

## A CRITICAL EPOCHAL REVIEW OF PHILOSOPHICAL MATERIALISM

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### **Abstract**

The sceptical and empirical doubts raised on the non-existence of metaphysical and abstract realities is a serious concern that question if existence is not a composition of material and spiritual realities. With this in mind, this work titled “A Critical Epochal Review of Philosophical Materialism,” identifies the place of materialism in various epochs. Is reality a compartment of matter alone? If there are "things" which are not based on physical processes, they are said to be the result of imagination or wishful thinking, can materialism justify this? The mind cannot be said to be a physical entity or matter. How then can Materialism justify the thought of reductionism of reality to matter? These problems were tackled through an exposition of different thinkers on materialism and then the evident weaknesses in their thought which by implication is against the tenets of idealism and also the objective understanding of the reality as encompassing matter and ideas. Materialism is a narrow or more limited form of naturalism in that it considers "nature" and "the physical world" to be one and the same. Most men are occupied most of the time with physical things. The materialists are impressed with the stability and permanence of these physical things and their necessity as a basis for life. For this reason it is easy to believe that the material things are the real things of life and that nonmaterial things depend upon the physical. Although materialism did not just grow out of the blues as it spanned years for such an argument to come into limelight. There exists therefore the need for a paper of this kind to examine the place of materialism without undermining the abstract aspect. Finally, given the various arguments posed forth by scholars in this paper, materialism can still be said to be lacking in trying to account absolutely for reality.

**KEYWORD:** Materialism, Mechanistic, Dialectical.

### **INTRODUCTION**

The achievements of humanity thus far can be understood through man’s attachment and utility of curiosity which triggers the epistemic nature of his personality. Despite the large number of philosophical schools and the subtle nuances between many, all philosophies are said to fall into one of the two primary categories, defined in contrast to each other idealism

and materialism. The basic proposition of these two categories pertains to the nature of reality the primary distinction between them is the way they answer two fundamental questions: What does reality consist of? And how does it originate? This paper therefore tries to explain and expatiate upon the various thoughts of scholars on materialism which centers on what the universe can be described or summarized into as matter. It is emphatic to note that these disagreements journeyed from era to era, thereby creating rooms for epochal justification of thoughts by thinkers. But important it is to bring to mind a clarification of term for elaborate understanding of the subject matter.

## **UNDERSTANDING MATERIALISM**

Materialism is a form of philosophical monism which holds matter to be the fundamental substance in nature, and all things, including mental states and consciousness, are results of material interactions. According to philosophical materialism, mind and consciousness are by-products or epiphenomena of material processes (such as the biochemistry of the human brain and nervous system), without which they cannot exist (Novack, 1979: 20). This concept directly contrasts with idealism, where mind and consciousness are first-order realities to which matter is subject and material interactions are secondary. There are some philosophies which are contradictory to materialism they include: Idealism, pluralism, dualism, panpsychism and other kinds of monism.

Materialism belongs to the class of monist ontology, and is thus different from ontological theories based on dualism or pluralism (Edwards, 1972: 4). For singular explanations of the phenomenal reality, materialism would be in contrast to idealism, neutral monism, and spiritualism. It can also contrast with phenomenalism, vitalism, and dual-aspect monism. Its materiality can, in some ways, be linked to the concept of determinism, as espoused by Enlightenment thinkers.

## **TYPES OF MATERIALISM**

There are two major types of materialism: Mechanistic and Dialectical Materialism.

### **MECHANISTIC MATERIALISM**

The term materialism may be defined in various ways: as the view that there is nothing in the world except matter; as the theory that extended, self-existent atoms of matter in motion are the constituent elements of the universe, and that mind and consciousness including all

psychical processes are mere modes of such matter and are reducible to the physical elements; and as the doctrine that the universe can be interpreted without residue in terms of the physical sciences (Thomson, 1981:18). These definitions, however, tend to represent the more traditional forms of materialism. In recent times the doctrine may be expressed in terms of "energism," which reduces everything to some form of energy, or as a form of "positivism," which emphasizes the positive sciences and disclaims concern regarding the nature of reality. It is more likely, however, to take the form of mechanism or mechanistic materialism, and it is from this point of view that we consider it (Robert, 1970: 5). While modern materialists do not find it necessary to deny the "self," they do insist that a physical substratum underlies all mental phenomena and that the self does not exist prior to experience. The self is neither an entity nor an autonomous thing. It is socially created, and it can be understood only in relation to the environment. For the mechanistic materialist, all changes in the world, from the atom to man, are strictly determined. There is a complete and closed causal series. This causal series is to be explained in terms of the natural sciences alone, and not as the expression of purpose.

