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EXPLANATION AS A COMPREHENSIVE TASK IN COMPLEMENTARY REFLECTION

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1.1 INTRODUCTION

Several explanatory models has been proffered by philosopher, sociologist, psychologist, historians and scientist, right from the ancient, medieval, modern and contemporary period in the history of philosophy. However, in spite of the common nature of such reflections on explanation, opinions hold that no consensus has been reached as to which explanatory model is most workable. It is on the above basis that this work is highly significant because it intends to examine, about the newest effort in this direction. We shall thus survey explanatory models that had existed before now, and those who proposed them, their limitations before showing with precision, how explanation has been or is a comprehensive task in complementary reflection.

1.2 HISTORICAL BACKGROUND ANCIENT PERIOD

According Ted Honderich in his article titled, "Explanation", a distinction gradually emerged in ancient Greek thought between explanatory theories and theories about the nature of explanation, (262). The import here is that, explanation as a concept has its origin in ancient Greek. Here it is argued that whereas Thales Empedocles, Anaxagoras and others proposed explanations of natural phenomena, Plato's theory of forms sought to offer a systematic explanation of things.

Again Honderich noted that historically, Aristotle seems to have been the first thinker to differentiate explicitly between investigating, what causes what and investigating the very nature of causation. Thus Aristotle revealed four different kinds of cause that an explanation of physical phenomena could cite. These are; (1) The formal cause, (2) the material cause, (3) the efficient cause, (4) the final cause.

The formal cause: This is that in virtue of which a thing is the type of thing that it is. Here, the formal cause of a thing is the form, the essence or the pattern which makes a thing the particular kind of thing that it is (262). It is the shape which distinguishes it from another kind of thing.

The material cause: The material cause is the stuff, whatever it may be that is typed by the formal cause. In a nutshell, it is the material with which a thing is made (262).

The efficient cause: The efficient cause is what produces a thing. It is the source of the agent responsible for bringing it into being (262).

The final cause: The final cause is purpose for which something is produced. In other words, it is the end in view, the purpose for which a thing exist (262).

MEDIEVAL PERIOD

Honderich argued that the medieval period of philosophy mostly echoed Aristotle's idea about explanation. In fact his concept of final cause is said to have found prominence within this period, and that it supplied a convenient foundation for religiously orientated teleology (262). This simply means that his notion of explanation influenced and became the basis for which everything in nature was believed to be purposive. That is, intended for an end and moving towards an end.

MODERN PERIOD

The modern period in the history of the above concept, records that it was Francis Bacon that took the decisive step of segregating teleological explanation from scientific explanation (Honderich, 262). At the same time, Bacon, it is argued, treated the form correlated with an observable characteristic as the law in accordance with which that characteristics occurs or can be made to occur and that within the hierarchy of these laws he supposed that the more comprehensive the explanation that a law achieves the more certainty it has (262).

Still within the modern period, Honderich quotes David Hume as saying that causal laws state merely the constancy with which one particular type of observable phenomenon succeeds another. He also argued that the feeling that this succession occurs necessarily should be explained as being merely the outcome of a mental association between the idea of the earlier phenomenon and the idea of the later one. Here, it is however argued that whether or not Hume is right about this, the dominant model of explanation in the natural sciences seems to require the citation of one or more laws which when conjoined with the statement of relevant facts entail occurrences of the phenomenon or uniformity that is to be explained (262).

Russell as also quoted by Honderich however argued that such laws should specify not a casual process but the correlation of one natural variable with one or more others (262).

Philip Kitcher in his article "Explanation", writes that, philosophical reflections about explanation are common in the history of philosophy and that important proposals were made by Aristotle, Hume, Kant and Mill, with the tenet that, the subject came of age in the twentieth century with the provision of detailed models of scientific explanation, prominently the covering-law model, which takes explanations to be arguments in which a law of nature plays an essential role among the premises (268). Here, Kitcher opine that in the heyday of logical empiricism, philosophers achieved a consensus on the covering law model but that during the

1960s and 1990s, that consensus was challenged through the recognition of four major kinds of difficulty. These includes;

1. A problem about the relation between idealized arguments and the actual practice of explaining.
2. The difficulty of characterizing the underlying reaction of a law of nature.
3. Troubles in accounting for the asymmetries of explanation.
4. Recalcitrant problems in treating statistical explanations.

