

THE SCIENCE - FICTION WORLD

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LOOKING AHE AD

Forrest J. Ackerman is, I believe, fandom's foremost exponent of Esperanto as an international language. There can be no doubt that an international language would greatly facilitate interlingual relations and at the present time Esperanto seems to have a popular advantage over other proposed artificial languages such as Ro, Novial, and Basic English.

We can probably look forward to the world wide acceptance of an international language sometime within the next fifty years; probably around twenty five.

There is another thing of an international character however in which the situation looks almost hopeless. I refer to the present number system which is based on ten. As most of you probably know the use of ten as the number base came about through a physiological accident --- the convenience of counting on the ten fingers.

Not all aborigines --- nor ancient cultures --- made use of ten as their counting base. The Mayans, who achieved spectacular success in their astronomical calculations used twenty for their base; some Brazilian aborigines used their finger knuckles for counting and came up with the base three; some peoples used base two and some used four.

Probably the biggest difficulty with the ten base is the small number of factors of ten. In ordinary everyday activity we find things more easily packed or measured in multiples or fractions of twelve such as dozens and gross. (Eggs, if they came in tens , could only be packed in two rows of five eggs each or one row of ten. Packed by dozens they can come in two rows of six, three rows of four, three by two by two, or one by twelve.) This lack of factors of ten leads to difficulty in decimals where we often encounter a frequently used fraction such as one third becoming decimally irrational.

The metrical system of weights and measures was introduced to overcome these difficulties but amounts only to minimizing an error instead of correcting it. A proper base should have the largest number of factors possible and a conveniently small number of characters, this latter for ease in memorizing. We already memorize our multiplication tables to twelve times twelve and twelve has four factors beside itself and one. The use of twelve as a base considerably shortens and facilitates calculations; it should have been introduced along with the so-called arabic numerals at the close of the Middle Ages. However that chance was muffed and now it appears that we'll be lucky if the base twelve comes to a widespread use among scientists alone during the next hundred years.

THE EINSTEIN THEORY --- RIGHT OR WRONG ?

To my mind the Einstein theory, far from being an advance, a revolution in scientific thought, is one of the most cataclysmic mishaps to befall human progress. It is of curious notice that the human mind after falling prey to the mysticism and superstitions of unnumbered religions should free itself in rational science and then to permit itself again to be led into mysticism and cabalistic rites under the name of science.

It is a phase of human psychology that leads us to accept quickly anything mysterious which comes shrouded in magnificent fancies which appeal to our subconscious desires and lead us to believe that things are as we might like them to be.

Actually present day theoretical science (i.e. physics) led by the Einstein theory, is erecting an overbalanced edifice of fanciful mysticism the rites of which are administered by those prelates, the mathematicians. This is not to be construed as an attack on science but more generally on the application of abstract math to concrete reality. (In school we are taught that we cannot multiply apples by oranges or any such set of diverse items but in science we find ourselves able to multiply pounds by feet.)

Physicists today tend to look on the law of conservation of energy as an approximation whilst they use it in their calculations; they call light a wave motion while denying that there must be anything to wave; insist that the Einstein theory has supplanted the Newtonian concept of force while they are unable to go without the concept of gravity in one way and another; and finally they blandly toss overboard the Euclidean geometry of space for a geometry of surfaces when they are unable to either locate or describe the surface which they have called into existence.

As regards light there are four or five theories extant as regards the nature of light none of which explains all the connected phenomena and despite this situation they cite the excess bending of light as it passes the sun as a proof of the Einstein theory when there could be a variety of other factors; they cite the motion of Mercury's perihelion as a proof despite their own admission that present math cannot handle the problem of three or more bodies reacting under Newton's law of gravitation except in special cases; thirdly, they cite displacement of the spectrum toward the red on emergence of light from a strong Gravitational field as a proof when the sun is not massive enough to give convincing evidence and the spectrum of larger stars is complicated by the Doppler effect.

One author says that the great remaining problem of physics is the relativistic formulation of quantum theory. I predict that they shall not succeed in this formulation. The quantum theory is based on hard fact which will remain constant throughout the universe while the Einstein theory is merely a fanciful hypothesis conjured out of unexplainable phenomena which may be merely attributable to the fact that our point of observation is in a field of gravity.

IS YOUR PENCIL SHARP ?

How about those two laws, the law of conservation of kinetic energy and the law of conservation of momentum ? Both k.e. and momentum are supposed to be conserved in any interaction between masses. The formula for k.e. is $\frac{1}{2}mv^2$ times v-squared and the formula for momentum is mv .

Suppose, for example, we have two masses involved in head-on collision; can we expect agreement between the results forecast by calculation from each formula ? To make it simpler suppose that one mass results from the collision (i.e. the two separate masses merge) so that only one velocity results from the collision.

Since one law is dependent on the square of v and the other on v alone it seems likely that we can only expect agreement between the laws when the velocities of both masses before collision are numerically equal and this is exactly what we find. Simple arithmetic shows that the velocity resulting from the collision as figured from the formula for K.E. is not the velocity derived from the formula for momentum.

Can it be that one of the laws is not true? Or, more likely is it possible that the formula of one or both terms is incorrectly stated ? Bertrand Russell in one of his books suggests that the formula for k.e. is more correctly stated as m divided by the square root of the quantity one minus v^2/c^2 where m is the mass at rest, one is taken as the velocity of light and v is the velocity of the body.

Does any reader know the origin of the definition of k.e.?

BIT PARTS

Saw Fred Mac Murray in Where Do We Go From Here and was surprised to find it fantasy. Not too good.-----
Read the first part of World Of A and I don't think it stacks up to the opening of Slan.....Bet you the new constitution is accepted by the NFFF membership with the largest item of dissent being the proposed name.----- If you want a good book on the history of the industrial revolution look up a work by Lewis Browne. I forget the title. ----- Has anyone read Citizen Tom Paine? A good biography of this early citizen of the world. If you're interested in anti-Bible arguments look up Paine's collected works. Paine is cherished in our history books for his activities in the French and American revolution but his religious activities are shushed. ----- Seabrook, who wrote a couple of books on witchcraft, voodooism etc., relating his experiences with various cults and aborigines, told of drinking bouts also. He later wrote another book telling of his time spent in an asylum recovering from acute alcoholism. ---- Pink elephants ? ----

James Jeans in Physics and Philosophy discusses the effect on philosophy of recent physical science. Doubts causation. ----- Only book I ever read where the Einstein theory was attacked was de Broglie's Back To Newton. ---- Pardon the lapses from good English, the rugged edges, and the typographical errors. -----

How about a letter? Dale

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