BY: JOHN JOSEPH BANNAN

The new philosophy of superdeterminism is a specific approach to answering fundamental questions about existence, knowledge, and morality based on a single scientific fact about the universe, namely that cause and effect in physics are not real. In 2020, Swedish theoretical physicist, Dr. Johan Hansson published a physics proof that our universe is superdeterministic meaning a predetermined static block universe without cause and effect in physics. A new philosophy of superdeterminism based on this scientific discovery that cause and effect are not real has many important implications for human beings, but one especially important implication is a disproof of existentialism. The major tenets of existentialism cannot be true in the absence of cause and effect in physics, such as the existence of free will or freedom of choice, the lack of predetermined human behavior, the absurdity of life in the face of the inevitability of death, and the meaninglessness of existence, life and the universe.

The philosophy of superdeterminism is a specific approach to answering fundamental questions about existence, knowledge, and morality based on a single scientific fact about the universe, namely that cause and effect in physics are not real. In 2020, a Swedish theoretical physicist, Dr. Johan Hansson, proved that cause and effect in physics are not real using Albert

Einstein's Theory of Special Relativity as applied to quantum entanglement.¹ Dr. Hansson proved that we live in a predetermined static block universe without cause and effect in physics.²

Because cause and effect in physics are not real, then past or present events cannot actually cause future events. But, future events arrive nonetheless, so future events must already exist, because future events cannot be caused to exist by past or present events. However, if future events already exist, then future events must already exist somewhere. Consequently, there must be a hidden fourth dimension of time in which future events already exist.³ In other words, we must live in a predetermined static block universe consisting of three dimensions of space (length, width and height), as well as a hidden fourth dimension of time.⁴

Cause and effect in physics is a purported property of the universe in which physical reality transforms into other physical reality in the course of time. For example, the location of a moving object can transform from one location to another location. Or, the substance of a

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¹ Hansson, Johan. "Bell's theorem and its tests: Proof that nature is superdeterministic – Not random." *Physics Essays* Vol. 33, No. 2 (2020).

² Dr. Hansson wrote that "[e]verything is predetermined, including the experimenters (non) free will, the 'random' orientation of the spin-analyzers at either end, and anything else you can think of. Each measurement does not create but merely uncovers what already is embedded in spacetime. All events leading up to, and including, the 'act of measurement' itself are already there. . . Bell's theorem and its many experimental tests thus are proof that nature at its fundamental level is superdeterministic – not random. A 'cause' cannot alter the 'effect.' The events in global space-time are predetermined and fixed, much like pebbles cast into a concrete block. . . . What an experimenter seemingly 'chooses' to do at either end A or B is the only thing she can do, and cannot 'cause' either the event at her own position or the event at the other end. All events in the global space-time 'block' we call the universe (past, present and future), observed or not, are superdetermined and unalterable." Hansson, Johan. "Bell's theorem and its tests: Proof that nature is superdeterministic – Not random." *Physics Essays* Vol. 33, No. 2, at 217 (2020).

³ Albert Einstein's theories of relativity interpret reality as spacetime, a four-dimensional

Albert Einstein's theories of relativity interpret reality as spacetime, a four-dimensional concept, meaning it has three spatial dimensions (length, width, and height) and one temporal dimension (time).

⁴ The dimension of time is hidden, because we cannot presently experience the past or future due to the fact that we are not presently in past or future locations in the dimension of time in order to presently observe those locations in the dimension of time.

physical object can be transformed into some other substance, such as fire burning wood to ash. However, cause and effect in physics does require a belief that physical reality changes from an initial state to a final state, where the initial state no longer exists in its original form. So, during cause and effect in physics, the initial state gradually transitions into the final state. But, the initial state no longer exists once it has fully transitioned into the final state. Consequently, cause and effect in physics requires a belief in the eventual disappearance of the initial state and eventual appearance of the final state. Cause and effect in physics is magical hocus-pocus, akin to a volunteer from the audience being covered by a cloth and magically transformed into a tiger once the cloth is removed.

One can extricate the magic from cause and effect in physics by introducing a hidden fourth dimension of time. Instead of the initial state eventually disappearing, the initial state recedes into past locations in the dimension of time as the observer proceeds into forward locations in the dimension of time where the final state is located. The initial state does not eventually disappear, but rather continues to exist in past locations in the dimension of time. The observer can simply no longer see the initial state, because the observer is no longer in the same past locations in the dimension of time as the initial state. And the final state does not eventually appear, but rather always existed in future locations in the dimension of time, which only become visible once the observer proceeds in the dimension of time to the future locations where the final state is located. We are all familiar with the three dimensions of space, so assuming the existence of a hidden dimension of time is simply an extension of a known truth that dimensions already exist.⁵

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⁵ Albert Einstein's theories of special and general relativity show that time is not absolute, but is relative to the observer's motion and the strength of gravitational fields. This means that time can

Clearly, cause and effect in physics are not real, because Dr. Hansson proved it false using Einstein's Theory of Special Relativity and because it is a magical process. We must be living in a predetermined static block universe without cause and effect in physics.

