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THE EPISTEMOLOGY OF LOGICAL POSITIVISM: ITS DOCTRINES, METHODS AND IMPLICATIONS FOR POLITICAL ANALYSIS

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Philosophy raises questions about the nature of justice, the basis of society, man's positions in the world, the relationship between man's ideas and his social condition and the basis of morality.

This means that philosophy is a discipline without known beginning or end, and tends to be equivocal. It also implies that philosophy is related to human life and human society and it cannot be understood outside human condition. It further implies that the primary concern of philosophy and philosophical theory is not only to illuminate the problems of human thought but also to elucidate the problems of human existence, i.e. of social praxis.¹

The presence of elements of human culture in philosophical thoughts, with the divergences in socio-economic development that takes place within human society facilitates the differentiation in the social organization of human society and subsequently the differentiation in philosophical conceptions. One of such conceptions of philosophy is that of philosophical materialism which seeks to understand the problems of human society as a "totality composed of internal related parts... with expandable parts" and philosophical thoughts as an outgrowth of the social organization of society.²

Another conception of philosophy — the bourgeois conception — see it 'as a series of abstract systems'.³ Instead of seeing philosophy within the context of the concrete existence of man, it reduces philosophy to the 'logic of science — philosophy of science — and of mathematics'.⁴

The conception of philosophy in the Western European tradition, especially, since the European Renaissance, has taken the latter form. Whether one considers the rationalism of Kant, the positivism of Comte, British empiricism of the past century, the logical positivism of the Vienna circle or the present Anglo-American logical empiricism, there is no exception.

A special case in point is logical positivism. As a result of its reduction

of philosophy to logical analysis, logical positivism came to assume an epistemological position which involved the doctrine of positivism/empiricism that whatever is capable of being known or of constituting human knowledge must coincide with something meaningful and verifiable, and whatever cannot be known is meaningless and unverifiable.

In that way, the limits of the human understanding (within Western philosophical thought) came to be identified with the limits of nature. This idea survives today in the notion that logically there are no mysteries, that to every question there is an answer, that there is nothing on earth beneath the waters or in the heavens above, which is in principle unknowable.

The main objective of this paper is to critically examine the epistemology of logical positivism (LP) — its methods and doctrines and to consider its implications for modern political analysis. Thus, it is divided into four sections. Section One presents the immediate origins of LP. Section Two elucidates some of the doctrines and methods of LP. Section Three of the paper discusses the implications of LP in the light of the three doctrines that have become the watch-word of social science. The final section shows that the basic epistemological assumption of logical positivism is nothing but an ideological assumption.

EARLY POSITIVISM AND THE DEVELOPMENT OF PHILOSOPHICAL ANALYSIS

The history of positivist thought involves the works of Francis Bacon, the development of philosophical analysis and of empiricism in England and the German scientific philosophers of the early part of the 19th Century.

The diffusion of positivist thought as a dominant philosophical thought in Western Europe was the work of many philosophers of that period. J.S. Mill and M. Spencer are said to have been in a direct line of descent from the positivism of Comte, Cournet and Germain⁸. The French philosopher, Henri de Saint-Simon, was the first philosopher to use the term 'positivism' to designate the application and extension of scientific method to philosophy. A student of Saint-Simon, Auguste Comte, later adopted the term and appropriated it to a philosophical movement in the (favourable) cultural climate created by the 18th Century Industrial Revolution.⁹ As a result:

Positivism made this climate into a philosophical program; that is, a universal project for human life. It exalted science without concerning itself — (as does contemporary positivism) — with the conditions and limits of the validity of science and it claimed that not only ethics and politics but also religion would become scientific disciplines. In one direction this led to an attempt to establish a 'positive' religion in place of traditional theological religion.¹⁰

The general objectives of positivism from this perspective were twofold: first, to generalize the human scientific conception about social facts and, second, through the process of generalization, to be able to systematize the art of social life. Thus, positivism naturally became the successor to Christianity/theology. Where theology failed to include the empirical side of human nature, the new spirit of positivism originated a new synthesis — (theory and observation) — that provided the explanation. This and the substitution of Christian dudes for positive individual rights constitute the radical break between positivism and theology.

