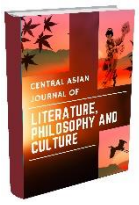

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An Examination of Alfred North Whitehead's Concept of Event Ontology

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Abstract: Leaving impact on several fields, including philosophy, physics, and computer science. In this paper, we critically evaluated Alfred North Whitehead's idea of event ontology, concentrating on its theoretical foundations, implications, and prospective applications in a variety of different domains. In philosophy, Whitehead's notion had an impact on the emergence of process philosophy, which emphasizes the dynamic and processual character of reality. This study adopts the expository and analytical methodology. The study exposes that event ontology is of vital relevance in an endeavor to grasp the constantly changing nature that cannot be ignored and that time and space should be attributes of substance or events and not its locale. In all, by closely investigating Whitehead's idea of event ontology, we gained a better grasp of the nature of reality and the complex web of interactions that define our world. This assessment can serve as a basis for further investigation and research in a variety of topics. The concept of event ontology encourages us to look beyond rigid concepts about objects and substances, and instead embrace a more fluid and interrelated view of existence.

Keywords: space and time, event ontology, scientific realism, concrescence

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1. Introduction

Alfred North Whitehead developed a novel notion of event ontology, which has had a considerable impact on several fields, including philosophy, physics, and computer science. This idea holds that event, not things or substances, are the primary elements of reality. In this paper, we will critically evaluate Alfred North Whitehead's idea of event ontology, concentrating on its theoretical foundations, implications, and prospective applications in a variety of different domains. Whitehead's event ontology contradicts the traditional Aristotelian idea that reality is made up of fixed and immutable objects. Instead, he proposes that happenings are the fundamental building elements of existence [1]. According to his idea, events are dynamic processes that evolve over time, always affecting and being impacted by their environment. These events can range from basic occurrences like a stone falling to more complicated phenomena like human thinking or social interactions. Whitehead's event ontology has important implications. First and foremost, it emphasises reality's interconnection and relational character. Events are not separate events, but rather interwoven and interdependent processes that shape the universe's structure. Second, this idea calls into question the traditional understanding of causality, arguing that events are not governed by a straight cause-and-effect relationship, but rather arise from a complex network of influences and interrelations.

Furthermore, the concept of event ontology has received interest in a variety of fields. In physics, it has been proposed that Whitehead's concept of events might give a more complete framework for comprehending quantum phenomena like entanglement

and superposition, which challenge typical object-based explanations [2]. Event-based systems are gaining popularity in computer science because they provide more flexible and adaptive real-time data processing. Whitehead's notion had an impact on the emergence of process philosophy, which emphasises the dynamic and processual character of reality [3] Beyond reinterpreting Whitehead, it is critical to strive to distil him into a single notion that encompasses others and his essence. This is classified as 'Events' since this essay makes the point. As a result, the main driving force for this article is a comprehensible re-appraisal of Whitehead that underlines the utility of event ontology one by one.

2. Method

This study adopts the expository and analytical methodology in order to achieve its set objective. The material for this work has been gleaned from primary and secondary sources through library research and internet information.

3. Whitehead's Rejection of Substance Ontology/Scientific Materialism

Whitehead has often criticised Aristotle (and hence all those who were inspired by him) for his viewpoint on the concept of substance, which gave birth to the concept of substratum in scientific materialism. Aristotle's logic is the culprit here, according to Whitehead:

> Aristotle asked the question, what do we mean by 'substance'? Here the reaction between his philosophy and his logic worked very unfortunately. In his logic, the fundamental type of affirmative proposition is the attribution of a predicate to a subject. Accordingly, amid the many current uses of the term 'substance' which he analyses, he emphasizes its meaning as 'the ultimate substratum which is no longer predicated of anything else' [4].

This is the beginning of the mistake that Aristotle caused in the stream of thinking that infected the present scientific understanding of matter (substance), which was widely accepted. It gave concreteness to matter, which is a voyage across time and space. Whitehead criticises the naïve acceptance of space and time as external requirements for natural existence, demonstrating that space and time are the frameworks within which nature operates. Whitehead rather held a relational theory of space and time and not absolute concept of them:

> My own view is a belief in the relational theory both of space and of time, and of disbelief in the current form of the relational theory of space which exhibits bits of matter as the relata for spatial relations. The true relata are events [4].

Scientific materialism is an offshoot of Cartesian dualism, which was influenced by Aristotle's substance theory. It is also object ontology, which implies independent realities, as opposed to event ontology, which lacks them. This is derived from the Aristotelian Subject-predicate method of thought informed by substance, which depleted the scene during the late classical period. Reality is more than just the subject-predicate position. Aristotelianism's negative effect is due to the subject-predicate type of preposition. Whitehead rejected this.

In CN, Whitehead criticized the idea of matter as the substratum that supports the characteristics we observe. Of course, this concept was shook to its foundations in the 17th century. The separation of the human body and mind influenced how people saw their surroundings. Several attempts to solve this dilemma prompted Berkeley to idealise. Whitehead rejected the concept of substance as something mysterious, following Locke's definition of substance as 'a thing I know not what', because he portrayed nature as concrete facts perceived in self-awareness, devoid of metaphysics of reality or psychic

additions supplied by the perceiving mind. Whitehead sees and reacts to materialism thus:

> The ultimate fact of an irreducible brute matter, or materialism, spread throughout space in a flux of configuration. In itself such a material is senseless, valueless, purposeless. It just does what it does do, following a fixed routine imposed by external relations which do not spring from the nature of its being [5].

Further, in PNK and CN, he describes materialism as "merely the fortunes of matter in its adventure through space" [4], and nature as the "distribution of material throughout all space at a durationless instant of time" [6]. This implies that Matter lacks intellect, inherent structural substance or relationships, quality, spontaneity, and freedom. Whitehead abandoned scientific materialism because its premises were no longer suitable to comprehend or explain new findings. Nature was regarded as rational, which influenced scientific hypotheses in both the ancient and contemporary times. Nature was deemed logical since it exhibits laws and some regularity, making it predictable. This was taken for granted since it was obvious, yet it served as a foundation for induction.

