RESIDUALS OF ZULF'S MARKOV MORAL THEORY

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1. Never Neglect the Problems of the Residuals

As scientists we acknowledge that Nature does not reveal her secrets easily, and Man's ability to extract some knowledge is beset with impossible difficulties. We, human beings, are prone to holding on to absurd consensus for decades and centuries, especially about truth of Nature.

It is not a matter of shame for a great scientist to be finicky about residuals to scientific models but one of honour. This seems counterintuitive. Wouldn't you be better off if your model were simply *accepted* by peoples of the world as the authoritative word on an issue of science? Wouldn't your immortal fame be better without all sorts of finicky attention to the failures of a scientific theory, problems of the residuals?

Shouldn't you try to explain all problems of the residuals with a dismissive "that's just noise and not substance"?

The answer is a resounding no. Science, our collective understanding of all things of Heaven and Earth, would dissolve altogether is we did not consider it worthwhile to examine the residuals of our scientific models with some care.

The major point I am making is that it is not *simply* a matter of showing off our integrity and honesty when we examine and publicize failures of our models but crucial to maturity of any science.

I will give you an example. It was the occurrence of impossibly difficult technical analytical problems such as occurrence of embedded eigenvalues in the continuous spectrum of polyatomic systems that I was examining before it became clear to me that Schroedinger theory was wrong as spectra of actual polyatomic systems had discrete spectra. Now Schroedinger's theory is such a nice precise theory on small atoms and got so many beautiful results that it seemed that it would be eternal law but it was wrong and I corrected Schroedinger and Maxwell law with S4 Electromagnetic law and this will produce a correct physical theory.

There are other examples. So residuals and failures are not awful things but ought to be treated with respect and care. No one will deny a great theory its due regardless of it being wrong in detail. It is no matter of shame to be conscientious about residuals and failures to match measurements. And besides, there is simply no human faculty able to decipher the secrets of Nature perfectly and so we need to value the virtues of scientific professionals who are able to examine residual mismatch with honour.

Date: May 6, 2021.