Mechanistic materialism is the doctrine that the world is governed by natural laws which may be described in mathematical terms when the necessary data are available. It is that type of metaphysics which enlarges the concept machine and stresses the mechanical nature of all processes, organic as well as inorganic. If it does not reduce all processes to the terms of physics and chemistry, it does claim that all phenomena are subject to the same methods of explanation. That is, the concepts mechanism, determinism, and natural law have universal application. The only world which men know or can know is the one that reaches them through the physical sense organs.

### **DIALECTICAL MATERIALISM**

Dialectical materialism has little in common with the mechanistic materialism which we have just considered. It is an approach from the point of view of history and politics rather than from objective science, although it holds science in high esteem? Materialism means that matter, nature, or the observable world is accepted as real in its own right. Dialectical materialism rejects the primacy of mind, since mind is not regarded as an independent and spontaneous activity in the world. It also rejects all dualisms of man and nature, as well as all forms of supernaturalism. Material forces are determinative in society and give the clue to evolutionary development, as well as to all phenomena — inorganic, organic, and human.

Dialectical materialism is a physical realism which is sometimes spoken of as "historical materialism" and as "economic determinism." The decisive factor in historical change and in human society is the production and reproduction of life in its material aspects. The first need is to live and therefore to care for the necessities of life. Thus the mode of production at any particular stage of history is of prime importance (Rigby, 2007:66). Dialectic materialism, as we have pointed out, is not a mechanistic or a completely deterministic philosophy. Man can influence his own life and history, but only within the framework of the materials at hand. Life comes from the inorganic, and man is a part of nature. Man and animals differ in degree rather than in kind. Man is able to make nature serve his ends, however, Man alone can create the conditions in which he lives and, in a sense, help to make his own history (Ollman and Tony, 2008: 36). The springs of action reside not in ideas, nor in men's desires, nor in their brains, but primarily in the processes of production and the class relations in society.

## **MATERIALISM IN DIFFERENT EPOCHES**

### **ANCIENT TIMES**

Ancient Greek atomists like Leucippus, Democritus and Epicurus prefigure later materialists. The Latin poem *De Rerum Natura* by Lucretius (99 – c. 55 BC) reflects the mechanistic philosophy of Democritus and Epicurus. According to this view, all that exists is matter and void, and all phenomena result from different motions and conglomerations of base material particles called atoms (Lucretius, 2021:15). *De Rerum Natura* provides mechanistic explanations for phenomena such as erosion, evaporation, wind, and sound. Famous principles like "nothing can touch body but body" first appeared in the works of Lucretius. Democritus and Epicurus, however, did not hold to a monist ontology since they held to the ontological separation of matter and space (i.e. space being "another kind" of being) indicating that the definition of materialism is wider than the given scope of this article (2021:36).

### **MODERN TIMES**

Modern philosophical materialists extend the definition of other scientifically observable entities such as energy, forces and the curvature of space; however, philosophers such as Mary Midgley suggest that the concept of "matter" is elusive and poorly defined (Midgley, 1990: 21). She understood matter has not just a material thing has scholars before her time viewed it but as a encompassing substance which equally moves the mind. During the 19th

century, Karl Marx and Friedrich Engels extended the concept of materialism to elaborate a materialist conception of history centered on the roughly empirical world of human activity (practice, including labor) and the institutions created, reproduced or destroyed by that activity. They also developed dialectical materialism, by taking Hegelian dialectics, stripping them of their idealist aspects, and fusing them with materialism (Marx, 1873: 62).

The German atheist anthropologist Ludwig Feuerbach would signal a new turn in materialism through his book *The Essence of Christianity*, which presented a humanist account of religion as the outward projection of man's inward nature (1841:23). Feuerbach introduced anthropological materialism, a version of materialism that views materialist anthropology as the universal science (Nicholas 1990:57). Feuerbach's variety of materialism would go on to heavily influence Karl Marx, who in the late 19th century elaborated the concept of historical materialism, the basis for what Marx and Friedrich Engels outlined as scientific socialism:

The materialist conception of history starts from the proposition that the production of the means to support human life and, next to production, the exchange of things produced, is the basis of all social structure; that in every society that has appeared in history, the manner in which wealth is distributed and society divided into classes or orders is dependent upon what is produced, how it is produced, and how the products are exchanged. From this point of view, the final causes of all social changes and political revolutions are to be sought, not in men's brains, not in men's better insights into eternal truth and justice, but in changes in the modes of production and exchange. They are to be sought, not in the philosophy, but in the economics of each particular epoch.

Through his *Dialectics of Nature*, Engels later developed a "materialist dialectic" philosophy of nature; a worldview that would be given the title dialectical materialism by Georgi Plekhanov, the father of Russian Marxism (1891: 20). Although in early 20th-century Russian philosophy, Vladimir Lenin further developed dialectical materialism in his book *Materialism and Empirio-criticism*, which connected the political conceptions put forth by his opponents to their anti-materialist philosophies (1909: 44). Here dialectical materialism was viewed as having a strong social and political connotation.

