



Verificationism and Phenomenalism to A.J. Ayer: Towards the Understanding of His Doctrine of Logical Positivism

Fornkenglack Derick Ngopang

Doctor- University of Dschang, Dschang, Cameroon

ABSTRACT

Ayer was inspired by the empirical method of David Hume, early Wittgenstein and Bertrand Russell in the elaboration of logical positivism. In the defence of this view, Ayer thought it wise in the first place to eliminate metaphysical propositions by posing the verification principle in the first moment of his empiricism and phenomenalism in the second moment to prove that science is a domain restricted to empirical matters of fact. Any statement that fails the test of verificationism or the verification principle to Ayer is nonsensical and should be eliminated. In the doctrine of phenomenalism, Ayer operated a scientific posture where by the only immediate and direct objects of perception are sense-data and not material things. Sense-data are occurrence of a sense-field, non-referential, non-intentional and subjective since it is a private conviction of an individual (solipsism) toward an object of perception. This illustrates the solution Ayer gave on matters of fact for considering knowledge to be scientific only when it is limited on a single method or approach of perception. The logical positivism of Ayer instituted a form of stagnancy in science by believing in scientific progress via a single approach of observation and sense-perception. But we will clarify in this paper that the progress of science today is thinkable via the plurality of methods as proposed the post-positivist. This is the reason why science move from theory to theory, change paradigms if necessary and no more from experience to experience like in the sensualist model that Ayer put in place. He did not notice that science is composed of perceived and unobserved or unperceived realities like quantum realities which explain the indispensability of complementation between the two blocks of reality.

Keywords: Empiricism, Logical positivism, Phenomenalism, Science, Verificationism.

INTRODUCTION

The defence of empiricism or empirical science against metaphysics occupies a primordial position in Ayer's philosophy of logical positivism or logical empiricism. He was a British philosopher known for his extension and promotion of the doctrine of logical positivism in Britain which started in Austria¹. He subordinated philosophy to science since to him "philosophy was seen as merging into science."² He reiterated in this assertion that, "What we should rather do is to distinguish between the speculative and the logical aspects of science, and assert that philosophy must develop into the logic of science."³ Ayer continues in the line of British empiricism established by Locke, Berkeley and Hume as well as Bertrand Russell and Ludwig Wittgenstein in the 20th century.

Knowledge is a vast and determinant factor of epistemology because of the diverse ideas about the possibility of its acquisition.⁴ Ayer in the *The Foundations of Empirical Knowledge, Language, Truth and Logic* and *The Problem of Knowledge* developed a more stratified and sure foundation of knowledge where he said "the necessary and sufficient condition for knowing that something is the case are first that what one is set to know be true, secondly that one be sure of it, thirdly that one should have the right to be sure"⁵. Ayer estimated that, for knowledge to be scientific, it must pass via the sledge hammer of experience and sense-perception. His preoccupation and question about empiricism (perception) has shifted from verificationism or the principle of verification in his work *Language, Truth and Logic* to the phenomenalism in the other work *The Foundations of Empirical Knowledge*.

The principle of verification or verificationism of the Vienna circle enables the logical positivists and Ayer to reject as nonsensical many traditional philosophical debates. To this principle, a proposition is meaningful if through observation it is judged as true and false otherwise it is meaningless while Phenomenalism is a theory that rejects the independent existence of material things or physical objects. As a philosophical theory of perception, it insists on the fact that propositions about material things are reducible to propositions about actual and possible sensation or sense-data. It was with Russell and

¹ Ben Rogers, <https://www.britannica.com/biography/A-J-Ayer> consulted on 10/9/2024

² Ayer, A.-J., *The Concept of a Person and Other Essays*, London and Basingstoke, The Macmillan Press Ltd, 1963, p. 4

³ Ayer, A.-J., *Language, Truth and Logic*, London, Wadham College Oxford, 1946. p.105.

⁴ Ayer, A.-J., "A Defence of Empiricism" in A. J. Ayer: *Memorable Essays*, *Royal Institute of Philosophy Supplement*, Ed. A. Phillips Griffiths, New York, The Syndicate of the University of Cambridge Press, 1991, p.4.

⁵ Ayer, A.-J., *The Problem of Knowledge*, London and New York, Macmillan, St Martin's Press, 1956, p. 35.

Ayer that this theory was well expanded in the 20th century. Ayer asserts that phenomenalism is a theory that physical objects are logical construction out of sense-data. This is why together with the verification principle, sense-data theory are at the foundation of science.

The proper understanding of a philosopher's thought requires a clear appreciation of the problems and issues with which he was concerned, and of the context in which they presented themselves to him. This is because, as Plamenatz says, "every thinker, even the most abstract, is deeply influenced by the circumstances of his day" and so for us "to understand a theory we must understand the conditions in which it was produced."⁶ This certainly is a most important requirement for understanding the context of Ayer's reason for instituting the philosophy of empiricism notably his doctrine of perception. It was within the context of 19th century dominant atmosphere of German idealism notably the Hegelian idealism and the 20th century neo-Hegelian idealist (Thomas Hill Green, F. H. Bradley, Bernard Bosanquet, J. E. McTaggart, Josiah Royce) who have engaged into metaphysical speculations that Ayer stood for the defence of empiricism. He was pushed to assert that, only sense-perception; sense-experience or observation development in his logical positivism is the unique and only method via which science is founded. Knowledge of reality that cannot be verified and is above sense-data or sense-contents becomes totally impossible and should be discarded.

Ayer was a thoroughgoing empiricist in his writings. In this paper, we will be examining the philosophical quest of Ayer's logical positivism or logical empiricism structured in two moments: the verifiability principle or verificationism and phenomenalism. This was the problem with the conception of Ayer who accorded an epistemological interest to perceived realities as the only method for science. In the first moment of his thought on empiricism developed in *Language, Truth and Logic* (1936 and 1946), Logical positivists or logical empiricists saw empiricism both as a way to understand scientific claims, a path to place philosophy on the scientific grounds by rejecting metaphysics. This especially pushes the conceptual side of empiricism for example, in the verifiability criterion of meaning, whose slogan was that "the meaning of an expression is its method of verification." In the second moment of his appropriation of the philosophy of empiricism, Ayer developed the theory of phenomenalism in his second work *The Foundations of Empirical Knowledge* (1940) and equally in *The Problem of Knowledge* (1956) exploring the theory of perception. At the end we will be evaluating the extent to which Ayer failed to understand that science and the progress of science today is thinkable via multiple methods. This is called for concern of the post-positivists like Popper who out rightly criticized logical positivism and Ayer supported by his disciples like Kuhn, Feyerabend and Lakatos. The thesis of paradigmatic shift operated by Kuhn shared in the same manner with the methodological anarchism of Feyerabend and the methodology of research programs of Lakatos is a form of epistemological discontinuity with the absolute and the universalized method of Ayer in science. Again, other realities like metaphysical and quantum realities are of the view that, unobserved realities must complement the perceived and observed reality of Ayer to bring out the complete face of modern science today.

