

# Leibniz or Newton? That is the Question

### Cusack Paul TE\*

Associate Professor, Department of Mathematics, University of New Brunswxik, Fredericton, NB Canada

# ABSTRACT

In this brief paper, we consider whether Newton knew of the ancient Babylonian and Egyptian Mathematical Physics as determined by a review of their works. It appears that Newton did not know of it; Leibniz may have. Or He may have discovered it again on his own. As science progresses, we learn who was on the right track. In this case, it was Leibniz, not Newton.

Keywords: Leibnitz; Newton; Ancient mathematical physics; Astrotheology

#### INTRODUCTION

As I continue to question what European's knew of Ancient Mathematical Physics, I've discovered that Leibnitz was much closer to the truth of Mathematical Physics since Astrothoelogy than was Newton. In fact, Newton was wrong about several key questions. In Newton's notes, he had what are called the forty-five headings. They included matter, place, time, and motion proceeding to the cosmic order. Or put in other terms: Mass, space, time and energy (TE=PE+KE=1.5Mc^2 s=v=a). I don't think Newton knew that the cosmic order was y=y' or the function equals its derivative. (Darwin interestingly said, "Give me time and order, and I'll give you design)

Was the universe continuous or discrete? Newton was an atomist while Leibniz was a compromiser. The truth is that the universe exists where the continuous meets the discrete. I've published a paper on that already. Newton "weighed the virtues of the two systems [1]. Although he never appeared to reach a final verdict, it is clear that he inclined toward atomism." Descartes may have introduced him to the mechanical philosophy, but Newton quickly transferred his allegiance to atropinism [1].

Newton did not know about Linear Algebra. Linear algebra was said to have been invented by Leibniz. Linear algebra is at the heart and is the best tool we have to express the mathematical universe. Newton got his idea of space from Sameul Clark who was a mutual friend with Leibnitz. Descartes believed space was continuous. If you know the cross-vector product, you know that space is proportional to sine theta – a continuous function. Leibnitz believed that each was right in what they asserted, and that the material world was both a continuum and composed of atomic units [2]. So,

- y=y'
- E=M
- Dot product=Cross product

- sin =cos
- F=P
- Ma=Mv
- v=a

Newton's calculus was proved by geometry whereas Leibnitz 'was based on analytic geometry. Understanding how to take a derivative and integral are essential components of Astrotheology. I suspect that the ancient mathematicians knew about Calculus o Analysis as it was called.

Newton reportedly, did not come up with the formula F=Ma. That was put down by Leonard Euler. Leibnitz had both momentum (P=Mv) and force(F=Ma) in his physics. Leibnitz should have realized that the Momentum is the function, and the force is tits derivative is according to Astrotheology.

Leibniz maintained that matter was nothing more than the receptive capacity of things, or their 'passive power' as he called it. Matter was just the capacity to slow things down, and to be accelerated rather than penetrated [2]. This think is along the lines of P=Mv and F=Ma. If Leibnitz that the derivate of sine was cosine, then he knew Astrotheology. If he knew that the cross-vector product of Energy and time was space and is the sine function, then space is continuous. If he knew that the dot scalar product was equal to the vector product, he knew that the continuous equals the discrete. I think he knew it.

Newton did not believe in such a thing as the "Ether" Leibniz did. Leibniz suggested that space was filled with an ether of extremely fine particles [2]. It turns out Leibnitz was correct where Newton was wrong. The main difference between an Einsteinian and a Newtonian account of space is that the former gives it a complex structure as contrasted with the homogeneity of Newtonian space. Leinitz's position was not a thing capable of having any structure at all [3]. Descartes was strongly

\*Correspondence to: Cusack Paul TE Associate Professor, Department of Mathematics, University of New Brunswxik, Fredericton, NB Canada, E-mail: st-michael@hotmail.com

**Received:** 03-Feb-2022, Manuscript No. ME-22-20992; **Editor assigned:** 06-Feb-2022, Pre QC No: ME-22-20992(PQ); **Reviewed:** 22-Feb-2022, QC No ME-22-20992; **Revised:** 28-Feb-2022, Manuscript No: ME-22-20992 (R); **Published:** 09-Mar-2022, DOI:10.35248/1314-3344.22.12.152 **Citation:** Paul CTE (2022). Leibniz or Newton? That is the Question. Mathe Eter 12:152.

**Copyright:** © 2022. Paul CTE. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

#### Cusack Paul TE.

inclined toward extreme mechanism, but he baulked at including reason and consciousness within the mechanist model. Leibnitz criticized him for wanting to eat his cake and have it [2].

Newton was never merely an empirical scientist, however. In his own eyes, he was a philosopher, intent on understanding the nature of things in the fullest sense of the phrase [1].

## CONCLUSION

With the never-ending progress of science, we see that that Newton was mostly wrong, and Leibniz was mostly right about mathematical

physics. Interesting that they were philosophers first and scientists second.

#### REFERENCES

- Westfall RS, Never at Rest A Biography of Isaac Newton. Cambridge UP 1980.
- 2. Ross G, MacDonald- Leibnitz Oxford UP. 1984.
- 3. Crowther JG, Six Great Scientists. Barnes & Noble Books. USA.1995.