

Re: Information–Knowledge Holographic Principle

Source: <http://sci.tech–archive.net/Archive/sci.physics/2005–07/msg00244.html>

- *From:* "OsherD" <mdoctorow@xxxxxxxxxxxx>
 - *Date:* 4 Jul 2005 02:08:40 –0700
-

>>From Osher Doctorow

I recall Bob Kolker's view that Material Implication does not really embody Causation because roughly speaking the "if" part isn't really "causing" the "then" part, and there is a whole "horde" of AI (artificial intelligence) people who believe that wholeheartedly. Not being very philosophically oriented although they tend to dabble in the technicalities of logic insofar as it is computer–enactable and even more in the technicalities of correlations whether spurious or not, their real quarrel is not with me but with (Probable) Causation. Having heard that non–spurious correlation is Causation, their proposition is to ignore Causation more or less and focus on correlation, attempting to prune correlation of its human and non–human "errors" by a variety of cross–checking experimental "safeguards". To them, what is needed is not more theory and less data but more data – data for endless correlations so to speak, with endless prunings and safeguards. That the computer industry and governments benefit is to them incidental, at least publicly.

But they tend to get thrown for a loop when asked what is physics intuition and mathematics intuition. Their version of physics intuition is most likely a computer which correlates masses of data like algebraists try to do and keep pruning out the coincidences. If they lose a few coincidences which shouldn't be lost in the process, it's too bad – the "Global Long Run" will even everything out including Individual outliers and quirks. If not, then a computer simulation will do it (speaking of non–causation!).

Everybody, I think, would agree that physics and mathematics intuition is an underlying idea or impression of how things or symbols or ideas work, especially things and processes (in physics). To a plumber, it is enough to "see" in his mind's eye so to speak the flows and pictures of a plumbing network. He/she is almost totally correlation–oriented – networks look like gigantic (or less gigantic) correlation complexes. But a Problem–Solver like John von Neumann doesn't have nice ready–made network packages to see, and neither did Beethoven. In fact, Beethoven criticized some contemporaries who claimed to have ready–made global pictures of their musical compositions (Chopin later made similar claims). Beethoven had to work hard, piece by piece, part

Re: Information–Knowledge Holographic Principle

by part, figuring out what comes next but more importantly what should come next in a Causal sense to influence the Perceptions and Cognitions and Emotions (although positive Emotions are arguably subtypes of Perceptions and Cognitions). It was no coincidence that John von Neumann almost single–handedly initiated Quantum Logic or that Beethoven marked the end of the Classical Era because he had no peers.

Physics and mathematics intuition is not just about how things work, but about how they work Causally. Take away the Causation, and you have Shakespeare's monkeys trying to retype Shakespeare. Actually, people should try typing Shakespeare or other lengthy Creative Genius books. Unlike monkeys, they may ultimately with enough persistence and good luck and Ethics, learn to be like Shakespeare, and that is really what they wanted and what will help us all.

Osher Doctorow

• *References:*

- ◆ ***Information–Knowledge Holographic Principle***
◇ *From: OsherD*
- ◆ ***Re: Information–Knowledge Holographic Principle***
◇ *From: OsherD*
- ◆ ***Re: Information–Knowledge Holographic Principle***
◇ *From: OsherD*

- Prev by Date: ***Feynman's dissertation***
- Next by Date: ***Re: neutrino interaction***
- Previous by thread: ***Re: Information–Knowledge Holographic Principle***
- Next by thread: ***New physical sciences/mathematics positions at <http://jobs.phds.org>, July 04, 2005***
- Index(es):
 - ◆ ***Date***
 - ◆ ***Thread***