1- Ayer and the Adoption of the Verifiability criterion of meaning as a determinant of Logical positivism.

In the early 1920's, a school of philosophy came up called logical positivism via a Thursday meeting organised by Moritz Schlick called the Vienna Circle attended by philosophers, scientist mathematicians, sociologist, physicist and the others. It was concerned with the foundations and possibility of knowledge, but approaches the subject through the limitations of meaning. Much impressed by the logical analysis of language developed by Russell and the early Wittgenstein, (*Tractatus*) and by the achievements of science, logical positivists developed a criterion for meaningful statements, called the principle of verification that enabled them to reject as nonsense many traditional philosophical debates. In response to what they saw as "the excesses of Hegelian idealism and the schools of thought it had spawned, they wanted to return philosophy once more to being the under labourer of the sciences."⁷ The principle of verification or verifiability criterion of meaning is supposed to furnish a criterion by which it can be determined whether or not a sentence is literally meaningful. A simple way to formulate it would be to say that a sentence had literal meaning if and only if the proposition it expressed was either analytic or empirically verifiable. To this, however, "it might be objected that unless a sentence was literally meaningful it would not express a proposition."⁸ For it is commonly assumed that every proposition is either true or false, and to say that a sentence expressed what was either true or false would entail saying that it was literally meaningful. Thus, Ayer asserts.

The principle of verification is supposed to furnish a criterion by which it can be determined whether or not a sentence is literally meaningful. A simple way to formulate it would be to say that a sentence had literal meaning if and only if the proposition it expressed was either analytic or empirically verifiable. To this, however, it might be objected that unless a sentence was literally meaningful it would not express a proposition, for it is commonly assumed that every proposition is either true or false, and to say that a sentence expressed what was either true or false would entail saying that it was literally meaningful.⁹

Before Ayer's formulation, a good number of philosophers in the empirical world had earlier mentioned about this principle like Moritz Schlick, Wittgenstein, Carnap and so on. The verification principle can be summed up in Schlick's famous slogan, "*the meaning of a statement consists in its method of verification*". The empiricists are of the opinion that only statements about sensory phenomena are legitimate. Knowledge will witness progress and evolution if all it branches take the direction and the spirit of science which is clear, observational with a language of logic thus, "Only science provides us with knowledge. Science has no limit; there is no question whose answer is in principle unattainable by science."¹⁰ *The Turning Point of Philosophy* put in place by Schlick was because, science was unable to provide answers to problems during the domination of philosophy by the end of the 19th century by the Hegelian idealism, this he express disgust that older philosophers have at least demonstrated their historical influence.¹¹ Ayer's

⁶J. PLAMENATZ, *Man and Society*, vol. 1, London, Longman Group Ltd, 1963, p. ix.

⁷ Lacey Michael, *The Project of Logical Positivism*, Routledge Taylor and Francis Group, p. 1.

⁸ Lazerowitz, M., *The Principle of Verifiability*, Mind, 1937, p. 372.

⁹ Ayer, A-J, *Language, Truth and Logic*, op. cit., pp. 106-07.

¹⁰ Misak, C.-J., *Verificationism*, London and New York, 1995, p. 55.

¹¹ Moritz Schlick, *The Turning Point in Philosophy*, Trans by David Rynin, In A. J. Ayer, *Logical Positivism* Glencoe, New York, The Free Press, 1959p. 53.

basic idea about the verification principles, his clear distinction between a good numbers of verification principles, his place in the Vienna circle will be seen in this sub-section.

It was in the *Demonstration of the Impossibility of Metaphysics* that Ayer gave the first view about the verification principles illustrating that, "I understand a proposition if I know what observations I must make in order to establish its truth or falsity. This may be more succinctly expressed by saying that I understand a proposition when I know what facts would verify it."¹² Later on in *Language, Truth and Logic*, he made a clear explanation of the principle since it was his weapon to eliminate metaphysics as indicated in the first chapter of the book. This, Ayer defined the principle of verification by admitting that, "a sentence is factually significant to any given person, if, and only if, he knows how to verify the proposition which it purports to express that is, if he knows what observations would lead him, under certain conditions, to accept the proposition as being true, or reject it as being false"¹³ enabling the expression of genuine propositions about matters of fact.

The verifiability principle had as prime aim in the elimination of speculative knowledge like metaphysics, emotive theory of values and religious notions by a distinction between meaningful and meaningless statements giving the view that only what is perceived has meaning. To verify a proposition, the method used counts a lot since there is the existence of diverse methods in science but what we have to use is that of observation and perception obtained from the human sense-experience which correspond to what Wittgenstein said, the principle of verification stands on the fact that, "the meaning of a proposition is the method of its verification"¹⁴ Verification is conceivable in the sense that we are able of stating the data we should have to experience in order to decide the truth or falsity of a proposition. To verify really means the capability of exhibiting in the given thus, Schlick asserts, "the meaning of a proposition is determined wholly and alone by its verification in the given"¹⁵ supported by Hempel's in his saying that, "certain doctrines which have been at one time or another formulated within empirical science or its border discipline are so contrived as to be incapable of test by any conceivable evidence, they are therefore qualified as pseudo-hypotheses which asserts nothing and which therefore have no explanation or predictive force whatever."¹⁶ Carnap perpetuated a form of direct and indirect verification in line with the early formulation.

In the latter formulation of verificationism, Ayer insisted showing how both putative proposition and sentences which purports to express are used. Ayer in this latter view shifted in the attribution of proposition on sentences to statements. For if a putative proposition is unable to express either empirical verification or analytic, it therefore means it will be talking absolutely nothing. Since the verification principle is to furnish the criterion determining a proposition as having meaning, the new way from this modified form of the principle is to state that, "a sentence had literal meaning if and only if the proposition it expressed was either analytic or empirically verified."¹⁷ Ayer's change of view from the use of statements than sentences in the attribution of the verification principle was because some sentences did not express proposition and therefore contradictory in saying that what it express is empirically unverified¹⁸ which is the reason why the application of the verification principle should be to statements rather than sentences giving the proper elaboration of the differences that exist between proposition, sentences and statements for better understanding.

