Analysis of Contrasting Scientific Philosophical Views and Application of the Concept Autism

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Abstract

The concept, autism, is an important area of interest in the author’s clinical practice and is chosen for comparing and contrasting two different philosophical views of science. Analysis of the logical positivist view and Alfred North Whitehead’s process philosophy are discussed. The constructed definition of autism is presented and used as a basis for comparison. There is discussion of past and present, physical reality and experience, time, and relations and particles between the two philosophies. It is concluded that Whitehead’s process philosophy lends itself better for the author’s definition of this concept.
The purpose of this paper is to provide an individualized definition of a specific concept, discuss the philosophical views of the logical positivists and Alfred North Whitehead, and determine which of the two provides the most applicable framework for this definition.

Concept Selection

The concept, autism, has been chosen and is defined as a group of behaviorally defined neurodevelopmental disabilities that exhibit widely variable deficits in socialization, communication and behavior.

Presuppositions/Underlying Assumptions

The logical positivists were an elite group of scientists, mathematicians and philosophers, originally known as the Vienna Circle. The goal of this formal group was to reduce all knowledge to logical and scientific underpinnings. Influenced by Descartes, Locke and Berkley, their foundation was grounded in the idea that experience was the only route to knowledge. They dismissed metaphysics, ethics and theological claims, stating that it was impossible to justify knowledge assertions that were outside the scope of science. The themes of their presuppositions are based on their mechanistic views of metaphysics, sensory data, induction, unified science and verifiability. They established that reason was superior to the obscure, logical was dominant over the intuitive and they attempted to prescribe a universal and precise language to define science (Godfrey-Smith, 2003; Kemerling, 2001a).

Alfred Whitehead was a mathematician, logician and philosopher. Whitehead viewed the philosophy of science much differently than the positivists. His philosophy of organism abandons scientific materialism and replaces mechanism with organism. He views reality as
process. Whitehead creates a universal organismic model founded upon aesthetics integrated with physics, other sciences, and the metaphysical concepts of ethics and theology. The themes of his presuppositions are based on his process views of metaphysics, simple location, misplaced concreteness, connection and wholeness (Cook, 1977; Northrop, 1948; Whitehead, 1967).

A landmark publication written by Russell and Whitehead in 1903, *Principia Mathematica*, attempted to demonstrate that all mathematics rests on logic and developed concepts allowing symbolic logic to be utilized in philosophy. Using the ideas presented in *Principia*, the positivists aimed at a unified science, which would produce the universal articulation of all the scientific propositions. The term, logical atomism, developed by Russell, stated the basic reality is atoms of sense observation, each of which is definite and unquestionable. The truth of any claim was determined by reducing a complex statement to its basic or atomic parts, which would then be matched with an atomic fact through sense observation. The positivists attempted to reduce everything to its smallest entity. Through this reductionist approach, they viewed an atom simply as an atom, whether it originated from a tree or a fish. For them, the smallest element of matter did not have any character on its own. Each reduced item was independent and used as a building block to produce basic, universal propositions. Basic matter did not interact; it just was (Hutchins, 1996; Godfrey-Smith, 2003).

Whitehead’s philosophy minimized the inappropriateness of reductionism, and ascribed to wholeness and creativity. In Whitehead’s philosophy of organism, enduring objects in nature are systems of smaller units with their own internal structure. Every event is a pulse experience in which feelings, not particles, exist. Evans (1998) states, “… the parts are looked at in relation to the whole with full recognition that the whole influences the characters of the parts” (p.28). Each entity is at once the cause of the whole and is caused by the whole. In his philosophy,
Whitehead replaced matter with *creativity*. Similar to the positivist’s view of matter, creativity does not have properties of its own. It is the vehicle that transforms everything into something else. It is what joins the disjointed universe into one actual occasion. Creativity replaces Aristotle’s “primary substance” (Lubbock, 1999, p.11). It is present and active in everything: minute particles, living entities and lifeless objects. It causes movement, integration, creation, growth, death, as well as emotions and feelings. Creativity brings about change and evolution on even the smallest scale. In his theory, the ultimate process is creativity, orchestrating the many into one actual occasion and eventually into complex unity (Lubbock, 1999; Whitehead, 1967).

