Review of the Video

B. F. Skinner: A Fresh Appraisal

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On seeing advertisements for *B. F. Skinner: A Fresh Appraisal* (Davidson Films, 1999), we were eager to view it. As instructors, teaching assistants, and graduate students, we were its consumers and, in part, its audience. And, the video's accompanying guide piqued our interest even further:

Other than Freud, no psychologist has been so discussed, critiqued and, at times, maligned as B. F. Skinner. Using both archival and new footage, this video takes a new look at who [Skinner] was, and what he really said in his twenty books. Like other thinkers who broke new ground, Skinner had to invent his own vocabulary to describe the phenomena he was studying. In this video, his terms are introduced in context so the student understands how they were intended to be used and the research that produced them. The video lays to rest some myths and credits Skinner with contributions not often attributed to him. (p. 2)

After having viewed the video, however, we were less enthusiastic. Before delving into our reasons, we comment briefly on instructional materials used in higher education.

Instructional Materials in Higher Education

At least since the putative cognitive revolution (Leahey, 1992), Skinner and

behavior analysis have often been inaccurately and unfavorably portrayed in college textbooks (see Cooke, 1984; DeBell & Harless, 1992); however, steps were eventually taken to correct this (Morris, 1985). Some behavior analysts, for instance, pointed out the inaccuracies and offered corrective measures (e.g., Lamal, 1996; Todd & Morris, 1992). But their work was published in behavior-analytic venues (e.g., Todd & Morris, 1983); therefore, its influence was likely attenuated (Reitman, 1998). Also, unable to find suitable textbooks, other behavior analysts wrote their own, for example, in introductory (e.g., Schlinger & Poling, 1998) and developmental (e.g., Novak, 1996; Schlinger, 1995) psychology, and in learning (e.g., Catania, 1998) and learning theory (e.g., Malone, 1990). Mainstream instructors, however, are generally reluctant to assign textbooks that are not conventional and encyclopedic, criteria on which behavior-analytic textbooks often fail. In the end, given the shortcomings, these reactive and proactive measures alone are insufficient to correct and offset the presentations of Skinner and behavior analysis in higher education. Other materials are needed, one genre of which is movies and videos. These can add immediate interest and variety to in-class presentations and are of no direct cost to students.¹ They are also well marketed, and thus likely to gain an

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¹ The indirect costs, however, can be high. The present video, for instance, sells for \$250; it rents for \$50.

audience among instructors. In this context, a new video on Skinner, *B. F. Skinner: A Fresh Appraisal*, should be enthusiastically welcomed.²

In our review, we assess both the video's content and its production. For the former, we relied on our backgrounds as instructors and graduate students of behavior analysis. But, because we are not filmmakers, we employed a technical resource for assessing the video's production: Rosenthal's *Writing, Directing, and Producing Documentary Films and Videos* (1996). Finally, we had several undergraduate classes offer ratings and comments.

The Video: An Appraisal

Rosenthal (1996) offers several guidelines for producing effective documentaries. One of them concerns rhythm: "Get into the film fast; establish what you are going to do, then do it" (p. 91). In this, the video falters somewhat. It begins directly and suddenly with Skinner quoting Francis Bacon (1620/1960)—"Nature, to be commanded, must be obeyed" (p. 39)—and immediately elaborating on Bacon's philosophy. We thought we had missed the video's beginning and rewound the tape. Even once underway, the video does not clearly establish what it is "going to do" beyond its title, which is itself somewhat enigmatic.

Following Skinner's opening comments, the video turns to Murray Sidman, who wrote and narrated the script; it comprises 34 of the video's 41 minutes. Sidman begins by describing the honor of being invited to undertake the task and then personalizes

his narrative by relating the importance of Skinner's work to his own. This will engage viewers who are knowledgeable about Sidman's many seminal contributions to the field (e.g., Sidman, 1960, 1966, 1994) but not many others, in particular, undergraduate students. The narrative itself is well written and nicely presented, but its effectiveness is compromised by the video's production. For example, the narrative's accompanying footage and stills are poorly synchronized with its content, repeated in disparate contexts (e.g., frequently reprised segments of a volleyball practice in which a participant flinches), and beyond the immediate comprehension of most students (e.g., cumulative records).

