



Introduction to Teaching the History of Behavior Analysis: Past, Purpose, and Prologue

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Abstract

This article introduces a special section of *Perspectives on Behavior Science* on teaching the history of behavior analysis. Although behavior is distinctive, behavior analysis is diverse, and the history of behavior analysis is deep, teaching the field's history often is not. The special section offers means for remedying this. The introduction has three sections. First, it relates the genesis of the special section: the 2018 meeting of the Association for Behavior Analysis International and, before that, the 2015 meeting of Cheiron: The International Society for the History of the Behavioral Sciences. Second, it addresses the purposes—reasons and rationales—for teaching history, especially the history of behavior analysis. And third, it offers a prologue for teaching the field's history based on a review of what is taught or not in recent textbooks and handbooks on the field's basic and applied research and their conceptual foundations. In its conclusion, the article previews the section's other articles: (1) three exemplars on how history can be embedded in courses on the field's foregoing three subdisciplines; (2) an exemplar of teaching history in a stand-alone course on the field's history overall; (3) a discussion that addresses how to improve instruction in these courses through narrative methods; and (4) a conclusion about the present and future of teaching the field's history (e.g., giving the history of behavior analysis away).

Keywords History · Behavior analysis · Textbook history · Teaching history

A briefer version of this article was presented in “Giving the History of Behavior Analysis Away in Teaching Behavior Analysis” (Morris, 2018b), a symposium conducted at the 2018 meeting of the Association for Behavior Analysis International, San Diego, CA (Morris, 2018a). I thank Bryan D. Midgley (McPherson College) for his constructive comments on another earlier version of it and Ric Steele (University of Kansas) for guiding me through the American Psychological Association's Standards of Accreditation, in particular, its standards for “discipline-specific knowledge” in the history and systems of psychology.

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Behavior is a distinctive subject matter (Skinner, 1938, 1953, 1974). It ranges from individual behavior (e.g., doing, knowing; Novak et al., 2022; Pierce & Cheney, 2017) to social and verbal behavior (e.g., cooperating, thinking; Catania, 2013; Guerin, 1994) to community and cultural behavior (e.g., educating, governing; Biglan, 2015; Cihon & Mattaini, 2020). As a result, behavior's field of study—behavior analysis—is diverse (Michael, 1985; Reese, 1986). It includes a discipline and a practice and the former's main subdisciplines: applied behavior analysis (Cooper et al., 2020), the experimental analysis of behavior (Iversen & Lattal, 1991), and their conceptual foundations (Moore, 2008), as well as behavior analysis as a cultural, intellectual, and scientific practice (Glenn, 1988; Schneider, 2012b). And, it is deep (Leahey, 2013; Morris et al., 1990): It has a long past, beginning in 500 B.C.E. Greek philosophy (Kantor, 1963), largely in Aristotle's naturalism (Rachlin, 1994); a short history, beginning in early 20th-century American culture and science (O'Donnell, 1985), generally in John B. Watson's (1878–1958) classical behaviorism (see Watson, 1913); and recent origins, beginning in the second third of 20th-century American psychology (Malone, 1990), mainly in B. F. Skinner's (1904–1990) neobehaviorism, in particular, in his science of behavior (the experimental analysis of behavior; Skinner, 1938) and his philosophy of that science (radical behaviorism; Skinner, 1945).¹

In contrast, teaching the history of behavior analysis is not yet as distinctive, diverse, or deep. In fact, it is often wanting or absent. As Jack Michael (1926–2020) observed: “no historical knowledge at all seems to be the most common alternative” to teaching the field's history, even to teaching such an “oversimplified” version as his own (Michael, 2004, p. 93). This special section of *Perspectives on Behavior Science* advances teaching the field's history. The present article introduces it by describing (1) the section's history; (2) the purposes of teaching history; and (3) a prologue about what is most commonly taught and how, but often not taught, in the history of behavior analysis.