Consequently, free will and freedom of choice on Earth cannot be real, because our decisions and choices cannot be free to change the predetermined future, when changing the predetermined future is impossible in the absence of cause and effect in physics. Moreover, all past, present and future events in the universe must equally exist and be predetermined and unchangeable, because nothing in physics can create, change or annihilate any events that have occurred, are occurring or will occur in the absence of cause and effect in physics.

Existentialism is a philosophy that denies any preordained meaning in life asserting that each person is free and burdened with the task of creating their own meaning and purpose in life. The existentialist believes that we are not predetermined by God, social expectations, or anything else, and that we have absolute freedom to make our own decisions about everything. However, this supposed freedom comes with the great responsibility that we are fully accountable for the choices we make and the life we create. Existentialist philosopher, Jean-Paul Sartre, is famous for his saying that "existence precedes essence," meaning we exist before we are defined by anything. In other words, we create our own meaning and purpose in life through our choices.

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flow at different rates for different observers. In the same way that we can move in different directions through space, we can also move at different rates through time. The concept of dimension relates to the ability to move or change in a particular direction or aspect. Numerous experiments have confirmed the predictions of relativity. For example, the Global Positioning System (GPS) relies on precise measurements of time and requires corrections to account for the effects of relativity, demonstrating its real-world significance.

⁶ Sartre, Jean-Paul. "Existentialism is a Humanism" World Publishing Company (1956).

However, the absence of cause and effect in physics disproves existentialism. Without free will or freedom of choice, we cannot be free to create or choose our own meaning and purpose in life. Because our entire life is predetermined, then our meaning in life must also be predetermined and unchangeable, because we do not have the actual power to cause meaning and purpose to our lives in the absence of cause and effect in physics. Moreover, every event that occurs in our static block universe must be predetermined and unchangeable, which means that the entire course of human history already exists in our static block universe. Consequently, what it means to be human or the essence of humanity already exists as the predetermined course of human history in our static block universe.⁷ And we cannot be free to choose how to respond to the predetermined course of human events, because we ourselves lack freedom of choice.

Because our entire lives already exist in our predetermined static block universe and cannot be changed in the absence of cause and effect in physics, then our meaning in life already exists as the role we play in the predetermined history of humanity and the universe. We cannot actually create a meaning in life for ourselves in the absence of cause and effect in physics, because we cannot change what we are predetermined to think and do. There is nothing else in our lives besides what we are already predetermined to think and do that can be the meaning for our lives. Existentialists claim that because the universe is meaningless, then we have to create our own meaning in life. But, meaning gives us a sense of what we should do. If everything we ever do is predetermined to occur, then our meaning in life is what we are predetermined to do in our static block universe and not a matter of freely willed choice. Likewise, the meaning of the

⁷ Human beings cannot actually invent religions, wisdom literature or stories in the absence of cause and effect in physics. These things are not human inventions, but predetermined thoughts and ideas already present in the predetermined history of human beings in our static block universe.

universe. Because the universe exists, then one can always say that the meaning of the universe is to do what it is predetermined to do, namely to exist. So, the universe is not meaningless, but rather the meaning of the universe is existence itself compared to non-existence. Indeed, the universe itself is an expansion of nothingness under the zero energy universe theory⁸ as evidenced by the flatness of spacetime.⁹ The universe therefore being contingent on nothingness must have been created from nothingness, but nothingness itself does not have the power to expand itself in the absence of cause and effect in physics. Consequently, the universe did not have to exist being contingent on nothingness without any power to create it, and has meaning in the contingent nature of its very existence.

In the absence of cause and effect in physics, you cannot freely will your own personal morality or identity. Every thought you ever have on any subject matter, including morality and identity, is already predetermined to occur in your head and you cannot change it. Your sense of morality or identity does not come from your own personal freedom of choice, but rather comes from our predetermined static block universe over which you have absolutely no control in the absence of cause and effect in physics. Your decisions and behaviors cannot actually change the predetermined future, because all your decisions and behaviors must occur in our

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⁸ Berman, Samuel Marcelo. "On the Zero-Energy Universe." *International Journal of Theoretical Physics* 48, 3278-3286 (Aug. 25, 2009).

⁹ Under Albert Einstein's Theory of General Relativity, the curvature of spacetime depends on the density of matter and energy in the universe. The flatness of the observed universe requires a very specific critical density of matter and energy. If the density was even slightly different in the early universe, it would have resulted in a much different shaped universe today either much more curved or much less curved. The flatness of spacetime indicates a balance between positive energy (mass and radiation) and negative energy (gravity) which exactly cancel out to zero implying our universe came from nothingness.

superdeterministic universe in the absence of cause and effect in physics. Moreover, your life in our block universe permanently exists, because nothing in physics can cause your block life to cease to exist in the absence of cause and effect in physics. So, while death is inevitable, our deaths cannot actually cause our block lives¹⁰ to cease to exist in our static block universe. Consequently, death cannot make living life absurd when death cannot actually destroy our block life. Superdeterminism is true and clearly disproves every major tenet of existentialism, including the existence of free will or freedom of choice, the lack of predetermined human behavior, the absurdity of life in the face of the inevitability of death, and the meaninglessness of existence, life and the universe.

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 $^{^{10}}$ A block life means the entire course of a living being's appearances in the dimension of time in a static block universe without cause and effect in physics.