

THE CONCEPT OF MATTER IN AWOLOWO'S PHILOSOPHY¹

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1. Introduction

Man's well-being and development is the central point of Awolowo's thought and philosophy. But man is made of both spirit and matter. Talking of human well-being and development, therefore, means that the spiritual element in man cannot be developed without improving on his physical conditions also. This alludes to another vital fact about him. Man is a being in the Cosmos or the universe. He lives in and is deeply rooted in it. This is an ontological fact we have to reckon with in any discourse on man.

So far, most of the studies about Awolowo have been concerned with the practical socio-political etc., domain of his philosophy, known as Awoism. The theoretical domain also exists and should be focused on.² As a step in this direction, this article examines the concept of matter in the thought system of Awolowo. The justification of this study is borne by the fact that Awolowo's so much discussed political philosophy, is based on his philosophy of nature, the knowledge of which becomes necessary if the understanding of Awoism itself is not to be a one-sided and shallow affair.³ But as Awolowo did not write and leave behind a systematic work on nature or the physical world, this article on matter is a construction from his various writings.

2. The Definition of Matter

The concept of matter is crucial to Awolowo's philosophy of nature. Through it, he gives a scientific explanation of the physical world. For Awolowo, matter is a reality; it is an entity which exists concretely, and can be observed empirically. Matter as a constituent of nature, i.e. the visible sphere of reality, is 'created in time' and spatially 'limited'.⁴ This explains why Awolowo does not explain it in absolutist terms in spite of its importance. In fact for an idealist like Awolowo, spirit is the fundamental entity of reality while matter is intrinsically related rather than opposed to it.⁵ Both the material and the spiritual elements combine together to constitute being, or, what is known as reality.

Now matter, as a principle of being and reality needs no further explanation. But it is not so with the material world. In the opinion of

Awolowo, it is necessary to give a scientific analysis of the composition and characteristics of the physical or material bodies since such analysis falls within the scope and function of his philosophy of matter.

3. Composition of the material World

The history of western philosophy shows how controversial views on the nature and properties of the physical bodies have been. (In the authority of Aristotle⁶, Empedocles, and not the Pythagoreans, was the first to establish the doctrine of the four elements, namely, fire, water, earth and air as the basic elements of the physical world.⁷ Since then, however, man's scientific perspective of the world in general and of the elements in particular, has changed and developed considerably.⁸ Even mass formerly considered as one of the essential properties of matter has ceased to be an indivisible, unchangeable and passive attribute and as one of the many variants of the wider categories of energy. We are now left with a scientific vision of the world whose basic elements are dynamic, evolutionary and developing.

It is in consonance with this new scientific outlook we should see Awolowo's view of the natural world generally, and of his concept of matter in particular. In *The Voice of Wisdom*, Awolowo defines matter as a synthesis or composition of atoms. The atoms are in turn composed of minuscule particles known as electrons, protons and neutrons. All material bodies or physical entities are composed of these atomic particles, and are, therefore the same in essence. But the difference and diversity in shapes and sizes of material objects in Nature is determined by the number and level of vibration and valency (i.e. combination, existing among the various atoms.

In essence, all physical objects or all matters are the same. Each and every one of them is composed of electrons, atoms, and molecules. What differentiates one physical object from another is the rate at which it vibrates; and which rate of vibration is in turn dependent on the number of electrons and protons together with neutrons contained in the atoms of each of the physical objects.⁹

Awolowo's concept of matter is evidently not the same with that of Leucippus and Democritus who regarded atoms as indivisible units — a static theory of matter which was shattered in the seventeenth century by the theory of electro-magnetic waves of Geyhussen Bohr. But, while it is one

thing to know the composition of physical matter, it is another thing to know what matter does and how it functions.

4. Matter and Dynamics

Awolowo's matter also displays an essential feature, dynamism and mutability; it is in process, change and motion.¹⁰ This is why it becomes easy for Awolowo to view the natural or physical world not just as empirical, but also in terms of growth and development. In *The Problems of Africa*, where Awolowo's views on dynamics are mostly to be found, he writes: 'It must be borne in mind that the world in which we live is governed by the law of change'.¹¹ He writes also: 'Nothing in the world is 'stagnant or static. Everything is developing all the time'.¹² Elsewhere Hume writes '... nature does not favour standstill'.¹³ Awolowo makes a distinction, however, between two types of change or motion. 'Change may be evolutionary' or revolutionary'.¹⁴ Evolutionary change, he thinks, is gradual and reformatory, while revolutionary change is often sudden and radical. It is his opinion that both types of change operate not only in the physical world, but also in the human society. Awolowo's preference is the linear, progressivist, but gradual and evolutionary change.¹⁵

But, how does Awolowo explain the mechanism of change and motion in material bodies?