Unfortunately, the new science of the 17th to late 19th centuries, famed for its naive rationalism, retained the assumption of the old science: nature was both regular, lawful, and accessible to reason. This bothered science. The new science's Naïve Rationalism dismissed non-rational and subjective parts of nature as unreal. They reject everything qualitative and non-quantitative. Quantitative was all that mattered. The spatial-temporal and mathematical concepts become absolutes. Whitehead questioned the absolutization of the quantitative over the qualitative, as if they were not valid components of reality. This absolutization had its precursor in Descartes when he said of matter:

> We must at least admit that all things which I perceive in them clearly and distinctly, that is to say, all things which, speaking generally, are comprehended in the object of pure mathematics, are truly to be recognized as external objects (as in [7]).

Whitehead sought to account for or explain the significance of subjective aspects such as chance, spontaneity, internal relations, final causation, and freedom, which nature incorporates and prioritizes. Herein lays Whitehead's postmodern attitude.

4. What is Scientific Materialism?

Newtonism established 'Scientific Materialism'. Scientific materialism may be defined as the mechanical perspective of nature that emerged from 17th-century science, which introduced the notion of dualism. Berkeley is thought to have coined the word to describe an unjustified belief in the existence of matter. Scientific materialism is defined as the conviction that physical reality as seen by the senses is all that genuinely exists, to the exclusion of any presumption that there are realities that cannot be scientifically tested. Whitehead points out:

> There persists, however, throughout the whole period the fixed scientific cosmology which presupposes the ultimate fact of irreducible brute matter, or material, spread throughout space in a flux of configurations. In itself such a material is senseless, valueless, purposeless. It just does what it does do, following a fixed routine imposed by external relations which do not spring from the nature of its being. It is this assumption that I call "Scientific materialism' [5].

Scientific materialism feeds on doubts about the knowability of any immaterial beings that may exist. Our view of scientific materialism differs slightly from Karl Marx's and Fredrick Engels' interpretation, which gave rise to 'historical materialism', which

traces the beginning of existence to matter and denies that any reality is immaterial. Materialism developed in the mid-18th century. Natural sciences investigate the observable world using sensory and experimental methods. Whitehead defines science as the study of organisms, as he chooses to refer to them. Science and the Modern World exposes his organismic worldview. It also serves as a critique of science, with a focus on materialism [5]. Whitehead hoped to demonstrate that the chasm between matter and values might be bridged by using the scientist's experimental approach. Materialism thinks that objects are distinct, discrete, and unrelated. It thereby eliminates the domains of forces that underpin reality. Hartshorne [8] defines materialism as "the denial that the most pervasive processes of nature involve any such psychical functions as sensing, feeling, remembering, desiring, or thinking."

5. Implications of Scientific Materialism

Materialism discards:

Religion	}	no regard for a supreme being and ethics/moral
Art		Aesthetic
Literature		value/ethics
Music		

Whitehead sought scientific materialism's impact on Western morality, politics, poetry, values, and culture. This was misplaced. Scientific materialism was not the definitive truth of nature, as widely believed. Whitehead thus started his effort of demonstrating that nature kept something other than the nature defined by science. This he accomplished by destroying scientific materialism, because "the only way to mitigate mechanism is by discovering that it is not mechanism" [5].

How can materialism's offshoot, dualism, be overcome by a new view of the nature of reality that takes into consideration the whole of human experience in all its hues and implications, including beauty and purposefulness? According to him, this new, non-materialistic vision of nature should provide a more adequate framework for natural research. Whitehead wants us to entirely abandon the habit of perceiving the material universe as a collection of lasting things moving around in an otherwise empty vacuum. He reinterpreted mass as no longer being a fixed quantity of substance. He believes, like Einstein, that mass equals energy. As Lowe put it, mass becomes the label for an amount of energy when viewed in connection to certain of its dynamical consequences.

According to him, matter/mass occurs when 'a specific structure survives over a linked series of occurrences; it becomes a lasting material 'object' [9]. This permanence is relative and refers to the 'form' of the process. Being is merely 'to be' a verb or event transformed into noon - the result of our natural object ontology. The concept of materialism is incorrectly thought to be founded on abstracted commitments. The Fallacy of Misplaced Concreteness [5] The Newtonian model of the cosmos had suffered a permanent setback. This demanded the replacement of Newton's notions, which extended beyond physical science.

6. On Event

An event is a characterization of change; the absence of clear-cut change means that salt change is restricted. Events should be planned to include properties. Event generates or causes another event or occurrences. Events interact causally. Events are made up of exchanges and informal contacts. Event ontology may provide a detailed description of reality without relying on characteristics. What can we achieve with event ontology that object ontology or early event as mind cannot, and how can we organize in a state of flux owing to development, healing, and digestion? The emphasis is on what is happening rather than what is causing it. Event ontology is of vital relevance in an endeavor to grasp the constantly changing nature that cannot be ignored.

7. The Rejection Object Ontology of Scientific Materialism

Scientific materialism is an offspring of contemporary classical physics, which was led by Newton. Scientific literature maintains dogmatically that pieces of matter that obey mechanical principles are the ultimate elements of the universe. This would indicate a loss of originality, spontaneity, and activity.

Seeing all reality through the lens of item specialisation misses out on important aspects of reality, such as the relationships and activities between two or more objects. Whitehead brought up other options in addition to objectification. Whitehead came at his conclusion after a thorough examination of historical trends, particularly in the realm of physics. He questioned the union of science and materialist dogma, pointing out the flaws that lead to such an incorrect position. The fallacies are as follow:

1) **Fallacy of Simple Location:** Whitehead dedicated much space to criticize scientific materialism. In SMW, the inability to understand and appreciate the holism, the relatedness and connectedness of reality is what Whitehead regarded as the fallacy of simple location. Thus, he rejected the idea that things that could be localized at 'points' of space and time, mathematically speaking, were authentically real. This suggests that matter or particles are out there in space and time existing on their own without connection with others. It destroys the idea of relatedness. According to Whitehead:

> The ultimate fact of an irrevocable a brute matter or material spread throughout space in a flux of configurations. In itself such a material is senseless, valueless, purposeless. It just does what it does do, following a fixed routine imposed by external relations which do not spring from the nature of its being [5].

Simple location has the effect of portraying nature in the light of mere "distribution of material throughout all space at a directionless instant of time" [6]. Matter is seen as in adventure through space [4] devoid of intelligibility, internal structural content or interiority. On this Kraus comments:

> Barren of any interiority, it is likewise incapable of self-initiated purposeful action and merely 'move around' by the mechanical causality of its environment. Since the totality of its behavior is induced by external observable and quantifiable force, its future in totally explainable and absolutely predictable [10].

