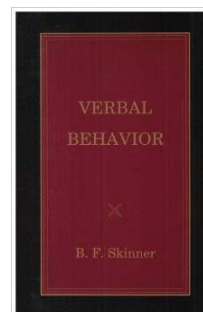


The Most Important Verbal Operant

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Recently, I conducted an informal survey where I asked several behavior analysts what they considered to be the most important verbal operant. The most frequent response was the mand. It's true that the mand is quite important and perhaps the most unique verbal operant presented by Skinner (1957). It certainly is important for language intervention programs for children with autism and other intellectual disabilities. Others felt that the intraverbal relation was the most important. This also seems quite reasonable given the ubiquitous role of intraverbal behavior in so many aspects of daily life, education, science, employment, relationships, and media. But according to Skinner, "The tact emerges as the most important of verbal operants because of the unique control exerted by the prior stimulus" (1957, p. 82). This was surprising to most who participated in the survey. None had offered up the tact as the most important verbal operant. What exactly does Skinner mean by this statement, or more precisely, what are the variables that evoked such a response on his part? The answer can be found among the first 6 pages of his Tact chapter (pp. 81-86).

Skinner opens the Tact chapter by restating the basic components of a functional analysis, and separating verbal stimulus control from nonverbal stimulus control. He notes that there are two types of nonverbal control, (1) the audience that "controls a large group of responses" (p. 81), and (2) "nothing less than the whole of the physical environment—the world of things and events which a speaker is said to 'talk about.' Verbal behavior under the control of such stimuli is so important that it is often dealt with exclusively in the study of language and in theories of meaning" (p. 81). In the tact relation, "A given response 'specifies' a given stimulus property. This is the 'reference' of semantic theory" (p. 83). However, the reasons that Skinner gives for stressing the importance of the tact are not the same as those given by linguists or semantic theorists. He warns against mentalistic theories of meaning and the implication that "in a tact the response 'refers to,' 'mentions,' 'announces,' 'talks about,' 'names,' ...its stimulus" (p. 82). In addition, he warns against the notion that once a speaker learns the meaning of a word, she is then, through various cognitive processes, able to "use" that word in discourse. It may be of interest to note that the linguist's exclusive interest in "expressive labeling" (the tact) and cognitive processing may explain why most common assessment and intervention programs for children with language delays fail to systematically include mands and intraverbals (Esch, LaLonde, & Esch, 2010).

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-Mark Sundberg on the importance of the tact

For Skinner, “the whole of the physical environment” as the primary source of functional control for the tact suggests that for a typical speaker, a massive amount of nonverbal stimuli must eventually acquire stimulus control over verbal responses (e.g., objects, movements, properties, location, possession, private stimuli, and so on). Learning to “talk about” these stimuli in their absence, as is common for the mand and intraverbal relations, or successful responding to those stimuli as a listener, is often dependent on the strength of the initial tact. Once the tact is established, transfer of control procedures can be utilized to establish motivational and verbal control, as well as listener behavior. For example, if a child can tact an iPad power adapter, and can tact a dead iPad, he is in a better position to learn to mand for that adapter given the relevant motivating operation. In addition, if he can tact the function of the power adapter, he is in a better position to learn to emit intraverbal behavior regarding the function of the adapter in its absence.

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Thus, for an early learner, it is quite reasonable to suggest that without a strong tact repertoire, mands and intraverbals would be quite limited. Impaired mands and intraverbals could also be related to weak, absent, or incorrect tacting. I’ve often made the point that it is important that a child be able to accurately talk about things when they are present (tact) before focusing on talking about those things when they are absent (intraverbal and mand). For example, if a child can’t accurately tact a plane or bird flying, landing, or floating (generative noun-verb combinations), it may be difficult to teach generative intraverbals about things that fly, land, or float. This certainly does not mean that tacts are necessary prerequisites for all mands and intraverbals, as many mands and intraverbals may have limited connections to specific tacts (e.g., mands for attention, mands for information, intraverbal song fill-ins, intraverbal philosophical discussions).

Skinner identifies several other important aspects of the tact in those first 6 pages of the Tact chapter. He notes, “The tact as a verbal operant is mainly useful to the listener. . .In very general terms we may say that behavior in the form of the tact works for the benefit of the listener by extending his contact with the environment, and such behavior is set up in the verbal community for this reason” (pp. 84-85). Skinner also describes how tacting behavior is established and maintained by a variety of different forms of reinforcement provided by listeners (e.g., generalized conditioned reinforcement, educational reinforcement, contiguous usage), as well as by “automatic reinforcements from the effects of the behavior upon the speaker himself” (p. 86). These forms of reinforcement not only establish tacting and nonverbal stimulus control, but they also help to break tacts free from motivational control and provide a completely different, but extremely valuable function for the listener. “Roughly speaking, the mand permits the listener to infer something about the condition of the speaker regardless of external circumstances, while the tact permits him to infer something about the circumstances regardless of the condition of the speaker” (p. 83). For example, if a supervisor for an autism program tacts the source of control for a child’s aggressive behavior as task demand, the listener (a staff member) who may have failed to tact the source of control, can behave more effectively as a clinician, and all are benefited by “extending his contact with the environment.” Table 1 contains a list of some possible effects of providing tact training for a child with language delays.

Table 1
Some possible effects of tact training in a language intervention program

Tacting can facilitate useful nonverbal behavior
 Tacting can make a child more valuable to listeners
 Tacting can facilitate useful manding
 Tacting can facilitate effective intraverbal behavior
 Tacting can facilitate textual behavior
 Tacting can facilitate transcriptive behavior
 Tacting can elicit emotional (respondent) behavior
 Tacting can facilitate effective autoclitic behavior
 Tacts benefit a listener by bringing the listener in contact with the physical environment he has not experienced or can't access
 Tacts inform the listener of a speaker's private events
 The autoclitic tact also informs the listener of unknown variables
 Tacts can participate in multiple control (Michael, Palmer, & Sundberg, 2011)
 Tacts can participate in joint control (Lowenkron, 1998)
 Tacts are essential for naming (Horne & Lowe, 1996)
 Tacts can participate in joint attention
 Tacts often get conversations going, and can play an ongoing role
 Tacts play an important role in social behavior
 Failure to tact can be a big problem in social behavior
 Incorrect or distorted tacts can cause problems (lying, exaggerating, cheating)
 Tacts can occur through all the sensory systems
 Tacting complex stimuli often requires special procedures (e.g., pain, exhaustion, discomfort, anger, obsession, danger, art, beauty, nature, love, friendship, enjoyment, and so on)
 Respondent behavior may occur when we cannot emit the correct tact

“ . . . the tact may be more important than the others because the “whole of the physical environment” contains an endless amount of nonverbal stimuli and complex multiple relations that we are said to talk about.”

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In conclusion, Skinner's position is that all the verbal operants, along with listener behavior, are essential components of an effective language repertoire. But the tact may be more important than the others because the “whole of the physical environment” contains an endless amount of nonverbal stimuli and complex multiple relations that we are said to “talk about.” In Skinner's functional analysis of language, “talking about” the physical environment involves not only the tact, but mands, intraverbals, and autoclitics, as well. In the absence of a strong tact repertoire, mands, intraverbals, and autoclitics could become quite limited, or even impaired in various ways. Thus, the tact emerges as the most important verbal operant not only because of its unique type of stimulus control, but also because other types of verbal behavior may be dependent on the tact.

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