-m-1_1434020122921.jpg.

during the rise of Christian Nationalism he might have again taken some political action to counter this rise.

Finally, Einstein discusses *pantheism*:

I am fascinated by Spinoza's Pantheism. I admire even more his contributions to modern thought. Spinoza is the greatest of modern philosophers, because he is the first philosopher who deals with the soul and the body as one, not as two separate things.⁶

Spinoza (1632-1677) was a rationalist who was effectively expelled and shunned by Jewish authorities and his own family, and his books were banned by the Catholic Church. He was called an atheist, although he never argued against the existence of God.⁷

Dorion Sagan wrote that his father, Carl Sagan, “believed in the God of Spinoza and Einstein, God not *behind* nature, but *as* nature, equivalent to it.”⁸ Other famous pantheists include Alan Watts, Emily Dickinson, Nikola Tesla, Terence McKenna, Ralph Waldo Emerson, and Henry David Thoreau.

I am interested in examining the universe, Einstein’s God, as nested systems. Chinese boxes are nested—with each box sitting into boxes of larger sizes. Russian dolls have also been nested. Even in literature we find stories that are nested within larger stories. There are different ways to categorize Einstein’s God into nests.

Non-Anthropocentric Nested Systems

Nowadays, we hear about ecology and nested ecosystems. A search on the Internet reveals many possible ways to represent them:

- 4-nested: *individual, population, community, ecosystem, biosphere.*
- 10-nested: *molecule, cell, tissue, organ, organ system, organism, population, community, ecosystem, biosphere.*
- 10-nested: *organelle, cells, tissues, organs, organ systems, organisms, populations, communities, ecosystem, biosphere.*

Anthropocentric Nested Systems

Here is an anthropomorphic nested 4-nested system I learned about in Scientology, and I also read about in a book by Robert Heinlein (an acquaintance of L. Ron Hubbard):
self, family, group and its symbiotes, humanity and its symbiotes.

Later, Hubbard expanded this to an 8-nested system:

self, family, group, humanity, life, matter-energy-space-time, spirit, Infinity (or the Supreme Being).

These are illustrated as concentric circles with the inner most circle being the self. Hubbard stressed that the self cannot exist unless the family exists, the family cannot exist unless the group exists, the group cannot exist unless humanity exists, etc. Thus, he thought that one should take into account all the nests when one makes a decision.

⁶ G. S. Viereck, *Glimpses of the Great* (Macaulay, New York, 1930) p. 372-373.

⁷ Scholars debate what Spinoza actually meant by the word “God,” but agree it wasn't the traditional meaning. See more at his Wikipedia page: https://en.wikipedia.org/wiki/Baruch_Spinoza.

⁸ Sagan, Dorion, *Dazzle Gradually: Reflections on the Nature of Nature*, 2007, p 14.

Hubbard and Heinlein may have gotten the system from the East. For example, in the Chinese book *The Great Learning* by Lezheng Ke, a student of Mencius, it says:

The ancients who wished to illustrate illustrious virtue throughout the empire, first ordered well their own States. Wishing to order well their States, they first regulated their families. Wishing to regulate their families, they first cultivated their persons. Wishing to cultivate their persons, they first rectified their hearts. Wishing to rectify their hearts, they first sought to be sincere in their thoughts. Wishing to be sincere in their thoughts, they first extended to the utmost their knowledge. Such extension of knowledge lay in the investigation of things.

Things being investigated, knowledge became complete. Their knowledge being complete, their thoughts were sincere. Their thoughts being sincere, their hearts were then rectified. Their hearts being rectified, their persons were cultivated. Their persons being cultivated, their States were rightly governed. Their States being rightly governed, the whole empire was made tranquil and happy.

This 8-nested system could be represented like this:

investigation, knowledge, thought, heart, person, family, state, empire.

I could interpret heart as “knowing by heart.”

Of course, political systems could be represented something like this 8-nested system:

- *individuals, towns, counties, states or provinces, nations, United Nations.*

Furthermore, nowadays we have 4-nested digital systems:

- *self with a connected device, digital groups, large cyber-organisms (such as Facebook, Twitter, and Google), the World Wide Web.*

A 14-Nested Anthropocentric System

For myself, I have somewhat arbitrarily devised an anthropocentric system into 8 ecosystems (outside us) and 6 ecosystems (inside us) for a 14-nested system in which you can zoom in or zoom out.⁹

- *subatomic particles, atoms, molecules, cells (nuclei, genes), tissues, body systems and organs, individual, family, groups, humanity, animals, Earth's biosphere, Solar System's biodisk, galaxy's biodisk, universe's biosphere.*

In this system, groups could include various large or small and sometimes overlapping entities: friends, neighbors, clubs, schools, teams, corporations, political parties, language-groups, towns, cities, states, nations, communities, businesses, cultures, ideology-groups, electronic-groups (such as talk radio), digital groups. Of course if you are immersed within a scientific community, as opposed to a religious community, it will affect your thinking about Gods.

