Re: "The map is not the Territory"...

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From: Bill Hobba (*bhobba_at_rubbish.net.au*)
Date: 08/02/04

Date: Mon, 02 Aug 2004 04:49:46 GMT

"Andr? Michaud" <srp@microtec.net> wrote in message
news:562f286c.0408010433.7f851291@posting.google.com...
> *"Bill Hobba" <bhobba@rubbish.net.au> wrote in message*
news:<ewWOc.25669$K53.379@news−server.bigpond.net.au>...
> >
> > *"srp" <srp2@globetrotter.net> wrote in message*
> > *news:410B967F.AB22F3D1@globetrotter.net...*
> > >
> > > *A final theory of nature that would cause all these problems to*
> > > *disappear cannot possibly come about until a sufficient number of*
> > > *people realize that the real MacCoy is the physical reality out*
> > > *there that all of our personal theories are ultimately trying to*
> > > *describe, and this includes the personal theories that have become*
> > > *generalized as current orthodox physics.*
> >
> > *Banding words about like 'physical reality' and 'out there is*
> > *fraught with danger.*
>
> *Why? What are you afraid of?*

That it degrgenrates into meaningless philosophical quibbling about words. The scientific method is not concerned about reality − it is simply a method of relating theories to experiments. It is a philosophical issue to ascribe any other meaning.

>
> *Physical reality is precisely the territory that this catch phrase*
> *refers to. Why is it dangerous to throw a glance at the territory*
> *once in a while to check where we're at instead of constantly mull*
> *over the incomplete maps that orthodoxy is so found of?*

Because no one can even define what physical reality is − but it is quite easy to define the scientific method.

>
> > *Such is not the way of science − all that counts is how well a*
> > *theory is in accord with experiment.*

>
> *You mean how well you think your map can determine what the*
> *territory is? You mean that anything that you can't find in*
> *your map can't possibly be in the territory? That's precisely*
> *the point that Paul is making.*

I meant exactly what I said − not the extra philosophical baggage you wish to introduce.

>
> > *When we have a number of theories equally in accord with*
> > *experiment and no reasonable reason to decide between*
> > *them then we have an issue.*
>
> *We have an issue whenever science is more preocupied with preserving*
> *its old maps than with redrawing them to fit the greater detail*
> *that we (at least some of us) are now aware of of the territory.*

That is an issue you are introducing. I say such is not really relevant to science.

>
> > *When we have arbitrary constants such as alpha that needs to be put*
> > *into theories we have an issue.*
>
> *Alpha is arbitrary only for those who have not dug deep enough to*
> *understand where it comes from.*

Those that believe they understand where alpha comes from are simply deluding themselves. If they believe otherwise let them get it published in a journal and collect their Nobel prize.

>
> > *As far as the aether is concerned we have a very good reason to*
> > *exclude such theories − the aether had never been detected. You*
> > *do not introduce into theories unecessary assumptions. However*
> > *the existence of EM fields is another matter.*
>
> *Why should EM fields be more valid than aether ? What if both*
> *were wrong, or what if both had pieces of the final truth in*
> *them?*

First EM fields to not prelude the existence of an aether. And I have posted the link many times on why scientists do not, generally, like an aether http://www.google.com/groups?selm=3838AA2A.829F46AD%40lucent.com. As the article concludes:

'In summary, there are good reasons for the ether to be absent from modern physics; virtually all modern physicists consider these reasons both cogent and sufficient (at least those modern physicists who have actively considered the issue), and no ether theory is part of modern physics. While

the viable ether theories are equivalent to SR in the sense that they are experimentally indistinguishable, they are most definitely NOT equivalent to SR in either mathematical elegance, explanatory power, or suitability as a starting point for further theories. But it is these latter properties which are most important for the basic theories of physics.'

Does that prove an aether does not exist − no. Do I believe it is good enough to pass the reasonable person test − yes. Do I believe anything I write or post will convince poser cranks who basically have no idea what they are talking about − no.

>
> How could you know? Who knows what the future will bring?
>

I don't. I argue on the basis of our best theories that the aether is irrelevant. I have no idea what tomorrow will bring any more than you do.

