

Science has always had a major effect on the thinking of society.

*And, Einstein's denial of prime objective space and time,
the 20th Century's attribution of uncertainty and indeterminism,
and Quantum Mechanics with its denial of cause and effect,
have had an adverse effect on both the progress of scientific
understanding
and the behavior of human society.*

Establishing Prime Objective Space and Time
serves to correct those adverse effects

THE PROBLEM

SECTION 1

The Claim of Einstein's Relativity

In the 19th Century the development of Maxwell's equations and of the behavior of light led to a new problem. While Newton's Laws and other physical behavior readily transformed from one frame of reference to another by means of simple linear transformations, the new equations of electromagnetic behavior would not so transform.

It was the physicist Lorentz who resolved the problem with his "Lorentz Transforms", but that created another problem. It created a universe in which the mass of objects, their length, and the time involved in their motions were all relative, depending on the velocity of the object being considered.

And, Einstein in his theories of relativity codified these into two principles:

1 - There is no prime frame of reference in the universe; rather, all frames are relative.

and

2 - Likewise there is no prime objective time in the universe; rather, all time is relative.

A PRIME FRAME OF REFERENCE

With regard to space, that is frames of reference, Einstein's claim that there was no prime frame of reference was not based on experimental or observational fact; rather, it was his [firmly believed] opinion.

Einstein's principle concern and the reason for his contention against there being any prime frame of reference was his confidence that the laws of physics and the fundamental constants involved in those laws had to be the same everywhere regardless of the frame of reference and must be the same throughout the entire universe.

To Einstein the designation of any frame of reference as "prime" automatically meant that that frame was, or could be, different from the other frames of reference, that it was or could be, dominant in some sense, that it could violate the universality of physical laws.

That reasoning, upon which the speed of light being a universal constant and upon which that speed of light being the same in every frame of reference depended, led Einstein to his position absolutely opposed to any prime frame of reference.

That decision was quite unfortunate for two reasons.

- First, it was a decision as to the nature of an aspect of material reality for which there was completely no evidence. Neither passive observation nor experimental evidence soundly support nor supported such an important decision.
- Second, that decision automatically closed any possibility of investigating physical effects related to behavior relative to a prime frame of reference. As will be seen further below, that forced erroneous scientific decisions in explanation of observed behaviors.

Or, in other words, that decision restrained and distorted the scientific work thereafter. The decision and its support and acceptance in the scientific community were an example of failure of scientific objectivity, a failure to adhere to the “scientific method”.

A UNIVERSAL PRIME OBJECTIVE TIME

A third reason as to why the decision against a prime frame of reference was unfortunate is that it made it easier, it opened the way, to assert, with similar lack of evidence, lack of justification, that there is no prime objective time in the universe, rather that all time is relative.

The reasoning employed here depends, again, on the speed of light, c . The problem is that two observers of an event, the observers well separated from each other and in different frames of reference cannot agree on an observed event which is distant from each observer but in different amounts of distance. They cannot agree because for each observer the event occurred at a time different from that experienced by the other observer because the light carrying the information about the event takes different times to travel the different distances of the observers from the event.

OVERALL AN ADVERSE EFFECT ON HUMAN SOCIETY

Circumstances can occur in which the observers cannot even agree on the order or sequence in time of related events such as cause and effect. That situation is completely unacceptable. Cause and effect are fundamental to physics and to the functioning of the universe. Objective, not relative, time is essential to the Reliability of cause and effect.

The combination of Einstein’s denial of a prime frame of reference and the denial of prime objective time, both starting in the 20th Century, led to great damage to human society.

That is because science on the large scale, that is science dealing with the fundamentals of reality and the universe, has always had and still has a major effect on the non-scientific - social - general philosophic thinking of that science’s society and its leaders as follows.

The beginning of the scientific method and the work of scientists such as Copernicus and Galileo resulted in the new period of “The Age of Reason” and “The Enlightenment” – rationality and empiricism replacing dogma and faith.

The new developments that Newton introduced led directly to the concept of the “clockwork universe” and the strong belief in laws, order and regularity.

And, Einstein’s denial of objective space and objective time coupled with the 20th Century’s attribution of actual uncertainty or indeterminism to all physical objects beyond the original Heisenberg conception, and the advent of Quantum Mechanics with its denial of cause and effect, resulted in our contemporary outlook of a probabilistic reality with no certainty, everything relative with no firm truths.

And, upon that we can lay some of the responsibility for the horrors and tragedies of the 20th Century because that has created the attitude that truth is different for each person and each case, that it is what each individual perceives it to be -- that there is no objective reality, only the subjective reality as perceived by each individual.

The great damage that such thinking does is the license that it gives.
It gives license to create, choose, decide upon one's own "reality"
and then act accordingly. Such thinking ultimately gives us war,
rapine, holocausts.