From the above assertion of Ayer's formation of the verification principle, the idea of reformulation shows that a proposition can be verified analytically or empirically in the sense that, their truth depends on their meaning or how directly or indirectly they can be verified. Ayer's revision of the principle as said before is because the adoption of sentence was so ambiguous. A sentence express in a language like English will account for differently from that used in French but the new usage of the sentence is different if we substitute it with propositions thus, from that end we can say the English and French expression were formulated from the same sentence. Confusion arises due to the use of sentences because any sentence express proposition without taking into account its literal meaningfulness leading to a disadvantage.

Ayer at this stage preferred the adoption of statements in his argument since we are dealing with what is either true or false. In effect, the resolution purpose for putting in use a familiar word "statement", though Ayer shall perhaps be used in a slightly unfamiliar sense. Thus any forms of words that are grammatically significant shall be held to constitute a sentence, and that every indicative sentence, whether it is literally meaningful or not, shall be regarded as expressing a statement. Furthermore, any two or more sentences which are mutually translatable will be said to express the same statement. The word "proposition" on the other hand, will be reserved for what is expressed by sentences which are literally meaningful. "That anything that could properly be called a sentence would be said to express a proposition, whether or not the sentence was literally meaningful."¹⁹ Thus, the class of propositions becomes, in this usage, a subclass of the class of statements, and one way of describing the use of the principle of verification would be to say that it provided a means determine when an indicative sentence expressed a proposition, or, in other words, of distinguishing the statements that belonged to the class of propositions from those that did not. Hence, "If we cannot arrange such a confrontation, the statement in question is literally meaningless; it is a "pseudo-proposition" because it has the grammatical form of a declarative sentence."²⁰ The consideration of statements in this context is because, they are sentences which are meaningful or not while sentence deal only with significant words. Now we have to consider the different types of verification principles to Ayer bearing in mind that, his reformulated principle can be applied directly and indirectly but to statements and no more to sentences. It is from this optic that Ayer adopted different types of verifications.

¹² Ayer, A.-J., *Demonstration of the Impossibility of Metaphysics* from <http://Mind>, Oxford Journal at University of Sussex, 18 May 2012, p. 337.

¹³ Ayer, A.-J., *Language, Truth and Logic*, op. cit., p. 6.

¹⁴ Susan Stebbing, *Logical Positivism Analysis*, London, Annual Philosophical Lecture, British Academy, 1933, p. 18.

¹⁵ Schlick Moritz, *Positivism and Realism*, Trans by David Rynin, In A. J. Ayer, *Logical Positivism* Glencoe, New York, The Free Press, 1959., p. 88.

¹⁶ Hempel G. Carl, "The Empirical Criterion of Meaning" 1950, in A. J. Ayers *Logical Positivism* New York, Glencoe, Ill: The Free Press. pp. 108-109.

¹⁷ Ayer, A.-J., *Language, Truth and Logic*, op. cit., p. 106.

¹⁸ *Ibid.*, p. 107.

¹⁹ *Ibid.*, p.108.

²⁰ Misak, C.-J., *Verificationism*, op. cit., p. 59.

a- Practical and Principle Verification

The distinction Ayer developed between practical and principle verification was a measure to let know how impossible observation is unable to help attain all propositions. You can know about the functioning of a particular thing theoretically but has never attempted to put it in practice in ordinary life situation. You might know for example that, there is a cat in the room but have never gone to that room practically to see it.

We know that, there are some propositions which are not verifiable simple that we have not used the proper method but could be done if enough time and concentration is taken. Apart from such propositions, other literally significant propositions about matters of fact could not be verified even if we chose on the ground that, "we lack the practical means of pacing ourselves in the situation where the relevant observation could be made."²¹ Ayer therefore took concrete example of such a proposition saying there are mountains on the farther side of the moon. From all indications such a proposition cannot be verified because no rocket has yet been invented which help to reach the farther side for verification via observation. Since practical means is not possible Ayer asserts that principle means is possible as he confirms "but I do know what observation would decide it for me if, as it theoretically conceivable, I were once in a position to make them."²² From this optic, observation will give way to principle making it clear that, some of our assertions are not verifiable practically but via principle. Adopting the principle means in the verification of some proposition concerning matters of fact does not give the audacity for absolute or metaphysical proposition to think that they could be by principle verifiable. One cannot conceive by observation the evolution and progress of the absolute.

b- Strong and Weak Verification

After the distinction between practical and verification in principle, Ayer took a bold step to clarify what his verification is all about by a further distinction between strong and weak sense of the term. He tried to define meaningfulness in terms of strong verification or conclusive verification. According to Ayer if strong form is adopted, the advocacy of our argument will prove a lot like the case of general propositions of law such as *arsenic is poisonous*, *all men are mortal*, *a body tends to extend when it is heated*. The truth of this proposition cannot be conclusively established in experience generating the doubt since Ayer consider that, "a proposition is said to be verifiable in the strong sense of the term if and if its truth could be conclusively established in experience."²³ Strong verification is rejected in the criterion of significant by Ayer because its adoption will oblige us to treat general proposition of law in the same way as we treat statements of metaphysics. Conclusive verification is defined as,

S is conclusively verifiable= df some finite set O of observation statements entails S

From the above statement, adopting strong verification in our criterion means, meaning will be given only to verification that depends on empirical matters apart from that any other thing is meaningless. Logical positivist could not account for this universal proposition considering them as pieces of nonsense.²⁴ The truth of such proposition can never be probable. Ayer explains from the distinction he made in verification by saying that "a proposition is said to be verifiable in the strong sense of the term, if and only if its truth could be conclusively established in experience, but that it is verifiable, in the weak sense, if it is possible for experience to render it probable. And I then give reasons for deciding that it is only the weak sense of the term that is required by my principle of verification."²⁵

From the rejection of strong verification Ayer adopted the weak sense of verification which shows how experience can render the truth of a statement probable because we cannot directly verify them. With weak verification, statements are able to be literally significant since it truth are not totally determine but probable for example; oranges are sweet. So this verification depends on ones capacity to state the type of evidence that will be capable of verifying it content providing enough evidence to justify the meaning of a proposition. With the fact that of strong verification that all men are mortal, experience cannot reach making verification impossible since we have to wait for all men to die before our criterion be validated since it proves so conclusive thus Ayer's weak verification as the only means because of it provision of the evidence of probability.