Change in material and physical bodies is explained by Awolowo under dynamics, which is defined thus:

*Dynamics is the science which is concerned with the motions of bodies and the ways in which these motions are influenced.*¹⁶

It is important to note that Awolowo's dynamics is very much dependent and influenced by the theories and laws of Sir Isaac Newton. Before dwelling on these sources, however, let us examine, first, the Greek theory of motion since it gave way to the Newtonian theory.

In Greek physics, motion was either neglected completely (Parmenides) or treated as a principle of being, as when admitted by Heraclitus and Democritus. Aristotle, in his physics, did not consider motion as such as a problem since the world for him, was created finite, and is eternally in motion. When Aristotle, therefore, treated the problem of motion in the physical world, his concern and aim was to explain the change of position, i.e. the radical or violent change of body from one position to another. His focus was on locus, place, and position rather than the act of motion itself. As to

be expected, the solution he put forward was the theory of external force or impetus. To secure a change of place and location by natural objects, there must be a causal being — which may even be internal rather than external. 'Omne quod movetur ab alio movetur' — Everything that is moved is moved by something else.

Contrary to Greek physics, it is change in motion itself, and change of motion in relation to its force that modern physics focuses its attention on since the time of Newton. According to Isaac Newton, in *Philosophiae Naturalis Principia Mathematica* (1681), there are three fundamental laws that determine motion in nature. These are the following:

1. Everybody continues in its state of rest, or of uniform motion in straight (right) line, unless it is compelled to change that state by force impressed upon it.¹⁷
2. The change of motion is proportional to the motive force impressed; and is made in the direction of the right line in which that force is impressed.¹⁸
3. To every action there is always opposed an equal reaction, or the mutual actions of two bodies upon each other are always equal, and directed to contrary parts.¹⁹

It is the newtonian explanation of the law of Inertia, which was, actually first discovered by Galileo Galilei, and given its first modern formulation by Rene Descartes,²⁰ that appeals to Awolowo. Thus, he writes:

*Newton's law of Inertia states that every body perseveres in its state of rest or of moving informally in a straight line, except in so far as it is compelled by impressed forces to change its state.*²¹

The followings are the three elements constituting Awolowo's dynamics: force, chaos and contest.

(a) Force

For Awolowo, a 'body' in space and in time is a quantity of matter called 'mass'.²² For the motion of body, force is also fundamental and necessary. In this he agrees with Newton. But he differs when it comes to the explanation of the relationship between mass and force (causality). For Awolowo, emphasis is placed on the *raison d'être* of applied force or the cause of motion of bodies. For the force that is applied to mass or matter or body is not just fortuitous or caustic; it is applied on purpose, and for a definite and required purpose too! This contention is explained in *The People's Republic*:

*Now, when force is purposely applied to body mass, or matter in a state of rest, it sets the body in motion in the purposed direction. The greater the applied force, the faster the motion towards the required direction. If the body, mass or matter is already in motion, the applied force may bring it to purposed rest, or shift it from pursuing straight line to infinite towards a purposed direction. Again, the bigger the force, the bigger the effect.*²³

Awolowo continues:

*From the foregoing, three phenomena call for special attention. They are applied force, body mass, or matter and purposed direction or rest. Of these three, applied force is the dynamic, active, causality agent and purposed direction or purposed rest, the effect.*²⁴

That force is causative and that its application is significantly purposeful in Awolowo's physical theory is evident from the variant and multiple use of the word 'purpose'. In fact, it is mentioned and repeated seven times in the citations above! With this emphasis on the purposeful use of force Awolowo without any further doubts departs from the positivistic interpretation of Newtonian mechanics²⁵ and in a way develops an teleological interpretation of the physical world.

Evidently too, Awolowo's conception of dynamics changes and acquires a new dimension and focus at this point. It moves from the inorganic to the organic level of matter. According to Teilhard de Chardin, material development converges on its axis: it acquires an intensity, complexification (i.e. thought and reflection) in man.²⁶ In agreement with Teilhard, Awolowo declares categorically in his works that man is the only purposeful force or dynamics in Nature.

