

## BEHAVIOURAL CONSTRUCTIVIST APPROACH TO THE SEMANTICS OF THE INDIVIDUAL IN PROPOSITIONAL ANALYSES

Etorobong Godwin Akpan\*; Omah Moses Njobuawu\*\*

\*Associate Professor,  
Department of Philosophy  
Faculty of Humanities, University of Port Harcourt  
Port Harcourt, Nigeria  
Email id: etorobong.akpan@gmail.com

\*\*PhD Scholar,  
Department of Philosophy  
Faculty of Humanities, University of Port Harcourt  
Port Harcourt, Nigeria

DOI: [10.5958/2249-7137.2023.00004.6](https://doi.org/10.5958/2249-7137.2023.00004.6)

---

### ABSTRACT

*The paper is concerned with an approach to the semantics of the individual within propositional expression. The objective of the paper is to propose behavioural constructivism as an analytic approach to the semantics of constative sentences. The primary focus of the essay is to present the semantics of the individual referent in a proposition. The method adopted to achieve this objective is content analysis. The analysis has shown that the individual described in any given proposition is neither its subject nor its predicate but a relation, which is a construct of the cognitive agent and expressed in a proposition. So, the central issue in the semantics of a proposition is its expression of a relation constructed upon experience, not the description of the subject's state. A proposition is a report of the existence of such a construct.*

**KEYWORDS:** *Constructivism, Behavioural, Proposition, Individual, Subject, Predicate.*

---

### INTRODUCTION

The structure of the bifurcation of objects in the expression of any proposition as subject and predicate has portended a serious problem for semantics and the philosophy of language. Propositions are expressed in present continuous tense and as a relation between two entities joined together by a copula. The subject is said to be a predicate. For example, "a is b." A literary understanding of the proposition could present the relation expressed as that of identity of the two objects. But traditional metaphysics, especially following Aristotle, would rather assume that the proposition is an expression of the relation of substance to its accidents. So, the subject term is taken as the substance, and the predicate term is the accident. On that account, the subject is taken as the individual that the proposition is about.

Traditional nominalism is quick to move from its assumption that words in language are labels for things and a description of the state of affairs to the submission that the proposition is a description of the state of the subject. But that will amount to a bias against the predicate. Why is it that the subject of the proposition is presented as the individual and not the predicate? If the semantics of propositions are permitted to model the structure of the proposition, then the

---

assumption that the subject is the individual will remain unquestioned. But is it possible to assume that the predicate is the individual? It will also amount to an aberration to assume the contrary position, which is that the predicate is the individual. Such an assumption will defeat common sense. Let us assume that the predicate is granted to be reckoned as the individual; then what will its argument places be called? If we assume that since predicates are general terms (because they could be found in identical forms in more than one instance), then they cannot be individuals, could we also deny the unique identity of the class of each predicate? From this vantage point, the predicate as a distinct class, say of ripped oranges, is also distinct. But to refer to an individual instance of a ripped orange as an individual will defeat common sense.

Now why do analysts choose to ignore the individuality of classes in the analysis of the proposition, but prefer to favour the individuality of the subject? The essay has shown that this policy is based on the assumption of the validity of the picture theory of language. But again, picture theory has been shown to be erroneous. Thus, the individual in the proposition, as understood by the behavioural constructivist approach, is neither the subject's nor the predicate class's individuality, but a relation built on experience by the cognitive agent. A construct such as an individual is the result of sensory stimulation interpreted in relation to past experiences and expressed in the proposition as a relation. Hence, the individual is the relation which the proposition expresses and that relation is a construct upon un-demarcated experiences.

### **THE PROBLEM OF THE INDIVIDUAL IN PHILOSOPHY OF LOGIC**

Traditional philosophies of language have overlooked an aspect central to resolving the problem of the individual in propositional analysis. That aspect is the one that has to do with what, in this essay, is called the unexpressed factors of language expression. These extra-logical factors function unexpressed in the background of every language, helping to move, motivate, and regulate it. Only a thorough logical analysis of language brings these factors to light. They are properties like the logical axioms or the individuals' functions, or generators, with their process of generation. According to the latter, the process of generation is a language actuator for the individual function  $f(x)$ , which generates individuals. So, the semantics of propositions would only be complete once the possibility of the individual was properly captured in theories.