With weak verification, proves for the significant of propositions are eminent. When one man dies, our evidence is proven not waiting for all men to die before we can conclude that all men are mortal. To say yesterday the sun shine can be verify weekly on the condition that empirical observation makes it probable. It was with week verification that Ayer was able to think of a form of proposition called experiential which stipulate the "records of actual and possible observation"²⁶ implying the impossible answer of metaphysical question like substance since there do not provide any actual based in the literal significant of a statement. In all, week verification and verification in principle are adequate and acceptable to Ayer in the in the principle of verification.

c- Direct and Indirect Verification

Direct and indirect verification came up when the principle of verification was reformulated in the second edition of *Language, Truth and Logic*. In view of the numerous critics Ayer receive about the principle in the first edition of *Language, Truth and Logic* 1936; he decided to change his mind by writing the second edition in 1946 which help in providing an answer to the critics. In a way to responds to the objections to the criterion of meaning, he developed the direct and indirect verification. He recognize the fact that there was a problem in his early formulation thus meaning can now be attributed to statements when there verify either directly or indirectly. The principle now is applicable only to the statement and no more to sentences as before.

²¹ Ayer, A.-J., *Language, Truth and Logic*, p. 6.

²² *Ibid.*, p. 7.

²³ *Ibid.*

²⁴ *Ibid.*, p. 8.

²⁵ *Ibid.*, p. 109.

²⁶ *Ibid.*, p. 9.

For a statement to be verified directly, Ayer reiterates under the condition that: such a statement should be an observational statement or it should be such that in conjunction with one or more observation statements, it entails at least one observational statement which is not deducible from these premises alone.²⁷ Observational statements are used at this point to define direct verification which the generator to the point where direct verification will be used to defined indirect verification. For a statement to have meaning, Ayer said it should instead be verified directly or indirectly. Where direct is either observe or those which observation statement can be derived as given, indirect verification is only significant when it is in conjunction with other premises thus, it assert under the condition that a statement is verifiable when; such a statement is a conjunction with certain other premise it entails one or more directly verifiable statements which are not deducible from these other premises alone and these other premise Ayer added to not include any statement that is not either analytic or directly verifiable, or capable of being independently established as indirectly verifiable.²⁸ Ayer in the consideration of weak verification as the possible way for proposition to have significance, adopted a type of proposition called experiential, then in the reformulation, he replace it with observational statement to designate actual and possible observation as he writes,

Accordingly, I put forward a second version of my principle, which I shall restate here in slightly different terms, using the phrase observation-statement, in place of experiential proposition, to designate a statement which records an actual or possible observation. In this version, then, the principle is that a statement is verifiable, and consequently meaningful, if some observation-statement can be deduced from it in conjunction with certain other premises, without being deducible from those other premises alone.²⁹

From the above quotation, direct and indirect verification is only possible do to some roles like the case of direct verification being deduced from other premise not only one Ayer writes, “in conjunction with certain other premises it entails one or more directly verifiable statements which are not deducible from these other premises alone”³⁰ and secondly he says, “these other premises do not include any statement that is not either analytic, or directly verifiable, or capable of being independently established as indirectly verifiable”³¹ were as indirect verification is not the case because verified statement do not need to include analytic or direct verification.

In all, Philosophy to Ayer is no longer to investigate the nature of reality, to build a complete system that seek to explain the universe or to fashion moral and religious philosophy of behaviour but in what he said “*the logical clarification of everyday language and science*”³² For example Ludwig Wittgenstein said the object of philosophy is the logical clarification of thought so that the result of philosophy is not the number of philosophical propositions but to make proposition clear. According to Ayer, to say that you know how to verify a proposition that it purports to express, is to know what perception and observation would lead you under a certain condition to accept the proposition as being true or false.

2- Phenomenalist theory of Perception: Between Sense-data and Material Things

Ayer had two different approaches in the doctrine of empiricism or better still logical positivism. The verification principle approach of *Language, Truth and Logic* and the phenomenalist approach of *The Foundations of Empirical Knowledge*. Shifting from the positivist phase³³ of Ayer as pointed by M. Dummett, he took a phenomenalist train stipulating a type of reduction relationship between sense-data or sense-contents and material things thus, “the problem of giving an actual rule of translating sentences about material things into sentences about sense-contents which may be called the problem of reduction of material things to sense-contents is the main philosophical part of the problem of perception”³⁴. Ayer argues about the verification principle in *Language, Truth and Logic* before shifting into a more popular use sense-data in *The Foundations of Empirical Knowledge*.

To make understand the theory of phenomenism, Ayer insisted on what is directly perceived, “It may be noted that an object is directly apprehended as it is a necessary, as well as a sufficient condition for saying that it is a sense-datum, for he would then be committed to holding that it was impossible for sense-data to exist without being perceived.”³⁵ In the same vain, sense-data is “making an empirical claim with an appeal to experience.”³⁶ Accordingly, Ayer proposed that “in the domain of sense-data whatever appeared, and only what appeared, should be taken as real, and we tried to show that this convention was not inadequate to the description of the empirical facts.”³⁷ What are immediately given in knowledge are objects of our sense-perception thus, scientific knowledge, reality should not transcend beyond sensible or perceptible objects.

We are living in a world where facts and observation carries the day. Perception is at the base of our today’s empirical knowledge. Perception retains “a central place”³⁸ in the philosophy of Ayer. The question will be centred on the issue of the relation between sense-data and material things. According to the phenomenalist theories “material objects are simply ordered collections or families of sense-data and that the relation of perceiving is a two-term relation between the observer and his sense-data. Material objects, for the phenomenalist, have either no independent existence or are no more than, in Mill’s phrase, permanent possibilities of sensation”³⁹ or as Ayer himself defines, “it is the theory that physical objects are logical constructions out of

²⁷ Kail, P., A. J. Ayer *Language, Truth and Logic Lecture Two: The Verification Principle*, September 2003, p. 3.