The effort of early positivism to establish positive religion in place of traditional religions, and its exaltation of science had led to a new conception of science which emphasized that science is the only knowledge capable of validation and, only statements that can be verified through observation are possible objects of knowledge; that the methods of philosophy and of philosophizing and those of science are the same; and that the primary task of philosophy is to find the general principles common and applicable to all human knowledge (sciences) and use these principles as guides to human conduct and as the basis of social organization.¹²

The early acceptance by positivism of the concepts of 'universal progress', and of 'the infinity of history and nature', gave rise to three fundamental kinds of positivism rooted in the social *milieu* of 18th Century European Industrial Revolution. They are: social positivism, evolutionary positivism and empirico-criticism-evolutionary positivism.

Social positivism arose principally in France through the major works of Saint-Simon and others like Charles Fourier, Pierre Joseph Proudhon, and the utilitarians Classical Political Economists in England. In Germany, Ludwig Feuerbach can be identified, while Carlo Cattaneo and Guiseppe can also be identified in Italy. The aim of social positivism was to promote a better social organization of society, through the application of science methods.¹³

According to social positivism:

... by destroying theological and metaphysical doctrines, positivism had eliminated the foundation of the social organization of the Middle Ages. A few organic level, in which positive philosophy would be the basis of a new system of religion, politics, ethics, and public education, was required. Through this system, society would regain its unity and its organization by basing itself on a new spiritual power — that of the scientists, and a new temporal power — that of the industrialists.

It was under this conception of philosophy as the basis of human society in the hands of scientists and industrialists that social positivists argued that perfect social organization and progress of man must be based on science methods and individual freedom.¹⁵

Evolutionary positivism accepted that view of social positivism about human progress but justified it in terms of nature, that is, physics and biology not of society and history as does social positivism. Some of the forerunners

of evolutionary positivism were, Charles Darwin, H. Spencer, Emile Durkheim, and Whitehead. It was from the evolutionary positivists that the doctrine of evolutionary and universal philosophy developed. This idea triumphed in Darwin's *Origin of the Species*, Lavoisier's *Law of the Conservation of Energy*, and Buchner's *Treatment of Force and Matter* ¹⁶.

Empirico-criticism, the third type of positivism, held that facts, which for all positivists constituted reality, were sets of interdependent groups of sensations that are connected to and dependent on each other and that the role of science was that of an "instrument which the human organism uses to confront the infinite mass of sensation and to act in the light of those sensations in such a way as to preserve itself". The function of science from that stand point becomes that of adapting organism to the environment. The concept of law and facts which other positivists described as having a direct link was criticized as a mere description which cannot explain the order in which we perceive things and how we project our impressions to the outside world.

At the same period, a British idealist philosopher, Francis H. Bradley, attacked the utilitarians, the empiricism of J.S. Mill and the positivists but 'his failure to say something significant' led the Cambridge group of philosophical analysts, especially Moore, to revolt against Bradley's post-Hegelian idealism.¹⁸ The revolt marked the turning point in the development of the epistemological base of the positivism of the Vienna circle — the progenitor of modern logical positivism.

Ludwing Wittgenstein who had been in contact with the Cambridge philosophical analysts simply criticized the empirico-critical positivists. By so doing, Wittgenstein provided the channel by which the new logic of the Cambridge philosophical analysts, especially as developed in Frege and Russell's *Principia Mathematica* exerted its influence on Moritz Schlick, the founding father of the Vienna Circle and subsequently of modern logical positivism.

Schlick accepted the doctrine of Wittgenstein in the *Tractatus* that language and reality are two different things and are not logically related, and that the role of philosophy is to clarify concepts and not to formulate propositions. Thus, logical positivism attempted to correct what were assumed to be errors and difficulties of Wittgenstein's doctrine. Consequently, logical positivists, especially Neurath and Carnap developed the thesis of Radical Physicalism. It is this thesis that leads to the doctrine of the unity of science and to logical positivists' assertion that the subject-matter of philosophy is also that of science, and that all philosophical problems can be understood from the point of view of logic and science.