*...Man alone is the dynamic, active causative agent;... body, mass or matter is the recipient passive agent.*²⁷

Again:

*Man is the sole creative and purposeful dynamic in nature: everything else by comparison is in a state of inertia.*²⁸

If man is the sole force or dynamics of nature, an ontological question arises: Is man the same as pure matter, or an entity with a unique and peculiar nature? In answering this question, Awolowo differs from Marx. For Marx, man is a collocation of material particles, pure and simple. His rational or spiritual life (e.g. sensation, consciousness, thought, etc) which he admits, also, is only an epiphenomenon, i.e. a different manifestation of matter, which nevertheless remains material. Put differently, the 'mind' and 'spirit' are terms distinct from 'matter' because they are the most developed form of matter.²⁹

On the other hand, Awolowo subscribes to the Judaeo-Christian perspective of man, especially as contained in the Book of Genesis, chapter one, v. 26—28. So, man for him is not a purely material being or an empirical fact. He is a complex, physico-metaphysical entity i.e. material, rational and spiritual elements are combined together as one in him. In *Path to Nigerian Greatness*, he writes:

*Man is a manifestation of three phenomena. The first is the soul which is the indwelling God. The second is the subjective mind which is the seat of man's reasoning facility. The third is the objective mind which can see, hear touch and taste but cannot comprehend what it sees, hears, smells, touches and tastes, without the reasoning and interpretative aids of the subjective mind.*³⁰

Now, which part of man is the sole force or the purposeful dynamics in nature? Which part of man enables him to develop and rule the world as Monarch? This, in the view of Awolowo, is the soul of man, which is of the same nature and essence as God Himself. He writes about it thus:

*Man's soul being the same in quality as God Himself is invisible, intangible and imperceptible.*³¹

Awolowo describes how the soul, as a unique and spiritual force, functions in the body.

*By itself it does nothing directly save through the intervention of the subjective mind which in turn uses the objective mind — that is the body of man — as an instrument for data collection and the accomplishment of visible and tangible objects.*³²

(b) Chaos and Chance

Purpose is not the only phenomenon observable in nature. Awolowo noted that there is the state of devolution or disorder as well, represented by chaos and chance. 'What part does chance play in Awolowo's dynamics? This question is not made any easy to answer since Awolowo's cosmos generally exhibits rationality, regularity and pattern. One does not plant beans and get yam. 'Like causes always produce like effects.'³³ In this context, chaos is an abnormal phenomenon in the cosmos.

However, this dilemma is not new in history. The Greek philosophers were quite conversant with the problem of change. For the Ionian philosophers, chaos was the general state of their experience. Hence, for Empedocles, chance was the principle of evolution and development.³⁴ Plato and Aristotle were also aware of the problem, Plato dismissed it with a wave of the hand as non-consequential, while Aristotle thought differently. For him, (Tyche) hazard or luck, although an irrational and inexplicable natural phenomenon, is also a phenomenon that influences and determines natural and human events for good or for bad-like the rational laws of nature and arts.

Our reason for identifying chance as a category within Awolowo's dynamics is that it serves as an opposing force, an antithesis of some sort in the evolutionary path of nature. Our position is further supported by the fact that Awolowo, like Aristotle, is aware of this naturally disturbing phenomenon, and gives testimony to its presence in various ways. In *The Path to Nigerian Greatness*, he describes chance as 'unruly'. As he puts it, 'The force of nature are unruly'.³⁵ He gives a more vivid testimony elsewhere in *Thoughts on Nigerian Constitution*, where he says: 'The forces of nature are blind, violent, and destructive'.³⁶ In the realm of human society, Awolowo, speaks of the 'few men that belong to that race of nature's freak which will forever defy and falsify objective classification, estimation and forecast'.³⁷

The attitude of Awolowo to disorder and chaos or 'the unpredictable and uncontrollable vagaries of nature',³⁸ is dual. The first attitude is negative and reminiscent of Aristotle who observed that man is often fragile and weak and falls an unfortunate victim of the 'blind' forces of nature otherwise known as the 'acts of God'.³⁹ Truly, for Awolowo, the forces of nature do not just enslave man physically, but also do so mentally. This situation will remain, he thinks, for as long as man does not yet know and understand how to control and deal with them.⁴⁰