²⁸ *Ibid.*

²⁹ A. J. Ayer, *Language, Truth and Logic, op. cit.*, p. 111.

³⁰ *Ibid.*, p. 112.

³¹ *Ibid.*

³² Srininas K., *Analysis as a Method in Philosophy* with Special Reference To A. J. Ayer, *Indian Philosophy Quarterly Vol. XVIII, No. 1*, 1991, p. 111.

³³ Dummett Michael, “The Verification of Metaphysics”, *The Philosophy of A. J. Ayer*, ed., Lewis Hahn, La Salle, Illinois: Open Court, 1993, p. 148.

³⁴ Ayer, A.-J., *Language, Truth and Logic, op. cit.*, p. 64.

³⁵ Ayer, A.-J., *Philosophical Essays*, London and Basingstoke Palgrave Macmillan, 1954, p. 67.

³⁶ *Ibid.*, p. 75.

³⁷ *Ibid.*, p. 91.

³⁸ Macdonald, G.-F., *Perception and Identity: Essays presented on A. J. Ayer with his Replies on them*. London and Basingstoke, The Macmillan Press Ltd, 1979. p. 277.

³⁹ O’Connor, D.-J., Brian Carr, *Introduction to Theory of Knowledge*, Sussex: The Harvester Press Ltd., 1982, pp. 99-100.

sense-data.”⁴⁰ Thus, phenomenalism implies, in this sense, a reduction of “all talk of things perceived or perceivable to talk about actual or possible perceptual experience.”⁴¹ This view has its roots in Berkeley’s philosophy⁴² developed in the *Principles of Human Knowledge*.

Another thing that we find is that, Ayer’s sense-contents or sense-data (indirect realism) which covers the heart of his concept of perception have two uses. First, they are part of one’s sense-experience and thus a tool for empiricism. Second, he uses the term sense-contents or sense-data as linguistic tools. The empirical usage of “sense-data” or “sense-content” derives inspiration from the Berkeleyian, Humean and Russell’s concepts of “ideas”, “impressions” and “Description” respectively. For Berkeley, ideas are immediately perceived hence, to be is to be perceived that is, (esse est percipi).⁴³

He made an attempt therefore to resolve between physical object or material things (direct realism) and sense-data (indirect realism) by saying that physical objects are indeed perceived but only indirectly. What is directly perceived, being dependent for its existence on the state of the observer’s nervous system may then be held to be a sense-datum or sense-contents. He defined sense-data as “the objects of direct awareness”⁴⁴ or “direct apprehension”⁴⁵ or “sensing”⁴⁶ Ayer admit in his work *Philosophical Essays* that the word sense-data was first used by Russell as he writes “I believe that the word “sense-datum” was first used as a technical term in philosophy by Bertrand Russell: and he defined sense-data as objects of acquaintance.”⁴⁷ Ayer affirms all the diverse definitions of sense-data are the euphemisms for the word “knowledge”⁴⁸ Perception is really the factor of motivation since we could not talk of empirical knowledge without it. So whatever is perceived should be certain hence, Ayer’s concept of certainty pushes us to be sure of what we know⁴⁹ in order to escape from the sceptic doubt. Sense-data are objects of direct perception because it is all about what is immediately given to us being interpreted as a reflection on the ordinary usage of sensory verbs like hear, touch, smell, taste and see but material things are only perceived indirectly. Sense-data makes us conscious of material things.

a- An unequal Relationship between Sense-data/sense-content and Physical objects/ Material things in the theory of Phenomenalism

From the definition of phenomenalism which is the logical construction of material things out of sense-data, we notice a kind of link between them. In perception, there must be an object (material thing or physical object) for the subject to perceive. It thus, shows the presence of the two in that process. Ayer affirms this by saying “We may be allowed to have indirect knowledge of the properties of material things. But this knowledge, it is held, must be obtained through the medium of sense-data, since they are the only objects of which, in sense-perception, we are immediately aware.”⁵⁰

This compromised relationship has been worked out all over his writings seen in the work of Montague Robert. Physical objects are to Ayer having a place because of sense-data developed in the mind. The feature material things exhibit is because their existence and their importance properties are independent of any particular observer thus, “As sense-contents are the fundamental objects of the hierarchy I shall say that all other objects are “constructed” out of sense-contents and that sense-contents “constitute” the objects which are constructed out of them.”⁵¹ Analysing Ayer’s point about perception is good we note that is the basis of empirical, scientific knowledge which accounts for all what we have to take as knowledge. The relationship he gives between sense-data and material things has its foundation in the thoughts of modern empiricism.

Phenomenalism as a theory of perception has earlier given the type of relationship that exists between the object and subject of perception. As mentioned above in the terminology of sense-data, what is directly aware of in perception is not the material object itself but rather sense-datum making it so difficult for the object of perception to be understood by the defenders of realist theory of perception. Material things are reduced to *sensa* as recounted in the dictionary of philosophy that “Phenomenalism is one attempt to elucidate the nature of material objects by reducing them to sense-data”⁵² holding that fact that only sense-perception are observed objects.

Berkeley in his modern quest for phenomena’s as sense-impression confirms that material things are the combination of actual sense-impression marking the reason why he saw God as continuity in the preservation of unobserved objects our knowledge that something is real would involve an inference concerning an entity that is not a possible object of experience, namely God.”⁵³ Attributing no independent existence to material thing by Ayer through

⁴⁰ Ayer, A.-J., *Phenomenalism: Proceedings of the Aristotelian Society*, London, New Series, Bedford Square, on February 24th, 1947, p. 163

⁴¹ A Dictionary of Philosophy, ed., Antony Flew, London: Pan Books Ltd., 2nd ed., 1979, s. v. Phenomenalism.

⁴² Warnock, G.-J., *Introduction to Berkeley’s, The Principles of Human Knowledge*, Glasgow: William Collins Sons & Co. Ltd., 1977; Jonathan Dancy, *Berkeley: An Introduction*, Oxford: Basil Blackwell, 1987; Antony Flew, *A Dictionary of Philosophy*, London: Pan Books Ltd., 2nd ed.

⁴³ Stump, Samuel Enoch and Fieser James, *History of Philosophy from Socrates to Sartre and Beyond*, New York, McGraw-Hill 8th edition, 2008, p. 239.

⁴⁴ Ayer, A.-J., *The Foundations of Empirical Knowledge*, op. cit., P. 61.