The emphasis on the individual function in the essay is germane because most of the controversies in traditional philosophy of language are controversies about the comprehensive relation of the notion of the individual to experience. For instance, the proposition "*so and so is such and such*" ordinarily appears at first glance to be straightforward but suddenly becomes complicated in philosophical analysis. How does "*so and so*" become "*such and such*"? Is it a member of the class "*such and such*" or is it identical with it? To say that the individual is identical with a predicate is to say that the individual is a predicate. This completely obviates the subject-predicate bifurcation that supports our logic. It is often clear in this analysis that individuals are not identical with any single one of their predicates, because one individual is capable of standing in several relations to an infinite disjunction of predicates. If it is a member of the class of "*such and such*," where is that class in experience? Much of the philosophy of language is based on the reconciliation of the entity's relationship with experience, which is divided into subject and predicate in expression. It is the reconciliation of the logic of expression with the logic of experience; logic here is used in the sense of the structure of relations. But as stated above, the pivot of that relation lies not in the structure of expression but in the

unexpressed extra-logical factors. Nonetheless, many philosophers write as if the logical space expressed in language must be the same as the extra-linguistic space provided by experience.

So, how is the individual as a linguistic object possible in propositional expression? This question could actually be understood as a question about what an individual is. The ability to successfully resolve this quandary in the philosophy of language depends to a great extent on the understanding of the logic of language. How do we come to know about the individual and its predicates as an object in our propositions? Traditional philosophical views of language offer numerous responses to this question. But only a few, taken as paradigms of such responses, will be discussed in the essay.

### **THE NOMINALIST RESPONSE TO THE PROBLEM OF THE INDIVIDUAL IN PROPOSITIONS**

The traditional philosophical conception of language is copy-theoretic. Thus, from the nominalism of ancient philosophy to the atomism of logical positivism, the understanding of language is founded on picture theory. The picture theory of language assumes a cognitive autocracy of the object as an epistemological validation. Cognitive autocracy is the establishment of all cognitive authorities on the object, with the subject as a passive receptacle of all knowledge. Another epistemological fallacy attendant to the picture theory orientation is the fallacy of the absolute objective standpoint, according to which the search for the interpretation of a theory is absolutely dependent on the object. Attendant to this fallacy is the fallacy of ontological convenience, which involves the assumption of the existence of some fictitious, putative entities as the domain of reference for concepts that lack empirical correlation. This tradition ignores the achievements of Immanuel Kant (1965) in epistemology. Kant turned the table upside down in the manner of a Copernican Revolution. Knowledge no longer depended on the object but on the subject. The Kantian Copernican man's aggression became so extreme that the concept of the thing-in-itself was questioned. Edmund Husserl admired Kantian epistemology but bemoaned the fact that Kant never distinguished between worlds that project from him and things in themselves (Husserl, 1970, p. 14).

The traditional philosophy of language is a label theory, which excludes a proper analysis of the intuitive elements in such an analysis. A tradition, which is properly represented by a theory called nominalism and attributed to Plato, states that words are labels or names for things. The relationship between a word and a thing is, therefore, a relationship of naming. Aristotle is alleged to have supported this tradition with his understanding of the roles of predicates as both identification and descriptive (Evans, 1987, p. 50).

Consequently, "some predicates identify the nature of a thing, others identify quality or quantity, and so on" (Evans, 1987, p. 50). In this descriptive use, predicates express various features that things possess (Evans, 1987, p. 50).

The picture theory of language is also traceable to David Hume. Humean epistemology is an impressionist epistemology. Wilfrid Sellars (1972) transforms this epistemology into a theory of language to argue that: "... in developing the form of the classical doctrine that the mind knows the world by virtue of containing a "likeness" of it, Hume assumes without careful explanation that the "perception" of a configuration of objects is a configuration of perceptions" (p. 228). This mindset manifests itself in the perception of language as labels for mental images. Humean empiricism had a radical implication for logical positivism and its anti-metaphysical orientation.

The principal document on language for the logical positivists was the *Tractatus Logico-Philosophicus* (1961) of Ludwig Wittgenstein. Language was divided into elementary propositions and propositions by logical atomism. Russell, who is also a member of this school, divided his own language into atomic propositions and molecular propositions. The elementary propositions are the same as the atomic propositions. The concept or proposition of Wittgenstein is identical with Russell's molecular propositions.