Another of Rosenthal's (1996) production guidelines concerns pacing: "Build the film with a variety of scenes and a gradual crescendo of climaxes" (p. 91). Here, the video misses a beat. It proceeds unevenly and without any crescendo. As we mentioned, the video begins suddenly with highly conceptual material and then drops into a low-key introduction. After this, it accelerates to a quick pace before slowing abruptly in a segment featuring Skinner's daughters, Julie Vargas and Deborah Buzan. As for the video's content in these segments, the quickly paced material covers Skinner's early life (e.g., his inventiveness), intellectual currents of the 1920s (e.g., Darwin, Freud, Pavlov), Skinner's analysis of thinking and feeling (e.g., as behavior), his research (e.g., reinforcement), and a tutorial on basic principles of operant behavior (e.g., the three-term contingency). In the slower segment that follows, Vargas and Buzan discuss the air crib (Skinner, 1945a; see Benjamin & Nielsen-Gammon, 1999) and teaching machines (Skinner, 1958; see E. A. Vargas & Vargas, 1996), albeit in a somewhat defensive manner. Vargas also critiques educational practices with well-taken points, but her qualifications are never established beyond her being Skinner's daughter (cf. J. S. Vargas & Shanley, 1995). The tone of

² In addition, the Association for Behavior Analysis (<http://www.wmich.edu/aba/>) has established a Special Interest Group—BALANCE—to address, in part, the misleading accounts of Skinner and behavior analysis in textbooks; the Cambridge Center for Behavioral Studies (<http://www.behavior.org/>) seeks to educate the public about behavior analysis more generally.

this section notwithstanding, Vargas's and Buzan's recollections of their father are among the video's most engaging moments (e.g., Vargas's reminiscence of Skinner putting Buzan to bed as a child).

At this point, the video's pace picks up again, this time with material on the application of Skinner's work to developmental disabilities (e.g., the use of his 1957 book, *Verbal Behavior*, for persons with autism), animal training (e.g., seeing-eye dogs), social skills instruction (e.g., American social customs), and intentional communities (e.g., Los Horcones). A visit to Skinner's home office ends this segment, but dwells too long on his rigging of a self-engineered, adjustable magnifying lens for reading.³ In the video's closing segment, Sidman summarizes Skinner's contributions: his methods (e.g., response rate), his discoveries (e.g., the operant), and his system (e.g., behavior analysis). What we missed was more of what made Skinner's (1945b) behaviorism "radical" to begin with—its treatment of private events—which textbooks so often misrepresent (see Jensen & Burgess, 1997; cf. Research Press, 1982).

Although we were disappointed in several aspects of the video's production and in how it compromised the content, the video itself is not without merit in several regards. For instance, some behavior analysts will value the segments that present well-known material in new ways (e.g., teaching tips). Others will find Sidman's narrative useful in organizing class lectures and discussion. And still others will appreciate the new or rarely seen archival footage (e.g., Pavlov classically conditioning a dog's salivation) as well as the contemporary material featuring Sidman, Vargas, and Buzan. And, of course, even the video's failings can be

made into opportunities. Instructors who are knowledgeable about behavior analysis can prepare introductory and follow-up material to make the video's segments more engaging and effective as pedagogical tools. Those who are not knowledgeable, however, will have a more difficult time.

Freshness: An Appraisal

Not only does the video's production sometimes work against its content, they both occasionally compromised its "freshness." For example, although Sidman's narrative is well wrought, he presents it seated in an armchair, reading from a three-ring binder. This is unlikely to convey the image of a vital, au courant science to today's students. And, whereas Vargas's and Buzan's discussion of the air crib and teaching machines is interesting, the promise of these two technological advances remains unmet. As such, they are likely to be historical curiosities to students rather than modern and fresh innovations. Finally, a content analysis of the video reveals that the topics students might find the least refreshing are among those most featured (see Table 1). For instance, Vargas's and Buzan's discussion and Skinner's intellectual lineage are allotted more time than Skinner's unique and creative contributions to a science of behavior. Admittedly, the abstractness of the latter can be difficult to make compelling, but a better selection of examples might have been fresher than historical lineages and failed legacies.⁴

³ Material in this segment of the video has now been expanded into another video, *His Own Best Subject: A Visit to B. F. Skinner's Basement* (Davidson Films, 2000). It sells for \$85; it rents for \$50.

⁴ Teachers who seek a fresh appraisal might consider *B. F. Skinner and Behavior Change: Research, Practice, and Promise* (Research Press, 1975; selling price: \$495; rental: \$55). Although now 25 years old, it remains a worthy alternative (notwithstanding the mid-1970s style of dress and grooming). Research Press, of course, had the advantage of filming Skinner in person, as well as extensive footage of his conversations with close friends and family members (e.g., Keller, Buzan) and interviews with students, colleagues, and peers (e.g., Bijou, Fester, Herrnstein, Patterson). Through no fault of its own, Davidson's video lacks the freshness of Skinner's personality.