⁴⁵ Ayer, A.-J., *Philosophical Essays*, op. cit., p. 66.

⁴⁶ *Ibid.*, p. 126.

⁴⁷ *Ibid.*, p. 105.

⁴⁸ *Ibid.*, p. 126.

⁴⁹ “I conclude then that the necessary and sufficient condition for knowing that something is the case are first that what is said to know be true, secondly that one be sure of it, and thirdly that one should have the right to be sure. And this being so, it turns out that the question which philosophers raise about the possibility of knowledge are not to be settled by discovering what knowledge is. For many of them reappear as questions about the legitimacy of the title to be sure. They need to be severally examined; and this is the main concern of what is called the theory of knowledge.” Ayer, A.-J., *The Problem of Knowledge*, London and New York Macmillan and co Ltd St Martin’s Press, 1956, p. 35..

⁵⁰ *Ibid.*, p. 11.

⁵¹ Ayer A.-J., *On Particulars and Universals*, Proceedings of the Aristotelian Society, London, New Series, Vol. 34, pp. 51-62, p. 52.

⁵² Buning Nicholas and Yu Jiyuan, *Blackwell Dictionary of Western Philosophy*, Australia, Blackwell Publishing, Oxford., 2004, p. 515.

⁵³ Fogelin Robert. J., *Berkeley and the Principle of Human Knowledge*, London and New York, Rutledge, 2001, p. 51.

phenomenalism is no more the factual phenomenalism of J. S. Mill about the saying that material things are permanent possibilities of sensation.⁵⁴ Ayer's own definition stipulates that phenomenalism a doctrine of perception as a logical construction of material things out of sense data.⁵⁵

The general quest of the philosophy of perception is about the object that determines perception or what is the object of direct apprehension in perception. Defenders of the *direct realist theory of perception* think that we are immediately aware of material things like tables, coins, chairs and so on. Contrary to the other view of *indirect theory of perception*, sense-data was the object of immediate apprehension which is a mental state pertaining in what Armstrong said in *Perception, Sense-data and Causality* that "Ayer rejected and still rejects direct realism."⁵⁶ Ayer via the argument of illusion affirms in his way that sense-data theory of perception is the object of direct and immediate apprehension. He was seen as one of the greatest defenders of this argument by attributing sensible qualities to at least mysterious mental state called sense-data. This mysterious feature of sense-data is attributed to psychological ground.⁵⁷ It was to prove that perception in all its dimensions whether of the subject or the object should be applicable to facts notably empirical facts so that scientific knowledge and science in general be defined within the hook of empiricism.

With the explanation of the sense-data, Ayer started with the approach of Professor Moore where he accounted for a situation that somebody sees his right hand and something else. This shows the possession of a visual field with two objects since the other thing from the right hand is sense-data. The terminologies "see" can in Ayer's word called "direct apprehension."⁵⁸ That is why he defined sense-data as "anything that is the constituent of sense-field"⁵⁹ couple with the assertion they are "mere fact that an object is directly apprehended is a sufficient condition for saying that it is a sense-datum so that according both to my usage and my intentions directly apprehended **smells** and **tastes** and **sounds** are just as much sense-data as directly seen objects"⁶⁰ because sense-data can't exist without been perceived.⁶¹ It is a theory in the philosophy of perception popularly held in the 20th century by philosophers as, "Bertrand Russell, C. D. Broad, H. H. Price, A. J. Ayer and G. E. Moore. Sense-data are taken to be mind-independent object whose existence and properties are known directly to us in perception. These objects are unanalysed experiences inside the mind, which appear to subsequent more advanced mental operations exactly as they are. They are distinct from real objects in the world outside the mind, about whose existence and property we often can be mistaken because our sense can sometime deceive us.

In all, the two moments are Ayer's double consideration of truth and reality. In other words the consideration in what scientific knowledge is built. The verifiability principle and phenomenalism marks the concept of certainty thus, perception is an experimental basic unit of the verification principle. Ayer conceived that, the method of science pave the way for conceiving knowledge as scientific. The classification of knowledge as scientific necessitate by the verification principle needs observation and sense-perception to take the lead. This is why Ayer was considered a sensationalist which stipulates that all forms of knowledge, concepts and theories are deduced from sense-perception or that, "all ideas can be traced to an origin in sensation; that all statements can be reduced to statements concerning the relations between sensations and nothing can be said beyond sensations and that sensations are also the ultimate criteria of verification of all knowledge. In all, sensation can be summarized into one sentence: the world is my sensations."⁶² Sense-experience designates the only method for scientific inquiry.

3- Post-Positivism and a Counter Approach to Ayer's ideal of scientific Progress.

Science argued by Ayer is focused on inductive method, subjectivity and geared toward a single, universal and finite theory of observation and perception is criticised. On epistemological domain, scientific progress is thinkable by the means of the critic and exclusion of all forms of dogmatism. Ayer advocates the notion of truth correspondence to reality in logical positivism enslaving science under the carnival of perceived entities. Only what can be expressed by means of observation, sense-perception, verified by human sense-organ can be considered the property of epistemology. Karl Raymond Popper opens with the possibility of falsity by giving the precondition for the possibility of science. He criticise verification principle to an extent by replacing it with the principle of falsificationism. Thomas Kuhn, Paul Karl Feyerabend, Imre Lakatos, Claude Bernard were seen as post-positivist who develop mechanisms to reject the ideas of adopting a single theory thus, a critic to the logical positivism of the Vienna Circle. The progress of science is possible in different objective dimensions and via the plurality of methods. The empiricist thesis about truth by correspondence has been shifted. Coherence truth to a lesser extend is giving way to truth by consensus which is working via programs of research thus, plurality of method in scientific research programs. "Whereas logical empiricists concerned themselves with the elaboration of universal models and procedural rules which they believed aptly characterized legitimate scientific practice, post-positivists emphasize the growth of knowledge over time, the dynamics of change within individual disciplines, and the actual practices of scientists."⁶³ This is to say universality is qualified by specificity but a challenge by the recognition of the change of standard of thought is necessary.

For an idea of progress and dynamism in the philosophy of science, Thomas Kuhn in 1970 publication *The Structure of Scientific Revolution* as goal to inverse the single and universal approach of the logical positivist and particularly Ayer to give science a new direction. This image which differed

⁵⁴ O'Connor D.J., Brian Carr, *Introduction to Theory of Knowledge*, Sussex: The Harvester Press Ltd, 1982, p. 100.

