# Skinner's Book *Verbal Behavior*: It is Certainly About Time



### Mark L. Sundberg<sup>1</sup>, PhD, BCBA-D

etween 1985 and 1990, B. F. Skinner and I corresponded on issues related to verbal behavior and the newly established journal, The Analysis of Verbal Behavior (TAVB). I was the editor of TAVB at that time. In the second of twelve letters I received from Skinner (dated August 11, 1986), he closed with, "I am pleased with the rapid growth of interest in verbal behavior. It is certainly about time" (Figure 1). In honor of the 60th anniversary of the publication of Skinner's book *Verbal Behavior*, I would like to offer some thoughts on perhaps why, in 1986, Skinner said, "It is certainly about time."

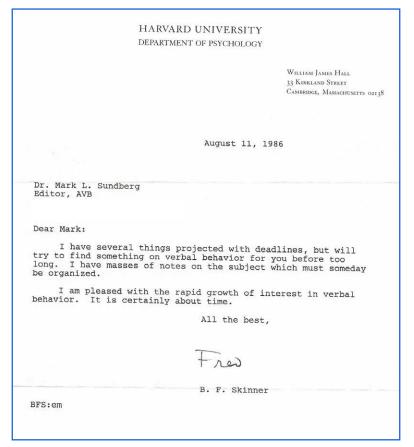
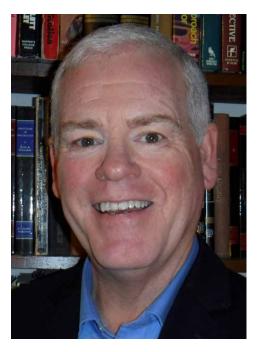


Figure 1

As early as 1945, Skinner proposed that an analysis of verbal behavior was essential for a complete account of complex human behavior. *Verbal Behavior*, published in 1957, contained the details of that account. However, the book's initial impact on the fields of behavior analysis and linguistics was minimal. There were several variables responsible for the slow appreciation



Mark Sundberg, PhD, BCBA-D received his doctorate degree in Applied Behavior Analysis from Western Michigan University (1980), under the direction of Dr. Jack Michael. He is the author of the VB-MAPP, and co-author of the original ABLLS and the book Teaching Language to Children with Autism or Other Developmental Disabilities. He has published over 50 professional papers and 6 book chapters. He is the founder and past editor of The Analysis of Verbal Behavior, a twice past-president of The Northern California Association for Behavior Analysis, a past-chair of the Publication Board of ABAI, and has served on the Board of Directors of the B. F. Skinner Foundation. Dr. Sundberg has given hundreds of conference presentations and workshops nationally and internationally, and taught 80 college and university courses on behavior analysis, verbal behavior, sign language, and child development. He is a licensed psychologist with over 40 years of experience. His awards include the 2001 "Distinguished Psychology Department Alumnus Award" from Western Michigan University, and the 2013 "Jack Michael Outstanding Contributions in Verbal Behavior Award" from ABAI's Verbal Behavior Special Interest Group.

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of Verbal Behavior among behavior analysts. For example, during the 1950s and 1960s our field was primarily focused on the experimental analysis of behavior, and only a small number of behaviorists were working in applied areas, and even fewer studying human language. Those who were early pioneers of the experimental analysis of language faced many challenges, such as the absence of an existing research methodology for studying language as behavior.

The field of linguistics demonstrated little interest in Skinner's analysis of language, or his behavioral views in general. This was partly due to Chomsky's negative review of *Verbal Behavior*, but also, as Skinner explained in a 1973 festschrift for his friend, I. A. Richards, "*Verbal Behavior*...has not been understood by linguists or psycholinguists in part because it requires a technical understanding of an operant analysis, but in part because linguists and psycholinguists are primarily concerned with the listener—with what words mean to those who hear them, and with what kind of sentences are judged grammatical or ungrammatical."

