

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

**Source:** <http://sci.tech-archive.net/Archive/sci.physics.relativity/2004-08/0258.html>

---

**From:** Andr? Michaud (*srp\_at\_microtec.net*)

**Date:** 08/01/04

Date: 1 Aug 2004 05:33:54 -0700

"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?

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?

> *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.

> *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 preoccupied 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.

- > *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.

- > *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 unnecessary 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?

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

- > *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.

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

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

- >> *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 them 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.

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.

- > *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.

Much more gratifying for the image of our "elite" to publicly wave the flag of impossibility than to admit their momentary ignorance.

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

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 developed 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.

> *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 developed the math to describe the larger picture that piecing these pieces together drew as he progressed.

> *Dirac made progress once he asked what would happen he pursued  
> ways other than the Klein Gordon equation to fit SR into QM.  
> Einstein made progress when he asked what would a beam of  
> light look like if you were 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.

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

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

sci.physics.relativity: Re: "The map is not the Territory"...

- > > *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