Prior to the positivists, sensationalists regarded the mind to be restrained behind a “veil” of ideas or sensations, and in essence, the mind could not retrieve anything that was outside the veil. For them the mind was its own private world the subjective contents were just “furniture”. Subject-object confirmation rested entirely in the mind (Godfrey-Smith, 2003, p.20). Descartes believed that mind and matter were two separate and distinct substances. Reality was dependent upon one’s consciousness of it. The positivists held to the idea of dualism; the mind is an independent substance that has private worlds of experience. Statements of the universe must be derived from the individual’s sensory experience and verifiable statements must be capable of definition in terms of sense-data (Kemerling, 2001b). The positivists viewed that physical objects occupied a certain part of space at a certain time. Their idea of simple location described their world. The location of things determined the forces between them, and ultimately, the forces determined their next location in space. The “place, shape, size and position belong to the set of determinators of every physical thing” (Neurath, Carnap & Morris, 1971, p.860).

William James challenged Cartesian dualism by his conjectures that thoughts are not made from material objects. Instead, a function in experience which thoughts perform this task,
is *knowing*. Influenced by James, Whitehead opposed Cartesian dualism stating, the “…analysis of process as the realization of events disposed in an interlocked community” (Whitehead, 1967, p.152). Whitehead addresses two types of prehended data: sensuous and nonsensuous. Nonsensuous data includes past data, such as our memories. Precise digital data and visceral vague data are types of data from the past. They enter our minds through physical prehensions. Other nonsensory data include our perceptions and introspections. All of these allow the organism to have choices. Whitehead states that all have choices, whether they are human beings or sub-atomic units (Lubbock, 1999; Whitehead, 1967). The mind is not separate from matter. It is a function of the organism. “Only feelings exist; no particles exist; and all the feelings have the same form; that of the human mind” (as quoted by Lubbock, 1999, p.2).

In contrast to the positivists, Whitehead assumed elements, which are perceived by our senses, are not only in the world, but transcend the world (Whitehead, 1967). He refutes simple location with his theory of “Misplaced Concreteness” and posits that experiencing things must be differentiated from our knowledge of things. He believes “…things that are experienced and the cognisant (sic) subject enter into the common world on equal terms” (Whitehead, 1967, p.89). Sense-experience gives knowledge beyond individuality. Whitehead insists that the unity of the perceptual field must be a unity of bodily experience, which illuminates the whole spatio-temporal world mirrored within the bodily life. In other words, “…everything is everywhere at all times” (Whitehead, 1967, p. 91). Therefore, there cannot be duality as believed by Cartesian philosophy.

Cartesian thought presumed that individuals were unable to break out of isolation and enter relationships in the world. Whitehead disagrees; in order to move into a modern way of thinking, one must recognize that epistemological issues are disguised as metaphysical issues.
For Descartes, one only needs the self to exist. For Whitehead, his term *actual entity* stresses the importance of relationships to other beings. Descartes viewed matter as inert; energy was something external to matter. In contrast, Whitehead did not see energy as external; energy was the essence of matter (Whitehead, 1967).

Whitehead, in an attempt to be sensitive to the structures and meanings entrenched in the philosophical language of his time, constructed a scheme of concepts that avoided the constricted language of past philosophies. Whitehead believed that language limited our thought patterns and that narrowly defined concepts precipitate these limitations. He chose abstract words to define his philosophical constructs, incorporating relationships he perceived to be overlooked in other theories. His invention of new words and phrases enabled him to communicate his philosophy and include the metaphysical systems of the past. Whitehead notes, “Mathematical logic relies on brute assertions based on intuition…the ultimate notions of philosophy must be grasped without truths. We do not know the roots of the world by reason; but only through our aesthetic sense” (as quoted by Lubbock, 1999). By understanding his language, human nature and society could be explored and explained by science (Whitehead, 1967).