I think that this model may help to clarify several issues such as free will versus determinism, good versus evil, and suffering. For example: how can God (Nature) allow human suffering? The answer is that from a larger, more encompassing nest the suffering is necessary. (More on this below.)

Truth and Perspective:

Verbal “truth” may depend on the distance.

⁹ This model has implication for what is called “multilevel selection.” This is the possibility that nature selects at more levels than just the gene level. In his book, *Darwin's Cathedral*, David Sloan Wilson discusses religion as multilevel selection, and I refer you there for a fuller treatment. Also in E-Skeptic #26 for July 5, 2004, Ernst Mayr says, “George Williams and Richard Dawkins have made a mistake, in my opinion, in completely rejecting group selection.”

example: A very, very long, wide building (3D), when viewed from high up, may look like a flat strip (2D). From even farther out, it becomes just a line (1D). From farther out, it becomes a curved line on the Earth. Go out far enough and the Earth becomes a point (0D). What appears “true” about this building’s dimensions depends on how far away you are when you look at it.

example: A person is three dimensional (3D) up close. From farther away that person begins to look increasingly 2D (but as part of larger complex systems) and from farther away to look increasingly like a one-dimensional point (but seen as part of even larger systems). The farther away you get, the more you see the interaction with outside events.

Free Will versus Determinism:

“Do we have free will?” It appears “free will” is “determinism” when viewed from a different magnification, and vice-verse.

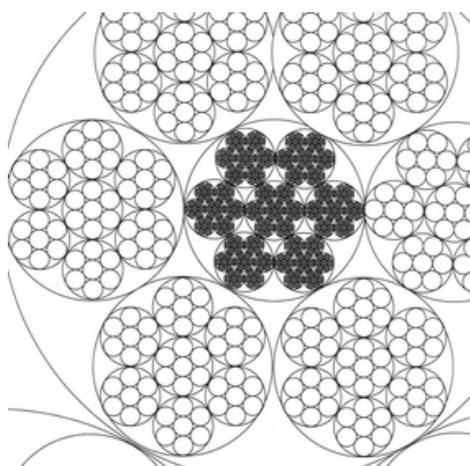
example: “Individuals” feel they are making decisions and thus have free will, but others, more distant, see how the environment has shaped them. I may feel I can decide and choose, but you may see me as being influenced by a host of variables. From *my* viewpoint, up close and inside my head, I am free to choose. From *your* viewpoint, I am making decisions based on various factors in my environment.

In other words, from inside our heads, we see many different choices, and select from these (Cognitive Darwinism). For someone outside your head, looking at you, you seem to be making certain choices based on the events and forces surrounding you, and your genetic makeup.

example: Some people feel humans have caused or can prevent global warming. In other words, humans think they have “free will.” When humans are viewed from another level, such as “animals,” they are seen to be just as predetermined as, say, squirrels and dolphins. They are seen to be the product of their genes and the forces and events surrounding them. So when humans think *they* are causing global warming they are not viewing themselves as part of nature. Just like the self, they feel humanity has free will. However, viewed from a larger perspective, it is *nature* causing global warning, as humans are just part of nature. Humans were not divinely created and special and separate from the rest of nature. This doesn’t mean we should not try to reverse global warming—nature can cause us to do that too. Dorion Sagan wrote in his 1992 book, *Biospheres: Metamorphosis of Planet Earth*, “I contend that the biosphere, through me, may be writing or helping to write these words.”

This relative truth operates all the way up and down the various levels. Humanity, when viewed up close, has certain characteristics. When viewed from far away, other characteristics appear. I think this is often why psychological theorists, political theorists and various debaters do not agree. They are looking at things from different distances. Of course many disciplines have multiple distances: biology, psychoanalysis, systems theory, evolutionary biology, and anthropology are some, although they do tend to emphasize some distances over others. For example, in psychology there is the “Bio-Psycho-Social” model, with three distances.

