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## Journal of Contextual Behavioral Science

journal homepage: www.elsevier.com/locate/jcbs



## Beyond What "Is" and What "Is-Not"

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#### ARTICLE INFO

Article history: Received 10 October 2014 Received in revised form 24 April 2015 Accepted 3 May 2015

Keywords: Ontology a-ontological Behavior analysis Contextual behavior science

#### ABSTRACT

Functional contextualism is a philosophy of science that maintains a notable silence on issues pertaining to philosophical ontology. Presumably, this is because ontological statements are not needed for successful working within functional contextualist scientific activities, such as behavioral research and practice. While this position is sound within the philosophical system of functional contextualism, it may appear bizarre to outside practitioners and scholars, with the effect of creating barriers to interdisciplinary collaboration. We propose that, as pragmatists, functional contextualists can adopt ontological language in particular contexts of interdisciplinary collaboration for the purposes of working more successfully with others. In this paper, we briefly describe this position and discuss hypothetical and real examples of potentially more-fruitful and less-fruitful examples of ontological speaking.

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As a sub-discipline of metaphysics, philosophical ontology is concerned with issues of being. Whether things are real or not, and whether statements about the world correspond to such reality are typical ontological questions addressed in many contemporary analytic philosophies. Such questions have a long history in philosophical discourse; however, the legitimacy of these questions is challenged within pragmatist viewpoints (e.g., Rorty, 1991). Other authors in this series will attempt to define or critique the a-ontological stance of functional contextualism (FC) in historical and philosophic terms and relate this to B.F. Skinner and other pragmatic or contextualist philosophies that have challenged representationalist positions. Our aim is slightly different.

First, we intend not to provide such a traditional philosophical discourse, but rather, to write from the standpoint of the practical reader of contextual behavior science that may have neither the interest nor the background to participate in philosophical system building. Our contention is that non-technical writing, at once accessible and precise, will serve to broaden the knowledge base of readers who are not professional philosophers and invite them into a useful dialogue that pertains to the philosophical foundations of contextual behavior science (CBS).

Our second aim in this paper is to extend the philosophical base articulated by earlier theorists (e.g., Biglan & Hayes, 1996; Gifford & Hayes, 1999; James, 2008; Skinner, 1976) into areas not

yet explored. Specifically, we wish to tackle the question of how functional contextualist (FC) scientists and philosophers might interact with other scientists or philosophers who do not share the position that FC holds with respect to the tenability of an a-ontological stance within any philosophical system.

The default position in most behavioral sciences, thus the one that contextual behavior analysts are most likely to have opportunity to work alongside in collaborative projects, is that science advances by modeling the way cognitive variables affect human behavior (Pepper, 1942). In most cases, the models involve hypothesized internal mechanisms such as neural substrates that work together to influence observable behavior, usually measured in the form of reaction time or electrical brain activity. These cognitive parts fit together to operate or at least support the whole of a person's observed behavior, in which case the person functions as might a machine – a unit composed of fundamental parts. When behavior is well predicted, it is said that such parts must in fact be at work, and the model is said to be valid.

Such cognitive models have utility in predicting behavior, but they do not target the variables of which the hypothesized mechanisms are a function. That is, the environmental factors that influence neural functions are not usually built into cognitive models. Thus, prevention and treatment of the factors that lead to human suffering and resilience are not directly addressed. Moreover, predictors in cognitive models, such as neural substrates, are not available for observation. However, the behavioral output of these events can be verified by independent observation; and in this way, the existence of the minute parts is said to be verified. Truth is said to be a matter of correspondence between the theory

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and the observation. From this perspective, predictive tests of the model identify essential building blocks of natural structures that are thought to exist in an ontological sense.

Functional contextualism begins with a completely different orientation to science and human behavior. First, both prediction and influence are of interest to contextual behavior scientists. Prediction is a worthwhile aim, but only in the context of producing a measurable effect upon behavior. Events are manipulated to show precisely that which is said to influence the response, and no other variable, is responsible for the effect. This is to say that correlational evidence, the mainstay of cognitive modeling, is insufficient to the aims of contextual behavior science.

Whereas an apt and often used metaphor describing cognitive science is that of the machine, the most common metaphor of contextualist sciences is that of the act situated in its historical and immediate context (Hayes, 1993; Reese, 1993). Contextual science approaches to behavior emphasize identification of the context of behavioral events and then environmental variables of which behavior is a function (Biglan & Hayes, 1996). When such variables are identified, they are then manipulated systematically to produce behavioral evidence of their effect. When taking this approach, there is little utility in making or evaluating statements about whether or not these variables actually exist. Likewise, there is little utility in worrying about which particular variables within a given system (e.g., learning history versus current circumstance) are more important than others. Given a different historical situation, immediate factors may play a more or less dominant role in predicting and influencing behavior. Likewise, given a different set of immediately occurring circumstances, the influence of historical variables may shift in direction and magnitude. Thus in contextualism, the parts are not said to be fundamental as they are in mechanist philosophies, rather, the goal is to study the event as a whole. If and when parts are studied individually (e.g., identifying particular environmental variables in accounting for a particular behavioral challenge), it is only because doing so helps bring about a practical outcome (e.g., producing improvement in that behavior problem). Finally, in contextual behavior science approaches, truth is not verified by prediction. Rather, truth is evaluated by the extent to which an analysis leads to successful working. The word truth, in this sense, loses much of its meaning and might properly be replaced with "useful"