Given the slow appreciation of *Verbal Behavior* by behavior analysts and rejection by linguists, in 1978, Skinner cautiously wrote, "Verbal Behavior...will, I believe, prove to be my most important work." His words "will, I believe, prove to be" could be classified as descriptive autoclitic tacts of weakness regarding the source of control for his primary response "my most important work." Skinner seems to be implying that after two decades his book had not achieved the impact he thought it should have, but he was not giving up hope. Eight years later, in his 1986 letter, Skinner referred to the "rapid growth of interest in verbal behavior" and exclaimed, "It is certainly about time." Why was Skinner now so optimistic about verbal behavior? I suggest it was due to a confluence of events and activities that occurred in our field from the mid-1970s to the mid-1980s that directly facilitated the development of Skinner's analysis of verbal behavior. Several of these events and activities will be briefly described.

#### Jack Michael and his Verbal Behavior Courses

Jack Michael taught his first course in behavior analysis in 1955 at the University of Kansas. He used Skinner's *Science and Human Behavior* as the textbook for that course. In that book, Skinner mentions his upcoming book Verbal Behavior in a footnote. Jack contacted Skinner regarding the book, and Skinner sent him early versions of the material (the Hefferline class notes and the William James Lectures). Jack began to incorporate Skinner's verbal behavior content into his behavior analysis course. After the book was published, he developed a full course in verbal behavior, and while at Western Michigan University (WMU) he offered that course almost every year between 1967 and his retirement in 2003 (see Esch & Esch in this issue of Operants). Jack was the consummate teacher of verbal behavior. He was able to impart to students the verbal repertoires necessary to use the concepts and principles of behavior analysis to analyze verbal behavior in any context. In the process of teaching others, Jack was constantly

working on furthering his own understanding of Skinner's analysis of verbal behavior and refining various aspects along the way (e.g., establishing operations, codic and duplic relations, automatic reinforcement). In addition, Jack was able to impress upon his colleagues the importance of Skinner's analysis of verbal behavior to the field of behavior analysis.

## The Midwestern Association for Behavior Analysis (MABA) and later, the Association for Behavior Analysis (ABA)

In 1974 MABA was established. This was an important development for the field of behavior analysis. Not only did MABA give an organizational structure to our field, but it offered contingencies to conduct and present behavioral research, and opportunities to meet and learn from our field's greatest contributors. MABA grew rapidly, and in 1978 the executive council dropped the "Midwestern" aspect of its name, and changed it to "ABA."

As evidence of the low interest in verbal behavior during that time, the 1st MABA convention offered hundreds of presentations, but a review of the program book turned up only one event related to Skinner's analysis of verbal behavior. It was a symposium chaired by Joe Pear titled "Skinner's book Verbal Behavior: Some Twenty-five years later." But, over the next three years the number of verbal behavior presentations grew steadily, and by the 4th annual MABA convention in 1978, the programs had offered verbal behavior presentations by some of the field's most prominent behavior analysts including Charlie Catania, Don Cook, Willard Day, Sigrid Glenn, Terry Knapp, Jim Holland, Jack Michael, Joe Pear, Kurt Salzinger, Roger Schnaitter, Eve Segal, B. F. Skinner, Joe Spradlin, Ernie Vargas, Julie Vargas, and Scott Wood. In addition, the MABA programs began to offer an increasing number of experimental and applied papers and posters on verbal behavior.

#### The Application of Skinner's Analysis of Verbal Behavior

In 1963, Joe Spradlin provided the first systematic application of Skinner's analysis of verbal behavior. Spradlin developed a language assessment tool for low-verbal institutionalized persons based on the verbal operants (the Parsons Language Sample). He was also instrumental in the early development of language intervention programs based on verbal behavior. Other applications gradually followed but progress was slow. Even MacCorquodale's solid rebuttal of Chomsky's review did not seem to spark an interest. By the mid 1970s, published research on verbal behavior applications was still rare.