Up to this point, the foundation and the general framework of logical positivism has been exhaustively revised. What became its major doctrines and methods of explication is considered in the succeeding section. But suffice it to say that the development of bourgeois positivist thought: social, evolutionary and empirico-criticism, fostered a climate favourable to the sustenance of bourgeois capitalist society which subjects value judgements to pragmatism.

THE DOCTRINES AND METHODS OF LOGICAL POSITIVISM

The doctrines of Logical Positivism can be summarized as follows:

- (a) identification of knowledge with science (natural and social) and mathematics, to the exclusion of other areas, e.g. ethics;
- (b) empiricism in the extreme form of either phenomenalism or physicalism, i.e. the reduction of science to statements about directly observable facts and the elimination as meaningless of any statement that is neither analytic nor empirical, e.g. metaphysical statements;
- (c) the reduction of philosophy to the 'logic of science' (philosophy of science) and of mathematics;
- (d) methodological naturalism (naturalistic methodological monism), i.e. the view that the social science and even the humanities have basically the same aims and methods as the natural sciences;
- (e) sociological relativism with respect to norms, in particular ethical ones;
- (f) the emphasis on the social value of science and on its practical applications.

The above six doctrines, according to Giedymin, represent the doctrines of all positivism. But then, how many of these modern logical positivism do not subscribe to, is a question of variations in content.

Even though, logical positivism was a movement with a common source by the teaching and writings of Moore, Russell and Wittgenstein,²³ they combined the logical analysis patterned after Frege and Russell's *Principia Mathematica* with a radical empiricism largely patterned after Wittgenstein's *Tractatus Logico-Philosophicus*. The *Tractatus* was developed partly as a critique of Russell's *Principia*. Wittgenstein's concern was to construct language criterion and to show that logic is connected to experience. The developments of these two works showed members of the Vienna group who had previously been influenced by the British empiricism and the Ernst Mach anti-metaphysical teaching, that empiricism could be grounded on logic rather than on psychology.

By 1928 the logical positivist movement had organized itself into what they called the Ernst Mach society with the avowed aim of: "propagating and furthering a scientific outlook and creating the intellectual instruments of modern empiricism". In 1929, they issued a manifesto: *The Scientific World View: The Vienna Circle*. The manifesto states that their 'aim is to form an *Einheitswissenschaft*', i.e. unified science comprising all knowledge of reality accessible to man — without dividing it into separate, unconnected special disciplines, such as physics and psychology, natural science and letters, philosophy and the special science. Logical positivism has four principal types of doctrines: (i) logical atomism, (ii) the verifiability theory of meaning; (iii) the analytical character of & *priori* knowledge; and (iv) the emotive theory of value.

The doctrine of logical atomism seems the most important of logical positivism. We say seems most important, because it is the philosophy upon which the two pillars of logical positivism converge. These are logic and empiricism. Logical atomism views the world as consisting of simple facts, with no internal relations, each of them independent of all the rest. It rules out all metaphysical doctrines²⁸ and holds that logic is the most important aspect of philosophy.²⁹

The second doctrine of logical positivism condemned ethics and speculative philosophy as meaningless, and favoured the verifiability theory of This theory argued that the meaning of a word can be understood by its use. Meaning, according to this doctrine is not a mentalistic thing lodged in our minds, but a statement of fact which can only be determined by the methods employed to verify it. As Schlick puts it:

Expressing the meaning of a sentence is the same as expressing the criterion of its usage, and this is the same as expressing the modes of its verification or falsification. A proposition has no meaning outside the methods employed to verify it.

This method of conceiving meaning as something outside the jurisdiction of human thought and consciousness led to the development of a science of semantics and syntactics.