Kitcher contends that appreciation of the above difficulties led to widespread abandonment of the covering-law model. He further argued that currently, there is no consensus on how to understand explanation. He however submitted that, the main contemporary view seeks to characterize explanation in terms of causation, that is, explanations are accounts that trace the causes of the events explained. Other philosophers believe that there is no general account of explanation and offer pragmatic theories. Yet another position sees explanation as consisting in the unification of the phenomena (268).

1.3 CONCEPTUAL CLARIFICATION

Reflection on the term explanation has attracted several philosophical opinions in the history of philosophy such that it has become so common. Although it still seems easy to understand, we would attempt some definition here, so as to make the focus and onus of the work simple and clear.

Explanation is an ambiguous word. This is because we often apply it to the clarification of terms or statements. It is also used to refer to the provision of reasons in support of a judgment. It is further used frequently as attachment to weaving together of a theoretical fabric within which credible generalizations may occupy determinate place (Scheffler 19). Implicitly therefore, explanation is a means of analytic clarification of either terms, statements, judgments, theories as the case may be, or used as support for a position etc.

Explanation has also been defined as that which produces understanding how or why something is as it is. (Honderich, 262) This implies that explanation gives one insight into the how or why of things.

Explanation has assumed different senses, thus the verb to explain, “is used to cover many human activities. It generally answers questions of How? Why? What? When? Whither and Whence? How much? And How far? All these amount to providing explanations in one form or another. More so, there is the sense in which we ask people to explain what they mean or have said when we mean they should restate, clarify or simplify their earlier assertion in terms that are more familiar and understandable” (Aigbodioh, 77).

There are other senses of the verb in which a request for explanation according to Aigbodioh is a demand for the following:

1. Reasons in the form of manifest or latent factors: This form of explanation provide us with excuses for why we hold certain beliefs to be true and others false. This is not supposed to provide an ideal form or model of scientific explanation, rather it is said to constitute a model of explanation in the Social Sciences (e.g

Anthropology, Sociology and Political Science) where Marxist and Freudian theories, among others are viewed as viable explanatory hypotheses. (79)

2. A statement of purpose or intended goal: This has to do with that which underlies our actions or behaviour as well as the activities of animals, God, and some mysterious forces and powers. It is however noted that there is a fundamental point of distinction between explanation by reference to reasons and purposive explanation. In the latter case the goals (reasons) which are imputed to persons are generally consciously entertained, whereas in the former case the reasons need not be despite the difference, both types of explanation are to be common in the social sciences, history and are classified under the form of explanation called functional or teleological explanations as explained earlier in this work (80).

3. Explanation as a Reductive Activity: Here it is pointed out that one sense in which explanations are thought to be attained is by reducing the statement of the event to be explained to terms which refer to more familiar events. The example given here, is that, when we seek explanation for the strange behaviours of some persons, we may be told that they are impelled to act the way they do by some events which arouse certain feelings, like of anger or sorrow, in them (80). According to P.W. Bridgman, as quoted in Aigbodioh's work, "Philosophy of science: Issues and Problems", in this manner of explanation we are made to understand that what appears to be a bizarre form of behaviour is a true to life experience which results from such feelings, motives and desires as we often have. Thus what earlier looked strange is explained in familiar terms. In his book, "A sophisticated's Primer of Relativity", as quoted in Aigbodioh, Bridgman, believes that, examination will show that the essence of an explanation consists in reducing a situation to elements with which we are so familiar that we accept them as a matter of course, so that our curiosity rests.

This idea is also shared by Norman Campbell in his book, "What is Science", as also quoted by Aigbodioh. Campbell points that, by tracing a relation between the unfamiliar changes and the extremely familiar changes, we are rendering the former more intelligible, we are explaining them (80).

However, although some philosophers like Bridgman and Campbell think that most scientific explanations, take this form, others maintain that there are good reasons to think that the concept of explanation as reductive activity is not satisfactory, although some events could best be explained by an appeal to it. One of such reasons given is that there are many familiar things about which we may seek explanation but which cannot be reduced to familiar terms of experience (Philosophy of Science: Issues and Problems, 81).

4. Explanation by subsumption under laws: Under this sense of explanation. It requires that an event requiring explanation to be placed within the context of a general law or some law like general statements. Thus while stating this view, John Hospers in his book "Introduction to Philosophical Analysis", as quoted by Aigbodioh, posited that to explain an event is simply to bring it under another law. It does not matter whether the law is one that purposes or not; what matters is that if the explanation is to be true, that law invoked must be true (82). Examples here includes: why does iron rust? Why do water and gasoline not mix? etc.

The proponents of this sense of explanation Hempel, Nagel and Hoppers argue that the model can be extended to all explanations if they are to be true.