⁵⁵ Ayer A.-J., *Phenomenalism: Proceedings of the Aristotelian Society*, op. cit., p. 163

⁵⁶ Armstrong D.-M., "Perception, Sense-data and Causality" in, A. J. Ayer, *Perception and Identity*, ed. G.F. Macdonald, London and Basingstoke: The Macmillan Press Ltd, 1979, p. 84.

⁵⁷ Ayer A.-J., *The Problem Of Knowledge*, op. cit., p. 108.

⁵⁸ Ayer A.-J., *Philosophical Essays*, op. cit., p. 66.

⁵⁹ Ayer A.-J., *The Foundations of Empirical Knowledge*, op. cit., p.130.

⁶⁰ Ayer A.-J., *Philosophical Essays*, op. cit., p. 67.

⁶¹ "I am directly hearing the (physical) sound of a bell and since what is directly seen or heard or otherwise directly apprehended, is by definition a sense-datum, the propositions which these sentences are used to express could also, according to this ruling, be expressed by saying a visual sense-datum, which I am directly seeing, is identical with part of the surface of my right hand or an auditory sense-datum." *Ibid.*, p. 82.

⁶² Buning, Nicholas and Yu Jiyuan, *Blackwell Dictionary of Western Philosophy*, op. cit., p. 634.

⁶³ Caldwell Bruce, *Beyond Positivism*, London and New York. 1982, p. 68.

radically from the logical positivist's and Ayer's verification criterion or falsification theory of Popper is what Putnam called the "received" view of science thus, "Structure was a new image of science. According to the logical positivist's or falsificationist's view, science is a depository of accumulated facts, discovered by individuals at specific periods in history."⁶⁴ With Kuhn, there was a necessity to change from logical analysis or explanation of scientific knowledge as finished product to a historical or natural description of scientific practices by which a community of practitioners produces scientific knowledge.

Feyerabend in an opening sentence of his work *Against Method* states that "anarchism, while perhaps not the most attractive political philosophy, is certainly excellent medicine for epistemology, and for the philosophy of science. The reason is not difficult to find."⁶⁵ He thought anarchism is the best way to solve resolution of the authority of science. Progress is viewed in science by the adoption of anarchism which gives way to plurality of methods because a scientific method should not have monopoly on truth. Historically, science has witness a lot of changes; as an act of liberation, to dogmatism and ideology. Philosophers who separate science from myth, religion, and magic ended up giving science an authority and hierarchy in the society, reason why Feyerabend adopted the theory of anarchism or Dadaist to refute the authority. This was a means to reject fixed rules in science.

To assure progress in science and the necessity of plural approaches, the Hungarian philosopher of mathematics and science Imre Lakatos adopted a methodological proof for his thesis in what he called methodology of research programs. To this methodology, great scientific achievements are research programs evaluated in terms of progressive and degenerating problem shifts. This is a form of methodological falsificationism which is sophisticated, which sees theories as part of the dynamic system. We do not talk of a theory in view of the dynamism, we instead talk of series of theories where each subsequent theory result from adding auxiliary clauses to the previous existing theory to accommodate some anomaly so it could have much content like that of his predecessor that cannot be refuted. "The methodology of scientific research programs constitutes, like any other methodology, a historiographical research programme. The historian who accepts this methodology as a guide will look in history for rival research programs, for progressive and degenerating problem shifts."⁶⁶ The logic of dogmatic falsificationism makes it clear that science grows by repeated overthrow of theories with the help of hard facts.

Once we accept the distinction between appearance and reality, and realize that things are not always the way they appear to us, then the role and value of metaphysics will become inevitable in all human endeavours. Once we accept that a reality is much more than the way we perceive it with the senses that there is no more to reality than we can perceived with our sense-perception then we can appreciate the role of metaphysics in taking us beyond appearance to the reality itself, beyond the level of sense-perception. Once we accept that man is not only purely and exclusively material, that there are immaterial elements in his being then we can be able to understand man's irresistible urge to go beyond the material realm of human life and experience, and strive for the immaterial realm through metaphysics. Hence "there is more to reality than what is physical and tangible."⁶⁷ Philosophy started like metaphysics with the charge in searching the principle of all things. Aristotle the father called it "first philosophy" giving metaphysics a central position in philosophy. It is the most fundamental form of rational inquiry in what Nelson Shang affirms that, "Metaphysics serves as the foundation upon which all other disciplines are built. It is in fact, the foundation of all other sciences. To say metaphysics has no place in our world is an aberration and a calculated attempt to destroy the structure of the universe because the universe itself encompasses both the physical and the spiritual."⁶⁸ Metaphysical realities are indispensable in the quest for human knowledge and provide another method imperceptible in the progress of science. "The advancement of science depends much on the vitality and creativity of metaphysics, on its ability to point to different directions."⁶⁹ It is from metaphysics that alternative research programs spring when sciences adopted program which is unable to overcome persistent problems. The necessity to rebuilt metaphysics in view of its total elimination by Ayer in favour of matters of sense-perception is important. Metaphysics and science cannot easily be separated same as the body and the soul cannot equally be separated. Also, unperceived or unverified realities are necessary for the progress of science today like quantum realities.

CONCLUSION

In a nutshell, the question in this paper was to demonstrate the doctrines that Ayer used illustrating his philosophy of Logical positivism. In the course of analysis, we notice that Ayer narrow the progress of science to an absolute, single method of verification, sense-perception or perception. In the elaboration of our work, we saw that, the philosophy of Ayer is centre on the theory of empiricism divided in two moments, the verification principle in *Language, Truth and Logic* and phenomenalism in *The Foundations of Empirical Knowledge*.

In the first moment of his empiricism or logical positivism Ayer put in place the verification principle, as a conceptual scheme and a model for understanding scientific claims. He established to know what should be the purpose of a philosophical inquiry. The central aim of this claim was to demolish metaphysics whose main arm was an attempt to say something about reality that transcend the world of science and common sense. Ayer

⁶⁴ Marcum, James A., *Thomas Kuhn's Revolutions: A Historical and an Evolutionary Philosophy of Science*, London and New York, Bloomsbury Publishing Plc, 2015, p. 55.

⁶⁵ Feyerabend Paul, *Against Method*, London, Third edition pub by Verso, Meard Street, 1993, p. 9.