As an interim measure, however, Awolowo suggests caution in human planning and expectation, and moderation in life style. His second attitude is positive and moral. Man must always take a bold stand and resolve never to allow himself to be controlled by the blind forces of nature.⁴¹

*The forces of nature are unruly. But man is ordained (by God) to conquer, tame, and harness them for his own well being and happiness.*⁴²

This attitude on the part of Awolowo is based on what he considers the functional role and purpose of science and technology, namely, that they are to help promote human development, well-being and happiness on earth.⁴³

(c) Contest

The third element of Awolowo's dynamics is contest. Newton's third law of motion which states that for every positive action there is counter effect or reaction already implies that the forces of nature are in a state of contrast and opposition between them. Awolowo having admitted the fact of evolution, cannot but also recognise devolution and that, to a degree, progress and development in the physical nature, are brought about by the interaction between these two forces. But while the process of development is made possible through conflict, a negative attribute imported from Newtonian mechanics into Hegelian and Marxist dialectics, it is through the positive attributes of 'Contest' or 'Competition' among the prevailing forces of nature that the dynamics of Awolowo interpretes and explains development.

*Contest is indispensable to growth and to studier evolution. All the creatures in the world today, are what they are because they successfully met the incessant contests to which nature and their environment have challenged them.*⁴⁴

If according to Awolowo, this is the law of being and existence, one is not surprised that he hates conflict, aggression and violence and advocates peaceful, constitutional and democratic method of resolving issues and of attaining human well-being and progress in society.

5. Evaluation and Conclusion

This paper has analysed Awolowo's concept of matter. It has done so within the context of his philosophy of nature to which the concept of matter

itself is crucial and provides a key for understanding. Matter has been demonstrated by Awolowo as atomistic in composition, and dynamic, mutable and evolutionary in character. The complex nature of matter has been demonstrated by Awolowo's refusal to reduce matter to 'merely' pure matter' whose importance ceases at the inorganic level of reality. Matter is considered by Awolowo, also, at the organic, human and spiritual level. This is where his philosophy of matter has far reaching implications for his socio-political philosophy. This position is justified by Awolowo's claim that the laws which operate in the physical and material world obtain as well in the human world. Thus, he can advocate for development of man in the political society because he already held the notion of dynamics in the physical world. Also, that social and political transformation should be reformatory, peaceful, constitutional and based on democratic principles stems from the fact that Awolowo's view of physical change is evolutionary and gradualistic rather than, sudden and chaotic. That material development is not an end per se and that it should bring forth happiness and fulfilment to man in the polity, however, constitutes the ontological basis of his perspective and concept of matter.

On the other hand, one would have wished that Awolowo had developed his concept of matter in relations to the categories of space and time, and to me, a little bit more than he actually did. It is important to mention also Awolowo's lack of familiarity with current developments in the physical sciences. His dynamics is heavily dependent on newtonian physics as the foregoing analysis has shown. But, while Newton's *Principia Mathematica* (1687) was revolutionary in its days, the work does not constitute the basis and principle of contemporary mechanics. The mechanics learned today are those of Joseph Louis Lagrange, W.P. Hamilton, Albert Einstein and a host of other successors of Newton, instead of Newton himself. Science progresses everyday, and those developments are undoubtedly new when compared with the discovery of Newton. However, these defects are extrinsic and do not constitute a problem in themselves, neither have they prevented Awolowo from developing his views on 'matter'. Rather he has incorporated these harmoniously within the total scheme of his philosophy.

Notes and References

1. This article is an adaptation of a departmental seminar paper titled, *Awolowo's Philosophy of Nature* presented at the Department of Philosophy, Seminary of Ss. Peter and Paul, Ibadan on 13th January, 1989.