FORMALIST AND CONTEXTUALIST APPROACHES TO EXPLANATION

Aigbodioh opines that formalist and contextualist are two opposing schools of thought in contemporary philosophical studies in the sciences. They differ on the issue of how scientific theories, as well as their explanatory and predictive powers, are to be construed. The basic question here goes thus, are there universalisable formal structure of logical forms into which all-scientific theories are analyzable? Or alternatively, are the essential elements of a theory context-dependent such that it contains its own primitive and peculiar a logical factors which border on values and interests (83)?

The formalists insist that, every scientific theory, as well as the way it serves the purpose of explanation can be analyzed into a definite logical structure. Here theories are viewed as complex deductive systems which are put to explanatory and predictive uses. (83) Put another way, theories are product of deduction, used to explain and predict events. That if theories are thus construed as calculi, that the task of the philosopher of science should only be that of an applied logician who is concerned with formulating and exhibiting the logical structures or models of scientific theories and explanations. (83).

On the other hand, the contextualist hold the opinion that the translation of ordinary language, including scientific theories into symbolic calculi distorts its meaning and deprives it of its function as a system of communications. They like Wittgenstein say that if we must genuinely assimilate the meaning of scientific theories we must take into account the intentions, motives, desires and aspiration of the scientists. They also believe that all sorts of considerations including the values and metaphysical beliefs of the scientific explanations and predictions. Thus for them, there are no logical models into which theories or explanations may be analyzed as the formalist want us to believe (83).

SCIENTIFIC EXPLANATION AS DEDUCTIVE NOMOLOGICAL

Aigbodioh quotes C. G. Hempel as saying, scientific theories and explanations are reducible to basic logical structures, he argues that all scientific explanations have certain logical characteristic in common. This he refers to as the Deductive-Nomological and Inductive-Nomological models of explanations. (85)

Under this form, explanation consist of two kinds of statements, first those which describe the antecedent conditions of the phenomenon which was to be explained, that is, the immediate circumstances which prevailed before or the phenomenon requiring explanation. The second kind of statements consists of some general laws. These two sets of statements he said, constitute the necessary and sufficient conditions for the occurrence of the phenomenon which need to be explained. This means that, the statements both of the antecedent conditions and of the laws are alleged to entail logically the phenomenon which was to be explained.

In order to state the purely logical and empirical conditions which a truly scientific explanation is supposed to satisfy, Hempel as again quoted by Aigodioh

drew a distinction between two kinds (parts) of an explanation, namely, the explanandum and the explanans. (87) Explanandum according to him, is the statement which describes the phenomenon or event to be explained while the explanans is the entire set of statements which are adduced for the purpose of explained the phenomenon.

He maintained that the latter kind of statements are again sub-divided into two, those which describe the proximate antecedent conditions C1, C2 Ck, and those which express the general covering laws L1, L2 L.

Hempel as further quoted by Israel Scheffler, stated the characteristics of true scientific explanations as follows;

R1. The explanandum must be a logical consequence of the explanans, which is to say that the inference of the explanandum from explanans must be deductive guaranteed by the explanans, with the latter providing the necessary and sufficient grounds for the occurrence of the phenomenon.

R2 The explanans must contain relevant general laws from which the explanandum is truly derived. But this requirement does not entail that there must be at least a factual statement which describes some antecedent conditions. This makes it possible for some laws to be explained and inferred entirely by reference to more general laws independent of particular facts.

R3 The explanans must contain some empirical facts if the phenomenon described by the explanandum is to be inferable from it. This means that at least part of the explanans must be capable of being tested by experiments or observation, if not in fact then in principle.

R4 All the statements of the entire explanans must be true else the inference from them to the explanandum would not be sound (The Anatomy of Inquiry: 29).

Having given the about characteristics, Hempel went on to summarize the general form of deductive argument which scientific explanations take as follows:

Logical deduction C1, C2 Ck
L1, L2 L

E

What this summary shows, is simply that the explanandum follows from the explanans. Thus the deductive model implies that we could have predicted the occurrence of the explanandum at an earlier period, we had known about the logico-empirical connections which the explanans has to the explanandum. (89)

However, according to Russell Keat and John Urry, it does not follow from this that the D. N. Model in fact provides an adequate account of scientific explanation. For there are many other examples which cannot be regarded as estimate cases of scientific explanation despite the fact that they meet this model's requirements. In other words, the model does not provide sufficient conditions for explanation, for there is some important element, which it fails to capture (11). They further argued that the D. N. model approach faces at least two difficulties.

