

Boscovich's Principle: foundation of relativity, **by Roger J. Anderton**

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At the Swedish Council for Planning and Coordination of Research's organized annual workshop held in May 1989, a small talk was given on Boscovich's theory.

Otto E Rossler informs us:

"Boscovich is already known as one of the forerunners of Einstein (and Leibniz) in the discovery of relativistic covariance." [1]

i.e. Boscovich's theory is a relativity theory, and as dealt with in the previous article according to Bertrand Russell it is the completed version of Leibniz's theory.

Rossler then tries to downplay Boscovich and says:

"However, the fact that Boscovich was unaware of the motion-independence of the speed of light necessarily diminished the impact of his impact that the state of motion of an observer relative to his world constitutes a primary reality." [1]

Well that is what Rossler thinks. As dealt with in my previous article both Boscovich's relativity theory and Einstein's relativity theory work as mathematical descriptions of physical reality. [2] The fact that Rossler (and others) do not realise this fact about relativity, means they neglect part of the picture of relativity; and do not hence fully understand that relativity. But we get to the root cause of why Boscovich gets neglected; many relativists are under the false impression that there is only Einstein's relativity that works.

After pointing out that Boscovich is ignored by the scientific community on relativity, Rossler then points out Boscovich is ignored on another issue. Rossler says of the second discovery of Boscovich:

“No similar qualification [i.e. no reason like the reason for ignoring Boscovich’s first discovery] appears to be necessary when it comes to the second discovery [of Boscovich] in the present context, a discovery which appears thus far to have gone unnoticed by the scientific community.” [1]

i.e. Rossler is telling us there is no reason why Boscovich’s second discovery should be ignored, but the scientific community ‘is’ ignoring it. In actual fact as pointed out in my previous article; [3] it is only the scientific community in the Western Bloc (that tends to) ignore Boscovich’s theory; while the scientific community in the Eastern Bloc are well aware of Boscovich’s theory and hold Symposiums on the subject. The Symposiums by the Eastern Bloc, the Western Bloc tend to ignore.

Now onto the issue of what was the second discovery of Boscovich; Rossler informs us:

“[Boscovich] was the first physicist to apply Newton’s theory to the microscopic realm. He founded theoretical chemistry by giving the first potential function for an [chemical] atom.” [1]

This is quite a big discovery to ignore by the Western Bloc scientific community – theoretical chemistry starts with Boscovich.

Anyway, Rossler continues:

“This was apparently the source of his insight that, contrary to appearances, matter (and the world) cannot be rigid but must be more malleable than meets the eye. At any rate, he proposed a new general principle stating that the world must be described relative to an observer.”

“Specifically, Boscovich claimed that the observer can never observe the world as it is – he can only describe the interface (or difference) between himself and the world.”

That’s quite a big insight; in my way of speaking I would say – appearances can be deceiving. What we perceive through our senses is an illusion, and at a deeper level there is a hidden reality, and as per my philosophic dedication to the Pythagorean point-of-view I say that underlying reality is mathematical. (As per the Pythagorean philosophy – the universe is mathematical.)

Rossler continues:

“One consequence of this principle is that a state of external motion of the observer relative to the world is equivalent to a state of motion of the whole world relative to a stationary observer. This insight forms the basis of both Einstein’s special and general theories of relativity.” [1]

That is the Principle of Relativity clearly stated, and it comes from Boscovich’s theory, and Einstein’s theories are based upon that foundation.

The scientific community that ignores Boscovich’s theory ignores the foundation upon which relativity theory is built. If the foundation of a theory is ignored, little wonder the theory is not properly understood by its followers; in this case the relativists- who are unaware of the deeper levels of the theoretical tradition from which they work.

Reference

[1] Boscovich Covariance, Otto E. Rossler, Beyond Belief, 1991, ISBN 0-8493-4291-0, p 65- 87

[2] <http://www.wbabin.net/science/anderton9.pdf>

[3] <http://www.wbabin.net/science/anderton12.pdf>

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