One can symbolize these levels or distances as fractal concentric circles rendered here by



one of my students.¹⁰

The largest circle here could represent seven families with each family having seven people and each person having seven body systems (although there are actually eleven body systems: integumentary system, skeletal system, muscular system, lymphatic system, respiratory system, digestive system, nervous system, endocrine system, cardiovascular system, urinary system, and reproductive system).

Conflict:

Disharmony between various elements at a certain distance is necessary for selection/elimination to take place. In other words, the Darwinian principles of 1) abundance, 2) variation, and 3) selection/elimination apply.

examples: rivalry between individuals, sibling rivalry, family feuds, corporate and team rivalry, national rivalry, and species rivalry.¹¹

Harmony is restored when one element defeats another, or engulfs another as when entire genomes are acquired, or when one nation, in occupying another, assimilates it, or when two opposing elements become aware of a cooperative advantage or common threat.

examples: two brothers stop fighting when their family is threatened by another family or when they realize they can work together on a project; two families stop fighting when the community is threatened by a flood and they cooperate to control it; two communities stop fighting when they are both threatened by another species (tigers); two species (man and tigers) stop fighting when they are both threatened by a forest fire, etc.

Pressures Between Different Distances:

Some elements at certain distances do not appreciate their connection to a more comprehensive level.

example: a social media company that only works to maximize profits and thus allows foreign nations to interfere with domestic affairs and weaken their home nation.

example: some corporations pollute the environment (a more comprehensive level) or exploit workers (a less comprehensive level) in an attempt to do better than competition (same level).

example: the mafia emphasizes family over nation.

Secrets:

Secrets at a certain distance (from the other distances) can prevent the smooth flow of information and thus promote disharmony. All distances can have secrets (the nucleus, cells, tissues, organs, systems, individual, family, groups, humanity, etc.) from other distances.

example: corporate environmental pollution that may harm humanity; corporate “insider” trading that harms individuals investors and families.

example: a disease in a tissue that the individual doesn’t know about.

example: an individual that steals money from his family.

So a “greater power” for an individual could be any or all larger spheres than the individual, such as the family, community, species, etc., including tornadoes, hurricanes, volcanoes, etc.

¹⁰ Damien Clenent.

¹¹ Of course, harmony/cooperation may be the best strategy at times (see “game theory” data).

Good and Evil:

Goodness at one level may not be good at another.

example: “violence against Joe” is evil; however, if Joe is a murderer, violence may be necessary to prevent violence to the larger group.

example: limited warfare can be “evil” from the individual perspective of someone who is killed or injured; however, from a more comprehensive level, limited warfare could be “good” as nature selects/eliminates technologies, nations, tribes, individuals, etc. Besides facing possible extinction from the various sources mentioned, we may also be competing in the galaxy with lifeforms that have little or no interest in our survival.

Suffering:

“Suffering” at one distance is necessary as selection/elimination restores homeostasis at another distance.

Homeostasis Hypothesis:

All points and levels influence the other points. From inside, genes, in order to survive, pressure the individual organism. From outside, culture pressures the individual organism, also to allow it to survive. There is a mutual feedback “dance” between these two. So at each distance, the structure is trying to reach an equilibrium, a *homeostasis*, by the mechanism of selection/elimination to dissipate the energy differential between the Sun and outer space or other gradient differences. (More in this later.)

Of course, as I have stressed previously, the map is not the territory. So any definition of God, including Einstein’s, can never completely describe the universe [Reality]. In fact, current theories in physics do not account for dark matter and a force that repels gravity known as dark energy, and they do not integrate gravity with quantum mechanics. Likewise, Darwin’s theory, Newton’s theory, religious theories, cellular automata, string theory, as well as my own theories can never completely explain something. So any description of reality or a description of a God is incomplete, but may be useful.¹²

¹² In the West, it appears that hunter-gatherer nature-inspired polytheism was abstracted by authoritarian monotheism (in which a ruler interceded for you with God), which was later decentralized and liberalized by Martin Luther so as to give you personal access to God, which was later grounded (by God as nature) by Spinoza, which was further liberalized in the 12-Step spiritual program of Alcoholics Anonymous so you could choose a God of your own understanding (although the use of “He” and the singular “God” is somewhat limiting, and there is also a noticeable Christian bias within AA literature). I am not suggesting here that any one of these definitions of God is superior—but some may be more useful at certain times than others.