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Voodoo Science

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A remarkable scientific result that appears to violate natural law may portend a revolutionary advance in human knowledge. It is, however, more likely an experimental screw up. Error is normal; it can be reduced by repeating measurements and better design of controls, but the success and credibility of science is anchored in a culture of openness. Ideas and observations are freely exposed to independent testing and evaluation by others. What emerges is the book of nature. On its pages we find, if not a simple world, at least an orderly world, in which everything from the birth of stars to falling in love is governed by the same natural laws. These laws cannot be circumvented by any amount of piety or cleverness, they can be understood - with the possible exception of String Theory. For those who elect to work outside the scientific community, errors may go unrecognized. We will examine examples of this, including claims of perpetual motion and cancer caused by cell-phone radiation.