According to Wittgenstein's picture theory of language, "the simplest kind of proposition, an elementary proposition, asserts the existence of a state of affairs" (1961, p. 166). Sellars (1972) argues that "it is a familiar fact that Wittgenstein restricts his conception of picturing to matter-of-factual statements in the narrow sense" (p. 222). Wittgenstein's writings corroborate this position. For instance, he writes in the *Tractatus* that "an elementary proposition consists of names." "It is a nexus; a concatenation of names" (Wittgenstein, 1961, p. 167). And he considered proposition to be the truth function of elementary propositions (p. 166). By so doing, Wittgenstein believed that he had discovered the logic of language. That conviction gave him the impetus to claim that: "most of the propositions and questions of philosophers arise from our failure to understand the logic of language" (p. 165).

For Wittgenstein, the logic of language is the conception of language as copy-theoretic. This conception of language completely ignored the contribution of the subject or the cognitive agent.

Wilfrid Sellars' own theory of language is a fraud with mythological thinking. He finds a correspondence between language and the world by virtue of the "Myth of the Super-Subscriber" (Sellars, 1972, p. 228). The duty of this inscriber is to inscribe in a wax-like form and at an incredible rate all the thoughts of the individual (Sellars, 1972, p. 228). Sellars' inscription resembled facts corroborating the Cartesian position that ideas are configurations of the ego.

Therefore, for nominalists, the linguistic structure of the individual is identical with the objective structure of experience. This has serious implications for the individual's comprehension. Either the individual is simply a predicate as literarily expressed in language, if language is just a label, or the individual possesses a predicate as exposed in philosophical analysis. If the individual is a predicate as literarily expressed in the proposition, then the individual will amount to an infinitely denumerable set of irreconcilable identities, which will erode the unity of the individual as an entity. As a result, labelling theory or nominalism is problematic.

### **THE CONCEPTUALIST AND CONTEXTUALIST RESPONSES TO THE PROBLEM OF THE INDIVIDUAL IN PROPOSITIONS**

Conceptualism transfers the realm of meaning from the physical state of affairs to mental images. Conceptualist semantics is rooted in mediaeval grammar. Accordingly, the mediaeval grammarians postulated that "*vox significati mediantibus conceptibus*" (the word signifies through the medium of concepts) (Udofot, 1998, p. 50). Conceptualism is also found in the works of Frege in his discussion of the components of language as consisting of expression, sense, and reference (Resnik, 1980, p. 18). Conceptualist semantic essence is the idea of sense, which is mental. There is still a sense of naming that the meaning of words assumes in conceptualism. The difference is that what is named are mental images derived from language use rather than physical entities of the state of affairs. It implies that the relation of the subject to the predicate is a mental picture. But what is unclear is the nature of the picture. Is it a picture of a class, where the subject is domiciled in the predicate, or is it a picture where the subject and

predicate are different manifestations of identical individuals? It is in just this solipsism that conceptualism fails to address the problem of the individual in the proposition.

Contextual semantics, as well as speech-act semantics, is the conviction that the meaning of a word is only found in the realm of activities. The proponents of this are the later Wittgenstein of the *Philosophical Investigations* (1993) and Malinowski, the anthropologist. According to Malinowski, language should not be removed from its context but seen as used by people for hunting, fishing, planting, buying, and selling (Udofot, 1998, p. 57). He derided the language of books as a far-fetched derivative function of language and argues that language was not originally a mirror of reflected thought (Udofot, 1998, p. 57).

The later Wittgenstein corroborates this position in his argument that the meaning of a word is in its use. He argues thus: "One cannot guess how a word functions." One has to look at its use and learn from that. But the difficulty is removing the prejudice that stands in the way of doing this. It is not a stupid prejudice" (Wittgenstein, 1993p.209). Wittgenstein blames the "copy theory" orientation for the process of language learning. Thus he writes:

One thinks that learning language consists in giving names to objects, viz; to human beings, to shapes, to colours, to pains, to moods, to numbers, etc. To repeat-naming is something like attaching a label to a thing. One can say that this is preparatory use of a word. But what is it a preparation for? (Wittgenstein, 1993 p.13).

