

## Causes: linguistic artifacts or genuine appeals?

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### Abstract

Causes are abundant in the principles and concepts of Radical Behaviorism. Such causal cannons are misinterpretations and impediments to scientific progress. A cause in behaviorism would require separation between stimulation and responding and for one to be held as the cause of the other. This paper questions whether these appeals are genuine or linguistic artifacts. It is suggested that principles and concepts which admit causes are riddled with linguistic artifacts and clarification of such descriptions are needed.

**Key words:** causality, interbehaviorism, radical behaviorism.

A review of the principles of Radical Behaviorism suggests that causalities, though subtle and external, abound. Thus, the question arises *are these causalities genuine or linguistic artifacts?* If events and relations among events are taken to be our subject matter, there is no “thing” there to be discovered. What is there to be discovered, so to speak, are new ways to talk about events. Thus, what we have is what we say about events, making how we speak about events of critical importance. What there is to examine are relations among psychological events and what remains is our construction and description of such. These descriptions can be riddled with linguistic artifacts of all types. The ways in which scientists have spoken are influenced

by their culture, time, and intellectual history.

Kantor’s suggestion, that modern sciences can reject casual cannons, is considered herein followed by comments on the state of Radical Behaviorism’s rejection nearly half a century later. A suggestion is made that if the admission of causality, as represented by the principles and concepts of behavior science, are genuine then there is an issue with the logical assumptions of the science. If the appeals to causality are artifacts of our linguistic histories, it is suggested that they must be reconsidered.

Kantor highlights that scientific cannons can be both beneficial and harmful. Beneficial cannons offer standards of precision while harmful cannons,

specifically those that are causal, block scientific progressions (Kantor, 1953). The distinction between events and descriptions of them is critical for any scientific enterprise. Causes reside not in events, but in descriptions and interpretations of such events. If causal notions are included in event descriptions, events are necessarily misinterpreted. Misinterpretation can arise from many sources, including dualistic institutions, powerful and authoritative schools of thought, and inferences that lose contact with events (Kantor 1953) to name a few.

Kantor has delineated the postulates of Interbehavioral Psychology. In “Proposition 8. Postulate 7. Causal Principles” Kantor states, “psychological events consist of interrelated factors which do not admit internal or external determiners” (Kantor, 1958, p. 89). Kantor suggests, “the 20<sup>th</sup> century science is now able to eliminate internal forces [causes] in favor of event fields” (Kantor 1953, p.53). Let us look first to psychology, more generally, and turn then to behavioral science, specifically, to comment on the rejection of causes.

Various scientific psychological enterprises have eliminated internal causes (e.g. the spirit and mind), yet others remain

(e.g. personality and brain). Perhaps the least objectionable has been the appeal to external determiners.

Kantor specifies that the notion of stimulus-response descriptions implies a seemingly unobjectionable causality. It is not dualistic, so there is no protest in that regard, yet the notion is problematic as only certain stimuli are said to elicit responding. Thus, the cause resides in the stimulus and the response (Kantor, 1958). The primary issue with causality here is that the cause of an event cannot lie in the event if it is to be a cause of such an event. Causality does not reside in the event but in the misinterpretation of events and such misinterpretations, Kantor suggests, will prevent scientific advancements (Kantor, 1953).

If we survey the principles and concepts of Radical Behaviorism for causalities, they will be found in some of the most foundational principles of the field. A causality, in behaviorism, would require a separation between stimulation and behavior, and for one to be held as the cause of the other. Discriminative stimuli, reinforcement, motivation, and generalization are spoken about in ways that are laden with subtle causalities. In the case of discriminative stimuli, the stimulus is said

to *set the occasion* for responding, reinforcement *increases* future responding, motivative operations *effect* the value of reinforcement and thus *change* the frequency of responding, and responses reoccur when conditions are similar *due to* generalization (Skinner, 1974). All of these aforementioned definitions include causalities, in which stimulation is held to cause responding. See Hayes & Fryling, 2014 for a critique on the use of concept of motivation; see Hayes, Adams, & Dixon, 1996 for a critique on reinforcement as a selection process and the causal confusions in such a construction.

Kantor specifies the domain of psychology by outlining the definitions of the subject matter and the scope of the system. He delineates several definitions of specific psychological events. Of particular relevance are the descriptions of discrimination, learning, and motivation. In the definitions of these events there is no admission nor appeal to internal or external causes. Instead, these are field descriptions (Kantor, 1958). There is no separation between stimulation and responding. Instead, in keeping consistent with event field descriptions, these definitions focus on interrelations between stimulus and response functions. There are no discriminative

stimuli that cause responding. Instead, “discrimination events [that] consist of differential responses to objects or their aspects” (Kantor, 1958, p. 81). There is no stimulus that causes an increase in future responding. Instead, learning refers to changes in, “the coordination of stimulus-response functions” (Kantor, 1958, p. 81). Motivation does not alter a future event but instead is a, “setting condition favoring or hindering performance” (Kantor, 1958, p. 81). Thus, there is no separation of stimulation and responding nor any admission of causes in these field events.

A causality, in behaviorism, would require a separation between stimulation and behavior and for one to be held as the cause of the other. There is no stimulation without behavior and no behavior without stimulation. Such an estrangement would be conceptually problematic. A division of this sort could reflect a genuine presumed causality or be an artifact of the linguistic history of scientists.

Kantor suggested that one of the benefits philosophy affords science is the role of supervising semantics, the objective being, “to arrive at the nature of things and events as free as possible from verbal patination laid upon them” (Kantor, 1981).

Contamination again can arise from many sources, most noteworthy in this regard is descriptions of events that lose contact with such events said to describe (Kantor 1953).

Others have also warned of the problems with language. Wittgenstein (1953), suggested that, “the meaning of a word is its use in language”. The connotation being that there is not absolute meaning that any word holds universally but rather the meaning of a words is in its usage. The role of philosophy in supervising semantics is to ensure that words are used in consistent ways (Kantor, 1981).

In the surveillance of the principles and concepts of the field, many issues arise. Linear influences predominate in many of the principles and concepts (e.g. discriminative stimuli, reinforcement, motivation, generalization). These events are spoken about in ways that are laden with subtle causalities usages.

Thus the questions remains, do these subtle appeals suggest a genuine notion of causality or are they laced with linguistic artifacts? That depends on the assumption about the relation between stimulation and behavior. If it is the former, that is stimulation causes responding, or vice versa, the question arises; how can a part of the

event be said to cause another part of the event? Behaviorism, then, is in much need of a coherent reconciliation between the principles and concepts and the presuppositions of the enterprise. Thus, this answer poses many problems and such a reconciliation may be difficult to achieve.

Difficulty in this path is especially likely given that the presuppositions of the enterprise are not coherently and cogently delimited. Semantic misgivings are likely to continue as an impediment to the science.

If it is the latter, that is these principles admit causality due to historical ways of speaking, what is required are efforts to clarify descriptions of events and to describe events in ways that are less riddled with linguist artifacts of our culture and history. This answer to the question requires, what is suggested, as an achievable reconciliation between principles and concepts that describe behavior-environment interrelations and coherent presumptions of the psychological enterprise. Kantor’s Interbehavioral psychology has done much of the heavy lifting in this regard, that is presuppositions have been delineated into a comprehensive system that can be adapted and intergraded into current practices. The suggestion is then to liberate our cannons

from the cripples of ingenuine causalities  
and clarify our causal appeals.

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