

Re: Feynman's fallacy

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From: Matt Giwer (jull43_at_tampabay.rOAr.com)

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Old Man wrote:

> "Matt Giwer" <jull43_at_tampabay.rOAr.com> wrote in message
> news:[aZIDd.224152\\$6w6.99218@tornado.tampabay.rr.com...](mailto:aZIDd.224152$6w6.99218@tornado.tampabay.rr.com...)

>> ilya_shambat2004@yahoo.com wrote:

>>> *I've been reading Richard Feynman's Six Not-So-Easy Pieces.*

>>> *In his first chapter he makes the point that, because the laws of the
>>> universe will be perceived the same from wherever the person observes
>>> it, there is no way to find the center of the universe.*

>> *If that is what he said then there is no basis for that assumption. The
>> best he can say is any place in near earth space or some loosely defined
>> local space. That is much more restrictive than "anywhere." No one can say
>> anywhere until we have been everywhere or at least enough places to
>> constitute a significant sampling of places. As that is not likely to
>> happen before another thousand years or so, the assumption is unwarranted.*

> *Doesn't compute. A quantitative prediction need
> only be empirically falsifiable in principle, not in
> current fact or within current capability, but that's
> not the point here. More to the point, Giwer
> seriously underestimates the scope of current
> astrophysical observations.*

It is not an issue of falsifiability. It is an issue of not clearly stating it is an assumption rather than a fact. That is how Einstein got his start. The assumption must then be validated. We are not in a position and likely never will be in a position to exhaustively validate it. But at the moment restricted to our local space it is clearly an assumption.

In the simplest example, intelligent intervention, where are all the aliens? We are a nature preserve which is artificially shielded from the signs of intelligence which would otherwise dominate the night sky.

sci.physics: Re: Feynman's fallacy

The Voyagers are slowing down. Is the universe we observe beyond our solar system changed by some local effect of our sun? Do all suns "modify" their own appearance with the same effect? Is the Voyager effect real? What causes it? Is distance a factor and if so linear or what exponent? Will the Voyagers eventually come to a full stop and fall back? No one knows.

As to the center of the universe that is at $T=0$. But because of the finite and relatively identical velocity of light we cannot establish the $X=Y=Z=0$ point. Because of relativity every place in space sees itself as the outer edge of the present — and therefore the Vulcan Science Academy has concluded time travel is impossible.

But we won't know that for sure until we get there and see for ourselves. The Voyager effect would imply entraining a particular view with the sun so we cannot be in a different place until it is significantly far from the sun.

- > *The laws of physics aren't guaranteed to be globally*
- > *invariant, but local invariance can be centered at any*
- > *point in time and space. However, physics provides*
- > *the necessary global transformations between various*
- > *local reference frames.*

But the stated assumption is that the same experiment in different parts of the universe will yield the same result. All we can say is if we observe the other one through out magic telescope it will appear to give the same result.

I bring this up in that the farther away things are the less explainable the details of the observation. To explain these things we are well into our second set of epicycles on the neo-ptolemaic celestial sphere. At the moment a better question might be why would a steady state universe give so many appearances of a bang time event?

- > *Under such global transformations, the light emission*
- > *and absorption spectrums of the hydrogen atom,*
- > *amongst many others, are observed to be invariant*
- > *WRT cosmological distance. Near or far, throughout*
- > *the observable Universe, the laws of Quantum*
- > *Electrodynamics are observed to be locally invariant.*

Or there is a filter around our local system either a stellar cause or little gray men with a greenish tint. Or an incorrect interpretation of early observations was chosen and we are nearing the point we cannot complicate it enough to explain recent observations.

- > *Much the same can be said for the physical laws of*
- > *gravitation and of the Standard Model of Particle*
- > *Physics.*

Much more can be said about what we don't know about both subjects. That mass particle has to be around some place. And if we could just shine a light on all that dark matter ... And if the Voyagers were not slowing down and if objects at

sci.physics: Re: Feynman's fallacy

great distance were not speeding up ... And if the appearance of reality would just stay the same with distance ...

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Freedom Medals aka booby prizes awarded to
George "slam dunk" Tenent
Tommy "we have enough troops" Franks
Paul "disband the Iraqi army" Bremer
-- The Iron Webmaster, 3319