- i. That Hempel together with many other positivists does not wish to restrict the concept of scientific explanation to that of casual explanation.
- ii. That the positivist treatment of causal relations is such that a distinction between causal and non-causal laws is very difficult to draw. This they attribute to their adoption of a Humean regularity theory of causation. (Social Theory as Science: 12).

INDUCTIVE –NOMOLOGICAL FORM OF EXPLANATION

This is the inductivist variant of the deductive-nomological model because it involves explanation by inductive subsumption under general statistical or probabilistic laws. Put in a nutshell, it involves inductive explanation. This inductive explanation differs from the deductive ones from the standpoint of its non-deductive mode of inference (Aigbodioh: 90). It is important however, to note that inductive explanation has the same basic logical format as the deductive explanation except that the inference of the explanandum from the explanans is inductive rather than deductive (92).

FUNCTIONAL ANALYSIS

According to Aigbodioh functional analysis, is the alternative method of explanation which is said to have been developed for use in biology, psychology, sociology and anthropology. It generally does not invoke law-like statements as deductive and inductive methods of explanations do, but seeks to explain the function (for purpose) of a given item, material or moral, in a biological system or a cultural organization. (92) the method is usually invoked to account for such phenomena, as a physiological mechanism, neurotic trait, a culture pattern or a social institution, which are recurrent activities or behaviour patterns in an individual or a group. Its primary goal is to determine how the phenomenon contributes towards maintaining the entire individual or group in a continuous condition of existence.

Aigbodioh quotes Hempel as saying that in view of the above method takes the basic pattern of functional analysis to be a kind of logical form or model which is applicable to explanations in the social sciences. It is also implied, that a functional analysis is a form of teleological explanation which indicates that the explanation in question is purposive or goal-directed. Thus for Aigbodioh, explanations are made not by reference to cause which bring about “an event but by reference to ends which determine the trend of events. (93)

The methods of scientific explanation surveyed above are necessary as an attempt to show the basis of the claim that science explains the physical world in a way that no other discipline, religious or metaphysical, does or can. However, our next sub-topic will refute or justify the above claims.

1.4 THE LIMITS OF SCIENTIFIC EXPLANATION

The issue here is, do the sciences offer true explanation as they claim? According to Aigbodioh one answer to this question is that no human science actually answers, or has the final word. On, the question “Why?” for every why question ultimately boils down to such question as why does anything or the world

exist rather than nothing? Why do events occur at all? And why are things related the way there are? He argues that, these are ultimate questions which cannot be adequately answered without getting involved in the problem of infinite regress. He further maintained that it is always possible to pose a why question after another so that we would have an endless chain of “causes and Beauses”. For this reason he said it could be argued that if any science is to successfully answer the question why? Then it must be capable of showing that the things that exist must exist, that the events that occur must occur, or that the relations which hold among things could not have been other than what they are. More so, he argued that since the natural sciences with all; their observational and experimental methods are hopelessly handicapped in providing us with secure ultimate and logically necessary answers, then they cannot be said without equivocation to explain in the real sense of the word. (94)

The empirical sciences he said are to provide answers only to how questions. This he said implies that, the sciences are concerned with logically contingent truths about the world, which do not explain in the real sense of the word. For this reason, Natural Science describes, so far as it can, how or in accordance with what rules phenomena happen, but it is wholly incompetent to answer the question why they happen according to E. W. Hobson, as quoted by Aigbodioh. (95) Here, it is also argued that, the scientific model, which was initially put forward as the way or the method, is it must now be admitted, a single way or method out of others. He as well maintained that the initial objection to the explanatory value of the sciences helps to arrest the growing conception in many quarters that the whole aim of science is to explain in a way that provides us with the ultimate essence of the world. This implied that scientific laws and theories are more than consequently true statements and embody the intrinsic facts of the world, whatever they (the facts) may turn out to be. However, he opined that, they are not necessarily true and it is doubtful if they are faithful descriptions of the world. He concludes therefore that, scientific explanations are naturally limited. (95).

From our historical examination, exposition and conceptual clarification of explanation, it is obvious that since ancient, medieval and modern period in the history of philosophy, of science, scientific explanation is incapable of providing secure ultimate and logically necessary answers, rather, it only answers how questions which are logically contingent truth of the world, and which do not explain in the real sense of the word. Its inability to explain the why of things, as in giving us the ultimate essences, has led philosophers to conclude that, it is not the only way or method, but one among others, and limited as well.