In 1976, Jack Michael started offering a graduate course at WMU titled Verbal Behavior Applications. In that course Jack focused on how to use Skinner's analysis of verbal behavior to analyze and treat a variety of verbal issues and problems (e.g., autism, intellectual disabilities, aphasia, dementia, literacy). At that time, Jack was also a research advisor at the Kalamazoo Valley Multihandicap Center (KVMC), a WMU psychology department practicum

site. Jack's main focus at KVMC was on verbal behavior research. Many of the staff members (especially Jack's graduate students) were eager to explore the experimental and applied potential of Skinner's analysis of verbal behavior. With Jack's direction, his students developed language assessment and intervention programs based on the verbal operants, and a thematic line of empirical research on the elementary verbal operants was established.

Over the years Jack produced hundreds of students who not only had obtained degrees in behavior analysis, but also received training in Skinner's analysis of verbal behavior and its applications. Several of Jack's students, as well as other behavior analysts, began to offer verbal behavior courses at universities across the country, and

provide verbal behavior workshops at conferences and other events. This led to an increase in the use of verbal behavior procedures in schools, state hospitals, clinics, and in-home programs (e.g., mand training, pairing, tact to intraverbal transfer procedures). Verbal behavior research also began to appear in the behavioral literature.

#### The Verbal Behavior Special Interest Group (VBSIG)

In 1977, MABA introduced a convention program category titled "Special Interest Group (SIG)." The first VBSIG meeting (1977) was chaired by W. Scott Wood and Jack

Michael. The room was full, and

many people spoke, including Skinner. A number of issues were raised such as the difficulty of teaching from *Verbal Behavior* (Skinner supported that point) and the prerequisite repertoires required for understanding the book. The consensus of the group was that every effort should be made to improve the instructional technology, foster the exchange of materials, and promote research in the verbal behavior area. Following that meeting, several actions were taken by the VBSIG members, including developing a method to better disseminate verbal behavior material, and

encouraging and supporting verbal behavior research.

#### Outlets for Dissemination and The Analysis of Verbal Behavior (TAVB)

Following the 1977 VBSIG meeting, we progressed through different outlets for disseminating verbal behavior content. Among our efforts was the creation of the Western Michigan University Behavioral Monograph Series. This series was started and maintained by a group of WMU students (Patty Cherpas, Stephen Fath, Mitch Picker, and Mark Sundberg) and supervised by WMU faculty members David Lyon (the department chair), Jack Michael, Kay Malott, and Alan Poling. Sixteen monographs were

HARVARD UNIVERSITY DEPARTMENT OF PSYCHOLOGY WILLIAM JAMES HALL 33 KIRKLAND STREET Cambridge, Massachusetts 02138 August 7, 1989 Dr. Mark L. Sundberg Dear Mark: Thanks for the copy of the new edition. I thought there were some excellent things in it. I like the review of Bruner. It is quite amazing how the linguists are coming around to the position of my book. They had to get around to the behavior of position of my book. They had to get around to the behavi-the speaker sooner or later, having spent centuries on how verbal behavior is understood by the listener. The book you cited must have been my <u>Recent Issues in the Analysis of Behavior</u>, not anything to do especially with verbal behavior. Things are going well here. I am transcribing and editing a draft of my paper at ABA for the Journal of Behaviorology. All the best, B.F. Skinner

Figure 2

them were Ralph Hefferline's notes from Skinner's 1947 verbal behavior course, Skinner's William James Lectures, Marge (Vaughan) Peterson's early work on automatic reinforcement, and our material on the application of verbal behavior to language assessment and intervention for children with language delays. The printing and mailing of the monographs were initially funded by KVMC (thanks to Jerry Shook), and made available to those who were interested. Another method of disseminating information on verbal behavior, beginning in 1982, was the VBSIG's newsletter.

published, among

the VB-NEWS. This newsletter served the verbal behavior community by presenting short verbal behavior articles, conference information, resources, and other standard newsletter content. We began to get submissions that were lengthy, and important contributions to the analysis of verbal behavior. The decision was made by the members of the VBSIG to transition the VB-NEWS into a journal format, including establishing a Board of Editors and a formal peer-review process. In 1985, the name and format of our newsletter was changed from VB-NEWS to *The Analysis of Verbal Behavior*, and a new behavioral journal was