Wittgenstein believes that words prepare the speaker to do things. But to really understand the use of a word in a given language demands a proper understanding of the language. Wittgenstein (1993) argues that "the inability of the ordinary person and even the typical mathematician to give a satisfactory definition of the number one or the concept of number is equated with a lack of understanding of concepts that are foundations of the whole structure of arithmetic" (p. 670).

So language is like a game, and the whole of life is the manifestation of that game. To understand language, one must understand how it is used. This means going deep to understand the ontological permutations of the language and its extra-logical components (Quine, 1969, p. 48). It calls for a participant-centered approach. Thus, a proper interpretation demands a presupposition of the intentions of the users without prejudice, especially with respect to the unwritten extra-logical forms. Williard van Orman Quine (1969 p.48) captures the situation vividly in his linguistic permutation of ontology as thus:

begin by picturing us at home in our language, with all its predicates and auxiliary devices. The vocabulary includes "rabbit", "rabbit part", "rabbit stage", "formula", "number", "ox", "cattle"; also the places predicates of identity and difference, and other logical principle. In these terms we can say in so many words, that a formula and that the number, this a rabbit and that a rabbit part, this and that same rabbit, and this and that different parts. In just those words, this network of term and predicate and auxiliary devices is, in relativity jargon, our frame of references, or co-ordinate system.

What contextualism achieves is the restriction of the universal concept of meaning of words within a language to a contextual concept of meaning. It promotes an observational approach to semantics. Such an approach detracts from acquiescence in the semantics of primordial meanings. But the concept of naming is not obviated by contextualism. The only difference is that, whereas nominalism regards words as static primordial names of specific entities, contextualism allows for naming fluidity within various social contexts. If context-based naming

is granted to contextual semantics, it would face the same implication as nominalism. So, with respect to the semantics of the individual, each proposition would be assumed to name two different individuals (the subject and the predicate) and thereafter assert a relation of identity between them on the basis of the copula. As previously demonstrated, this will call into question the concept of the subject's unity as substance.

### **BEHAVIOURAL CONSTRUCTIVIST APPROACH TO THE SEMANTICS OF THE INDIVIDUAL**

Even though Quine understands logical entities as meaningless entities allowed only on pragmatic grounds, his historical approach to meaning assumes the unprejudiced observer-participant approach. This approach sets Quine apart from other contextualists. Restriction to a mere observer approach causes contextualism to fall victim to the semantics of naming. However, using this approach, one can understand both the written and unwritten properties of a given language, because epistemology without context is incomplete. To achieve an adequate understanding of the structure of language, a correct epistemological disposition must be assumed, which is that knowledge is the result of the cooperation of the subject and the object. Thus, with an observer-participant approach, the particulars and use of the language will be understood. The approach appreciates knowledge as a construct based on real experience and language as a behavioural expression of the totality of such a cognitive act. This has implications for the phenomenalism of both empirical knowledge and spiritual knowledge as well, because we cannot go beyond ourselves and our experiences to know how things really are. Spiritualists will even have problems striving to assume knowledge of the nature of reality beyond spiritual phenomena. It could be painful anyway. But it is difficult to assume otherwise.

So, we construct our physics, our mathematics, and our religion from the stimulation of our senses. In the same way, we construct the individuals in our propositions with their predicates. So, if one wants to find meaning for the relation of the individual to its predicate, the person has to do so in the activity of cognitive construction. Language is a report about the cognitive construction of facts, not a label for objects. To properly locate the meaning of language, one must query human cognitive acts. Semantics, like epistemology, must become observation-participant. This is because we suddenly discover that we are identically human and that we share some identical traits of perception, and this is confirmed in our language. We equally confirm that our experiences are consistent. Hence, we fall back on induction because the world is what is revealed to us in our science. In this way, it becomes easy to differentiate between reality and imagination or false perception. This cognitive attitude is appropriately classified as behaviorist. But a construct results from this cognitive behaviour, so we shall refer to it as *behavioural constructivism*.

In behavioural constructivism, we study speech in speaking, knowledge in knowing, classes in classification, and numbers in numbering. The museum's and the mortuary's attitudes toward language are untenable because there is more to language than mere references. Language is a by-product of the cognitive process and a medium of cognitive socialization. It is different from seeking to ascertain the context of the use of the words, as in the new Wittgenstein (1993). It has more to do with being both a participant and an observer.