The above limitations of scientific explanations as demand for reason, purpose, reductive activity, subsumption under laws, logical structure or non-logical structure, deductive analysis as presented by E. W. Hobson, Phillip Kitcher, F.A Aigbodioh are clear indication that there is still need for a philosophy, with a method, more dynamic, and which will consider, as well as give thorough and comprehensive insight into explanation.

According to Asouzu, most realist, positivist and conventionalist theorist give the impression that theoretical and experimental entities are either single observable or unobservable realities. This he said negates the mutual necessary

intrinsic complementary relationship needed to grasp any entity either real or imagined. This methodological flaw he stressed, is the foundation of any explanatory paradigm that has its root in a bifurcating ontology (Ibuanyidanda: 299). And that this is one of the most severe flaws endemic to Western scientific methods of investigation and its models of explanation.

The positivist model of explanation is limited because it makes recourse to an understanding of induction that puts units in serious doubt. Also, a positivist approach focus much on singular instances devoid of the mutual complementary relationship existing within any given situation (Ibuanyidanda: 299). Again most conventionalists suffer same limitation, because they approach the issue of explanation with the impression that anything goes. And by so doing, they relinquished explanation to the uncertainties arising from human ambivalent situation (Ibuanyidanda: 299).

From the realist point of view, the subject matter of scientific research and scientific theories exist independently of our knowledge of it. This presents a kind of limitation because explanation hardly transcends an understanding of a cause that is an agent and one which is not inherently related to an effect that it produces in a complementary mutual way (Ibuanyidanda: 299).

Another difficulty enshrined in most realist, positivist and conventionalist models of scientific explanation subsists in the ontological foundation of their articulation. This in Asouzu's opinion is an ontology that is very sensitive to the inherent difference existing between substance and accident. Such that in the course of any explanation the mutual complementary dependence between all actors and factors entering into an explanation can always be doubted (300). These models he argued are erected on an elitist type of ontology that extols differences, as this ontology discriminate and polarizes. For this reason therefore, one can say that models are limited in my opinion, which also agrees with that of Asouzu, where he said that these models lay undue emphasis on the role which reason alone plays in the genesis of ideas such that in explaining an event a disproportionately higher importance is ascribed to the input arising from reason. He maintained that under such circumstance, the mind hardly sees the intrinsic worth of the input of other units who may be seen as mere muscle powers. This he added amount to a situation where the input of reason is disproportionately also rewarded, at the detriment of other actors and factors needed to bring about an event. In this form, most of these models of explanation are often homogenizing and reductionist, since they are all matters of explanation as things reducible to the operation of the intellect (Ibuanyidanda: 300).

1.5 LIMITATION OF MYTHS AND FABLES AS EXPLANATORY MODELS

Just like the short-coming of the natural sciences in providing us with secure ultimate and logically necessary answers through all their observational and experimental methods, as pointed by J. A. Aigbodioh (94). Similarly, Asouzu argues that, wherever myths and fables replace critical thinking, and the search for causes takes the form of world immanent causal co-determination, object- based rational explanation can be impaired greatly. And that those solutions that need

natural incremental and ultimate empirical explication in many cases would not receive adequate attention beyond mere guesswork and conjectures (Method and Principles of Complementary Reflection: 206). He writes that the anonymous traditional African thinkers were aware of the type of empirical physical causes obtainable in nature as can be shown by their ability to induce rainfall through the manipulation, of natural elements as causes. Again these thinkers he maintained saw the logical causal link between good fodder and the health of animals, but failed to see the need to delve into the complex question of what constituted good fodder or good nutrition. More so, they had the tendency to ascribe the inexplicable to causes of mysterious supernatural type that were necessarily related to the complementary transcendent unity of consciousness, yet this tendency stifles scientific curiosity, (Method and Principles of Complementary Reflection: 207). According to Asouzu, the above tendency again, seek ultimate incremental explanation through careful analysis and that exact knowledge between things in a natural relationship of elements to each other was grossly underdeveloped within the framework of explanation. He advanced that under the above framework, such speculative reason sought ultimate explanation of the unexpected, complex and extraordinary cases through reference to the same basis of legitimization of all that had value in society. This he said generated the desire to seek ultimate causal connection in a mythological manner, which hindered the kind of explanation needed for scientific progress. The above attitude he argued explained why fate, influence of gods and destiny became major explanation categories of such intellectual milieu (Method and Principles of Complementary Reflection: 207).

