

Why are we in the Universe?

by Don Benson

Humanity is just now transcending a series of localized struggles for survival. Our minds are no longer locked into traditional patterns. We have to find a new purpose for living beyond the immediate insanities of this world.

The Big Bang Theory

One of the principal insanities we have to overcome is the Western belief that humanity has no future.

Western Civilization was created by men who went against the prevailing winds on this planet; its traditional *modus operandi* has been the conquest of nature. Western science, the supreme accomplishment of this tradition, has attempted to delineate and describe the universe as a gigantic machine. During the last few centuries, Westerners have exulted in learning how to manipulate this machine for fun, profit and the greater glory of this or that.

But, in the process, we have discovered that machines tend to run out of steam. No one has been able to build a perpetual motion machine. Every system studied by Western scientists has been found to be losing energy. Machines require inputs of fuel to keep going, and only part of the fuel can be transformed into work. Some energy inevitably escapes as heat. This process of energy loss is known scientifically as "increasing entropy," a term invented in 1865 by the German physicist Clausius.

In typically authoritarian fashion, Western scientists wrote a law—the Second Law of Thermodynamics, alias the Law of Entropy—which says that energy must escape from machines. It was assumed that, in obedience to this law, the whole universe was moving towards inexorable death. The book entitled *Energy* in the popular Life Science Library (Time, Inc., New York, 1963) includes such gloomy section headings as "Heat, the Inevitable Tax on Usefulness," "Nature's Obstinate Progress Down a One-Way Street," and "Entropy: Death Knell for the Universe." In this way, untold thousands of school children have been indoctrinated with the utterly demoralizing view that life is essentially futile.

Children are taught at an early age that the sun will burn up eventually and go out. They are taught that the earth might be destroyed totally at any moment by nuclear explosions, that human life might be eliminated quickly in biochemical warfare or slowly in industrial wastes, that the fuels which modern societies require are fast diminishing, and that in general "progress" has led to one disaster after another.

The prevailing theory of universe in the West is cheerily called "the Big Bang Theory." In 1920, the astronomer W.M. Slipher advanced a theory that the galaxies are retreating from us at rates which increase in proportion to their distances from us. He advanced this theory to explain the so-called "red shift" phenomenon: certain red lines in the spectra of light from other galaxies

deviate from their expected positions by a factor which correlates with distance. Following the work of Slipher and others, scientists have presumed that galactic dispersion is occurring as just another manifestation of the general dispersion of the universe. According to the Big Bang Theory, the universe began with a "big bang" some billions of years ago, and it is gradually degenerating to a condition so miserable that it will be incapable of even a "little whimper."

In the spring semester of 1964, I attended a class on "the History of Western Civilization" at Amherst College in which the professor made the following parenthetical comment about revolutionary movements and all other efforts to improve the human condition: "But you realize of course that all these efforts are ultimately futile. We really shouldn't take them seriously because according to the Second Law of Thermodynamics there is absolutely no chance of even preserving human society much less improving it. The universe is gradually reducing to a sort of luke warm energy bath, and the possibility of human life is reducing with it."

After class, when I confronted the professor with some questions about the validity of his assumption, he attempted to dismiss me by saying, "Don't worry about it. The universe won't run down completely for a long, long time. This is nothing to lose sleep over." "But the nature of the universe and man's role in it is something which concerns me very deeply," I replied. "On occasion I have stayed awake all night thinking about these questions." "Well, then," said the professor, "why don't you go join the Peace Corps!"

More recently, I encountered a book by Angrist and Hepler entitled *Order and Chaos, Laws of Energy and Entropy* (Basic Books, New York, 1967) which attempts to make thermodynamics palatable to the general reader by means of humor and other literary devices. Since the book was written in a frame of mind oriented towards the death of the universe, it is laced with a kind of gallows humor, and even the most positive statements are exceedingly grim. The authors indicate, for example, that life should be regarded as just some inexplicable quirk with negligible significance for the overall process of universal degeneration. Medicines which help sick people to recover have a negative value in the overall scheme of things; whereas, poisons are to be regarded as positive catalysts which speed the inevitable processes of death and decay.

Western science has undermined all the old values, imperatives and truths. Contemporary man has been provided with two excellent rationalizations for doing whatever happens to suit his whims: (1) moral principles aren't sacred; every culture has a different conception of right and wrong; (2) what the hell, we're all doomed anyway.