Through the linguistic influence of Wittgenstein’s, *Tractatus*, positivists attempted a universal language for all of science. In *The Logical structure of the world (Der loische)*, Carnap asserted the necessity of studying philosophical issues in artificial languages, which were governed by rules of logic and mathematics (Murzi, 2006). Analytic truths were necessary, but they did not say anything about the world. Philosophy distinguished between what is factual or possible (synthetic) and what is necessary (analytic) between the world’s form and content. Positivists held to the idea of *analytic-synthetic distinction*, insisting that “pure mathematics is analytic” (Godfrey-Smith, 2003, p.26). They divided geometry into two parts, one that describes
geometric systems (analytic) and the second, which describes how geometric systems apply to the world (synthetic).

The questions of how to address statements that were not analytical and decipher meaning from sentences about the world posed a problem for the positivists. Concerning these instances, they applied the theory of verifiability. Assertions of a proposition (or hypothesis) are only meaningful when the content meets a specific condition about the way that the truths should be determined. Neurath et al. (1971) stated, “Whatever is verifiable, is unchanged, but our language is so interpreted as to avoid an unnecessary metaphysical assumption of permanence” (p.861). For the positivist, the world consisted of facts that were reducibly independent of one another. This principle did not allow for anything except the verifiable empirical observations of the natural world and the useful, but empty statements of logic and mathematics. Metaphysical statements were unable to meet this criterion and were consequently viewed as cognitively meaningless. (“Logical Positivism”, 2008).

The use of deductive logic by the positivists did not provide them with generalizable results. An unanswered problem remained with the logical consistency of verificationism. Although both positive existential and negative universal claims allowed for a clear method of verification, negative existential and positive universal claims did not. The positivists pursued induction and in an attempt to rectify these problems. Inductive logic provided support for conclusions, but could not give the guarantee found in deductive logic. The problem with induction was its inability to prove with absolute certainty that the past can insure future events (Sober, 2005).

Hume debated that one cannot be certain that past events will resemble future events. He did not dismiss induction, but he believed that it was not rationally based. In his writings,
Carnap asserted that the probability of a statement combined with observable evidence produced a logical relation between the statement and the evidence. Through inductive logic, a mathematical method of evaluating the reliability of a hypothesis would answer the problem raised by David Hume's analysis of induction (Murzi, 2006). Of course, the logical positivist could not be sure that a hypothesis was true, but its degree of confirmation could be evaluated and compared with alternative theories (Godfrey-Smith, 2003; Sober, 2005).

Influenced by Hume, Whitehead’s views differed from the positivists. He argues that although space affects the character of material, time does not. Concerning the location of a material throughout time, Whitehead posits there is no reference to any other time, past or future. There is nothing in the present that inherently refers either to the past or the future (Whitehead, 1967). Every part of the cosmos reflects and brings into existence every part. *Actual occasions* are pulses of feelings and choices, which act deliberately. An actual occasion perishes once it asserts itself, or *becomes*. Upon perishing, the entity forms a base and sets the boundaries for successive occasions. This process of *ongoingness* continues for generations. For Whitehead, the cosmos is a self-actuated network of actual occasions that are renewed instant by instant. Patterns never repeat exactly in the same way. Echoing the thoughts of Hume, past occasions cannot be repeated and cannot predict the future (Hutchins, 1996; Whitehead, 1967).

A primary organism emerges with some particular pattern, which is grasped as a unity of real event. This pattern will grasp other events, therefore, offering modifications. The prehension, or the intrinsic and extrinsic reality of an event, will support the concept of the interaction of organisms. Events, according to Whitehead, cannot occur in isolation. They have impact on the event as well as all other events (Irvine, 2003; Lubbock, 1999; Whitehead, 1967). Whitehead’s assumption of a connection in events and occasions are associated with *becoming*
and *being*. The becoming is something new from what is, relating objects and events, and being is something different, no matter how minuscule (Evans, 1998, p.59). The refinement and developing of layers of relational connections between people and the surrounding world are termed, *prehensive occasions*. Connection enables change and continuity, permanence and flux, becoming and being. There is a vast web of interdependence and interrelatedness (Cook, 1977). A detached entity, in an effort to be themselves, requires that they find themselves in a system of things (Whitehead, 1967). For Whitehead, the factor of experience is dependent upon all others in order to express itself. An actual occasion cannot assert itself independent of the cosmos. Intrinsic value is not just for the parts, but for the whole. There is identical intrinsic value and all benefit. Whitehead sees that all of the universe is interdependent and cannot be separated (Whitehead, 1967; Zajonc, 2007).