⁶⁶ Lakatos Imre, *The Methodology of Scientific Research Programmes*, Philosophical Paper Vol I, Press Syndicate of the University of Cambridge, 1978, p. 114.

⁶⁷ Quoted by Grice, H.-P, in Pear D.-F., *The Nature of Metaphysics* New York, Macmillan, 1965, p. 2.

⁶⁸ Nelson Shang, "The Value of Metaphysics in the Post-Metaphysical Era" in *International Journal of Humanitatis Theoreticus*. Vol. 4. Issue: 2; December, 2020, pp. 56-57.

⁶⁹ *Ibid.*, p. 56.

thought that metaphysics was an impossibility reason why he put in place a kind of empiricism which is the view that, all our knowledge must be based on sense-experience or sense-perception. The second moment of his philosophy of empiricism was capital as it was meant to really understand his notion of perception. The doctrine of phenomenalism made an attempt therefore to resolve between physical object or material things and sense-data by saying that physical object are indeed perceived but only indirectly. What is directly perceived, being dependent for its existence on the state of the observer's nervous system may them be held to be a sense-datum or sense-contents. Perception is really the factor of motivation since we could not talk of empirical knowledge without it. What are immediately given in knowledge are objects of our sense-perception thus, scientific knowledge, reality should not transcend beyond sensible or perceptible objects but remain within the guard of empiricism. At the end we analysis the place of post-positivist and the necessity of metaphysical and quantum reality that is, unobserved or unperceived to complete Ayer's method thus, the need for a complementarity.

References

- ANTONY, Flew** (1979), *A Dictionary of Philosophy*, Pan Books Ltd 2nd ed. s. v. Phenomenalism, London.
- ARMSTRONG D.-M.**, (1979), "Perception, Sense-data and Causality" in, A. J. Ayer, *Perception and Identity*, ed. G.F. Macdonald, London and Basingstoke: The Macmillan Press Ltd.
- AYER, Alfred Jules** (1963), *The Foundations of Empirical Knowledge*, London and New York Macmillan and Co Ltd. St Martin's Press.
- (1947), *Phenomenalism: Proceedings of the Aristotelian Society*, London, New Series, Bedford Square, on February 24th.
- (1963), *The Concept of a Person and Other Essays*, London and Basingstoke, The Macmillan Press Ltd.
- (1956), *The Problem of Knowledge*, London and New York, Macmillan.
- (1946), *Language, Truth and Logic*, London, Wadham College Oxford.
- (1991), "A Defence of Empiricism" in A. J. Ayer: *Memorable Essays, Royal Institute of Philosophy Supplement*, Ed. A. Phillips Griffiths, New York, The Syndicate of the University of Cambridge Press.
- (2012), *Demonstration of the Impossibility of Metaphysics*, from <http://Mind>, Oxford Journal at University of Sussex, 18 May.
- (1954), *Philosophical Essays*, London and Basingstoke Palgrave Macmillan.
- On Particulars and Universals*, *Proceedings of the Aristotelian Society*, London, New Series, Vol. 34, pp. 51-62.
- BUNING Nicholas and YU Jiyuan** (2004), *Blackwell Dictionary of Western Philosophy*, Australia, Blackwell Publishing, Oxford.
- Caldwell, Bruce** (1982), *Beyond Positivism*, London and New York.
- DUMMETT Michael** (1993), "The Verification of Metaphysics", *The Philosophy of A. J. Ayer*, ed., Lewis Hahn, La Salle, Illinois: Open Court.
- FEYERABEND Paul** (1993), *Against Method*, London, Third edition pub by Verso, Meard Street.
- FOGELIN, J. Robert** (2001), *Berkeley and the Principles of Human Knowledge*, London and New York, Routledge.
- HEMPEL, G. Carl** (1959). *The Empirical Criterion of Meaning*, 1950 in A. J. Ayers *Logical Positivism* New York, Glencoe, Ill: The Free Press.
- Journal of Humanitatis Theoreticus Philosophy of Science*, London and New York, Bloomsbury Publishing Plc.
- KAIL, P.**, (2003), *A. J. Ayer Language, Truth and Logic Lecture Two: The Verification Principle*, September.
- LACEWING, Michael** *The Project of Logical Positivism*, Routledge Taylor and Francis.
- LAKATOS Imre** (1978), *The Methodology of Scientific Research Programmes*, Philosophical Paper Vol I, Press Syndicate of the University of Cambridge.
- LAZEROWITZ, M** (1937), *The Principle of Verifiability*, Mind.
- MACDONALD, G.-F.**, (1979), *Perception and Identity: Essays presented on A. J. Ayer with his Replies on them*. London and Basingstoke, The Macmillan Press Ltd.
- MARCUM, James A.**, (2015), *Thomas Kuhn's Revolutions: A Historical and an Evolutionary*
- MISAK C.- J.**, (1995), *Verificationism*, London and New York.
- NELSON Shang** (2020), "The Value of Metaphysics in the Post-Metaphysical Era" In *International*. Vol. 4. Issue: 2; December.
- O'CONNOR, D.-J.**, (1982), Brian Carr, *Introduction to Theory of Knowledge*, Sussex: The Harvester Press Ltd.
- Quoted by **GRICE, H.-P, in PEAR D.-F.**, (1965), *The Nature of Metaphysics* New York, Macmillan.
- PLAMENATZ, J** (1963), *Man and Society*, vol. 1, London, Longman Group Ltd.

SCHLICK Moritz (1930), *The Turning Point in Philosophy*, Trans by David Rynin, In A. J. Ayer, *Logical Positivism* Glencoe, New York, The Free Press, 1959.

SCHLICK, Moritz (1959), *Positivism and Realism*, Trans by David Rynin, In A. J. Ayer, *Logical Positivism* Glencoe, New York, The Free Press.

SRININAS K., (1991), *Analysis as a Method in Philosophy with Special Reference To A. J. Ayer*, *Indian Philosophy Quarterly* Vol. XVIII, No. 1.

STEBBING, Susan (1933), *Logical Positivism and Analysis, Annual Philosophical Lecture*, London, British Academy.

STUMPT, Samuel Enoch and FIESER, James (2008), *History of Philosophy from Socrates to Sartre and Beyond*, New York, McGraw-Hill 8th edition.

WARNOCK, G.-J., *Introduction to Berkeley's, The Principles of Human Knowledge*, Glasgow: William Collins Sons & Co. Ltd., 1977