

## THE SECOND LAW OF THERMODYNAMICS

The second law of thermodynamics is based on uniformly reconfirmed observations that all measurable real processes tend towards disorder and decay. An abandoned car rusts and falls apart. It does not become an airplane. A farmer's field left unattended reverts to a wild state. Photocopies of photocopies become gradually less clear and more invaded by random noise. Individuals grow old, deteriorate and die. Stars are putting out energy and losing potential energy. The whole universe is moving in the direction of increased entropy, which means basically increased chaos and decreased order.

This, of course, is in exactly the opposite direction from that required by evolution. Evolutionists do not deny the conflict. Rather they claim that evolution is allowed in an "open system" in which energy from the outside is allowed to increase order in one specific location even though the overall direction of the universe is in the direction of disorder. This sounds like an answer, but does not hold up under close examination.

What is needed for the formation of living systems is not energy but ordering. Raw energy is very efficient at tearing down complex molecules and not at all good at building them. For example, place two objects in the hot sun and see what happens. One is a dead fish; the other is a living plant. The fish decays. The plant grows. The difference is in the presence of an ordering mechanism in the plant that transforms raw energy into controllable chemical energy by way of the chloroplast and then, through the synthetic mechanisms of the cells, into structural additions following the preset pattern from the DNA. Now, to be sure, the decay of the fish is hastened by the presence of microorganisms, but even in a sterile environment, the effect of the sun's radiation would be the breakdown of complex molecules into progressively simpler components.

Only in grade B horror movies would anything alive, not to speak of "improved," crawl out. To use unordered energy for increasing order, decreasing disorder and performing work requires the presence of a "machine." Evolution tries to build the machine with unordered energy. In another example, put a pile of bricks on the ground. For them to become organized onto a brick wall would require going counter to the general direction of the universe as described in the second law of thermodynamics. But to allow this to happen, let us open the system to energy from the outside. So we have the sun shining on the bricks. It does not help. Why? Because the energy is not appropriately ordered for the task at hand. How about wind caused by differential heating of the atmosphere? Maybe if we get a tornado there is some possibility that the outside energy could make a difference but it clearly is still much more likely that walls would be broken down than built up and no one in his right mind would ever seriously suggest that the Taj Mahal could be constructed by "natural forces."

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