The Evaporation of Common Sense

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Abstract

Common sense left the human mind a hundred years ago.
It was forced out by relativity theory. This wildly imaginative
work of fiction displaced all the logic humankind had labored
so long to establish. People loved it. They were set free of the
constraints of disciplined thought. But today we have a problem:
relativity and all it has sprouted has taken us down a blind alley.

Truth can be spoken in few words; lies require volumes.

This is not the typical paper criticizing Einstein. This is about the salesmen who surrounded
him. H.A. Lorentz was the greatest of these.¹

I’m not exactly sure what caused the sudden smackdown of common sense. Why were these
imaginings of Einstein’s accepted as ultimate truth? What was the catalyst that provided the
transmutation to surrealism? Knowledge painstakingly acquired over five millennia briskly
swept aside as if it never existed.

Is relativity physics’ version of existentialism? This philosophical movement was sweeping
theology, literature, and art. It arose primarily from a general malaise over the fact that the moral,
ethical, political, and legal standards of civilization were powerless in preventing destruction of
life and property. Is it reasonable to expect that physics could not be affected by what was going on in its ambient intellectual environment? We have to project ourselves historically into the early twentieth century to see a world weary of absolutes. Absolutes had proven worthless. Europe woke up one morning and found itself flattened to the ground. People needed another reality, and the patent clerk in Bern provided it. The salesmen Lorentz and Eddington went to work and delivered some of the best sales pitches of all time.

I remember as a boy the fever of relativity. It was even a topic of discussion among schoolyard thugs. And when Einstein died on April 19, 1955, even they were sad.

But what did the thirty years that shook physics do? It created what reminds me of Arthur Rimbaud’s “Le Bateau Ivre”. Rimbaud’s boat has no compass heading and is at the mercy of the winds and the waves on the high seas. That’s where physics is today.

We have found out the hard way that imagination cannot serve as the basis for science. There is a call today for a return to nineteenth-century physics, that we should start over. Camelot in the sky has collapsed.

In a recent paper, physicists ask why students can no longer reason on the basis of common sense. Whose fault is that? Have we not told our students that common sense has no power? Have we not told them that common sense is useless for the obtainment of understanding in modern physics? We have raised these youngsters on mathematics, not physics. They believe whatever the math tells them.

Some physicists have condemned our science to the trash heap, while some have said physics is on an inevitable course to disaster. But the history of our science instills confidence in me that physics will set itself aright. It will take a lot of work on the part of a lot of people, but it will be done. Our century of congé will be perceived in the future as evidence that physicists bleed. Of course we have a hundred years of physics literature that is worthless.

References


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