### Study of the Concept by Philosophical Views

*Which approach would lend itself better to the study of your concept? Why?*

In view of the two philosophies presented, Whitehead’s process philosophy lends itself better to the proposed concept of autism. Currently, the identification of autism is based upon behavior. It is dependent upon the exhibition of a minimum of six symptoms involving qualitative social and communicative impairment as well as restrictive and repetitive behaviors. The individual must undergo a comprehensive physical examination, an evaluation of cognition, and be screened with the standardized Modified Checklist for Autism in Toddlers (M-CHAT). In addition, input from family and key community members is necessary. Once autism is identified, genetics testing is usually recommended since 40% of these patients have genetic abnormalities (Spence, Sharifi, & Wiznitzer, 2004). The logical positivist’s philosophy of science utilized narrow rules and parameters for arriving at inductive conclusions. Their accumulation of
quantitative data would provide useful information for the concept of autism; however, MRI, PET scans and genetic abnormalities do not capture every autistic individual. Their findings would limit this concept because they could not account for the non-quantifiable emotional and behavioral outliers. The standardized M-CHAT has low sensitivity, which would allow individuals that actually have autism to be misdiagnosed. Much of the data utilized for diagnosing and managing autism is subjective and qualitative. The positivists would only consider the qualitative, measurable data as a means of defining autism (Godfrey-Smith, 2003; Spence et al., 2004).

The positivist view does not include the whole person. In their view of science, they exclude thoughts, behavior and attitudes. The language that they chose was their particular language, with narrowly defined concepts fitting only their self-constructed molds. In addition, the positivist’s philosophy does not account for differences in culture. Their use of language only crossed the cultures of its members. The term *universal* referred to their world only. The evaluation of subtle body movements and eye contact are necessary components when identifying autism, and culturally variations could easily be misinterpreted. Their limited views could not account for all of the observations of all autistic phenomena (Godfrey-Smith, 2003).

Whitehead’s grounding in science and mathematics enables him to address the many aspects of autism. Just as he utilized physics as scaffolding for his process philosophy, he is able to utilize quantitative data (genetics, imaging, and standardized testing) in the same manner. He did not limit his philosophy to measurable data, but rather, his philosophy is able to incorporate the findings from qualitative data. Unlike the positivists, Whitehead gives attention to mental phenomena. Instead of narrowly defined language and tenets, he ascribes to process and wholeness. Autism affects and is affected by the individual and the milieu in which the
individual exists. Whitehead’s philosophy is inconsistent with the positivist’s view of correlating one human attribute with another attribute. Concerning autism, many medical studies have tried to correlate a specific attribute (for example, immunization administration) with another attribute (physical detachment and repetitive behaviors), in hopes of establishing an etiologic relationship. For Whitehead, these correlations indicate prehensions, or parameters, of autism. His philosophy attempts to avoid limiting factors in complex events (Mittel, 1968; Whitehead, 1937).

Humans have a natural desire to organize and categorize things, events and to determine patterns of everyday life. The positivists attempted this in their philosophy of science. Their attempts were thwarted by inevitable and unpredictable changes, diversities, progressions and regressions (Godfrey-Smith, 2003). Whitehead believed logic was important, but it is only a piece used in understanding the world. It is a useful tool in explaining well-defined knowledge; however, it is not helpful in clarifying poorly defined terms or determining if relevant information is missing. Whitehead (1937) states, “In the focus of experience, there is comparative clarity. But in the discrimination of this clarity leads into the prenumbral background” (p.45). The concept of autism involves human beings. Because there are always extraneous variables, attempting to analyze this concept will always leave some questions unanswered. The application of Whitehead’s process philosophy best lends itself to understanding this definition of autism because it takes into account defining behaviors that have variations within each affected individual. (Whitehead, 1967).

What is the relationship between the present and the past in the two views and how does this relationship influence the way your concept would be studied?

