

Re: Stephen Wolfram vs. Charles Darwin on natural selection

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- *From:* John Edser <edser@xxxxxxxxxxxxxxxx>
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dkomo <dkomo871@xxxxxxxxxxxx> wrote:–

JE:–

Complexity is equated with an decrease of entropy mostly because increasing complexity can be equated with increasing levels of order.

When discussing complexity it's best to stay as far away from mentioning entropy as possible. When it comes to entropy, hardly anyone knows what they're talking about.

JE:–

Entropy is a concept of physics which can be usefully incorporated into falsifiable theories of biology. Like complexity, entropy remains almost entirely subjective, so indeed, "hardly anyone knows what they're talking about" with regards to either term. This does not render either to be invalid or useless, _as long as both remain a part of a falsifiable theory_.

However, crystals are well ordered while displaying a _higher_ level of entropy compared to the same substance uncrystallized. I think what we may need is a better definition of complexity.

Why? Complexity is like pornography -- you know it when you see it.

JE:–

If it looks like a duck and quacks like a duck it may not be a duck. Verification/non verification remains critically insufficient without refutation within all of the sciences. The problem is, mathematics is a not a science so all it has going for it is verification/non

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verification. In today's regrettably Post Modern world mathematics attempts to replace the sciences (e.g. Hamilton's Rule) rendering subjective concepts of entropy and complexity as (mostly) misused. An example is the recent discussion here about entropy within which some contributors failed to comprehend that it, like complexity, has to be totaled per fertile organism providing an entirely biological concept of entropy "inside" and "outside" of a biologically critical fertile organism boundary. Their error is not dissimilar to the ongoing gene centric proposition of simply