This brief introduction may need a great deal of unpacking. In particular, the notions of ontological truth versus the a-ontological stance of functional contextualism are best examined by way of an extended example. To begin this discussion, we invite you to consider the ontological status of a pencil in my hand.

I am holding a #2 lead pencil in my hand at this moment, and authoring the paper you are reading by use of dictation software. I'm rolling the pencil in my fingers and wiggling it between my index and middle fingers. What is it this thing in my fingers? It would be correct to say that the object in my hand is a pencil. That's what it is to you, but not to my dog. To my dog, this is a plaything, a toy to wrest from my hand, run with, and invite me to chase with him. This thing functions for me as a pencil in a particular context, thus I characterize it that way based on my use of it. At the same time, others might experience it and characterize it differently. Thus, it is the relation that we have with a thing in context that gives it its identifiability, not any innate thingness within it. Kantor (1933, 1958) described this as the inseperability of stimulus and response, and Skinner (1938) was quick to build Kantor's observation into the rubric of radical behaviorism. In Behavior of Organisms, Skinner wrote, "The impossibility of defining a functional stimulus without reference to a functional response, and vice versa, has been especially emphasized by Kantor" (Skinner, p. 35).

In CBS and behavior analysis writ proper, our fundamental unit

of analysis - what we aim to understand, predict, and influence is and has always been behavior, which we say is a function of the relationship between organism & environment. We have never concerned ourselves simply with organism, environment, or behavior alone. Said differently, we are concerned with the situated act in context - genetic, historical, and current. Change any factor and you change the event of interest to us. Since it is the event that we consider to be of importance, and not any particular thing in and of itself that influences the event, we say that we have no horse in the race regarding the independent ontological status of those things. As Skinner noted, the behavioral event involves a relationship between occasion, response, and consequence, and the interrelationships between these aspects of the event "are much more complex than those between a stimulus and a response, and they are much more productive in both theoretical and experimental analyses" (Skinner, 1969, pp. 7-8). Ultimately, we have no scientific interest, no pragmatic use for taking a stand on what things exist independently of other things. We are interested in functional relations between things. The independent status of these things, or the dividing line where one thing ends and the other begins, is arbitrary (Kantor, 1953). The whole of the natural world is divided into arbitrary categories simply for the sake of deriving useful functional relations that allow us to take effective action. In other words, our interest in the connection between things and events is an interest in the relation between parts of an undifferentiated whole, the world, that we parse into units that suit our pragmatic and analytic purposes. And importantly, we are unable to examine the existence of a thing outside of a relation to ourselves. How would we go about doing that? Any experience of other is committed by a self with respect to other. Said differently, I can only know YOU in relation to an I, and I can only know I in relation to YOU.

The functional contextual a-ontological stance described above works for functional contextual researchers and practitioners but problems can arise when it comes to collaboration with other disciplines who adopt very different basic philosophical assumptions. In the context of such interdisciplinary collaborations, can we legitimately argue the position that we have no interest in the ontological existence of the phenomena we study? How might we respond when scientists from other disciplines posit that FC does have an ontology and, further, that FC, itself, is a thing that exists? In other words, can other scientists looking at us in relation to their own discipline experience us as having an ontological status? We will argue yes, they can, and further, that it is legitimate for them to do so, from their perspective. After all, doesn't the dog experience the pencil as a plaything? Doesn't the writer experience the pencil as an implement with which to write? Others can and do experience FC as a thing that exists independent of other things and events. This brings us to a central tenet of the a-ontological position: You can have an experience that is, for you, quite real, but that does not make your interpretation of that experience real. The truth is not within the interpretation, is not exemplified by the interpretation, nor is the truth found in the thing being examined by itself, in and of itself. The truth, written with a lower case t, is found in the immediate and historical, dynamic, and fluid interplay or relation between the thing and the context in which it is evaluated.

But this interest of ours in the relation between things and events rather than in the status of things in and of themselves makes us unique in the world of science. In this regard, we are not like other natural sciences. And in particular, if we seek to engage with other philosophers of science, we have a problem should we care about the fact that from their perspective in evaluating FC as a thing to be evaluated in and of itself, we are not without an ontology. From their perspective, our ontology is a statement about being that involves relation with others (Stemmer, 2001). To them,

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