This mindset as described above formed the inadequacies of that tendency as an explanatory scientific model. Such a method tended to bottle up the mind in the self-imposed straight jacket of causal co-determinacy. This according to him substituted the search for ultimate causes with complementary model which imposes some limits to any attempt aimed at explaining things ultimately and insightfully since it misunderstands the world's immanent causes as ultimate causes in a way that absolves and unburdens the mind of its explanatory empirical responsibility. The outlined inadequacies formed the brainchild of an obvious mind-set, which aimed at identifying world immanent missing links in the relativity of their historical constitution and the desire to explore their connection in the most detail complementary way possible. This he maintained marked the differentiating point from purely myth oriented metaphysical thinking to the demands of scientific methodology reasoning, because where a myth oriented approach is in place, the comprehensiveness of the applicability of the principle of contradiction would always remain doubtful (Method and Principles of Complementary Reflection: 207). Again, explanation is limited "when encrypted realities such as matters dealing with witches, wizards, magic, ogwu, charms, sorcery, oracle, divination, myriad of supernatural forces, are handled only within the dictates of our raw primary cognitive ambience" (Ibuaru: 140). When this happens, Asouzu posit that, there is always the danger of superimposing encrypted cognitive categories drawn from the same ambience and such that make understanding and explanation difficult if not impossible. Similarly, he argued that, "it is when researchers seek to consign these phenomena only to their explicative worth within fixed ambits, as

those as dictated by the raw primary cognitive ambience, that most complications arise” (Ibuaru: 140). It would suffice as we have earlier argued to say that the scientific method is only one way or method among others, and that it answers questions of how only, but cannot give ultimate essences of the world, and so makes it limited. In his book *Ibuanidanda Asouzu* states “As a scientific paradigm, all forms of world immanent pre-deterministic concomitant ways of seeing the world have the capacity to focus the mind only on known causes, persons and events. When this happens, this way of seeing the world easily hinders the mind from attaining ultimate expression beyond what the immediacy can provide” (19). He further says that the methods of explanations based on this reasoning are grossly incomplete as they are not comprehensive. We shall therefore show how complimentary reflection as achieve this comprehensive explanation in the next sub-section.

1.6 WHAT IS COMPLEMENTARY REFLECTION

Professor Innocent I. Asouzu of the Calabar School of philosophy is the founder of complementary reflection as a philosophical movement in contemporary African philosophy. He has variously in his many writings outlined the basic assumptions and principles of complementary reflection. It is a new scholarly endeavour, which seeks to capture the very soul of the type of positive approach required in handling issues in the world today. So like other philosophical directions, that have their natural roots somewhere, it is a life- philosophy, which seeks to understand reality from the preceding conditions of its African background, without committing itself uncritically to these preconditions. It seeks to outline the conditions for understanding and interpreting human life and situation with a view to providing the tools necessary for harmonious co-existence. (*Method and Principles of Complementary Reflection*: 41) He opines that complementary reflection is the sum total of the intellectual mechanisms employed to make the philosophical project materialise, a project, which seeks to consider things in the significance of their singularity and not in the exclusiveness of their otherness in view of the joy that gives complement to all missing links of reality. It emphasizes the richness of differentiation in complementarity and does not handle exclusiveness as absolute category of world-immanent realities. Rather, it considers world immanence as aspects of transcendent unity of consciousness, which drives the reality of the world. (40) In complementary reflection according to the author, the mind considers realities in the universality, totality, wholeness, comprehensiveness, and future relatedness of their composition.

1.7 EXPLANATION AS A COMPREHENSIVE TASK IN COMPLEMENTARY REFLECTION

From our examination and discussion so far, it is clear that all the forms of explanatory models x-rayed are limited or have shown inadequacies, as in, not being able to provide us with ultimate essences of the world, and again posing hindrances to insightful explanation needed for scientific progress. In view of the shortcomings of both the scientific explanatory models, myths and fables, I shall devote this sub-section to examining and discussing why and how explanation is a comprehensive task in complementary reflection. Thus although Phillip Kitcher hold the tenet that the main contemporary view seeks to characterize explanation