>
> > We can formulate a theory that does not require them − but at a
> > cost − our normal notions of conservation laws.
>
> Well, so you can't, but maybe others can.

Well known no go theorems show otherwise − see page 113 − Gravitation and Space−time by Ohanian and Ruffini.

>
> How can you know? The future is not written yet.
>

I know logic and what it implies − namely that unless you can prove what I said above incorrect then I am perfectly at liberty to hold the view I do.

>
> > The issue here is not as clear. So why do people generally not go
> > for the Feynman−Wheeler theory? − it resolved the problem of a
> > particles field acting on itself.
> > Symmetry arguments from QM strongly support the idea of a field
> > − it can deduced by local gauge invariance (see page 280 of the
> > following reference
> > http://www.colorado.edu/philosophy/vstenger/Nothing/Law.doc). I know
> > something of QED but there are people around who know more and they
> > may correct me if I am wrong. But my understanding is that QED
> > contains within it both the Feynman−Wheeler and Maxwell's theories
> > − that being the case then the difference between the two views
> > is rather moot. But that is an interesting point I might do a
> > separate post on.
>
> Very interesting, but you systematically talk here about maps

> being used to determine the territory.

Me? I have not mentioned that in any way − that is Stows choice.

> What Paul meant was the
> opposite operation, having the territory determine the map.

What Paul is attempting is his typical ploy of asserting that people such as myself that agree with conventional physics assert the mathematical formalism of a theory determines physical reality. Science makes no such claim − it claims purely to have theories that makes predictions in accord with experiment. No claim is ever made of the theories determining reality or any such rubbish. For example when I say that energy is determined by Noether's theorem he responds with a theorem can not determine physical reality. Anyone with a brain can see such is a context shift done for his own dubious purpose − in this context it is meant that physical theories that have a Lagrangeian have a quantity called energy determined by a theorem. Energy is defined as the conserved Noether current related to time translation. The theorem guarantees the existence of the quantity thus defined.

>
> > > No real progress in that direction ever was accomplished in the past
> > > until a sufficient number of people stepped back a little from their
> > > own pet theories and started assembling the good pieces that fit
> > > together, whatever personal theories they may have stemmed from.
> > >
> > > This happened only a few times in the past. Among others, In Newton's
> > > time, and in Maxwell's time, in Plancks time...
> >
> > Details please. I claim progress is made once the physicists concerned
> > asked key questions that allowed then to translate their ideas into
> > mathematics and the mathematic into physics.
>
> Not so.
>
> Newton built his so successful theory by trying to reconcile
> among others, Kepler's obviously right conclusions about orbits
> with Galileo's discovery about acceleration. He deeply disliked
> Descartes own theory on cosmology and decided to develop his own.
>
> What he did was fit together findings of previous discoverers that
> were obviously and verifiably right and came up with a larger concept
> that could enclose them without contradiction.
>
> In clear, he took new now precisely described pieces of the
> territory and came up with a new wider ranging map that
> allowed still more progress.

Newton actually explained to one of his friends that there must be a reason that apples fall straight to the earth (gravity), rather than sideways. The

story about the apple falling on his head is just that a story − but asking the question of why apples fall straight to the earth (gravity), rather than sideways was, according to Newton himself, a key question he asked. Note what I said − progress is made by asking key questions − I did not say it was the only thing. I do not even assert it is the key thing in all cases − I simply assert is it an important thing in most cases.

>
> As for Maxwell, he did exactly the same. he built his so successful
> theory by trying to reconcile the obviously right conclusions of
> Ampere, Coulomb, some others, and especially Faraday.
>
> Just like Newton, and came up with a new map that integrated
> all these disparate correctly described pieces of the territory
> that fit in no currently existing "maps", and that now integrated
> in a new wider ranging map that allowed more progress.
>
> That's all there is to it, years of sweat and hard work on the
> part of very dedicated individuals who refused to be restrained
> or discouraged by current orthodoxies, but I am convinced that
> what I say here is totally meaningless to you.

I am also convinced that what I say here is totally meaningless to you.