The doctrine of & *priori* knowledge espoused logical positivism and also rejected rationalism, speculative philosophy and theology as useful methods of understanding the nature of things. It argued that the problem of a *priori* knowledge or the ultimates of knowledge can only be determined within the context of protocol statements, that is statements which simplified facts without any attempt to alter, add or mould them.³¹

The fourth doctrine of logical positivism, the emotive theory of value, rejected the idea that moral values are part of knowledge. It argued that the problem of knowledge lies in meaning and verification, in other words, in observables and theory of construction.

The above doctrines put together formed the basis of logical positivism's rejection of metaphysics. Drawing from early positivism before it, logical positivism rejected as nonsensical any question that in the light of logical analysis, revealed itself to be absolutely unanswerable. Consequent upon this, logical positivists claimed that the science of mathematics and logic have standards which are meaningful, free of all speculative statements and capable of validation on their own. Thus, they designed a 'meaning criterion' to separate factual statements or propositions from those that are pseudo-problems and can lead to solutions. In propounding the verifiability doctrine, logical positivism argued that "the factual meaning of empirical statements consists in the method of their verification".³²

As regards philosophy, logical positivism contended that it must be reformed such that it becomes a generalizing method capable of proving all scientific theories. Philosophy, they argued, must be integrated with physics and biology into a single unified science such that in the practice of

philosophy and science both would involve knowledge reconstruction and the justification of its claims through observable statements.

The reduction of philosophy to reform epistemology led logical positivism to argue that the question of 'how do we know'¹ pre-supposes the question of 'What do we mean'. In the attempt to answer both questions, logical positivism argued that our knowledge must be reconstructed in the form of empirical evidence so that all generalizations can be justified and legitimated on the basis of observable evidence.³³ The idea of epistemology from that point of view is nothing but a logical study of the language in which scientific results are expressed and empirically validated. And statements which cannot be logically structured to provide scientific results are considered meaningless.

Logical positivism further posits that the primary task of science is to predict new observable occurrences on the basis of given observation or statement and, that the meaning of all propositions (either belonging to psychology, physics or political science), have the same content, and can only be established by the condition of their verification (physicalism).

Taken apart, all the doctrines of logical positivism cannot be dealt with in their entirety here. For example, the doctrine of the analytic-synthetic distinction, the doctrine of the context of discovery and that of verification; the doctrine of the fact-value distinction, the doctrine of operationalism, verificationism, deductivism, phenomenism, conventionalism and formalism are doctrines associated with positivism which would need detailed discussion. What we have attempted here, thus far, is the elucidation of just some of the principal doctrines of logical positivism and their methods of explanation. But since the doctrines of value-free science and deductivism and the doctrine of operationalism seem to have glaring effects on modern political analysis, we shall deal with these in the succeeding section.

THE IMPLICATIONS OF LOGICAL POSITIVISM FOR MODERN POLITICAL ANALYSIS

One of the doctrines closely associated with logical positivism, operationalism may be considered the first commandment of the social sciences. According to this doctrine, the meaning of a concept can only be provided by a set of operations using a semantical language that will relate the concepts to event(s), objects or symbols. Logical positivism holds that sentences formed in operationally defined processes are meaningful if the assertions can be empirically tested. A term which cannot be operationally combined is meaningless. Under the so-called operational rules, logical positivism divided propositions into formal and empirical. The former are signs arranged according to syntactical rules given in science. Empirical propositions which are common in the social science are said to be meaningful only and only when their structure obeys syntactical rules and there is a concrete procedure for verifying their truthfulness or falsity. Any term or concept that does not obey syntactical rules of natural language are considered a pseudo-proposition, metaphysical, and operationally meaningless. When they are not meaningless, they are considered ethical, i.e. emotive and aesthetical, both of

which cannot be reduced to observable statements.³⁶ As Scriven has observed, there are grave problems with logical positivism which demand concepts should be defined in such a way that it is equivalent to or expresses sets of operations. The problems result from whether it is possible to give an operational definition of this kind. How to determine what constitutes an operation and how to recognize what should be counted as a single operation.³⁷ Despite Scriven's observation and Gunnells contention that operationalism is not useful in answering the problems of defining and interpreting scientific concepts and theories because operationalism attempts to put facts before theories, these doctrines remain the watch word of the behavioural sciences.³⁸