in terms of causation, that is, explanations are accounts that trace the causes of the events explained (268). Innocent I. Asouzu in his complementary approach argues, “what has been said about the idea of causality has natural grievous implications for the way we understand explanation” (Ibuanyidanda: 294). A complementary model of explanation for him “strives to supersede all forms of reductionism that might arise were we to view explanation not as something involving all possible relations that serve each other complementarily, within the framework of the totality and in a future related way” (Ibuanyidanda: 294). In other words, under complementary explanation, statement of the event to be explained are not reduced to terms which refer to more familiar terms. This implies that Asouzu’s complementary explanation goes beyond P. W. Bridgman, who believes that examination will show that the essence of an explanation consists in reducing a situation to elements with which we are so familiar that we accept them as a matter of course so that our curiosity rest, as well as Norman Campbell’s idea, because for Campbell, by tracing a relation between the unfamiliar changes and the extremely familiar changes, renders the former more intelligible, and by this, we are explaining them (Philosophy of Science: Issues and Problems: 80). However, as earlier noted, some philosophers hold that there are good reasons to think that the concept of explanation as a reductive activity is not satisfactory, although some events could best be explained by an appeal to it. One of such reasons given is that, “there are many unfamiliar things about which we may seek explanation but which cannot be reduced to familiar terms of experience” (81). Given the above criticism against explanation as reductive activity, it would suffice to say that Asouzu’s complementary approach to explanation is more comprehensive as it overcomes the problem associated with reductionism.

With regard to scientific explanation, Asouzu argued that, “complementary reflection sees this as something that has to do with giving a comprehensive account of what is needed to be explained, bearing in mind the special character of the nature of being as *ihe di, nwee isi na odu*” (Ibuanyidanda: 295) This is however not the case, for according to E. W. Hobson in his book, “Pattern of Discovery” as quoted by Aigbodioh, the empirical sciences are said to provide answers only to how questions. And so are concerned with logically contingent truths of the world, thus it is again wholly incompetent to answer the questions why they happen. (95) This is more so why it has been argued by Aigbodioh that scientific explanations are limited, because of its inability to explain in a way that provides us with the ultimate essences of the world.

Again the query presented by Russell Keat and John Urry against the D-N model says that “although we could predict the occurrence of the explanandum if, at an earlier period, we know about the logico-empirical connections which the explanans has to the explanandum, it does not follow from this that the D-N model in fact provides an adequate account of scientific explanation. For there are many other examples which cannot be regarded as legitimate cases of scientific explanation despite the fact that they meet this model’s requirements”. In other words, the model does not provide sufficient conditions for explanation, for there is some important element, which it fails to capture. (Social Theory as Science: 11)

Based on the above criticisms against scientific explanation, this work holds as a matter of fact, that it falls short of a holistic account of explanation. This is more so because for, Asouzu to explain a thing or an event does not subsist only in determining what its efficient cause is or might be; as if such an efficient cause is the sole determining active agent that is needed in order that a thing or an event can be explained. He further argues that, “to explain a thing, does not subsist in limiting ourselves to such conditions that we think can be isolated as reasons for things to take new forms. A comprehensive type of explanation is the one which uses the complementary approach. Here, it involves seeing units as things that serve each other interminably, as well as takes into account all possible conditions that might be adjudged necessary to determine the character of a thing, bearing in mind the position of the subject, which convey the moment of intrinsic necessity that is complementary” (Ibuanyidanda: 295). Complementary type of explanation therefore has to do with the capacity to see the processes involved as things needed to make the joy of being realizable and affirmed within any given context of explanation, in which case, all actors and factors have to be seen as constituting interminably constituents of what is needed for the joy of being to result as what is intended by all types of explanation. This is because once any of the units is not taken into account, no explanation can be said to occur. A good explanation for him and in this case does not subsist in giving good reasons only, without taking into account all the units as they are mutually related to each other in an intrinsic complementary related way. (Ibuanyidanda: 295). In this context, he argues that to explain a thing means an attempt to go beyond all forms of world immanent pre-determinate causes and to grasp into the future. Particularly, it is an attempt to connect an agent, which is the efficient cause, to the effect it produces in a necessary mutual complementary mode bearing in mind the mutual dependence and interdependence in complementarity, which exist between all the actors and factors needed in any given condition. In this case, it is opined that all forms of explanation within a complementary framework have a future reference in view of which anything that might be considered necessary in serving as missing link of reality can be integrated into the processes needed to produce the whole. (Ibuanyidanda: 296).

Essentially, Asouzu contends that, “all complementary modes of explanation center on the human person. Therefore, in explaining an event within the complementary framework, we have to bear in mind always that the processes needed to bring about an effect have always an intrinsic character of necessity bestowed by the human agent as a thing that is self-conscious. It is from this background that we put into account, in any type of explanation, all actors and factors needed to produce an effect” (ibid. 297). He also posited that “as things that have to deal with a self-conscious human subject, the idea of mutual complementary necessary dependence between all things and events, in need of explanation, is not something that can be explained based on mere habits or frivolous deceptive assumptions. On the contrary, these are matters that have to deal fundamentally with a being that is self-conscious” (Ibuanyidanda: 297). This moment of necessity for him, follows basically from clear intuition of a subject that

is not alone in the world. This subject has the capacity to relate events to each other and recognizes them as service in complementarity.

