

**PROLEGOMENON TO A
NEW COPERNICAN
REVOLUTION**

A NEW SCIENCE

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PLACE AT THE CENTRE OF THE
UNIVERSE AS A PRIVILEGED
KNOWER***

MAN IS DECENTRED

BY

COLIN LESLIE DEAN

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There have been two major decentring in the history of human thought. Copernicus and Freud. Copernicus took the earth from its place at the center of the universe- in other words he decentred the earth. Freud similarly took mans consciousness from the center of his experience – he decentred man. In other words Freud destroyed the belief that man can have an understanding of himself solely via his consciousness. Freud’s views of the unconscious decentred man from his place as an autonomous free thinking subject at the center of his world. A third decentring has now occurred. The situation is now that man has been decentred this time from his place as the privileged knower of the universe. **MAN HAS LOST HIS PLACE AS THE CENTRAL REFERENCE POINT FOR THE UNDERSTANDING OF THE UNIVERSE.** This because the very medium through which man uses to understand the universe i.e. language in fact falsifies the universe. Thus man loses his ability to be a privileged knower of the universe. With the inability of language to capture the totality of the known about the universe man ends up without any intellectual reference points and is thus decentred from his privilege place as the interpreter the universe- he is decentred from the universe. Man cannot know the universe as the language he uses to understand the universe at his previous centre only falsifies it. Mans language is not able to capture the totality of the known about the universe.

For thousands of years man has thought that his language can unlock the secrets of the universe. But this is just blind arrogance in his belief of his own creation i.e. language as being a privileged medium through which to know the universe. Man can not know the universe as his language used to know it only falsifies the universe. This results in the death of man i.e. the death of asserting a privileged observer of the universe. All we have is an endless free play of words trying to capture the universe but all these words are man's own creation which in fact falsifies the universe. WITH THE DECENTRING OF MAN FROM THE UNIVERSE WE HAVE NO GUARANTEED FACTS OR INTERPRETATIONS WHICH ARE AUTHORITATIVE SINCE THE WORDS WE USE FOR THESE FACTS OR INTERPRETATIONS ONLY FALSIFY THE REFERENTS. The universe is now seen as being that which is produced by man via his culturally arbitrary conventional systems of signs i.e. language. What arrogance to think that this constructed human system is a privileged medium to know the universe? As if the totality of all knowledge about the universe is captured in our puny human words. A new science is called for where by we leave behind our language and concepts and embark upon a new way of seeing the universe. Operationalism was one such way of knowing without the use of language as such. Mysticism was another . It is time for a new science

The very words physicists use to describe reality constrains their knowledge of it and scientists in every field will one day encounter this barrier to human understanding”¹

Now on the point of an object being both a particle and a wave Zajak notes that “we are limited by our language to lists of words much as our worldly experiences limit the concepts those words bring to mind.”² With this in mind Zajak points out that we naively apply to the micro world concepts which only have applicability in the macro world. Electrons don’t behave like mini billiard balls and light does not behave like scaled down sea waves. As Zajak notes “*particles and waves are macroscopic concepts which gradually lose their relevance as we approach the submicroscopic domain.*”³ Thus with regard to the ontological nature of the world the situation seems to be as O’Hear notes “ontology here would be seen as determined by the demands of an area of discourse, rather than by any feeling that human recognitional powers and abilities should determine the limits of our language.”⁴ In this regard the logic which is generated by the

¹ A. Wick, *The Infamous Boundary*, Birkhauser Berlin, 1995, p.33.

² H.Zajak, *Optics*, Addison Wesley Publishing Company, New York., P. 449

³ *ibid*, p.450.

⁴ A.O’Hear, *What is Philkosophy*, Penguin, 1991, p.51.

use of the logical constants of a natural language such as ‘or’, ‘if’, ‘not’, ‘and’, etc may not be adequate enough for the natural language to interpret or understand the ontological nature of the physical world. Thus concepts which are contradictions in terms such as an object being a ‘wave-particle’ or such mathematical ideas as ‘completed infinities’ reach the limits of our logic because they start violating our logical laws. In other words the nature of the world may transcend the limits and ability of language thus logic to characterize.

Quine argued that science had rejected the notion of the object and regarded it as a myth. Physical objects are as mythical as the gods of Homer. As Quine notes “...physical objects are conceptually imported into the situation as convenient intermediaries-not by definition of terms of experience, but simply as irreducible posits comparable, epistemologically, to the gods of Homer.”⁵

Now relativity physics through the assigning of properties to matter i.e. objects sees these properties as being due to the object’s relation with other

⁵ W.V. O,Quine, From a Logical Point of View, Harvard University Press, Massachusetts.

1953, p.44.

objects not so much as intrinsic to the object or constituting its essence. In this regard science denies that objects have sui-generis determinate, necessary, and immutable properties or essence. On this point M. Born argues “the theory of relativity...has never abandoned all attempts to assign properties to matter...But often a measurable quantity is not a property of a thing, but a property of its relation to other things...Most measurements in physics are not directly concerned with the things which interest us but with some kind of projection, the word taken in the widest possible sense”. Commenting on these findings Marcuse states that “objects continue to persist only as ‘convenient intermediaries’ as obsolescent ‘cultural posits.’”⁶

“The very words physicists use to describe reality constrain their knowledge of it and scientists in every field will one day encounter this barrier to human understanding.”⁷

Bohr said “ the role of theory is to predict what we see on the dials of our apparatus they say if the predictions are accurate the theory is god

⁶ Marcuse.H, (1992) One Dimensional Man, Beacon Press, Boston. P.149.

⁷ A. Wick, *The Infamous Boundary*, Birkhauser, Berlin, 1995 p.39.