To Whitehead, this position amounted to the reversal of the facts of nature also borne out by experience. Fallacy of simple location therefore treats as more real entities with simple location than entities of field relations.

2) **Fallacy of Misplaced Concreteness:** Whitehead posited this fallacy as entailing the fallacy of simple location, but going beyond it. This fallacy treats 'points' of space and time as more real than extensional relations which are given in presentations immediacy or experience. This means that abstraction such as space and time are treated as if they were real concretely, thus reversing the or misconstruing functions of the concrete and the abstract.

The whole idea of substance is built on the foreign misconceptions and undue objectification of space and time. For according to him;

> Thus, the origin of the doctrine of matter is the outcome of uncritical acceptance of space and time as external conditions for natural existence. By this I do not mean that any doubt should be thrown on facts of space and time as ingredients in nature. What I do is the unconscious presupposition of space and time as being that within which nature is set [4].

8. Time and Space

Whitehead argues that time and space should be attributes of substance or events and not its locale. Since the whole being of substance is as substratum for attributes [4]. Following this, Whitehead adopts the relational theory of space and time which he upholds in all his works and lectures. Space therefore becomes a consequence of relations between bits of matter.

The Principle of Extensive Abstraction: Regarded as Whitehead's major contribution to philosophy of science. Victor Lowe notes that a thorough consideration of this principle of 'extensive abstraction' will reveal Whitehead's approach to philosophy of science and metaphysics shows 'a combination of theory and concreteness' [9]. This distinguishes him from others. Extensive abstraction, according to Victor Lowe,

> …is the name of the technical instrument which Whitehead invented for defining in terms of relationships evident in the perceptual flux those apparently simple concepts of space and time such as 'point', 'line' and 'instant', in terms of which all exact natural is expressed [9].

Relationships are parts of the flux also known as process. Thus, the need to bridge the gap between what is experienced in space and concepts of science became of utmost importance to Whitehead. The experience for nature should be connected with scientific of nature should be connected with scientific concepts which include space and time and their corollary. To continue to operate based on a mechanistic Newtonian physics-based conception of reality that is known to be fundamentally false and untrue is akin to building on quick sand which would lead to disaster one day. We cannot operate on falsehood and expect it to last. Newtonian physics – based conception of reality is known to be fundamentally false and defective. The quintessential role of our conscious choices is ignored and even denied.

9. The Importance of Classical Sense of Substance

The classical view of substance serves some purposes that deserve to be mentioned here. They are:

1) It fosters a common-sense knowledge and understanding of the world around us. The importance of this cannot be overemphasized as this world has a common-sensical dimension without which so much would be lost.
2) The scientific understanding of the world requires integration with commonsense understanding. This is made possible by the classical sense of substance.

This subject-predicate stance or form of proposition has come to be known as 'the evil of Aristotelianism' as it corrupted reality. This is what Whitehead has come to regard as scientific materialism. The full import of this would be unpacked subsequently.

10. Actual Entities: The Meaning and Implication of Event

The philosophical quest seeks to decipher and identify the kinds of things that exist and how they exist. To exist may have different shades of meaning for individual philosophers. While Whitehead conceives of it to be fully actual as a concrete particular item or thing, Kierkegaard sees to exist to be in reference to individual human being. He said to exist, "implies being a certain kind of individual, an individual who strives, who considers alternatives, who chooses, who decides, and who above all, makes a commitment [11].

Whitehead sees actual entity as the most basic concept in the Categoreal scheme, for according to him:

> Actual entities – also termed actual occasions – are the final real things of which the world is made up. There is no going behind actual entities to find anything more real. They differ among themselves: God is an actual entity and so is the most trivial puff of

> existence in far off empty space. But though there are gradations of importance, and diversities of function, yet in the principles which actuality exemplifies all are on the same level. The final facts are, all alike, actual entities… [1].

It should be noted that actual entities and actual occasions can be used interchangeably but Whitehead notes a slight difference in meaning thus: while occasions imply a spatio-temporal location, actual entities include God and other actualities in spatio-temporality with its character of extensiveness (either temporal extensiveness or spatial extension). God is considered as one nontemporal actual entity and in that sense, unique. Put clearer, actual occasion excludes God due to its character of extension. Actual entities capture God in its sphere.

Actual entities are microscopic units of reality. Actual entities can be seen as meaning the same thing as events and are central to the process ontology. Aggregates of actual entities, otherwise also to be known as macroscopic entities are the objects that dot our world such as trees, stones, people, among many others. These aggregates are not the final reality and to consider them as such would be to commit the Fallacy of Misplaced Concreteness. Actual entities are final.

Each actual entity is a 'process of becoming' by its own activity. In other words, it is self-creating or self-causing. This self-creation is the generic metaphysical feature that distinguishes all actual entities. They are multiples but also individual actuality and acts of becoming. Each actuality rises out of a process of activity that is generic to all, but it becomes an individualization of the generic activity [12]. Actual entities are birthed through creativity. Put a little differently, creativity is the creation of actual entities. They are not conceived as being individually or wholly independent and separate superseding each other. Each actual entity that has become serves as data for future novel actual entities. Leclerc, alluding to Whitehead, renders it thus:

> …. That is to say, the present actuality which is in the process of origination, in the process of becoming, is a novel creation out of components constituted by antecedent actualities. Whitehead uses the word conformity advisedly, for the present actuality in becoming is a new creature, self-created; it is not an antecedent actuality in a new state. But the novel creature cannot be an origination out of nothing - that would constitute a violation of the ontological principle; it has to have 'data'. The primary data for an actuality in becoming are the antecedent actualities which have become. That is, the antecedent actualities constitute the data for, and the component of, the new actuality in becoming. The new actual entity is a novel origination, but if conforms to the past in the past in the sense that its components are derivative from antecedent actualities [12].

From the foregoing, we discern that no actual entity is entirely original but is as a result of data supplied by that which has preceded it. Older actual entities serve as parent to newer ones. Actual entities are concrescences of prehensions. This is possible by the seizing of its datum with its own subjective form. Whitehead sees actual entities as being in the process of activity: "each actual entity is a cell with atomic unity.

But in analysis it can only be understood as a process; it can only be felt as a process, that is to say, as in passage [1]. Thus, there is a growth from phase to phase; there are processes of integration and reintegration that are constantly ongoing. Actual entities are constituted by their becoming through the category of process. Whitehead gives further insight into actual entities: they are "drops of experience, complex and interdependent" [1]. This brings to the fore the fact that actual entities experience or possess consciousness especially within complex societies. This way, actual entities differ from Democritus' atoms that merely inert, material imperishable stuff. Actual entities are vital, transient

and in a state of flux. However, it should be pointed out that Whitehead does not intend to endow inanimate things with consciousness as consciousness is a part of sophisticated actualities.