## **CONTEMPORARY TIMES**

Contemporary analytic philosophers (e.g. Daniel Dennett, Willard Van Orman Quine, Donald Davidson, and Jerry Fodor) operate within a broadly physicalist or scientific materialist

framework, producing rival accounts of how best to accommodate the mind, including functionalism, anomalous monism, identity theory, and so on (Ramsey, 2003: 20).

Scientific materialism is often synonymous with, and has typically been described as being, a reductive materialism. In the early 21st century, Paul and Patricia Churchland advocated a radically contrasting position (at least, in regards to certain hypotheses): eliminative materialism (1981:67-90). Eliminative materialism holds that some mental phenomena simply do not exist at all, and that talk of those mental phenomena reflects a totally spurious "folk psychology" and introspection illusion. A materialist of this variety might believe that a concept like "belief" simply has no basis in fact (e.g. the way folk science speaks of demon-caused illnesses). With reductive materialism being at one end of a continuum (our theories will reduce to facts) and eliminative materialism on the other (certain theories will need to be eliminated in light of new facts), revisionary materialism is somewhere in the middle.

Contemporary continental philosopher Gilles Deleuze has attempted to rework and strengthen classical materialist ideas (Smith & Proteyi, 2015:14). Contemporary theorists such as Manuel DeLanda, working with this reinvigorated materialism, have come to be classified as new materialist in persuasion (Dolphijn & Tuin, 2013: 7). New materialism has now become its own specialized subfield of knowledge, with courses being offered on the topic at major universities, as well as numerous conferences, edited collections and monographs devoted to it.

Furthermore, it has been particularly instrumental in bringing theories of monist ontology and vitalism back into a critical theoretical fold dominated by poststructuralist theories of language and discourse (Bennett, 2010). A Scholar like Mel Y. Chen has critiqued this body of new materialist literature for its neglect in considering the materiality of race and gender in particular (Chen, 2012: 10). This became a foundation for Zoe Todd who queried the colonial orientation of the race for a "new" materialism (Todd, 2016:4). Watts in particular describes the tendency to regard matter as a subject of feminist or philosophical care as a tendency that is too invested in the reanimation of a Eurocentric tradition of inquiry at the expense of an Indigenous ethic of responsibility (Watt, 2013: 1). Other scholars, such as Helene Vosters, echo their concerns and have questioned whether there is anything particularly "new" about this so-called "new materialism," as Indigenous and other animist ontologies have attested to what might be called the "vibrancy of matter" for centuries (Schweitzer, 2014: 38). Other scholars such as Thomas Nail have critiqued "vitalist" versions of new materialism for its depoliticizing "flat ontology" and for being a historical in nature (2018: 36).

One challenge to the conventional concept of matter as tangible 'stuff' came with the rise of field physics in the 19th century. Relativity shows that matter and energy (including the spatially distributed energy of fields) are interchangeable. This enables the ontological view that energy is *prima materia* and matter is one of its forms. In contrast, the Standard Model of particle physics uses quantum field theory to describe all interactions. On this view it could be said that fields are *prima materia* and the energy is a property of the field. With the advent of quantum physics, some scientists believed the concept of matter had merely changed, while others believed the conventional position could no longer be maintained. For instance Werner Heisenberg said, "The ontology of materialism rested upon the illusion that the kind of existence, the direct 'actuality' of the world around us, can be extrapolated into the atomic range. This extrapolation, however, is impossible...atoms are not things" (1962: 3). The concept of matter has changed in response to new scientific discoveries. Thus materialism has no definite content independent of the particular theory of matter on which it is based. This Noam Chomsky supported when he explains that any property can be considered material, if one defines matter such that it has that property (2000: 39).

## **MATERIALISM AND PHYSICALISM**

Materialism is closely related to physicalism, the view that all that exists is ultimately physical. Philosophical physicalism has evolved from materialism with the theories of the physical sciences to incorporate more sophisticated notions of physicality than mere ordinary matter (e.g. spacetime, physical energies and forces, and dark matter). Thus, the term physicalism is preferred over materialism by some, while others use the terms as if they were synonymous. George Stack tried to distinguish between materialism and physicalism as such posited that:

In the twentieth century, physicalism has emerged out of positivism. Physicalism restricts meaningful statements to physical bodies or processes that are verifiable or in principle verifiable. It is an empirical hypothesis that is subject to revision and, hence, lacks the dogmatic stance of classical materialism. Herbert Feigl defended physicalism in the United States and consistently held that mental states are brain states and that mental terms have the same referent as physical terms. The twentieth century has witnessed many materialist theories of the mental, and much debate surrounding them (Stack, 1998: 171-172).