Furthermore, he argued “that when we remove this moment of self-consciousness (*ima onwe onye*) entering into explanation, nothing is explained. Were we assume that the dimension of necessary mutual linkage between events, at the moment of explanation, is nothing other than mere habitual assumption, the tendency is to debase explanation to an act unworthy of a human subject” (Ibuanyidanda: 298). For this reason, Asouzu holds the position that, to give an explanation, as a human act, there is need to consider always all the things that enter into this process as they relate to each other necessarily, complementarily, mutually, because those persons that enter into the process of explanation are human subjects endowed with consciousness (Ibuanyidanda: 298).

What therefore seems central to a complementary explanatory index, is that it seeks ways of giving fuller account of what it means to explain a thing or an event in a way that seeks to complement the insight deriving from all models of explanation. It thus involves always, a complementary comprehensive account of the necessary links existing between an agent and the effect it produces in a future related way. This dimension of future relatedness according to Asouzu serves as a mechanism that forestalls relapse into any form of arbitrariness and intolerance in view of the factors and conditions that might be considered necessary for any event or thing to be explained (Ibuanyidanda: 300)

With regards to what Asouzu calls “encrypted phenomena”, he emphasizes the point that “the moment we divorce what is to be explained from the wider framework of its articulations, that is the moment they continue to relapse into obscurity and create more problems” (Ibuaru: 139). This is because, no phenomena claiming special character can be grasped creditably. It can do this only within the context of mutual complementary relationship. Contending therefore, that “it is only in this mode that all encrypted phenomena can be seen as things serving pragmatic cognitive postulates geared towards comprehensive explanation” (Ibuaru: 139). In order to proffer solution to the difficulties posed by such mysterious phenomena, Asouzu opined that, “to surmount all forms of world immanent pre-deterministic supernaturalism inherent in commitment to most forms of encrypted phenomena, there is need to create a conceptual framework that guarantees some measure of freedom of action and of reasoning for all stakeholders” (Ibuaru: 144). This is because, as long as the powers of the explainer to give meaning to what is needed to be explained is drawn from the same mysterious foundation, all matters relating to such supernatural milieu would remain perpetually shrouded in mystery (Ibuaru: 144). Essentially therefore, he argues that, it is in mutual complementarity of our efforts that we can address problems arising from encrypted phenomena adequately (Ibuaru: 144).

1.8 CONCLUSION

In this work, I advance the argument that the search for a holistic explanatory model, is an issue which started disturbing the mind of lovers of wisdom, in the scientific, sociological, anthropological psychological and philosophical sphere right from ancient period to the medieval, to the modern and contemporary period,

in the history of philosophy. And since this endeavour started, men like Thales, Empedocles, Anaxagoras, Plato, Aristotle, Francis Bacon, David Hume, Descartes, Kant, Mill, Marxist, Freudian, P. W. Bridgeman, Norman Campbell, John Hospers, Wittgenstein, C. G. Hempel, Russell Keat, John Urry have all contributed one version of explanation or another. Although those versions of explanations has been useful in a way and had helped to solve some form of problems in the past, it would suffice to say that those forms of explanation, had inherent limitations that has hindered them from achieving holistic success in their application as explanatory models. These limitation ranges from inability to provide ultimate essence of the world, not being able to answer the “why” questions about the world, not being able to capture the relational elements in things explained etc. and that in view of the unsatisfactory characteristics of the explanatory models discussed earlier in this work, the need for a more comprehensive explanatory model could not wait further but to jump out of the drawing board to be conceived so clearly by a very distinguished professor in the University of Calabar school of philosophy, the founder of complementary reflection.

We have shown in this work that one of the main task which complementary reflection has undertaken has been to give a thing or an event a complementary comprehensive account of explanation, which seeks to show the necessary link existing between an agent and the effect it produces in a future related way. It is unique because unlike the other explanatory models, it takes into account the actors, factors, intrinsic character of necessity bestowed by the human agent as a thing that is self-conscious, mutual complementary necessary dependence between all things and events needed for a comprehensive explanation. This it has achieved by going beyond all form of world immanent pre-determinate causes and to grasp into the future. More so, by considering all units mutually related to each other in an intrinsic complementary related way.

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