The logical positivists had a high regard for the components of scientific knowledge that were closely related to evidence from sense-data. The goal of the positivists was to connect the
statements that made up their theories with statements that described their observations. Their verifiability principles were tested in isolation, one item at a time and through induction, they believed that past events and observations could predict present and future events. They utilized quantifiable data to define science. However, their observational evidence only provided support; it could not provide absolute proof. Their finite observations could not produce absolute generalizations (Godfrey-Smith, 2003).

Whitehead was skeptical of induction because it involved “some character…a particular future…or a part of a past” (Whitehead, 1967, p.120). The key to induction originated in the correct understanding of the immediate occasion and the knowledge of its full concreteness. Whitehead believed that events had a past. Events mirror within itself the forms of its ancestors. He believed that events have a present. Events mirror within itself forms of its contemporaries as a presentation of immediate achievement. The event becomes a layer in the foundation and sets the boundaries for the next events and occasions. For Whitehead, the passage from past to present is only possible because the actual occasions and potentialities join together to form entities. The world is an ever-growing totality of experiences (Lubbock, 1999; Whitehead, 1967).

The positivist’s philosophy maintains that the patterns of autism from the past would be the patterns for the present and future. There would be no room for change or alteration because their formulas would not allow for anomalies in expected behaviors. When looked at from Whitehead’s process, the concept of autism could be altered based on the experiences and exposures from the past, present and future. Although predecessors of the past would exert influence on the concept, it would not necessarily restrict it from evolving into something different in the future. The concept autism that existed a minute ago is not the same exact concept in this present moment. It will also not be the same conceptual entity tomorrow.
Whitehead’s philosophy allows for the possibility of multiple treatments and outcomes (Mittel, 1968).

What is the relationship between physical reality and experience under each view and how does this relationship influence the way you would study your concept?

The positivists relied on sensory tools, such as the nose, eyes, and ears, to accumulate information. These tools responded to physical stimuli caused by objects and events in their environment. Their world assigned entities such as taste, colors and scents to the individual thoughts of the observer. Their sense perception rested entirely within their own mind. For them, this experience was equated with knowledge, yet they refused to think about what might be beyond experience. If all that is available is access to one’s own sensory experiences, how can the positivists logically justify what lies behind their mind’s veil? If they chose to answer this dilemma, they would have to admit a metaphysical element to their philosophy (Godfrey-Smith, 2003). They could not answer the question posed by Whitehead (1967), “How can knowledge be obtained in the truly objective world?” (p.146).

The positivists’ linked atomic statements directly with sense-experience. Verifiability of meaning was the litmus test that determined if something had meaning or was simply nonsense (Banach, 2006). All propositions that were not analytical and cognitively meaningful were considered expressions of emotion and classified as metaphysics. Modes of consciousness (perceptions and imaginations) only existed within the individual observer. For the positivists, their experience was reality.

Whitehead (1967) states that a single observation is simply the “…bare diversity…” in the totality of one’s experiences (p.153). Using the example of the color red, Whitehead remarks that color is an ingredient in the process of realization. He goes beyond irreducible facts and
notes that colors are not facts of nature but are just motions of material. He views that these sensations are “…projected by the mind so to clothe appropriate bodies in external nature” (Whitehead, 1967, p.54).

Whitehead discusses the relationship between events. Relationships require substance. Substance is the activity that synthesizes relations into its emergent character. Multiple relationships become events, which are both independent of and dependent upon other events. Each relationship enters into the core of the event, so the event could not be itself without the relationship. The whole is essential to the part. The process of observing human beings allows the scientist to view snapshots or small windows of observational behavior. Individuals cannot be observed in their totality. Whitehead’s philosophy allows for the observation of species and stresses the importance of a favorable environment that supports endurance. The positivists believed that one must adapt to the environment. They believed that the there was a given amount of material and that individuals must take advantage of it for survival. Whitehead opposes this idea and believes that organisms can create their own environment. The organism needs the environment for survival because it cannot exist independent of it (Godfrey-Smith, 2003; Whitehead, 1967).