However, not all conceptions of physicalism are tied to verificationist theories of meaning or direct realist accounts of perception. Rather, physicalists believe that no "element of reality" is missing from the mathematical formalism of our best description of the world. "Materialist" physicalists also believe that the formalism describes fields of insentience. In other words, the intrinsic nature of the physical is non-experiential.

## EVALUATION

In the *Critique of Pure Reason*, Immanuel Kant argued against materialism in defending his transcendental idealism (as well as offering arguments against subjective idealism and mind-body dualism) (Kant, 1781: 345-352). However, Kant with his refutation of idealism argues that change and time require an enduring substrate. This translates into the fact that we can determine that there has been a change in the objects of our perception, not merely a change in our perceptions themselves, only by conceiving of what we perceive as successive states of enduring substances. Postmodern/poststructuralist thinkers also express skepticism about any all-encompassing metaphysical scheme. Mary Midgley argues that materialism is a self-refuting idea, at least in its eliminative materialist form (1990: 22). Some critics object to materialism as part of an overly skeptical, narrow or reductivist approach to theorizing, rather than to the ontological claim that matter is the only substance. Particle physicist John Polkinghorne objects to what he calls promissory materialism claims that materialistic science will eventually succeed in explaining phenomena it has not so far been able to explain. He prefers "dual-aspect monism" to materialism (2013: 22). Some scientific materialists have been criticized for failing to provide clear definitions for what constitutes matter, leaving the term materialism without any definite meaning. Noam Chomsky states that since the concept of matter may be affected by new scientific discoveries, as has happened in the past, scientific materialists are being dogmatic in assuming the opposite (2000: 55).

Rudolf Peierls, a physicist who played a major role in the Manhattan Project, rejected materialism: "The premise that you can describe in terms of physics the whole function of a human being ... including knowledge and consciousness, is untenable. There is still something missing" (2012: 23). In support, Erwin Schrödinger said, "Consciousness cannot be accounted for in physical terms; for consciousness is absolutely fundamental as it cannot be accounted for in terms of anything else" (2009: 334). Werner Heisenberg, who came up with the uncertainty principle, wrote, "The ontology of materialism rested upon the illusion that the kind of existence, the direct 'actuality' of the world around us, can be extrapolated into the atomic range. This extrapolation, however, is impossible ... Atoms are not things" (1962: 30).

Some 20th-century physicists (e.g., Eugene Wigner and Henry Stapp), as well as modern day physicists and science writers (e.g., Stephen Barr, Paul Davies, and John Gribbin) have argued that materialism is flawed due to certain recent scientific findings in physics, such as quantum mechanics and chaos theory. According to Gribbin and Davies (1991):

Then came our Quantum theory, which totally transformed our image of matter. The old assumption that the microscopic world of atoms was simply a scaled-down version of the everyday world had to be abandoned. Newton's deterministic machine was replaced by a shadowy and paradoxical conjunction of waves and particles, governed by the laws of chance, rather than the rigid rules of causality. An extension of the quantum theory goes beyond even this; it paints a picture in which solid matter dissolves away, to be replaced by weird excitations and vibrations of invisible field energy. Quantum physics undermines materialism because it reveals that matter has far less "substance" than we might believe. But another development goes even further by demolishing Newton's image of matter as inert lumps. This development is the theory of chaos, which has recently gained widespread attention (20).

The objections of Davies and Gribbin are shared by proponents of digital physics who view information rather than matter to be fundamental. This is supported by John Archibald Wheeler wrote, "all matter and all things physical are information-theoretic in origin and this is a participatory universe" (1990: 67). Their objections were also shared by some founders of quantum theory, such as Max Planck, who wrote:

As a man who has devoted his whole life to the most clear headed science, to the study of matter, I can tell you as a result of my research about atoms this much: There is no matter as such. All matter originates and exists only by virtue of a force which brings the particle of an atom to vibration and holds this most minute solar system of the atom together. We must assume behind this force the existence of a conscious and intelligent Mind. This Mind is the matrix of all matter (1994: 30).

Planck saying the Universe begins to look more like a great thought than like a great machine. The Mind no longer appears to be an accidental intruder into the realm of matter.

## **CONCLUSION**

To Buttress, it cannot be disputed that matter exists in reality right from the ancient to the contemporary times which adopted a scientific approach. But the problem remains to what extent all things in reality can be qualified into the principles of materialism. This took turns

in history while centering on diverse aspects of existence; the understanding from matter and void to substance and accidents and then down to hermeneutics of scientific empiricism. For the sciences all things are explained in terms of simple causation. One must merely accept the physical facts as they occur and as they are described by the natural sciences. But this is weakened by the fact that reality is obviously not adequately captured by materialism. As such, amidst the stand of the materialist over the years to justify reality with matter, reality transcends materialism although materialism is a part and parcel of reality.

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