TABLE 1

Topics covered in *B. F. Skinner: A Fresh Appraisal* by time and percentage

Topics covered	Minutes	Percentage
Influence, specific and general	5:26	13.3
Intellectual framework	4:59	12.2
Reinforcement	4:32	11.1
Consequences	3:50	9.3
Skinner on Skinner	2:45	6.7
Teaching machines	2:15	5.5
Air-crib	2:05	5.1
Reinforcement schedules	1:53	4.6
Biographical information	1:49	4.4
Personal environment	1:42	4.1
Discriminative stimulus	1:40	4.1
Punishment	0:51	2.1
Three-term contingency	0:48	2.0
Early distinctions	0:41	1.7
Methodology	0:35	1.4
Ethical concerns	0:35	1.4
Other (e.g., transitions, titles, summaries)	4:34	11.1
Total	41:00	100.0

Student Evaluations

Overall, as reviewers ($N = 6$), we gave the video a mean rating of 2.5 (range, 2 to 4) on a scale of 1 (*poor*) to 5 (*excellent*). However, educational materials should not be evaluated solely by instructors; they should be evaluated by students as well. Although instructors may decide what to teach (e.g., content) and how to teach it (e.g., production), student behavior is the final arbiter of educational effectiveness (Reese, 1986; Skinner, 1968) or, lacking data, at least of social validity (see Wolf, 1978). Thus, in the process of preparing our review, we showed the video to undergraduate students and had them evaluate it, albeit informally and unsystematically. One instructor gathered written responses from one developmental ($N = 38$) and two introductory ($Ns = 40$) psychology classes at a small private college and community college, respectively, about half-way through the semester. The other instructor collected numerical ratings and written responses from an introductory behavior analysis class ($N = 52$) at a large state university, where the video was shown at the end of the semester.

Although the students' evaluations confirmed ours in many regards, they sometimes suggested that we might have been overly critical. For instance, the students in the developmental and introductory psychology classes reported liking the material relating Skinner's work to that of his predecessors (but not always), the distinctions drawn between Pavlov's and Skinner's contributions (although sometimes too time consuming), the interviews with Skinner's daughters (e.g., "a good, personal touch"), and the material on the application of Skinner's science. In contrast, they found Skinner's personal history and the details of his home office less compelling. Like us, the students were also critical of the video's production. Some of them noted that it began too quickly and that its narration was read, not spoken, and thus not lively. Others commented that (a) the point of some visuals was "lost on the novice" or did not "correlate with the narrator"; (b) the video "jumps around . . . not very chronological" for a biography; (c) there were "too many elements: drawings, old footage, camcorder shots, for the viewer to follow"; and (d) "to use [the video] as an edu-

cational tool—it would be best to pause it every couple of minutes—as it's a few movies worth of material."

In contrast, the students in the behavior analysis class were more positive. They did not find the video too advanced ($M = 1.5$, where 1 = *not* and 5 = *very*); they "learned a lot from the narration by Sidman" ($M = 3.7$); and they thought that the video helped "explain the importance of behavior analysis to the science of psychology" ($M = 4.2$). They did suggest, though, that the video would not be as effective at the beginning of a semester ($M = 2.7$).

Conclusion

Although the promise of *B. F. Skinner: A Fresh Appraisal* is in many ways compromised by its production, the video has one special merit: It is fair, accurate, and positive, and thus "fresh" in this important regard. The ratings of the behavior analysis class support this assessment. On the item, "The video helped correct claims made about Skinner and behavior analysis in other courses," the students' mean rating was 3.7. With respect to correcting the claim that Skinner promoted "the use of punishment and threat," their mean rating was 3.9.

Fair, accurate, and positive appraisals, however, are only the beginning, not the end, for effective presentations of Skinner and behavior analysis in instructional materials in higher education. Their content must also be instructive, presenting material that matters at a level of scope and precision that best fits the audience. Their production must provide rhythm, pacing, and sequences that enhance the viewer's comprehension of the content. And, the content and the production must work together, not against one other. In the end, the video faltered on this last point, all the while never failing to be fair, accurate, and positive. The latter, unfortunately, does not make up for the former.

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