The concept of autism contains many factors and components that go beyond the quantitative data obtained from our senses. Only 40% of individuals diagnosed with autism actually have quantitative data available for confirmation. The emotional and behavioral aspects of autism necessitate other types of data and information to be obtained. There is not a gold standard used in the diagnosis of autism (Spence et al., 2004). Whitehead’s process allows for the utilization of both quantitative and qualitative data. Diagnosing autism is not like diagnosing pregnancy or strep throat, where test results yield positive or negative confirmation. There are
many grey areas that make identifying this concept complicated. Whereas the positivist’s view of science lacked depth, Whitehead’s philosophy consists of many layers. His metaphysics provide a broader canvas for its multifaceted components. It allows for the remaining 60% that cannot be identified by quantitative information.

In addition, there is no single treatment that has proven success for autism. Treatments usually include therapy, medication and educational interventions (Swiezy, Stuart & Korzekwa, 2008). Application of Whitehead’s process could allow for these treatments as well as alternative interventions that are not currently supported by scientific data. Autism cannot be simply reduced to particles. Human beings are complex and one cannot isolate behaviors and emotions without taking something away from the individual. According to Whitehead’s philosophy, emotions and behaviors do not originate from nerve fibers. They are prehended through non-sensous data. Autism alters the individual and ultimately the universe in its entirety. Conversely, the universe in its entirety affects the autistic individual. All affects autism; autism affects all (Lubbock, 1999; Whitehead, 1967).

*What is “time” under conception and how would that influence the study of your concept?*

The positivists believed in an essentially unchanging universe. They viewed matter as static objects that had the quality of passing through time. For each object of matter, there was a definite present instant “…at which all matter is simultaneously real” (Whitehead, 1967, p.118). Their definition of absolute time stated that the interval of time between two events could be measured and the time would be the same regardless of who measured it. Absolute time was consistent with Newton’s law. Their notions had worked out well on objects such as apples and planetary movement, but did not apply to Maxwell’s newly discovered properties of light. Maxwell’s theory postulated light waves traveled in a certain fixed speed and he conceived the
idea of ether occupying “empty” space (Hawking, 2005, p.31). For them, the idea of simple location was their solution for describing the relationship of matter to space and time. Their simplistic view that space-time was flat was too simplistic and “earlier science had only refined upon the ordinary notions of ordinary people” (Whitehead, 1967, p. 116).

In 1905, Einstein’s theory of special relativity put an end to the idea of absolute time. He observed that time was different for observers in relative motion. Space and time were thought to be a fixed arena in which events took place but were unaffected by what was in it. In 1915, Einstein’s general theory of relativity stated that space-time was curved. Space and time could now be viewed as dynamic qualities; when an object moved or a force acted, the curvature of space and time was affected (Hawking, 2005).

Whitehead rejects the positivist’s view of time and space. Einstein’s general theory is interwoven throughout Whitehead’s philosophy. For Whitehead, time is a series and succession of durations. Time is a series of durations. Durations are necessary for the realization of the pattern. Events are part of the duration, and duration is the whole of nature simultaneous with the event (Whitehead, 1967, p.124). Time is also a succession of durations. Durations are not realized by its smaller parts but are given with its parts. Whitehead (1967) states, “The organism is an event holding in its essence its spatio-temporal relationship through the spatio-temporal continuum” (p.127). The ultimate is endurance, or the successive repetition of the pattern. In explaining endurance, Whitehead discusses the parts of a whole. He gives the example of the total body pattern of a human during one minute’s time. During that minute, a thumb is part of the whole body event. The pattern of the thumb is not the pattern of the whole body. Using this example, Whitehead demonstrates that one must take the life of the whole body during any portion of that same minute (Whitehead, 1967).
For Whitehead, a unique present instant does not exist. He redefines all natural occurrences in terms of organismic processes. Physical objects are a nest of events with infinite ramifications through time and space rather than a collection of static objects and as having the quality of passage through time. The primary thing is not “I” as an entity, which happens to pass through time, but rather a series of experiences that make up the processes of one’s life. The idea of “I” as an individual that travels through time is not an illusion, but an abstraction. The primary reality is process of the life; the concept, “I”, as individual, is a secondary abstraction (Sowa, n.d.; Whitehead, 1937).