Past

The origin of this special section was a 2018 symposium on teaching the field's history at the meeting of the Association for Behavior Analysis International (ABAI; Morris, 2018b). The symposium, though, had its own origins: the 2015 meeting of Cheiron: The International Society for the History of the Behavioral Sciences. There, historians were gravely concerned that undergraduate and graduate courses on history were becoming history. First, the courses were being replaced by other courses, for instance, those required for the accreditation of psychology departments by the American Psychological Association (APA). Second, when their instructors retired,

¹ In psychology, the distinction between the long past and short history was originally made by Hermann Ebbinghaus (1850–1909). He wrote: “Psychology has a long past, yet its real history is short” (Ebbinghaus, 1908, p. 3). E. G. Boring (1886–1968) made it famous as: “Psychology has a long past, but only a short history” (see Boring, 1929, p. vii).

they were being replaced by instructors to teach these other courses, not history (e.g., clinical, experimental, statistics). Third, APA offered only modest support for teaching history. The Standards of Accreditation for Health Service Psychology programs—which includes clinical psychology—required “discipline-specific knowledge” in history, but the “evaluated educational experience” for that knowledge need not be a history course. The experience could be based on units in the history of psychology’s discipline-specific knowledge (e.g., on affective, biological, cognitive, developmental, and social psychology).

At the Cheiron meeting, I offered advice adapted from the cognitive psychologist George A. Miller (1920–2012). At the end of his 1969 APA presidential address—“Psychology as a Means of Promoting Human Welfare” (see Miller, 1969)—he famously urged psychologists “to give psychology away” (p. 1074). At Cheiron, I urged my colleagues to give the history of psychology away. In particular, I recommended—in my words, not theirs—that they increase the probability that history is taught by reducing the effort of teaching it. For this, I recommended presenting and publishing symposia on teaching the history of psychology and the units on the history of its discipline-specific knowledge at the meetings of APA and its corresponding divisions. I also recommended submitting the syllabi for the history course and the units on the histories of the discipline-specific knowledge to syllabus banks maintained by Cheiron, APA Division 26 for the Society for the History of Psychology, and APA divisions that corresponded to psychology’s discipline-specific knowledge. In fact, every division should teach the history of its discipline-specific knowledge. This would be giving the history of psychology away.

Historians of behavior analysis have similar concerns about teaching their field’s history. Miller’s (1969) advice is again relevant: Give the history of behavior analysis away through the same and additional means. That was the origin of the 2018 ABAI symposium and now of this special section of *Perspectives on Behavior Science*. The claims and criticisms that teaching the history of behavior analysis is wanting or absent, though, presuppose that teaching it has purposes. It does, but they are not often articulated. The next section offers some of them.

Purposes

Teaching the history of behavior analysis has the same purposes as the field’s discipline and practice: to improve the human and nonhuman condition. In teaching its main subdisciplines—applied behavior analysis, the experimental analysis of behavior, and their conceptual foundations—the purposes range from concrete reasons (e.g., the prediction and control of behavior) to abstract rationales (i.e., reasons for the reasons; e.g., awareness, knowledge, understanding, compassion, tolerance). Likewise, so do the purposes of teaching history and, in particular, teaching the history of behavior analysis.

Teaching History

The purposes of teaching the history of behavior analysis are those of teaching history in general, for instance, human history, history of science, and histories of the sciences and their technologies (see Diamond, 1997). These are broadly cast. The Roman statesman and philosopher, Marcus Tullius Cicero (106–43 B.C.E.), was perhaps the first to offer a purpose, now also an aphorism: “Those who know only their own generation remain children forever.” Another purpose is based on the American author, Mark Twain’s (1835–1910), observation about travel:

[History] is fatal to prejudice, bigotry, and narrow-mindedness, and many of our people need it sorely on these accounts. Broad, wholesome, charitable views of men and things cannot be acquired by vegetating in one little corner of the earth all one’s lifetime. (Twain, 1869, p. 427)

