



Readings II in Faith & Science

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Chance/Chaos Versus a Planned Design in the Universe: Pointers to God?

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Definitions (Webster)

chance - 1(a). something that happens unpredictably without discernible human intention or observable cause, 1(b). the assumed impersonal purposeless determiner of unaccountable happenings, 1(c). the fortuitous or incalculable element in existence; 2. a situation favoring some purpose; 3. a fielding opportunity in baseball; 4(a). the possibility of an indicated or a favorable outcome in an uncertain situation, 4(b). the degree of likelihood of such an outcome; 5(a). risk, 5 (b). a ticket in a raffle.

chaos -- 1. chasm, abyss; 2(a). a state, of things in which chance is supreme - the confused unorganized state of primordial matter before the creation of distinct form, 2(b). a state of utter confusion, 2(c). a confused mass or heterogeneous agglomeration.

and without any extra charge, a third definition:

entropy - 1(a). a measure of the unavailable energy in a closed thermodynamic system so related to the state of the system that a change in the measure varies with change in the ratio of the increment of heat taken in to the absolute temperature at which it is absorbed, 1(b). a measure of the disorder of a closed thermodynamic system in terms of a constant multiple of the natural logarithm of the probability of the occurrence of a particular molecular arrangement of the system that by suitable choice of a constant reduces to the measure of unavailable energy; 2. a measure of the amount of information in a message that is based on the logarithm of the number of possible equivalent messages; 3. the degradation of the matter and energy in the universe to an ultimate state of inert uniformity.

So What?

If we take some time to plow through the above definitions, we soon come to the gloomy conclusion that there is an awful lot of uncertainty in our scientific knowledge that ranges from subatomic physics to our universe (and beyond?). In spite of the finest equations and theories of the world's finest physicists, astronomers, chemists, mathematicians and meteorologists, we still do not understand everything about our environment. In fact, a whole new science, Chaos, has been christened to try to deal with the unpredictable. The best example I have heard of what difficulties this discipline is facing is:

If a butterfly in China flies in its irregular path, what effect will this beating of its wings have on the surrounding air currents and, subsequently, the weather in the United States?

Obviously, those who are active in the science of Chaos will have a long, long future.

Generally, when scientists develop equations to explain a particular phenomenon, they discard those parts of the differential equation that are "insignificant" in quantity [$\pm 5\%$] compared to the rest of the equation AND cause the equation to be non-integratable by other than computer generated numeric (trial-and-error) methods. [In the latter case, man sets limits to the calculations so that the computer will not give up or, at least so that others can get time on the mainframe. Could this act itself be a chaotic influence on exactness of the solution that results from the calculation?] It is all of these "discards" that have become the study of Chaos.

I Think I Know Where He’s Going. . .

Humans have recognized their limitations with regard to their ability to understand all of the universal environment, except for those few whose eyes look through long, opaque tubes of ego. If all were comprehensible we would not need to invent words like chance and chaos and mathematical fudge factors such as entropy.

Why are these words in our vocabularies? Could it be that there is some element “out there” that has been, is, and always shall be beyond our comprehension? If it is there, perhaps we could call it God.

If humans could completely understand God, then we would have no further questions about our universe. Also, if this were true, it would be mandatory that humans would have to be equivalent to God to handle all of this information. If this is true, then these enlightened humans would have to be God and we’re right back to the old roster of gods that existed in mythology. In a reversal of these thoughts: in order to be God, God, by definition, must be unique. To be unique requires that there be no other like God, and in this case there can be no being superior to God or that latter being becomes God.

Summary

Humans in their frustration have assigned words and numerical symbols to represent gaps in the body of scientific knowledge. Although many scientists have lived comfortably with these replacements for years, still others continue the good search to maximize their knowledge. The ultimate, underlying cause of the remaining gaps will be due to our inherent inability to completely understand God, the Creator of our universe and therefore express His controlling influences in mathematical equations.

A Final Thought

Perhaps in some cases it is the unwitting search for God that drives the scientist to search for truth, since God is Truth.

Questions

Why do many scientists find it easier to accept concepts such as chance, chaos and entropy than a concept like God?

Do you believe that there are elements (or there is an element) in our universe which is beyond human comprehension? How does your belief shape your understanding of the work of the scientist?

Do you agree with the author that it is the “unwitting search for God that drives the scientist to search for truth”?

How might you explain the “logic of faith” to a confirmed atheist or agnostic?

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