The second logical positivist doctrine at the heart of modern political scientists or analysis is the notion of deductivism. This doctrine asserts that the role of science is to provide laws which can be used to interpret and explain events; that there is a logical connection between events that are predicted and those that are explained; that there is no difference between explanation arrived at through deduction and casual explanation; that in the consideration of all sciences natural science is supreme; and that science and logic are the same.³⁹

For example, the doctrine which has permeated the world bourgeois social sciences holds that in order to determine the truthfulness or falsity of a sentence, say hypothesis A , one must compare it with certain other sentences, say hypotheses $B_1, B_2, \dots, B_n$, the value of which are already established. The process from hypothesis $B_1, B_2, \dots, B_n$ to hypothesis A is called deduction, A is regarded as deducible from $B_1, B_2, \dots, B_n$. But when the fundamental question is raised as to what criterion determines the truth-value of $B_1, B_2, \dots, B_n$ which logical positivism and bourgeois social behavioural sciences tell us what we already know, they have no answer except to argue that it is an explanation of logical construction "between (an *explanandum*) a class of sentences describing the phenomenon to be explained (*explanandum*) and a class of sentences adduced to account for the phenomenon (*explanans*). Thus, in order to give a useful explanation, logical positivists add that sentences describing the phenomenon to be explained must be logically deducible from the sentences adduced to account for the phenomenon. As an example of logical positivism's failure to say that criterion actually determines the truth-value of the *explanans*, we quote Ayer:

... When we speak of certain objects, $b, c, d, \dots$ & being elements of an object e , and e , as being constituted by $b, c, d, \dots$, we are not saying that they form part of e , in the sense in which my arm is part of my body, or a particular set of books on my shelf is part of my collection of books. What we are saying is that all the sentences in which the symbol e occurs can be translated into sentences which do not contain e itself, or any symbol which is synonymous with e , but do contain symbols $b, c, d, \dots$. In such a case, we say that e is a logical construction out of $b, c, d, \dots$. And, in general, we may explain the nature of logical

constructions by saying that the introduction of symbols which denote logical constructions is a device which enables us to state complicated propositions about the elements of these constructions in a relatively simple form.⁴²

As a result of the failure of logical positivism to say something about the epistemological questions raised, Ounnell contended that the deductive model which has become the hand maid of modern political analysts is not a useful method of scientific inquiry in the social sciences.⁴³ Gunnell further noted, "that the deductive model presupposes a syllogistic form of scientific inference which neither conforms to the logic of scientific discourse nor is it viable as a paradigm for evaluating scientific inferences; that the belief in the logical symmetry of explanation and prediction is neither representative of scientific practice nor reasonable as a goal; that explanation in science takes many forms and may not involve laws; that even when laws are involved, they do not function as premises in a deductive argument; and that the model fails to take account of the ways in which competing explanations and of the manner in which they infer explanations from data".⁴⁴

The third major doctrine of logical positivism championed and propagated by political scientists, especially the adherents of the so-called behavioural movement is the notion of value-free social science. Here again positivism holds that value-term(s) hick any properties of their own, (and that property cannot be ascribed to it because they are expressive of attitudes) emotion or desire, which cannot be reduced to theoretical observable statements. In all respects, the political researcher/analyst is urged to exercise tolerance and be scientific. Where he cannot be scientific he is expected to make his value premises known, so that the *reader* can separate facts from value. A superficial separation is quickly erected between the social phenomenon being studied and the individual doing the study as if both are not products of the same social *milieu*.