A more familiar purpose was offered later by the Spanish-American philosopher, George Santayana (1863–1952): “Those who do not learn from history are doomed to repeat it” (Santayana, 1905/2005–2006, p. 284). Later still, the Irish historian, Benjamin Farrington (1891–1974), addressed the purpose in almost a behavior-analytic idiom:

History is the most fundamental science for there is no human knowledge which cannot lose its scientific character when men forget the conditioning under which it originated, the questions which it answered, and the function it was created to serve. A great part of the mysticism and superstition of educated men consist of knowledge which has broken base from its historical moorings. (Farrington, 1949, p. 173)

Other purposes include Carl Sagan’s (1934–1996), “You have to know the past to understand the present” (www.quteslyfe.com), and Ibram Kendi’s (1982–present), “To know the past is to know the present. To know the present is to know yourself” (Reynolds & Kendi, 2020, p. ix).

The purposes of teaching the history include not only the foregoing, but also those for teaching the history of other behavioral, cognitive, and social sciences (see, e.g., Boring, 1950). Within them, the purposes in psychology are especially relevant, but beyond the purview of this article (see, e.g., Graham et al., 1983; Henle, 1976; Pettit & Davidson, 2014; Ware & Benjamin, 1991; Watson, 1966; Wertheimer, 1977, 1999; see also *Teaching of Psychology*, Volume 6, Issue 1). Behavior analysis, though, has its own purposes.

Teaching the History of Behavior Analysis

Although the purposes of teaching the history of behavior analysis are those of teaching history in general, they are rarely addressed in the behavior-analytic literature. Perhaps they are too remote and probabilistic for a field whose goal is the prediction and control of behavior (see Smith, 1992). Perhaps they are too abstract

and metaphorical for a field whose foundations include naturalism and physicalism (see Delprato & Midgley, 1992). Nonetheless, they include the foregoing purposes of teaching the field's history: to avoid remaining children forever; to avoid being prejudiced, bigoted, and narrow-minded; and to avoid being doomed to repeat history. Other purposes may be drawn from the field more directly.

Skinner

Although Skinner was properly wary of using history in lieu of prediction and control for understanding human behavior (e.g., Skinner, 1972, pp. 348–349), he practiced behavioral interpretation widely (see, e.g., Skinner, 1953, 1957, 1974, 1999). Historiography is a form of behavioral interpretation. It is a form of successful working in three ways: (a) description-as-explanation—a coherence criterion of truth. It is even more successful when it serves the more pragmatic criterion of truth: (b) prediction-as-explanation—a correspondence criterion of truth. It is even more successful when it serves the most pragmatic criterion in behavior analysis: (c) experimental-control-as-explanation—prediction *and* control (e.g., see Moxley, 2001, 2002; Smith, 1992). By including behavioral interpretation as a form of successful working and, if coherent, as a criterion of truth, behavior analysis includes coherent historiography as one of its purposes.

In addition to interpreting everyday human behavior, Skinner interpreted his own behavior as a scientist in terms of the consequences of his own history. In describing why he wrote *Verbal Behavior* (Skinner, 1957), for instance, he noted: “My reinforcers were the discovery of uniformities, the ordering of confusing data, the resolution of puzzlement” (Skinner, 1979, p. 282; see also Skinner, 1953, pp. 247–256, on thinking). With this, he could interact more successfully with his own behavior about verbal behavior and then more successfully with the behavior of his students, peers, and colleagues about it. These are not abstract purposes. They are pragmatic in their consequences. Those who do not learn from their histories remain children forever (see Cicero, 106–143 B.C.E.). So, too, with not learning from the history of behavior analysis.

Among Skinner's important early publications was his interpretation of the behavior of physiologists and psychologists in defining behavior as a subject matter. Skinner (1931) based it in the physicist-philosopher Ernst Mach's (1838–1916) history of science (see Mach, 1883/1960; Marr, 1985, pp. 130–131). To quote Mach: “Certain historical facts are considered for two reasons: to discover the nature of the observations upon which the concept [of the reflex; i.e., behavior] has been based, and to indicate the source of the incidental interpretations with which we are concerned” (p. 427).