11. Event and Associated Concepts

11.1. Eternal objects

From Whitehead's perspective, entities can be actual (real things that exist) or ideal (pure forms that do not exist but are able to define existent realities). These ideal entities are eternal objects. Whitehead goes on to define eternal object as "any entity whose conceptual recognition does not involve a necessary reference to any definite actual entities of the temporal world…." [1]. Eternal objects are forms of definiteness that are fundamental and necessary ingredients in the making of actual entities which are individuals and of particular form or character.

Shang observes about eternal objects:

> They define a realm of possibilities, of conditional potentials of existent reality and therefore of actual entities and their dynamic processes of association in their complex evolution. There is a terminological diversity that revolves around this concept: forms, ideal identities, abstract entities, universals, potential forms [13].

Kraus opined: "… for there to be an individual activity, its activity must take a definite form. Its being as an actual entity requires its definiteness being determined by a particular kind of 'entity', namely, its 'form'" [12]. This means it is the 'form' that gives actual entities their definiteness and individual character. Whitehead holds that these forms of definiteness are things, entities that exist, but not as actual entities themselves. They are components of actual entities, in their modes of existence. They are fundamental ingredients in the existence of actual entities and serve as determinant of their definiteness. They are unique sorts of entities that are different from actual entities.

Eternal objects are comparable to Plato's Forms and the Universals of the Medievals according to Whitehead [1]. As can be seen, both actual entities and eternal objects exist but there is a difference between them. Actual entities, by their very nature involve change, process and evolution. They are usually in the process of becoming which is a process of acquiring definiteness by a series of decisions to select or reject various forms of definiteness after grading them in a diversity of relevance. Eternal objects, on the other hand, do not consist in a process of becoming. They are 'eternal' because they are not subject the assault of necessary transition occasioned by the internal constitution as obtainable in actual entities. The seeming process eternal objects are subject to is that of informing the constitution of actual entities. In doing this, eternal objects do not become new creatures as actual entities become or are. Through 'ingression' the eternal objects inform or determine the formation of actual entities. Put clearer, the eternal objects 'ingress' in the novel actual entity coming into existence, thereby determining its definiteness [10]. Whitehead put it thus:

In such a philosophy the actualities constituting the process of the world are conceived as exemplifying the ingression (or 'participation') of other things (entities) which constitute the potentialities of definiteness for any actual existence. The things which are temporal arise by their participation in the things which are eternal [1].

Through ingression, actual entities can select or reject any eternal object in its concrescence. In serving as ingredients in the making of actual entities, eternal objects are neutral and can ingress into any actual entity if selected. They are eternal and given in their nature – given to actual entities in becoming, thus "an eternal object is always a potentiality for actual entities; but in itself, as conceptually felt, it is neutral as to the fact of its physical ingression in any particular actual entity of the temporal world" [1]. Eternal objects are qualia and patterns, making unity in concrescence. Christian explains further:

> Eternal objects are pure potentials. They are in fundamental contrast with actual entities. In themselves they do not determine in what actual entities they are ingredient. This is what is meant by saying that they are "pure" potentials. They are merely possible forms of definiteness. Prehensions of eternal objects are called conceptual prehensions, in contrast with prehensions of actual entities, which are called physical prehensions [14].

What informs the selection or rejection of eternal objects by actual entity in concrescence? Are actual entities absolutely free to choose or reject eternal objects to be involved in concrescence? Sherburne, in agreement with Whitehead, is of the view that actual entities do not have absolute freedom in the selection or rejection of eternal object. On this, Whitehead had pointed out, "an actual entity arises from decisions for it and by its very existence provides decisions for other actual entities which supersede it" [1].

11.2. Classification of eternal objects

Eternal objects can be classified by their modes of ingression into actual entities. The modes are:

1) As an element in the definiteness of some objectified nexus, or of a single actual entity.
2) As an element in the definiteness of the subjective form of some feeling
3) As an element in the datum of a conceptual or propositional feeling

From these three modes, two kinds or classifications of eternal objects can be discerned:

1) External object of objective species
2) External object of subjective species

While the former obtains its ingression as an element in the definiteness of some nexus or single actual entity, the latter is merely a type of eternal object whose element is in the definiteness of subjective form of feeling of an actual entity. Eternal objects are indispensable parts of actual entity that is central to Whitehead's Event ontology/Process philosophy. Without eternal objects, there cannot be actual entities. Eternal objects transcend all actual occasions but are actualized in individual occasions of experience.

11.3. Prehension

When Whitehead said, "The primitive form of physical experience is emotion –blind emotion- received as felt elsewhere in another occasion and conformally appropriated as a subjective passion" [1], he was referring to his notion of Prehension. David Ray Griffin notes that prehension is Whitehead's more technical term for "feeling" [15]. It shows the relationship or relatedness between actual entities in their formation. Etymologically, prehension is from *prehendere* (Latin) which means the activity of seizing [10].

Whitehead makes interesting points in SMW to elucidate his theory of prehension. He refers to Francis Bacon's very word in Natural History which give basis to prehension: "It is certain that all bodies whatsoever, though they have no sense, yet they have perception:… and whether the body be alterant or altered, evermore a perception procedeth operation; for else all bodies would be alike one to another…." (Bacon, as in [5]). He considers perception as used by Bacon as meaning taking account of essential character of the thing perceived [5] This is foundational to his doctrine of prehension. Griffin calls it "the prehensive doctrine of perception" [16].

He points out the difference between cognition and prehension: while the former is to be understood in terms of sense, and in association with perception is shot through with what he calls the notion of cognitive apprehension, the later, he says is to be used for uncognitive apprehension [5]. This is in order to avoid the centrality of the sensual perception. As can be seen, the doctrine of prehension is very important in Whitehead's scheme in a bid to develop a vision of dynamic related reality. Whitehead used prehension to refer to a mode of taking account of other things that could be nonsensory

above those that are sensory. To Whitehead, our most fundamental mode of perception is the nonsensory mode. Therefore, his is a nonsensationalist doctrine of perception rejecting the assertion that our senses are the most fundamental mode of perception.