2. Cfr. F. Ogunmodede, 'Contemporary African Philosophy: Awoism' in *Bodija Journal*, Vol. 1, No. 1, pp. 54—63. See also Mr Oke: 'Awolowo's Metaphysics' in *Obafemi Awolowo: The End of An Era?* O. Oyediran et al. O.A.U. Press Ltd., 1988, p. 237.
3. Cfr. F. Ogunmodede, *Chief Obafemi Awolowo's Socio-political Philosophy*, Rome, 1986, p. 45.
4. Ibid.
5. As already explained, 'universal mind' or God is the first principle of reality for Awolowo, Cfr. *The People's Republic* Op. cit., p. 206.
6. Cfd. Aristotle, *Metaphysics* 984 a8 — 985 a31; Cfr also W.K.C. Guthrie, *History of Greek Philosophy*, Vol. 1 — II, Cambridge, 1962, p. 255f on the difficulties in determining priority between Empedocles and the Pythagoreans.
7. Empedocles also postulated an aesthetic doctrine that there exist four basic colours, white, yellow, black and red corresponding to four basic physical elements.
8. For a comprehensive treatment of the philosophical issues concerning classical mechanics, Cf. E. Nagel, *The Structure of Science*. (New York, 1961), Especially chapters 7 -- 12; Specific issues are well treated in C.D. Broad, *Mechanical Explanation and Its Alternatives* in PAS Vol. 19 (1919), pp. 86--124.
9. O. Awolowo, *The Voice of Wisdom*, Akure, Fagbamigbe Publishers, 1981, p. 24.
10. Awolowo used the three terms interchangeably.
11. O. Awolowo, *The Problems of Africa*, London: Macmillan Press, 1976, p. 7.
12. Ibid.
13. O. Awolowo, *The Voice of Wisdom*, pp. 140—141.
14. O. Awolowo, *The Problems of Africa*, p. 8.
15. It would have been contradictory and inconsistent for Awolowo to sustain a revolutionary change as a principle. Evolutionary or reformatory change is based in the ultimate analysis on constitutional and democratic principles.
16. O. Awolowo, *The Problems of Africa*, p. 53.
17. The first law of motion, paradoxically called the law of inertia or rest, is the key to Newtonian mechanics. It is expressed in the mathematical formula my where m stands for mass and v stands for velocity.
18. The second is usually expressed as $(F=ma)$ i.e. force equals mass multiplied by acceleration. But in the differential calculus which

Newton discovered, contemporaneously and independently of Leibnitz. Force is expressed as $(F=mdv/dt)$ i.e. force equals mass multiplied by rate of change of velocity with respect to time "being the definition of acceleration", "velocity with respect to itself is defined as the 'rate of change of position', with respect to time.

19. The third law is called the law of opposite effects; (positives and negatives) which are inherent in every natural activity. This has no mathematical formular.
20. The law of inertia was given its first modern formulation by Rene Descartes, *Principle of Philosophy* Penguin Books Ltd. 1968, Part II, Par. 39/10: 'any given piece of matter considered in itself tends to go on moving not in oblique path, but in straight lines'.
21. O. Awolowo, *Problems of Africa*, p. 53.
22. Ibid.
23. Ibid.
24. Ibid.
25. It is the presupposition of Guster Kirchhelf that using Newtonian second (and/or first) law, one can define mass and uniform rectilinear motion independently of force. Consequently, the law of motion and observation of bodies is no more in terms of cause (force) as effect (acceleration).
26. Cfr Teilhard de Chardin, *Phenomenon of Man* London: Collins Publishers 1959, Book Three, chapter one.
27. O. Awolowo, *The problems of Africa*, p. 53.
28. Ibid.
29. V. Lenin, *Materialis, and Empirico--Criticism*, New York: International Publisher, 1927, p. 207.
30. O. Awolowo, *Path to Nigerian Greatness*, Fourth Dimension Publishers Ltd., 1981, p. 129.
31. Ibid.
32. Ibid.
33. O. Awolowo, *The People's Republic*, p. 188.
34. W.K.C. Guthrie expressed the same view in his *History of Greek Philosophy*, *Op. cit.* Vol. II, p. 165: 'Nature in Empedocles and pre-Platonic mind amounts to no more than this, 'the movement of each of the elements fortuitous (tyche).
35. O. Awolowo, *Path to Nigerian Greatness*, p. 91.
36. O. Awolowo, *People's Republic*, p. 81.

37. O. Awolowo, *Thoughts on Nigerian Constitution*, London: Oxford University Press, 1966, p. 77.
38. O. Awolowo, *Voice of Wisdom* p. 129.
39. Aristotle, *Esthetics*, Trans J.O. Kennedy, New York: Macmillan press, 1966, p. 20.
40. O. Awolowo, *Path to Nigerian Greatness*, p. 143.
41. Aristotle is resigned to the irrational powers of nature and thinks that man is helpless and redeemable only by death.
42. O. Awolowo, *The People's Republic*, p. 181.
43. Ibid; Francis Bacon in his *Novum Organum* expressed the same idea.
44. O. Awolowo, *The Peoples Republic*. p. 106.

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