umn should read 12, not 2.] The test provided (Model 1) has two components: one is for p = 0.5 and the other for randomness in arrangement. When the test statistic has extreme value, it could be due to deviation in either component or both. It will be useful to separate the test into these two components and find out what is the reason for deviation. It seems that there is no *a priori* reason why p should be 0.5; the deviation from p = 0.5 should not be viewed as against randomness. After decomposing the test, more insights could be gained. From the results given in the paper one can only make a limited conclusion that, regarding the length of strings and under the probability models considered, more randomness is found in more complex eukaryotes.

Even if a collection of data can pass many tests of randomness, it may not warrant the conclusion that the data are random. For example, the random numbers generated by computer are called pseudo-random numbers because they are not truly random. They could pass many tests of randomness, but they are generated by a deterministic algorithm. When one knows the seed number and the detailed algorithm, the data sequence is entirely predictable. The same is true for some chaotic patterns. They are generated by some deterministic means, which could be repeated under the identical initial conditions. Therefore, appearance of unpredictability is compatible with algorithmic determinism. Some choose to differentiate between unpredictability and randomness.

Randomness can only be evaluated in a population scale (Dembski distinguishes between randomness and chance). All of the statistical tests depend on sufficient amount of data. Even if a collection of data is random (passes all tests of randomness), that does not imply that an individual data point is necessarily random. Therefore, population randomness is compatible with individual determinism. That could be the basis of statements in Prov. 16:33 and Rom. 8:28. That also provides justification of applying probability theory and statistical models for the investigation of natural and human phenomena. For all practical purposes, the probability theory and statistical models provide good approximations or descriptions of some population phenomena. Florence Nightingale was quoted in saying: "To understand God's thoughts we must study statistics, for these are the measure of his purpose."

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Can Inanimate Objects Exercise Rationality?

The shortcoming I see in the article "Faith and the Human Genome" by Francis Collins (*PSCF* 55, no. 3 [September 2003]: 142–53) is just about as fundamental as a shortcoming can be. Collins asks inanimate objects to exercise rational judgment. Yes, it is "amazing to contemplate the elegance of DNA carrying information." But it is even more than amazing to go one more step and to contemplate how inert materials know how and when to do what needs to be done if a process is to proceed as required. The author is certainly not alone in saying that clumps of inanimate atoms are "able to direct all of the biological properties in a human being." In fact, I am made to feel like a very lone voice in the vastest of wildernesses when I argue that articles such as this one only describe the prosaic, the superficial features of biological events and circumstances. As such, the resources that are inherent in the pursuit of science give way to other human endeavors that are willing to answer the public's urge to know what it really means to be alive.

This is why I have tried to encourage science teachers to explore with their students the possibility that life is an entity in itself, something beyond the realm of familiar chemical and physical kinetics. Something every bit as real as energy, equally impossible to experience apart from interaction with matter, equally impossible to destroy and improbable to create anew, equally infinite in time and space. Yes, I realize that I am challenging the mindset of our most honored scientists. However, to me, there is no other way to address the discrepancy between the paltry dimensions of the physical-chemical concept of life and the actual magnitude of whatever it is that tells us a newborn is breathing, a kernel of wheat may germinate, an anthrax spore is infectious, a giant redwood will stay green, or a stem cell will show differentiation.

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