The problem of the fallacy of simple location of bits of matter in space and time which was of interest to Whitehead and to be developed later in this essay, had serious implication and consequence for space and time, also to be examined, as it rendered space and time as bits. This stance rendered all the bits as mere objects of external influence devoid of any internal/interior relatedness, which gives rise to a philosophical problem. This fails to account for nature and its processes, thus prompting Whitehead to attempt a theory that will fully portray the internal relatedness of things and processes obtainable in nature. This is what the theory of prehension is about.

Furthermore, the theory of prehension brings about a justification of the principle of causality but not on Hume's term this time. Causality, from the theory of prehension would no longer be seen as mere sequence of events in which event 'B' merely follows event 'A' without any sort of relatedness or intrinsic relation. Prehension therefore becomes a better pedestal for induction, having provided justification for causality, for according to Whitehead; "Either there is something about the immediate occasion which affords knowledge of the past and the future, or we are reduced to utter skepticism as to memory and induction" [5]. To this, Kraus adds:

> …as to memory, for unless the past is retained in some real way in the present, memory is reduced to a species of fantasy; as to induction, for unless the future is in some sense prefigured in the past and present, predicative statements are entirely arbitrary. Unless an occasion embodies in its present both its past history and its future possibilities, all that can be said of it is where it is – its instantaneous configuration [10].

We therefore see prehension adequately demonstrated and as holding the key to solving the problem of induction. The theory of prehension seeks to make the point that the past is retained somehow in present and is significant for the future. Whitehead selected the term 'prehension' to demonstrate and designate internal relatedness of an entity to its world.

Prehension is the process by which an actual entity 'grasps' another prior entity, whether actual or not, thus forming a connection or nexus in the process of becoming. It is a concrete fact of relatedness according to Whitehead [1]. Prehension means 'feeling'. Lewis [17] says prehension means "any (conscious or unconscious) taking account of another such that the prehender is affected by what is prehended".

Prehension refers to how multiplicities of actual entities organically unify in the production of novel actual entities. It refers to the activity of actual entities in concrescing with other entities. In any act of prehending, there is a subject –that which transacts the prehending and an object –that which is grasped in the prehending transaction. The object is the datum which provokes the special activity in the subject. The object could be another actuality or eternal object. There are three factors of prehension, two of which have been mentioned. Whitehead aptly states that:

> Every prehension consists of three factors: (a) the 'subject' which is prehending, namely, the actual entity in which that prehension is a concrete element; (b) the 'datum' which is prehended; (c) the 'subjective form' which is how that subject prehends that datum [1].

For prehension to occur, the objectification of the object must spark off the transaction of the process of prehension. By objectification is meant the simplest aspect of prehension by which an entity prehends another single actual entity as datum. Put differently, it is the means by which an entity presents itself as datum to be prehended by another actual entity, which becomes the subject

In establishing prehension as an essential aspect of the actual entity and his system,

Whitehead strongly advocated for a form of perception different from conscious perception. For him, what should be considered is the unconscious causal perception as it is more fundamental and necessary over and against conscious perception. It is the unconscious perception in the mode of causal efficacy that exhibits the essential features of 'experience' and not conscious perception. This unconscious perception of data has to do with the act of perceptually 'grasping' and 'including' the data as its 'objects' [12].

Whitehead rejects terms like 'awareness' and 'perception' whether qualified or not with the term, 'unconscious', as unsatisfactory. Those terms are closely associated with consciousness and therefore not necessary. They are also close to representative perception. Furthermore, Whitehead rejects 'apprehension' which to him stands in contradistinction to prehension. It is a derivative which implies grasping by the intellect or senses.

11.4. Concrescence

The actual entity that is becoming is a concrescence of the previous or antecedent data into a novel unity. This is what concrescence is all about: a growing together. A concrescence is the growing together of perishing past actual entities into a vital novel unity. It is the process of becoming which gives rise to novel actual entity. The Latin root word *Concrescere* suggests a concrete togetherness which antecedent individual diverse entities in disjunction grow into. *Concrescere* is seen as a productive act of becoming. Iroegbu, looking at it etymologically, opines:

> Concrescence is the act of becoming of actual entities. From the Latin *Concrescere*, to grow together, it is the productive act, the act of becoming of a being which is togetherness. In concrescence, the new being passes from its components in their ideal disjunctive diversity into the same components in their realized concrete togetherness. The new being becomes real [18].

Concrescence addresses the concreteness of the actual entity. Concrescence has to with the prehension of eternal object. Kraus points out that concrescence is "the 'growing together' of objects to create a novel subject which enriches the many from which it springs" [10]. Concrescence is the process that supplies data for emergent actuality from antecedent actualities. Whitehead adds, "actual entity is the real concrescence of many potentials" [1]. It is a concrescence of feelings. Concrescence captures "the process in which the universe of many things acquires an individual unity in a determinate relegation of each item of the 'many' to its subordination in the constitution of the novel 'one' [10]. The concrescence is the novel thing in question not that there is concrescence and the novel thing separately.

Therefore, to Whitehead, actual entity is an instance of concrescence. This takes place through 'feeling' of data. In other words, concrescence describes how actual entity feels data presented to it in prehension towards giving birth to a new actuality in an integral unity. Concrescence begins with the givenness of the past that is thrust out in a receptive moment to the concrescing reality. Monserrat brings a biological dimension to the meaning concrescence:

> It is the union and the growing together of parts that were originally separate. It is the constitution of unity in the universe of multiple things until the final result of a new unitary entity. The evolutionary process of the universe has been a process of concrescence because the original actual entities are dynamic and produce a process that is made up of continual relationships between entities [19].

Lango [20] presents concrescence of an actual occasion as being in three phases namely:

1) Initial Phase
2) Supplementary phase

3) Final phase

The first phase (initial phase) is the stage the actual entity conforms to actual entities in its actual world. It is the phase of simple physical feelings. A multiplicity of simple physical feelings comes into being through a process known as 'transition' leading to the actual entity's conformity to other actual entities in its actual world. The first phase is at a very simple level in the gradation.

The supplementary phase witnesses the emergent actual entity aiming at its own 'private ideal'. At this phase, a multiplicity of prehensions comes into being through integration of those that have already come into being. At the earlier phase, a multiplicity of conceptual prehensions comes into existence through a process of 'derivation' from the simple physical feelings in the initial phase. The emergent entity at this level makes its own 'valuation' from the prehensions of eternal objects available to it. This is the commencement of its own private aim.