It is in this sense that it could be recommended that philosophers avail themselves of the findings of cognitive science in order to facilitate their project. In the behavioural constructivist sense, truth is contextualised by the language expressing our constructive process. So, truth becomes a

sociological feature of our language. Therefore, truth could be defined in this sociological sense as "the correspondence of a statement and its referent, to the foundational linguistic (sociological) permutation of ontology, coordinately in a recursive structure" (Akpan, 2005, p. 73). This analysis leads to the conclusion that knowledge is the result of the subject and object working together.

The behavioural constructivist approach to mathematical foundations could be seen as a continuation of constructivism in mathematics philosophy. However, the linguist component and the fact that concepts are constructs properly understood in conceptualization distinguish behavioural constructivism from Hilbert's complicated idealism. Hence, to discover the ontology of an entity in behavioural constructivism, one must investigate the cognitive linguistic moments involved in the expression of the ontology. It is expected that the entity will emerge as a cognitive construct as a result of this experience.

Again, from the standpoint of behavioural constructivism, the concept of class could be studied by investigating the processes of classification and predication within the process of predication. That upsets the old order, prompting the question of whether both the subject and predicate refer to different instances of the individual with the identity relation. For an individual to be said to possess a predicate, it must be observed to possess some basic features of a member of a given class. Observation is not enough; the epistemologist must also presuppose the processes according to which a class is possible. All such presuppositions are presumed in the semantics of propositions. What is presumed is the cognitive act of the subject over the stimuli in the senses.

The same thing is applicable to the question of what the knowledge of the world would have been like without human beings. That question is as meaningless as asking what I would have been like without my current parents. There will be no me. Knowledge is consistent with human existence, and it is the root of error to ask what knowledge would be like for beings other than humans. So it is unknown whether there would have been knowledge of atoms, trees, or rivers if humans did not exist. Knowledge is an experience-based human construct.

There is an intrinsic error in set theory, a kind of category mistake. Set theory is often conducted as though its objective is the classification of elements into sets by the definition of conditions for classification. This tradition spans from Cantor's development of class for analysis to the contemporary set theory of Zermelo-Frankel. But set theory is actually supposed to be the study of the concept of class, not an exercise in classification but an investigation of classification as a process. All set theories conducted as analyses of the concept of class have been consistent. But surprisingly, mathematicians would not accept such set theories, thereby causing the theorists concerned to erroneously interpret their theories as theories of classification, or classes, as they may call them. An example of this kind of set theory is Dedekind's. But within behavioural constructivism, set theory is understood as the study of the concept of class. Hence, instead of seeking to carry out model classifications, the concept of class should be understood in the process of classification.

## CONCLUSION

Set theory, predication, characterization, classification, proposition, etc., all refer to the constructive behaviour of the cognitive agent upon experience. They are all exercises in judgment, and their study is the study of judgement and the process of judgement in human experience. For the linguistic expression of this process to receive proper semantic analysis, it

must presuppose the cognitive process that is presumed in the expression but unstated. The individual in the proposition is a construct of cognitive judgement based on experience. So, its structure of relation in the proposition is not its structure of existence, because its existence is in the history of cognitive construction, and its meaning can only be properly referenced from there.

#### REFERENCES

1. Akpan, Etorobong Godwin (2005). *An Epistemic Assessment of Russell's Logician Foundations of Mathematics*. Master degree Thesis. Calabar: University of Calabar.
2. Evans, J. D. G (1987). *Aristotle*. New York: St. Martin's Press.
3. Husserl, Edmund. *The Paris Lectures*. The Hague: Martins Nijhoff, 1970.
4. Kant, Immanuel (1965). *Critique of Pure Reason*. New York: St. Martin's Press.
5. Quine, Williard v. O (1969). *Ontological relativity and Other Essays*. New York: Columbia University Press.
6. Resnik, Michael (1980). *Frege and the Philosophy of Mathematics*. London: Cornell University Press.
7. Sellars, Willfrid (1972). "Truth and Correspondence". *New Readings in Philosophical Analysis*. Ed. H. Feige New York: Meredith Corporation. Pp.214 – 231.
8. Udofot, Inyang (1998). *English Semantics*. Uyo: Scholars Press.
9. Wittgenstein, Ludwig (1961). *Tractatus LogicoPhilosophicus*. London: Roulledge.
10. Wittgenstein, Ludwig (1993). *Philosophical Investigation*. Cambridge: Basil Blackwell.