

Re: "Political Correctness" drives scientific errors

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OsherD wrote:

> > *From Osher Doctorow*

>

> *Replicability of results is an excellent method provided for results*

> *that are "replicable". I wouldn't quite apply it as a standard to*

> *9-11, the beginning of the Matter-Dominated Era, evaporation (or not)*

> *of black holes, the cure of AIDS, and on and on.*

The main application of replicability in empirical sciences is in the testing of the predictions made by physical theories.

I am not aware of any physical theories concerning 9-11 that make any predictions that cannot be (or have not already been) empirically verified. For example, the techniques used to thermally insulate the central pillars (load-bearing structures) in the WTC Towers have been tested and shows to be vulnerable to removal by explosions. Gravity (the reason the buildings fell straight down when structural integrity was lost) is tested and verified countless times daily.

Observations of the Cosmic Microwave Background radiation are replicable.

Observations of Hawking radiation allegedly emitted by black holes are replicable.

A cure for AIDS (if found) should certainly be replicable.

> *There are definitely*

> *places where imagination and originality and speculation are needed*
in

> *science, mathematics, engineering, medicine, etc., and where*

> *exploratory studies are needed.*

All theories (good and bad) are developed by people using imagination and originality and speculation. It is the replicability of observations of the predicted consequents of these theories that decides which theories are good and which are not.

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- > *In fact, biological and behavioral*
- > *and social sciences are full of exploratory studies, which could well*
- > *be studied by physicists not wearing blinkers or should I say*
- > *sunglasses?*

If you think there are no 'exploratory studies' in physics, then you just have NOT been paying attention.

- > *Exploration does require an axiom or two (or should we say*
- "convention"*
- > *in order not to frighten the Fairy Tale believers in young physics?)*
- > *such as "tolerating rather than killing off competing theories",*
- > *"thinking about what could be rather than exclusively about is",*
- > *"thinking abstractly as well as or sometimes more than concretely,"*
- and
- > *on and on.*

These are neither 'axioms' nor 'conventions.' These are mindsets that encourage speculation – the very beginning of the development of any theory. Einstein reportedly developed Relativity after 'thinking abstractly' about how the world might look to someone riding a beam of light.

They are useful fuel for creativity, but there is far more that must occur before a new theory becomes acceptable, let alone established.

- > *I realize that in a generation where marching for the "good*
- > *guys with lots of promises and little to show" in politics is far*
- more
- > *the fad than philosophy, it is difficult to "peddle" philosophy and*
- > *modifications of methods.*

The scientific method – unique among epistemological methods in that it relies upon empirical validation as the criterion for the establishment of the truth of a proposition – is relatively new as an organized method, and remarkably successful. Its main inadequacy is that it is incapable of handling events and phenomena that are by their very nature impossible to define operationally, to observe independently, or to validate empirically. Modification of the method to include such events and phenomena would be welcome – perhaps new validation tools are called for.

- > *My guess is that philosophy will survive the*
- > *Age of TV/VCR/Dumb–But–Fast–Computers/Conformity, at which point*
- > *Exploration rather than Survival–Of–The–Fittest will probably resume.*

Philosophy and empirical science will both survive. Exploration and survival will both continue. People (both individually and collectively) will continue to adapt to the discoveries made in their explorations, or perish due to their inability to adapt.

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Change happens, whether we make it or it is thrust upon us. We deal with it and move on, or not.

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