>
> > This is examined here:
> > http://modeling.la.asu.edu/R&E/SecretsGenius.pdf .
>
> Good reassuring stuff for orthodoxy. Informative though.
>
> Particularly this piece about the "incompatibility" between
> Newtonian mechanics and Maxwell's theory, which for orthodoxy
> immediately boiled down to an "impossibility" of resolving
> the problem, not taking into account that maybe not enough
> of the territory was known to solve the problem at that time.
>
> Very typical of orthodoxy to conclude to impossibilities
> when their "great minds" can't instantly find a solution.

Or perhaps its resolution came when Einstein asked the right questions.

>
> Much more gratifying for the image of our "elite" to publicly
> wave the flag of impossibility than to admit their momentary
> ignorance.
>
> They did exactly the same with the uncertainty principle.
>
> Always waiting for a some genius among them to show the way,
> as hinted in this piece.
>

> *Well, so−called "genius" is such an overblown strawman!*
>
> *Einstein, and all others that stood out for their achievements*
> *simply were individuals who had developped the pattern of*
> *systematic re−questioning. This is open to all who develop*
> *the pattern early enough in their youth and then have*
> *access to knowledge.*
>
> *You may not know this, but Einstein re−questioned even GR,*
> *ultimately rejecting it at the end, although no one listened.*

Who gives a rats ass what Einstein thought of GR in the end? What has that got to with anything? Only people who can not justify their views any other way bring this sort of thing up just like the I do not know how many postings of his talk about the reintroduction of the concept of the aether. Yet few choose to bring up what he said in his lecture (in 1920 I believe) − he was unsure what role his new concept of the aether will play in future progress. Well up to this point we know the answer − none, zero, zilch, zippo. BTW GR is in accord with experiment − end of story.

>
> > *For example Maxwell made progress once he looked at the*
> > *mathematical consistency of the equations experiment*
> > *showed EM obeyed.*
>
> *Not so. He sweated 24 years painstakingly piecing together*
> *the verified stuff that Coulomb, Ampere, Faraday and others*
> *had as painstakingly discovered, and slowly built his EM*
> *theory while he was shunned by his orthodox peers for*
> *hub−nobbing with such an "ignorant" outsider as his friend*
> *Faraday, when not treated with sarcasm for his strange ideas*
> *about EM.*
>
> *He slowly developped the math to describe the larger picture*
> *that piecing these pieces together drew as he progressed.*

And the mathematical inconstancy he found, as alluded to in every textbook that describes how they were developed, played no part? Pull the other one it plays jingle bells.

>
> > *Dirac made porgies once he asked what would happen he pursued*
> > *ways other than the Klein Gordon equation to fit SR into QM.*
> > *Einsnten made progress when he asked what would a beam of*
> > *light took like if you war moving with it. All these*
> > *are examples of asking the right question.*
>
> *No. They are examples of trying to fit together disparate*
> *pieces put on the table by others. The big question is,*
> *were those pieces, or some of them, really precise descriptions*
> *of the territory, or were they, or some of them, only mirages,*

> that is, descriptions stemming from incomplete maps, and that
> can lead only to more mirages.

In this case you are obviously ignorant of the facts. See page 286 Pias − Inward Bound for what really happened. As he said it was an outgrowth of the 1927 Slovay conference. Bohr asked: 'What are you working on'. Dirac: 'I am trying to get a relativisitc equation for the electron's Bohr: 'But Klein has already solved that problem. Dirac disagreed and exactly as I said asked the question: 'What would happen if he pursued ways other than the Klein Gordon equation to fit SR into QM' and the Dirac equation was born. BTW is it not just my thesis that progress is made when the right question is asked − it is the thesis of Pias as well. In fact one can look on the whole of Inward Bound as a demonstration of it for he mentions it time and time again.

>
> A good map of a territory can only be drawn from real
> descriptions of the territory, never from descriptions
> stemming from older incomplete maps.
>

Bullcrap − the Dirac equation for example demonstrates otherwise.

>
> That's the point that Paul was making and that Korzybski
> completely explored.
>

That is not the point Paul was making − it was his typical straw man rant that the math does not cause the physics.

>
> > > I think that great discoveries will be the payoff when such a
> > > stepping back occurs again.
> >
> > I think the great discoveries will be the payoff for asking
> > the right questions.
>
> You may think this if reassures you, but you are wrong.
>
> André Michaud

You may think this if reassures you, but you are wrong.

Bill