In the first reason, the *observations* were observations of functional relations between classes of responses and stimuli, that is, the subject matter of behavior analysis (see Skinner, 1935). In the second reason, the sources of the *incidental interpretations* were misconceptions of his subject matter and science, for instance, as mechanistic and reductionistic (e.g., Garcia & Garcia y Robertson, 1985; Mahoney, 1989; Mills, 1998; contra Hayes et al., 1988; Morris, 1993). As J. R. Kantor (1888–1984) noted,

one purpose of history includes identifying the sources of misconceptions (Observer, 1975, 1976, 1983²; see Fredericks, 2006). Having clarified the misconceptions of his subject matter, Skinner could interact more successfully with his own behavior about behavior and then more successfully with his students, peers, and colleagues about it. These, too, are not abstract purposes. They are also pragmatic in their consequences. Not knowing the source of the incidental interpretations invites prejudice, bigotry, and narrow-mindedness (Twain, 1869, p. 427). So, too, does not knowing the history of behavior analysis.

Behavior Analysis

Teaching the history of behavior analysis has other consequences, among them understanding the field's conceptual and scientific foundations (Morris et al., 1990). Indeed, these may be more easily understood when taught in the context of history, both within behavior analysis (Coleman, 1995; Leahey, 1992; Morris, 2002; Todd & Morris, 1992) and more broadly (e.g., Beins, 2011; Mauskopf & Schmaltz, 2012; Watson, 1966). In understanding the foundations, behavior analysts can interact more successfully with their own behavior about behavior analysis, as well as with their students, peers, and colleagues in behavior analysis; in philosophy, biology, and the behavioral, cognitive, and social sciences; and in the culture at large. These reasons are not abstract purposes either. "You have to know the past to understand the present" (see Sagan at www.quteslyfe.com). Michael (2004) put this more concretely:

Students of behavior analysis who know little of its history will be less than optimally effective in acquiring new knowledge. They will also be unaware of relations among various parts of their professional and scientific repertoires. In short, it is important to know where we came from. (p. 93)

One example is how differences between science and practice in professional organizations can lead to conflicts within them and their members and then to conflicts between organizations (e.g., in chemistry and chemical engineering; Critchfield, 2011). The difference between them in the Association for Behavior Analysis International (est. 1975) is a case in point. It led to conflict and then the founding of a seemingly rival, but actually a complementary, organization: the Association of Professional Behavior Analysts (est. 2007; see, e.g., Bayles et al., 2012; Johnston, 2011; Schneider, 2012a). Behavior analysts who know nothing about the history of professional organizations or the conflicts between their respective contingencies of scientific and professional survival may be doomed to repeat the conflicts.

Finally, teaching the history of behavior analysis is useful not only for understanding the field's conceptual, scientific, and professional foundations, but also for understanding them as products of a process: the behavior of philosophers, scientists, and behavior analysts (e.g., Skinner, 1931, 1950). Teaching the field's history as the successful action of individuals and groups makes its foundations real in behavior, not just abstractions about behavior (e.g., ontologies, epistemologies). It is useful

² Observer was J. R. Kantor.

that abstractions have names (e.g., determinism, empiricism, pragmatism), but more useful that the names denote behavior: the behavior of philosophers, scientists, and behavior analysts in the history of behavior analysis (Kantor, 1963, 1969). “To know the past is to know the present. To know the present is to know yourself” (see Kendi, in Reynolds & Kendi, 2020, p. ix).

These and other purposes for teaching the history of behavior analysis are addressed further in Steve Coleman’s (1995) comprehensive and accessible review, “The Varied Usefulness of History, with Specific Reference to Behavior Analysis” (e.g., the big picture, breadth, depth, sobriety, therapy; see also O’Donohue et al., 2001).

Prologue

The claims and criticisms that teaching the history of behavior analysis is wanting or absent is supported by the history that is commonly taught—or not. Granted, many distinctive, diverse, and deep primary- and secondary-source histories are increasingly available (Morris, 2022), but most teaching is seemingly based on tertiary sources—textbook and handbook histories of famous names, dates, and places—not on independent in-person or online course instruction.