#### Skinner's Influence on Linguistics

Skinner hoped that linguists would eventually understand his analysis and agree with him. In many respects, it was the shortcomings of linguistic theory that were the primary target of his book, shortcomings he sought to amend. I received my tenth letter from Skinner (dated August 7, 1989) after sending him Volume 7 of TAVB. In that letter (Figure 2), Skinner commented on a review by Terry Knapp of Jerome Bruner's book *Child Talk* that had appeared in an earlier issue of TAVB. I'm guessing Skinner had just read it when he wrote, "I like the review of Bruner.

It is quite amazing how the linguists are coming around to the position of my book. They had to get around to the behavior of the speaker sooner or later, having spent centuries on how verbal behavior is understood by the listener." It had to have been satisfying for Skinner to see such enlightenment from a well-respected linguist.

In the Spring of 1990, Skinner was excited about a paper soon to be published by a well-known historian of linguistics, Julie Tetel Andresen, titled "Skinner and Chomsky thirty years later." From a historian's perspective, Andresen reevaluated the debate between Skinner and Chomsky and sided with Skinner. She also recommended changes in the historical record, and noted, "writing Skinner into

the record changes the history of what we think our discipline to

be and thereby reconfigures the disciplinary boundaries." Skinner sent me two letters about Andresen's work, as well as a draft copy of her paper. Andresen then wrote me, noting Skinner had asked her to do so, and provided me with the publication information. The paper was going to be published in the journal Historiographia Linguistica, but Skinner felt her findings also needed to reach the behavioral community. In the twelfth letter I received from Skinner (dated April 24, 1990), he suggested, "some good operant

person (should) review the article by Andresen for your journal. I think it would be wonderful for more people in the field of verbal behavior to know about it" (Figure 3). Terry Knapp was on it, and we published his review of Andresen's work that year in Volume 8 of TAVB. In addition, shortly after publishing her first paper on Skinner and Chomsky, Andresen published a similar paper in *The Behavior Analyst*.

#### Post Skinner

Skinner died August 18, 1990. Now, 60 years after the publication of *Verbal Behavior*, verbal behavior research is thriving and his book is selling at an all-time high. TAVB is entering its 34th volume, and its archives

contain approximately 400 conceptual and empirical papers on verbal behavior. Empirical research on verbal behavior now appears regularly in the major behavioral journals, as well as in journals outside of our field. Applications of verbal behavior have been successful in a number of areas (e.g., autism, dementia, education, second language learning, problem solving, emergent relations), and many speech-language pathologists (SLPs) are now using a verbal behavior approach in their clinical work. Also, some SLP professors are teaching verbal behavior in their courses.

We are just beginning to unpack Verbal Behavior and realize its potential. But, we now have a solid body of empirical

research, a research methodology, and verbal behavior research labs

operating around the world that regularly produce new findings on verbal behavior, often in great thematic detail. For example, in a recent review of the literature, Aquirre, Valentino, and LeBlanc identified 53 empirical studies on just the intraverbal relation published in the past 10 years. Skinner's analysis of verbal behavior is finally receiving the attention it deserves. It is certainly about time!

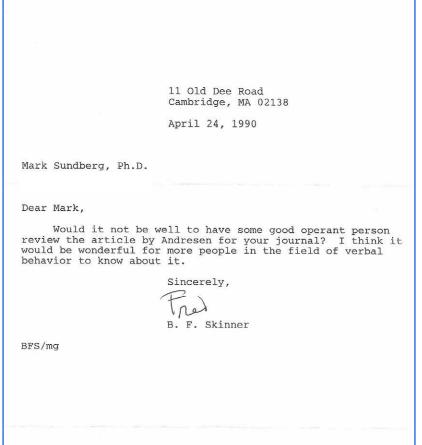


Figure 3