

Title:

THE SKILL OF REPRESSION IN PHYSICS

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1506 words.

ABSTRACT:

The article throws light on the consequences for society and environment from mental repression, using physics as example. A way out of all bias and the resulting disadvantages for society and environment could consist in establishing new sciences focussed to the facts and avoiding mental and social constraints from old sciences.

KEYWORDS:

Geometric theory of fields, quantum phenomena, facts, evidence, picture of nature, constraints.

A nice story from Ephraim Kishon [1] shall illustrate the message.

The narrator is disturbed at the morning by a neighbour, who has heard "from absolutely reliable source", that the union house had be blasted. Since this house was in the same street, he went to the window in order to see for himself. And see, the house was at its place like always. Nobody has blasted it. However, the neighbour did not like to hear this fact, because it destroyed his conviction in the "absolutely reliable source". The narrator dragged him to the window, but the neighbour closed the eyes and said, that he refuses to see for himself. Rudely forced to open the eyes after all, the neighbour claimed that the house had been reconstructed last hour.

The author experiences exactly the same in physics.

It is fact : All nature obeys the source-free Einstein-Maxwell equations, in all dimensions. [2] The best evidence are the particles. These are discrete solutions of mentioned field equations. In that, the particle quantities like mass, spin, electrical charge, magnetical

momentum are the first integration constants of these equations.

The stability of the several solutions depends on the values of the integration constants, and is tested by means of numerical simulations. One can see the stability with the number of arithmetic operations until the program crashes. (It has to do with chaos.) As well, the different values of the integration constants are inserted into the initial conditions one after another during lots of tests. The method consists in it, that the initial conditions are decided in a known area around the particle, and the computation is done successively from outside inwards. [3]

There are indeed certain values of the integration constants, that bring forth operation numbers above average. That means, these numbers are clearly above the computer artefacts. The special values of the integration constants, causing operation numbers above average, are identical with the known quantum numbers. (All quantities of course normalized.) First tests, done with PC, presented eleven values already within tolerances of $\pm 5\%$, each three of them mutually conditional. That are:

Spin, charge, magnetical momentum of the free electron,

Spin, charge, magnetical momentum of the proton,

Spin, charge, magnetical momentum of the deuteron,

Mass and charge of the Helium nucleus.

These still inaccurate results (due to insufficient precision of the numeric processor) provide already great certainty, because the probability, that these results are an accident, amounts to 10^{-11} . With other words, first the 100,000,000,001st accident after 100,000,000,000 produced these results at once.

Numerical simulations provide only one evidence. There is more, for example:

Qualitative derivation of Planck's constant from Maxwell's equations (with diverse predictions),

Plausible interpretation of electrical conductivity and tunnel effects (inclusive of super-lightspeeds as noticed by the outer observer),

Clarification as it is with causality, and why at all it is possible to use statistical methods.

(Quoted from [4].)

Moreover, the math runs seamlessly, and the entire theory, the Geometric theory of fields [5], is fully consistent. By way of contrast, mainstream physics has problems over problems modelling all the quantum phenomena and trying to harmonize them with the field phenomena. The most primitive rules like the energy law do not more properly run, and physicists are doing more and more dubious patchwork. [4] A theory using mainstream methods, that unifies gravitation with the rest, has not been found yet, and cannot be found.

Why is that so ?

The psychologist Werner Mikus [6] said, that people "take the space as scene for the events in the time". The "events" can be explained only with "matter", that be something different from space or time. This picture does not more prove successful. But the quantum phenomena together with the false picture of matter, time, space seduced physicists into the assumption of building blocks. All matter consist of them. - It is impossible to list all the problems from this picture at this place. A few of them are discussed in [4].

The Geometric theory of fields contradicts the internal rules of physics. That is the only possible way fundamentally solving the problems of today's physics. Such way has been suggested already by Hermann Minkowski, who is usually underestimated and, with it, not understood. Only Albert Einstein went a part of this way, and succeeded with the General theory of relativity for that reason. The Geometric theory of fields completes Einstein's work, because it unifies gravitation and electromagnetism in consideration of all quantum phenomena. [5] But the quantum phenomena are in the geometric theory only the consequence of the fact, that discrete solutions exist.

Why do physicists not follow these actually simple insights, and rather hunt after phantoms like strings or unseen forces ? These insights require another picture of nature. Not time is the deciding category. Time and space are unified to the four-dimensional space-time, and that is a geometrical term, namely a four-manifold. The source-free Einstein-Maxwell equations define the *geometrical* properties of this manifold. In that, matter is pure geometrical structure of the four-manifold (!) and, with it, only an auxiliary term. Building blocks do not exist. It is intelligibly explained in [5], why that all must be so and not otherwise. Note that each body describes a curve in the space-time. All measurable quantities are parameters of this curve. This geometry is no mathematical trick but reality !

With it, physicists can forget the dream of the Great unification. One cannot unify different methods. Unified are the really existing fields, that are gravitation and classical electromagnetism.

One should not underestimate the consequences from the bias in physics for society and environment . How can people reasonably handle energy, if they do not know, what it is ? And the bias is everywhere, not only in physics.

What can one do with this situation got lost ? Physicists have spent a life-time learning subjects and dealing with stuff, that is based on false assumptions. They will never be ready to confess that they get their favorite stuff wrong. In which, physicists could still well live a while with partial results, that have practically proven successful. They do not need to throw away such results. - Let us look above the dish border.

Werner Mikus tells in [7], how psychology originated from the necessity to concede the mental an own nature, with laws, that are not deducible from biology or physiology. He also tells, how psychology can help folk, who do something false or harmful under constraint. This help is widely necessary, because actions under mental respectively social constraints are a

social phenomenon with disastrous consequences. (Everybody knows these consequences in society and environment.) - Thus, a new science originates when old sciences are not more sufficient for a subject, or begin to fail. Now, we need a science of the facts. This new science may cover subjects from all known sciences, with the focus even to the facts and nothing else. Mental and social constraints are inherent also in sciences. We should avoid to import the constraints from old sciences.

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