In undergraduate courses, textbook history is often about great persons, not on the social, social, cultural, intellectual, and scientific bases of their contributions (Furumoto, 1989). For instance, the history of behavior analysis is more often about Skinner than urbanization and social progressivism in the United States, which advanced behaviorism in general (see O’Donnell, 1985). Its history may also be more presentist and ceremonial about behavior analysis as today’s winning behaviorism than historicist and critical in discerning the consequences and context from which it emerged, developed, and evolved (see Smith & Woodward, 1996). In graduate courses, textbook history may be supplemented with primary sources (e.g., Fuller, 1949; Skinner, 1950), secondary sources (e.g., Day, 1998; Michael, 2004), and other tertiary sources (e.g., Goodall, 1972), along with class discussions of, for instance, Frances Bacon (1561–1621; see Smith, 1986, pp. 259–297), Ivan P. Pavlov (1849–1936; see Todes, 2014), J. B. Watson (see Buckley, 1989), and Skinner (see Bjork, 1993). Many of these sources, though, are still more great-person and presentist than historicist, contextual, and critical.

These are not necessarily criticisms of textbook history. Textbooks have limits. History’s inclusion and the extent of its inclusion depend on purposes. Nonetheless, a perusal of the history of behavior analysis in the discipline’s textbooks and handbooks shows that it varies significantly in quality and quantity. A perusal of its quality suggests that teaching its history is wanting. Although a systematic review of the literature waits, a review of its quantity offers evidence: Where history is not included in textbooks, its quality is necessarily wanting. A brief overview of the field’s textbook history follows, organized by the three main subdisciplines of behavior analysis.

Applied Behavior Analysis

The 11 textbooks on applied behavior analysis (and behavior modification) published since the late 1990s in my library on June 1, 2022 reflect this variation in the field's historiography. One handbook includes three pages of history-as-lived as its foreword (i.e., Sulzer-Azaroff, 2000, in Austin & Carr, 2000). Another handbook includes "history" in the title of its 10-page introduction, but includes no section on history because history is properly integrated throughout (i.e., Fisher et al., 2021). One textbook uniquely includes an independent chapter on the subdiscipline's history (i.e., Martin & Pear, 2015). Of the nine remaining textbooks, only five (56%) include sections on history in their introductions (i.e., Cooper et al., 2020; Kazdin, 2001; L. Miller, 2006; Miltenberger, 2012; Sarafino, 2012). These range from 3 to 11 pages (mean: 34% of the introductions; range: 17%–45%) and comprise 1.0% of their texts' enumerated pages. The remaining four textbooks include no history in their introductions (i.e., Baldwin & Baldwin, 2000; Chance, 1998) or no introductions (i.e., Austin & Carr, 2000; Malott & Shane, 2014). Thus, although the history of behavior analysis is included in textbooks on applied behavior analysis, its historiography is modest and its inclusion is variable, usually limited to a few pages.

For historical perspective, the first handbook of applied behavior analysis included no history (i.e., Catania & Brigham, 1978). The year it appeared, though, a significant internalist historiography of behavior modification—including applied behavior analysis—was published (i.e., Kazdin, 1978; see Ferster, 1981; Krasner, 1979). By 1990, enough material existed to warrant a bibliography of the history of behavior analysis that included applied behavior analysis (see Morris et al., 1990). Today, noteworthy secondary sources—both internal (see, e.g., *The Behavior Analyst*, 1978–2017) and external (i.e., Rutherford, 2009; see Lamal, 2009; Midgley, 2012)—offer relevant histories. In contrast, textbook histories of behavior therapy (and behavior modification), which include applied behavior analysis, often offer more substantial histories (e.g., Craighead et al., 1995; Kazdin, 1982; Krasner, 1982, 1990).