This mistake resulted from the attempt to *create* a value-free social science and of the belief that fact can only be deduced from logically related statements. The other mistake results from the superficial philosophical distinction being made between (i) logical judgments, (ii) factual judgments, and (iii) value or moral judgments. The undue emphasis of these distinctions in bourgeois political science as if they were information that cannot and should not be disputed led to the attempts by the political scientist to construct theory and *analyze* events according to these distinctions without recognizing or examining the underlying philosophical assumptions and the problems inherent in the relationship between social science and philosophy. As a result of this, bourgeois political scientists tend to treat the problem of values from the point of view of the separation and/or distinctions made by logical positivism/empiricism between facts and value, known and unknowables, factual and moral judgements, etc.⁴⁶

The positivist dichotomies have also resulted in the emphasis upon careful and systematic definitions of empirical phenomenon to be investigated and upon the construction of hypotheses and their testing. Furthermore, it

gave impetus to the so-called 'behavioural revolution' that emphasizes the compilation and comparison of data, to provide the correlations for answering all socio-economic problems and those of political behaviour; thus, subjecting the treatment of all fundamental human problems to the rules of science.

The desire on the part of political scientists to be scientific as demanded by positivism changed the focus of political studies from the study of social structure to political trivialities carried out in a political journalistic fashion that emphasizes election data, voters behaviour, etc., and on the fallacy of the 'input', 'output' and 'conversion' of a bourgeois politico-economic system.

As a result of this intolerance and dogmatism on the part of bourgeois political scientists in embracing the doctrine of logical positivism whilst refusing to consider fundamental ontological questions, and dogmatism in their religious embracement of the doctrines of logical construction, deductivism, operationalism, the emotive theory of value and other doctrines discussed above, a limitation was imposed on human knowledge and the human understanding of social phenomenon. The intolerance and dogmatism also discouraged any probing into the deeper meaning of social phenomena by its exclusion of ethical issues and their dismissal as nonsense.

Furthermore and more seriously, bourgeois social science as the torch-bearer of logical positivism engendered a climate of opinion which was favourable to capitalism, fascism and imperialism, since these exploitative and repressive systems were allowed to develop in an environment where concern with fundamental human values were subjected to the rules of logic and deductionism.

The analysis of the implications of logical positivism for our present-day political or social science cannot be overlooked if dogmatically imbibed, particularly in terms of its negativism for African peoples whose view point has long been subjected to that of the people who control the world in nearly all ramifications, consequent upon which Claude Ake once tagged Western social sciences as imperialistic.⁴⁸

But then, our point of departure here is a total rejection of the alleged analytical value neutrality of logical positivism within the parameters of modern political analysis otherwise, the wherewithal of Africans' existence *vis-a-vis* political inclinations and activities as well as non-bourgeois scholars predispositions would be taken for granted or slaughtered on the altar of unfortunate ignorance. In other words, the issue of value-free science in analytical consideration of social or human phenomena as postulated by logical positivism and its claimed domination of positive economics is not tenable within the parameters of modern political analysis or within the disciplinary boundary of political science unless the latter is to be erroneously taken out from the scope of human sciences where the issue of values cannot be ignored without severe consequences.

The foregoing apart, social (political) scientists cannot but deal with values "because people are moral beings and thus social scientists are irretrievably immersed in value questions": And, the relevance of this immersion to political science was once put thus:

Political science is a policy science. Politics is mainly concerned with goals and the means to achieve them — policies. Politics involves policies, and policies involve values.

(Even), no political scientist denies (or can deny) that values hold a significant place in his discipline. Much of politics involves the value commitments of political actors, and so political scientists must study values political scientist does not have to deny that he has values.

James Farganis clearly puts into perspective why this is so:

Those who claim that value-free social science is possible delude themselves with false notions of scientism and objectivity; for, the very existence of social facts implies an evaluative structure, and, the social analyst who denies their presence implicitly accepts ideological legitimations by which a social order is maintained.⁵¹

The indispensability of this to modern political analysis catalyzed the rejection of behaviouralism by post-behaviouralism and the subsequent emergence of integrative scientific approach *vis-a-vis* analytical appraisal of human related issues within the parameters of political science.