Answering these other questions about what is really going on -is a meaningless exercise.”⁸

“ [operationalism]To avoid the imprecision’s of ordinary speech [Bridgman] identified the meaning of a concept in terms of the set of operations used to measure it .. He considered the difference between laboratory physics and the cosmology of general relativity to be the difference between science and nonscience.”⁹

“Einstein’s famous rejection of the concept of absolute simultaneity on the grounds that the simultaneity of events is always relative to the frame of reference of the observer, who is assessing it, is operationalism in spirit.”¹⁰

“... for Saussure the signifiers which make up a language refer only to one another and interact with one another but do not figure forth a world.”¹¹.

Saussure’s thinking stressed the way language is arbitrary, relational and constructive and this way of thinking about language greatly influenced the structuralists because it gave them a model of a system which is self-

⁸ V, Stenger *The unconscious Quantum*, Prometheus books, 1995, p 10.

⁹ A. Bullock & R.B. Woodings Bridgman, Percy Williams in “*The Fontana Dictionary of Modern Thinkers*”, Fontana, 1992, p.103

¹⁰ A. Bullock & O Stallybrass & S. Trombley, “Operationalism in *The Fontana Dictionary of Modern Thought*, Fontana, 1988, p.609

¹¹ . P, Barry, *Beginning theory*, Manchester university press, 2002 p 113.

contained in which individual items relate to other items and thus create larger structures.”¹²

“... signs float free of what they designate, meanings are fluid and subject to constant slippage”¹³

“The post-structuralists maintains that the consequences of this belief are that we enter a universe of radical uncertainty since we can have no access to any fixed landmark which is beyond linguistic processing and hence no certain standard by which to measure anything.”¹⁴

“In the resulting universe there are no absolutes or fixed points so that the universe we live in is ‘decentred or inherently relativistic.’”¹⁵

Modern theory takes this idea of Saussure and extends it by coupling it with the idea that because we can only know the world through language then language does not reflect the world but constructs it

¹² Ibid., p. 44.

¹³ *ibid.*, p.64.

¹⁴ P, Barry, *Beginning theory*, Manchester university press, 2002. p. 61.

¹⁵ *ibid.*, p, 67.

“The very words physicists use to describe reality constrain their knowledge of it and scientists in every field will one day encounter this barrier to human understanding.”¹⁶

As Zajak notes *“particles and waves are macroscopic concepts which gradually lose their relevance as we approach the submicroscopic domain.”*¹⁷

To some Buddhists “... logic and meaning, with its inherent duality, is a property of thought and language but not the actual world”¹⁸

“... all our knowledge is what a Taoist would call conventional knowledge, because we do not feel that we know anything unless we represent it to ourselves in words, or in some system of conventional signs as the notation of mathematics...”¹⁹

“Such knowledge is called conventional because it is a matter of agreement as to the codes of communication. Just as people speaking the same

¹⁶ A. Wick, *The Infamous Boundary*, Birkhauser, Berlin, 1995 p.39.

¹⁷ *ibid*, p.450.

¹⁸ A. Watts, *The Way of Zen*, Arkana Penguin Books, 1990, p.93.

¹⁹ *ibid*, p.24

language have tacit agreement as to what words shall stand for what things...”²⁰

“Zen is extracting people from the tangle in which they find themselves from confusing words and ideas with reality.”²¹

Lao Tzu “ Tao can be talked about but not the Eternal Tao / Names can be named but not the Eternal name”²²

“So long as the conscious intellect is frantically trying to clutch the world in its net of abstractions and to insist that life be bound and fitted to its rigid categories the mood of Taoism will remain incomprehensible and the intellect will wear itself out.”²³

An example of words falsifying reality, how can I, knowing, say, the exact physical properties of a cannon, calculate the balls trajectory with a tremendous amount of accuracy using simple physics?

But words falsify the referent. A ball is a complex thing atomically metallurgically and physically

For one thing it has mass

but science don't know what mass is

yes $e = mc^2$

²⁰ A, Watts, *The Way of Zen*, Arkana Penguin Books, 1990, pp24-25.

²¹ A, Watts, *The Way of Zen*, Arkana Penguin Books, 1990, p.187.

²² C, H, Wu *Tao The Ching*, Shambala 1990, P.1.

²³ A, Watts, *The Way of Zen*, Arkana Penguin Books, 1990, p.39.

but that only makes it as unknown as mass

if you don't know what mass is

you don't even come close to capturing the totality of the referent

So mathematicians are using math's to calculate the balls paths based on its mass and they don't know mass. Also is a cannon ball a particle or a wave de broglie has proved all mass has a wave function λ i.e. $\lambda = h/mv$, where λ is wavelength, h is Planck's constant, m is the mass of a particle, moving at a velocity v. de Broglie suggested that particles can exhibit properties of waves. But Zajak says particle and waves loose their relevance. Thus the mathematician knows completely nothing about the referent "cannon ball"-even though he does calculate its path.

From the **Ptolemy**. model of the universe they could calculate events but the model was wrong . Just because you can calculate its trajectory don't mean you know anything about the referent i.e. tell us what mass is then tell us what the subatomic particles are then tell us how at all behaves in a different acceleration frame of reference on and on and on and the word cannon ball will never capture the totality of the referent

Thus the history of science is the history of words falsifying reality. The theories of 100 years ago are mostly fictions or myths now. And in a 100 years time the theories will be myths as well. Words cannot capture the totality of reality as the history of science shows. Because of the inability of language to capture reality and the fact that it in fact falsifies it, man is decentred from his privileged place at the centre of the universe as a privileged knower of the universe. This realization and decentring means that science needs to reinvent itself and find more appropriate ways of seeing the universe. We have a new Copernican revolution; we have the dawn of a new science.

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