The Experimental Analysis of Behavior

Of the 10 textbooks on the experimental analysis of behavior, principles of behavior, and learning published since the mid-1990s in my library as of June 1, 2022, only 3 (30%) include sections on its history in their introductions. These range from 7 to 18 pages (mean: 49%; range: 26%–90%) and comprise 2% of their texts' enumerated pages (i.e., Leslie, 1996; Mazur, 2017; Pierce & Cheney, 2013). Six of the seven remaining textbooks include no sections on history (i.e., Catania, 2013; Chance, 1999; Donohoe & Palmer, 1994; Grant & Evans, 1994; Pear, 2001; see also Catania, 2017), although some integrate history throughout (e.g., Catania, 2013, 2017). The seventh textbook has no introduction (i.e., McSweeney & Murphy, 2014). Thus, the history of behavior analysis is less frequently included in textbooks on the experimental analysis of behavior and its quantity is more modest than in applied behavior analysis.

For further historical perspective, Skinner's (1938) introduction of his science, *The Behavior of Organisms: An Experimental Analysis*, and its first presentation as a system (Keller and Schoenfeld's [1950] *Principles of Psychology: A Systematic Text in the Science of Behavior*) had no sections on history per se. However, the 1995 reprint of Keller and Schoenfeld included 29 pages of supplementary notes, titled "Matters of History" (Keller, 1958–1959/1995). This was a history of psychology (see Keller, 1937, 1973) that Keller and Schoenfeld handed out in their class on the principles of psychology (A. Charles Catania, personal communication, August 3, 2018). The first two handbooks on the experimental analysis of behavior also included no history (i.e., Honig, 1966; Honig & Staddon, 1977). In contrast, two recent biologically and cognitively oriented textbooks on learning include sections on history that range from 11 to 23 pages of their introductions (mean: 56%; range: 41%–68%) and comprise 4% of their texts' enumerated pages (i.e., Bouton, 2007; Domjan, 2015). Their coverage is more substantial than that in textbooks on the experimental analysis of behavior.^{3, 4}

Conceptual Foundations

The three textbooks on, for the most part, the field's conceptual foundations published since the mid-2000s in my library as of June 1, 2022 include chapters or sections of them on history (i.e., Baum, 2017; Johnston, 2021; Moore, 2008; see also Cheisa, 1994; Lattal & Chase, 2003; Leigland, 1992). These range from 5 to 41 pages of the chapters (mean = 66%; range: 21%–100%) and comprise 8% of the texts' enumerated pages. Although the history of behavior analysis is included more prominently in this subdiscipline than in the others, its quantity is still modest and its inclusion is once again variable.⁵

Conclusion

The extent to which the history of behavior analysis is taught or not in textbooks and handbooks on the field's three main subdisciplines supports the claims and criticisms that its historiography is wanting or absent. Beyond the textbook and handbook

³ Within-subject research in the experimental analysis of behavior is often history writ small, but is sometimes a subject matter unto its own (see Wanchisen & Tatham, 1991). Moreover, applied behavior analysis creates histories that alter future behavior (St. Peter Pipkin & Vollmer, 2009).

⁴ Textbooks that include both applied behavior analysis and the experimental analysis of behavior were not reviewed. The only one in my library was O'Donohue (1998). Its introduction includes no history.

⁵ Only two recent textbooks and handbooks in my library address behavior analysis more generally: Leslie (2002) and Madden (2009). Leslie (2002) includes an eight-page section on the field's history in his introduction. It comprises 57% of that chapter and 3% of the text's enumerated pages. In his prospectus, Madden included a chapter on the history of behavior analysis and secured an author to write it, but it was not submitted.

histories, teaching its history may also be wanting or absent independent of them in in-person and online course instruction. This special section of *Perspectives on Behavior Science* addresses how this teaching might be done. The first three of the following five articles describe how history can be embedded in courses on the field's three main subdisciplines. The fourth describes teaching history in a stand-alone course on the field's history overall. The fifth article reviews the preceding manuscripts and describes how to improve teaching the field's history through narrative methods.

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