Concerning time and autism, Whitehead’s process takes the focus off of the individual and puts the focus onto the process. The location of entities through time does not have inherent references to any other time. Logically, it can be concluded that substances of nature within any period does not refer to nature at any other period. Reducing the autistic individual to simply as one who lives for some length of time through a variety of circumstances and experiences is the positivist’s view of time and matter. It cannot explain the subtle and dramatic changes that occur from birth to death. The autistic individual of today will not be the exactly the same individual tomorrow or thirty years from now. Autism involves many mental and physical idiosyncrasies. Whitehead focuses on an “existential relatedness through time and space centering on an individual psyche” (Mittel, 1968). His process is dependent upon feelings that constitute energy transmitted between events. Using this paradigm, autism treatment would shift off of the individual and onto the entire system through the evaluation and alteration of relationships. Autism must not be viewed as a sub-particle of the individual within an isolated period of time. Autism interacts with everything and time is just secondary (Mittel, 1968; Whitehead, 1967).
How important are relations as compared with particles under each of the competing views and how that influences the study of your concept?

The positivist’s reduced everything that was within their domain into the smallest particle, void of character. Their objective world was confined to simple matter that maintained simple location in space and time. Influenced by Descartes, they presupposed independently existing substances with simple location in the identity of “spatial extensions” (Whitehead, 1967, p.145). Particles were subject to definite laws about its locomotion. Particles were rationale and they did not relate with each other. They were separate, independent entities.

For Whitehead, the world is composed of substances characterized by qualities. Units of nature are not material particles or a collection of inert objects. The world is not made up of atoms and particles. Instead, these physical attributes act as a superstructure. Elements are organized systems of energy vibrations. Physical objects have a quality of energy that is, in some manner, related to the human conscious experience. Whitehead’s philosophy consists of small emotions. Only feelings exist, not particles. He establishes unity between living and nonliving entities. For Whitehead, even inert objects are sensitive to the existence of other objects in a manner that is similar in the ways that humans do. It is as if molecules have a mind of their own. Whitehead sees everything as having feelings, choices, and the ability to registerprehensions. (Whitehead, 1967). There is just one type of entity, “the aesthetic moment of choice, of feeling” (as quoted by Lubbock, 1999, p.2).

Autism involves repetitive behavior by its members. It also exhibits extreme fascination, organization and manipulation of inert objects (Spence et al., 2004). The application of Whitehead’s process philosophy takes into account these interactions. It justifies a metaphysical relationship between individuals and inert entities. Whitehead also allows for the transmission of
energy between entities that cannot be entertained by the positivist’s philosophy (Whitehead, 1967).

Whitehead substitutes matter with creativity. The many become one actual occasion. It underlies everything. It is the desire to advance towards beauty; it is genuine feeling. However, without a blueprint to work on or instruction to follow, it cannot be. It is suspended as endless yearning, unable to get anywhere (Lubbock, 1999; Whitehead, 1967). Whitehead’s creativity is a construct that gives depth to the concept of autism. Does Whitehead’s creativity have a role in the repetitive behaviors or the aversion to tactile sensations displayed in many instances of autism? Perhaps this paradigm could provide answers as to why some autistic individuals exhibit extraordinary mathematic skills while others can play a musical instrument proficiently, yet without any formal training. An autistic woman, Temple Grandin PhD, describes her use of imagery in order to understand abstract images. She notes that she is only able to conceptualize concrete images and must rely on image-based reasoning methods when comprehending abstractions (Grandin & Johnson, 2004). The application of Whitehead’s creativity may offer insight as to the multiple approaches of learning and communicating differences in autism. Is creativity the bridge that links autism’s cognitive anomalies with behavioral eccentricities? Utilizing this paradigm would open up avenues of discovery that might otherwise never be imagined.

Currently in the United States, there is an increase in reported prevalence and a heightened public awareness of autism. In regards to identification and treatment, autism must be viewed as multi-complex and highly variable state, rather than a rigid, quantifiable condition. In order for this to be accomplished, autism is better served when conceptualized through the paradigm of Whitehead’s process philosophy.
References


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