To ignore the continuous relevance of this to modern political analysis particularly in Africa in preference for positive political science (which does not really exist or can hardly exist) or in preference for the evaluative neutrality that formed the core of logical positivism is, in our view, a Utopian optimism concerning the scientific or value-free nature of political science. However, our position here is not a demonstration of the impossibility of a science of politics relative to modern analysis but, rather, an indication of the impossibility of a 'photo-finish' application or importation of the value-neutrality syndrome of logical positivism to modern political analysis.

To ignore the immediate foregoing in the analysis of modern political phenomena, in our view, would subject the outcome of such analysis to contamination. And, this is not and should not be the goal of modern political analysis. And whatever is done in this respect constitutes the defining boundaries of the implications we have in mind here and, which would be negative if the assured value-neutrality is dogmatically embraced; and not effectively down-played or, is expected to be realistically blended with the humanity of the modern political analyst.

CONCLUSION

This paper started by considering the relationship between philosophy and society, and how the reduction of philosophy to abstract logical relations led to its being divorced from human problems. It then proceeded to explain the development of positivist thought in general and logical positivism in particular. In the section that followed, the paper discussed the doctrines and methods of logical positivism, and their implications. These were considered by focusing primarily on the doctrines of deductivism, operationalism and value-free social science.

From the discussions referred to above, one can conclude without reservation that the basic epistemological assumption of logical positivism that philosophical problems are the same as that of science, and can be understood through empirical demonstration⁵³ is nothing but an ideological assumption, which grew out of the European Renaissance, and the European Industrial Revolution of the 18th Century.

As it can also be concluded from our discussion, it was logical positivism that created a climate of opinion favourable to the sustenance of bourgeois society by its facilitation of the growth of science impregnated with ideology Eurocentric teleologism⁵⁴ and of positive economics.

The former has resulted in a continuous revolution in technology — the basic tool of domination and exploitation of non-European peoples. The latter, 'economic science' or positive economics has been strengthened by the positivists' superficial separation between what 'is' and what 'ought to be'. Logical positivism claimed that positive economics is not part of the human sciences because it deals with 'what is' not with 'what ought to be'. In this, positive economics is said, in principle, to be independent of any ethical position or normative judgment. Its task is 'to provide a system of generalizations that can be used to make correct predictions; its performance is to be judged by the precision, scope and conformity with experience of the predictions it yields'. The practice of this economic science at the level of abstraction completely removed from the domain of human activities in term of how wealth is produced and distributed. Thus, to a significant extent, the issue of positive economics is realistically misleading as does any claim that may intend to classify political science as a positive science.

We can conclude by rejecting the notion of scientific and independent observational statements, because in the analysis of social events, observational language cannot be said to be independent, and there are no facts completely separated from value. Observational statements and facts are usually informed by theory. The superficial separation between theory and observation is a practical separation determined by the rules of the statement separating them. And the difference between the statement being discovered and the statement justifying it, is based on the beliefs that separation exists, between how theory is interpreted and how it is validated.⁵⁶ However, since facts are based on theories and provide the base for facts and conceptual framework for conceiving, interpreting and validating facts, then the basis of the dichotomy of logical positivism between facts and value disappears.⁵⁷

The consequences of the doctrines of logical positivism for society are that it allowed injustice and oppression to reign by sapping the efforts of people who would have revoked against them. It also discouraged intellectual inquiry into ethical issues and thereby sanctions the *status quo*. It ostracized social classes and argued that class society does not exist because it cannot be empirically demonstrated or observed the way statements about the individuals are translatable into observable statements. Any discussion of social classes are said to be descriptive, and therefore meaningless.

The doctrine of logical positivism, its methods and epistemo-logical assumptions are ideological. Contrary to the ideological assumption of logical positivism, philosophy is more than abstract logically-related system. There are ethical issues which cannot be empirically verified or explained. For, if logical positivism is right in its extreme empiricism, there are, no *apartheid*, no exploitation, no imperialism, no oppression, no injustice, no hunger, no social problems, no parties, no fascism, no underfed people, no inadequate housing, no election annulment, no guided democracy, no mechanistic transition programme, no fuel crisis nor scarcity, no racism, no capitalist system and no socialist system, because they are value statements which cannot be

ENDNOTES

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