In later supplementary phase of concrescence, a multiplicity of integral prehension comes into being through the process of 'integration' of prehensions that have already come into being the earlier phases. The aim here is to heighten 'intensity' of satisfaction of the actual entity. A 'private ideal' of the actual entity is being aimed at. In the final phase, the emergent actual entity becomes a completed unity of feelings. This is the phase of 'satisfaction' of an actual entity's concrescence. The actual entity emerges. Concrescence is about prehensions entailed by actual entities.

11.5. The Theory of Society/Nexus

The theory of society is an attempt to concretize actual occasions in the world of human experience. A society is a nexus which illustrates or shares in some type of social order. It is considered as the grouping of occasion. Therefore, "Any set of actual occasions are united by the mutual immanence of the occasions, each in the other. To the extent that they are united they mutually constrain each other" [21]. Society brings about the world of concrete, enduring yet changing objects. In the theory of society, particular relations that join actual entities into atoms or stones, or mountains that are given in the mode of presentational immediacy are captured and made understandable. Actual entities form into Orders, Nexus and Society toward concretization in the world of human experience.

Nexus of actual occasions can be Regions, Societies, Persons, Enduring Objects, Corporal Substances, Living Organisms and Events [21], all of which are not dwelt upon by Whitehead. Nexus is Whitehead's term to depict any group of actual entities that are joined together or united in their being interrelationship. Nexus occurs among actualities that share a particular ideal character. Society is created when a nexus of actual entities shares some ideal character that dominates each of them. The character brings 'Order' or 'Social Order". The component members share or inherit something genetic from each other. Thus, it "is constituted by the genetic relationships of a nexus of actualities exhibiting a particular 'Order'. For Whitehead: "Thus a society is, for each of its member, an environment with some element of order in it, persisting by reason of the genetic relations between its own members" [1]. This 'Order' consists in the actualities in question sharing a particular 'defining characteristics.'

'Order', for Kraus, "is the factor in an actual world which limits a concrescence, deciding for it what it can and cannot become (Kraus, p.61) Furthermore, "…the presence of a defining characteristic lends an order to a social environment which is not found in a nexus" [10]. This 'defining characteristic' is equal to Aristotle's 'substantial form' [1].

The concept of Society plays important roles in Whitehead as they are unities that lead to the formation of entities of our everyday experience. Societies can be analyzed into different strands of 'enduring objects' which when combined (in societies) give rise to permanent entities that enjoy adventure of change in time and space, and are relevant for science of dynamics. They are known as 'corpuscular societies' with little variations in the cases of gases and light waves. The significance of societies lies in the fact that

actual occasions present themselves as a conglomeration of social environments providing complex orders with positively prehended members that share some defining characteristics. In line with the organic model, all such actualities receive objectifications from members of the social environment but this is more proper for defining an inorganic corpuscular and structured societies. Societies are not matters of simple location of scientific material as in Whiteheadian society:

There are no self-contained, 'simply located' societies, needing nothing but themselves in order to survive. Every society exists within a wider framework, needing a background of social order to ensure its continuance by supplying the more general characteristics necessary for the maintenance of its specialized characters [10].

These serially ordered, single-lined genetically related societies that give rise to 'enduring objects' of our presentational immediacy. Whitehead concludes, "An ordinary physical object, which has temporal endurance is a society. In an ideally simple case, it has personal order and is an 'enduring object' [1]. They enjoy the adventures of change throughout time and space and are subject-matter of the science of dynamics being corpuscular. It is the defining characteristic that gives a society its corpuscular nature. To endure, a society must have antecedents and subsequents, hence the real actual things that endure are all societies. There are societies of societies such as families, groups of families, nations, species, groups etc., according to Whitehead [21].

11.6. Extension/ Extensive Continuum

Extension is a relation which two limited events can have to each other [4]. It entails 'whole' and 'part'; the whole is an event which extends over the part which is also an event. Extension makes for the continuity of nature. It is continuous and ongoing. It is bits of extension that are known in time and space. Extension is a very crucial component of event. By it, there is forward and the gaining and the loosing of parts permanently altering things and forming new events. The structure of events is the complex of events as held together by the relations of extension and congredience. Discerned events are relata in the structure to other events that may be disclosed. These discerned events include those in the remote past as well as events in the future far off unbounded time [4]. The Principle of Extensive Abstraction is regarded as Whitehead's major contribution to Philosophy of Science. Victor Lowe notes that a thorough consideration of this principle of "extensive abstraction" will reveal Whitehead's approach to Philosophy of Science and metaphysics shows "a combination of theory and concreteness" [9]. This distinguishes him from others. Furthermore, Lowe sees Extensive Abstraction as:

> …the name of the technical instrument which Whitehead invented for defining, in terms of relationships evident in the perceptual flux, those apparently simple concepts of space and time, such as 'point', 'line' and 'instant' in terms of which all exact natural science is expressed [9].

Relationships are parts of the flux also known as process. The, the need to bridge the gap or connect between what is experienced in space and concepts of science became of utmost importance to Whitehead. The experience of nature should be connected with scientific concept which includes space and time and their corollary.

11.7. Space-Time

Alfred North Whitehead's philosophical framework includes the concepts of space and time. According to Whitehead, space and time are not independent or absolute entities, but rather relational and emergent qualities arising from the universe's underlying web of events [22]. Whitehead contends that space is not a pre-existing container in which objects exist, but rather the result of relational experiences between events. He proposes that space originates from the "extensive continuum" of events, where the relationships between events produce the sense of spatial extension [1]. This

viewpoint undermines Newton's notion of absolute space as a fixed and autonomous object.

Similarly, Whitehead's view of time contradicts the idea of absolute, independent time. He believes that time is a measure of the progression of events that comes from the continuous flow of experiences. According to Whitehead, time does not exist independently of events; rather, it is a relational feature of the unfolding process [23]. Whitehead's view of space and time as emergent features of an interconnected web of events is consistent with his whole ontological worldview. His event ontology holds that reality is composed of dynamic and interrelated events rather than static objects or things. According to this viewpoint, space and time are neither permanent or absolute, but rather depend on the relationships and interactions between events in the universe [22].

