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semper integritas

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## Systems, Complexity & Chaos...

Problems? Or *Opportunities?* 

'System' is, as pointed out in an earlier article on these pages, not so much a thing, as a *paradigm*. And we may go further, without great risk, and identify the *paradigm* as being "of a singular 'thing,' *material* or *immaterial*, comprised of many interconnected /*interacting*, *complementary parts*."

Interestingly(?), *natural complex systems* tend to be *non-linear*. And exhibit a degree power/energy density that exceeds those in manmade systems, which are generally linear in design and operation.

So, instead of limiting ourself to creating linear systems, could we perhaps *exploit the complexity* in non-linear systems. In Nature, they are are smaller, lighter, yet more powerful—could we be missing an important trick?

Similarly, we are nervous around chaotic situations and devices. Yet Nature accommodates chaos. The electrical impulse, which activates your beating heart as you read this, supposedly comprises a chaotic shower of electrons...and is exceedingly reliable (fingers crossed!) *because(?)* it is chaotic...

The following video explores these 'alien' notions of complexity and chaos. Together with:—

- Evolution, and the...
- Permian Explosion,
- Life, Disorder & Order,
- Black Holes, and...
- Hymenoptera,
- Global Warming,
- Behavior and...

- Behavioral Archetypes
- Robot police,
- Lorenz's Butterfly,
- Self-organized Criticality in ancient Egypt,
- Battle of Britain,
- Etc., etc.

Uninterested? Switch off. Else, take your time, sit back and, hopefully enjoy.

N.B. It goes pretty fast...

https://youtu.be/Ar0Jz4fRkOI