11.8. Creativity

In SMW, Whitehead calls Creativity the 'underlying activity' or 'substantial activity' [5]. He replaces these terms with CREATIVITY in PR. Creativity is a very crucial concept in the understanding of process and actual entities. Creativity as used by Whitehead has different meaning from the usual daily usage of the word. Creativity is one of the three notions of the Category of the Ultimate as held by Whitehead. Other notions in this Category are 'Many' and 'One'. Creativity describes the most fundamental relationships that all actual entities participate in. as a notion, it very central to the ongoingness of process with the attendant succession of one generation of actual entities by others (newer ones). The cycles of successions go on endlessly. It is creativity that makes this ongoingness intelligible. Neville points out that the One and the Many are united through creativity (Neville as quoted [16]).

According to Kraus, creativity answers the question; 'Why does a settled past grow together through the mediation of eternal objects to form a newly patterned present' [10]. There is need for creative advance. Reality does not have to be grounded when a past is settled into an actual occasion by the cooperation of eternal object. Should this happen, there would not be advance and a future. It is the creative advance that brings about new patterns of actual occasions from the past. Creativity is the link between past actual occasion and eternal object and newly created patterns of actual occasion. Relatedness underscores all actual occasion the creativity yields. Actual occasion (completed fact) and eternal objects (forms) represent the static aspects of reality. The dynamic character of reality has to be brought to bear by another element known as creativity. Without it, the metaphysical scheme would be incomplete.

Creativity is the ultimate reality embodied in God and multiplicity of finite event. It is the twofold power of actual occasion through which it exercises self-determination (final causation) and then exert causal influence (efficient causation) on subsequent events [15]. It is about how actual occasions actualize themselves and causally influence each other – the causal principle being inherent in the nature of the actual occasions. Whitehead sees it as a replacement for Aristotle's static matter. In order words, the notion of Creativity of the Category of the Ultimate replaces Aristotle's category of 'primary substance' [1].

Creativity does not indicate any entity or being which may be more real than actual entities. It is the Universal of Universals characterizing ultimate matter of fact. What creativity does is to describe the most fundamental relationships actual entities can enter in. Creativity is the birthing or creation of actual entities which perish at the birthing of another actual entity. Therefore, there cannot be the production of new actual entities that is central to the concept of process except through creativity. According to Whitehead, "The word, Creativity expresses the notion that each (actual entity) is a process issuing in novelty" [21].

11.9. The Ontological Principle

The Ontological Principle is a key notion in Alfred North Whitehead's philosophical

system. According to Whitehead, the Ontological Principle states that "all that is actual is actual by reason of its exemplifying a principle of creative advance" [1]. This principle states that every real entity in the cosmos derives its existence and importance from its contribution to the continual process of creation and becoming. Whitehead contends that reality is not made up of static things or permanent entities, but rather is a dynamic and changing phenomenon. The Ontological Principle emphasises the intrinsic creativity and innovation found in all actual phenomena, from the most basic components to sophisticated creatures and beyond [24]. The Ontological Principle is based on the premise that every actual entity contributes to the universe's creative process, and nothing is excluded from its dynamic growth. Everything that occurs, from physical events to mental experiences, contributes to the continual process of creative becoming [1].

The Ontological Principle is strongly related to Whitehead's larger metaphysical idea of process philosophy. He believes that reality is made up of interdependent processes that are always changing. These processes are neither predefined or fixed, but are open to experimentation and creative development [24]. Whitehead's Ontological Principle provides a fresh viewpoint on the nature of reality. It questions traditional ideas about substances and permanent essences, emphasising the dynamic and interrelated character of reality. By emphasising the creative aspect in all actual entities, the Ontological Principle provides a framework for interpreting reality as a continuous process of becoming.

11.10. The Theory of Perception

Theory of perception shows how Whitehead handled the philosophical problem associated with perception generally. Francis Bacon's words provide the background for the discuss on the theory of perception. The interpretation of actual entity as a drop of experience serves as the ontological basis of perception. The quote from Francis Bacon helps us to understand it further:

> It is certain that all bodies whatsoever, though they have no sense, yet they have perception; for when one body is applied to another, there is a kind of election to embrace that which is agreeable, and to exclude or expel that which is ingrate; and whether the body be alterant or altered, evermore a perception precedeth operation: for else all bodies would be like one to another. And sometimes this perception, in some kind of bodies, is far more subtile than sense; so that sense is but a dull thing in comparison of it:….And this perception is sometimes at a distance, as well as upon the touch; as when the loadstone draweth iron; or flame naphtha of Babylon, a great distance off. It is therefore a subject of a very noble enquiry, to enquire of the more subtile perceptions; for it is another key to open nature, as well as the sense; and sometimes better. And besides, it is a principal means of natural divination; for that which in these perceptions appeareth early, in the great effects cometh long after [25].

Perception, for Bacon would mean 'taking account of' the essential character of what is perceived. It is some kind of reaction to the environment [26]. Following from this, 'sense' is to be construed as meaning 'cognition'. Other relevant words to Bacon's stance include embrace, exclude, agreeable and ingrate which can be applied to inert matter. Other salient points made by Whitehead include cognition and the repudiation of passive matter as merely an item simply located in space acted upon by physical and external laws/forces devoid of inner life that affords some kind of attraction. He further hinted on perception being a means of natural divination, which lends credence to telepathy. These are of particular interest in this essay. Perception is seen as a natural event devoid of Newtonian physics of vector fields. Perception is rooted in "experience". Experience, as

used by Whitehead has a different meaning from the general use of it. His usage is more generic in nature.

Descartes' metaphysical dualism, which dominated modern thought, shows that experience has been seen to be predominantly 'human experience' – connoting mentality or consciousness. By this, 'unconscious experience' is left unaccounted for; it is rather seen as a contradiction of terms. A consideration of the nature of conscious mental experience produces two schools of thoughts, namely Descartes' Rationalist School and Locke's Empiricist School. While the former sees 'thinking' or 'cogitation' as the primary generic nature of conscious mental experience, the later sees 'perception' as essentially a species of thought [26].

Locke and his followers in the empiricist tradition hold perception and thought to be secondary. This is because both hold different conception of the word 'idea': Descartes holds 'idea' to be primarily of the intellect while Locke considers it as of being of sensory origin – as of being of 'sensory impression', giving rise to sensationalism. Kant's attempt at reconciling both gave rise to the 'Categories of understanding' which constitutes experience. Whitehead rejected Kant's intervention as being more lopsided towards 'thought', rather than the 'sensory':

> In any metaphysical scheme founded upon the Kantian or Hegelian traditions, experience is the product of operations which lie among the higher of the human modes of functioning. For schemes, ordered experience is the result of schematizations of modes of thought, concerning causation, substance, quality, quantity [1].

Whitehead believes Locke's perception based on sensory impressions, is nearer to the truth and therefore more fundamental and satisfactory idea about the generic nature of experience. Cartesian 'thinking' is thinking about something which is different from the perception of it. While thinking may be the peak of our humanity, it does not constitute the generic nature of our 'existence' as thinking can cease when we sleep or are unconscious, yet we 'exist' at such times. Although Whitehead agrees with the empiricists that 'perception' is more fundamental than 'thought', he disagrees with Locke and others on the point that perception must be of sensory nature (sense perception). In other words, Whitehead rejects the account of perception where sensual perception reign supreme. Thus, he rejected sensationalism/sensationalist theory of perception associated with Hume which led him to the problem of Causation namely, based on sensory data, causation cannot be proven.

How can one prove that 'B' is as a result of 'A'? He therefore redefined Causation to simply mean constant correlation between two events or phenomena. Hence, sensationalism of the empiricists fails to explain the reality of causal influence, the reality of time and the reality of the past. The principle of induction, which holds that the past will hold true in the future, becomes problematic. The sensationalist does not take into account or provide explanation for normative values such as logical, aesthetic and moral norms. For Locke, such values are divinely revealed.

Whitehead was a radical empiricist in rejecting the sensationalist view of perception. To him, sensory perception as held by empiricists is not tenable but should be seen as a hybrid of two modes of perception namely that of presentational immediacy and that of causal efficacy. Whitehead differs from the theory of perception held by Descartes and Locke/Hume whose position leads inexorably the sensationalist theory of perception which was rejected by Whitehead. Closely related to the theory of prehension, it holds the key to solving the problems raised earlier.

11.11. Modes of Perception

Whitehead discusses three modes of perception as briefly reviewed here:

1) **Mode of Presentational Immediacy:** This is the sensationist doctrine of perception whose main advocate is Hume. In this mode, sense data are immediately present to the mind through the senses; it is dependent on the sensory discrimination of data

and concerns itself with the present. Various data such as coloured things are immediately present in consciousness. Sense experience is generated from data, which Whitehead refers to as Sensa, from the senses. This mode displays extensive relationships and is a realm of contemporaneousness with the percipient giving direct knowledge of the external world. Descartes, Hume and Locke, in spite of the difference in their core philosophies, seem to agree on the presentational immediacy mode of perception by omitting or failing to take into account the detailed description of what Whitehead refers to as 'withness of the body' [12] Presentational immediacy leads to solipsism of the present and Fallacy of Simple Location which should be overcome.

2) **Mode of Causal Efficacy:** This is also known as Whitehead's "Prehensive doctrine of Perception" [16] as it states that the most fundamental mode of perception is a non-sensory mode. It is a way of perceiving the existence of actual realities and their causal efficacy on us. Prehension is a more fundamental way of grasping things. This mode is more fundamental and vaguer than the mode of presentational immediacy. From this mode, we derive the notion of causation as real influence, the past is objectified and other realities that are beyond the senses are grasped. The prehension of the prior occasion of experience confirms the reality of the past and therefore, time.

   Epistemological problems associated with Descartes and many others up to Kant was/is because of the erroneous identification of sensory awareness with presentational immediacy leading to the Fallacy of Misplaced Concreteness. The non-sensationalist theory of perception is the crux of Whitehead's critique of modern philosophy which boldly denied or brilliantly explained away facts about reality. Whitehead asserts that sensory awareness is a building of more primordial physical experience that all actual entities share in and through this, he overcomes the bifurcation between phenomenon and noumenon. There is no indifference to the past and future as obtainable in presentational immediacy, for 'Causal efficacy concerns itself

   Whitehead thus calls us to deeper realities of nature easily skimmed over in science. It is for this that science fails to come to terms with concepts such as causation, induction and other normative values such as aesthetic, ethical and religious, but as we know, Whitehead was intent on building a cosmology that takes into full account the scientific, aesthetic, ethical and religious intuitions [5]. He argues for a full perception that factors in the sensory and the non-sensory modes of perception.

3) **Mode of Symbolic Reference:** The Mode of Symbolic Reference combines the Modes of Presentational Immediacy and that of Causal Efficacy to afford full-fledged perception; it is a synthesis of both. It is the belief of Whitehead that sensory perception, in its fullness, must be a mixture of sensory and non-sensory modes: while the Presentational Immediacy tells us of what is immediately present to the senses, Causal Efficacy takes us beyond the immediate. As Griffin helps us see:

> Full-fledged sensory perception tells me, for starters, that I have a body, made of things as actual as my experience is, and that at least parts of my body, such as my eyes, exert causal efficacy on my experience. And, knowing that my bodily parts are actual and capable of exerting causal efficacy, I then have an analogical basis for thinking of other things, beyond my body, as also actual and causally efficacious [15].

Perception, properly conceived, has both modes, thus giving full-fledged knowledge (captured in the mode of symbolic reference). Hume's fatal error centres around focusing on what is secondary and supplemental in experience and thus subordinating what is primary, foundational and original to what is secondary and inferior. What we perceive visually or sensuously are results of later stages of what started earlier in the mode of causal efficacy. The error proved fatal to philosophy

producing unresolvable complications earlier highlighted that manifested in science.

12. Conclusion

In the end, our exploration of Alfred North Whitehead's idea of event ontology has revealed the enormous implications and possible uses of this innovative viewpoint on reality. Whitehead's idea of events as the primary elements of existence calls into question traditional notions of objects and substances, emphasising our world's interconnectivity and dynamics. This notion has found resonance in a variety of fields, including physics, computer science, and philosophy. In physics, Whitehead's event ontology provides a viable framework for comprehending the complex phenomena of quantum mechanics, including entanglement and superposition. Event-based systems have grown in popularity in computer science due to their versatility and ability to analyse input in real time. Whitehead's idea of event ontology is consistent with the dynamic character of such systems. Furthermore, in philosophy, Whitehead's concept of events fostered the formation of process philosophy, which emphasises the dynamic and processual aspect of reality.

By closely investigating Whitehead's idea of event ontology, we have gained a better grasp of the nature of reality and the complex web of interactions that define our world. This assessment can serve as a basis for further investigation and research in a variety of topics. The concept of event ontology encourages us to look beyond rigid concepts about objects and substances, and instead embrace a more fluid and interrelated view of existence. Overall, Alfred North Whitehead's notion of event ontology has proven to be a valuable and productive framework for investigating and interpreting reality.

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