



ARTICLE

A “Not Particularly Felicitous” Phrase: A History of the “Behavioral Sciences” Label

Jefferson D. Pooley
pooley@muhlenberg.edu

Abstract

The article reconstructs the history of the “behavioral sciences” label, from scattered interwar use through to the decisive embrace of the newly prominent Ford Foundation in the early Cold War. The rapid uptake of the label, the article concludes, was the result of the Ford Foundation’s 1951 decision to name its social science unit the “Behavioral Sciences Program” (BSP). With Ford’s encouragement, the term was widely adopted by quantitative social scientists eager to tap the foundation’s social science funds. The label’s newness and its link to the gigantic foundation’s initiative generated much suspicion and resistance as well.

Keywords

Behavioral sciences, Ford Foundation, Cold War

There are few behavioral scientists today. But as recently as the 1950s and 1960s, self-identified “behavioral scientists” occupied the elite ranks of American social science. The rapid uptake of the label was the result of the Ford Foundation’s 1951 decision to name its social science unit the “Behavioral Sciences Program” (BSP). With Ford’s encouragement, the term was widely adopted by quantitative social scientists eager to tap the foundation’s social science funds. The label’s newness and its link to the gigantic foundation’s initiative generated much suspicion and resistance as well.

This paper reconstructs the label’s career from scattered interwar use through to Ford’s embrace. Existing histories trace the term back to psychologist James Grier Miller’s Committee on the Behavioral Sciences at the University of Chicago. The term, however, was already in limited circulation by the mid-1930s, deployed in distinct but overlapping ways by political scientist Arthur Bentley and psychologist Clark Hull.

Drawing on Ford Foundation archives, the paper draws connections between Hull, Miller, and Hull student Donald Marquis, who played a pivotal role as the key social science planner at Ford. For Marquis, the label was a layabout alternative, an encumbrance-free near-neologism that could, on the one hand, avoid the recurrent conflation of “social science” with “socialism” by anti-New Deal-



ers in Congress, but also signal a linguistic break with the speculative, unscientific legacy that allegedly remained a drag on social scientific progress. The term quickly became a flash-point around which clashing visions of postwar social science were organized.

The “behavioral sciences” label has largely escaped historical scrutiny, especially relative to other postwar formations like “cybernetics” and “systems science” with which the term was complexly entangled. One reason for the neglect is that the “behavioral sciences” term was never coherently defined, in part due to internal Ford politics. From the beginning the term had no stable referent, and was often used generically as a substitute for the more common “social sciences” designation. Throughout the postwar era, moreover, Miller clung to an idiosyncratic definition centered on his “living systems theory.”

Even so, the “behavioral sciences” did refer to a more-or-less distinct intellectual agenda, centered on enthusiasm for cross-disciplinary, team-based research employing quantitative methods. The Ford Foundation’s 1950 “behavioral sciences” christening, moreover, put a name to a movement that was already underway, with roots in World War II. Many of the social scientists who had mobilized for war service had returned to their campuses with the good-faith belief that the owl of Minerva was set to take flight. Though federal funding fell off initially—the social sciences struggled in vain to win a prominent place in the planned National Science Foundation—the heated-up Cold War of the late 1940s brought substantial military and State Department spending. The massive Ford investment began in this period too, backed by some of the same Cold War exigencies.

The social scientists on the receiving end of government and foundation funding constituted a new elite that would, in the early 1950s, start calling themselves “behavioral scientists.” Based on their wartime service, these scholars were far more sanguine about the potential scientific yield from problem-based team research than, say, quantitative enthusiasts from the interwar years. They were also more likely to embrace general theory, mathematics, and modeling than their interwar counterparts. Bound by interwoven funding streams, wartime service, and excitement about the near-term potential to uncover general laws, the social scientific elite of the early postwar years was already in gestation when Ford proposed its “behavioral sciences” label.

If the intellectual coordinates were in place *first*, why bother with a name that was tacked on later? The paper argues that the history of Cold War social science—a good deal of it, at least—is suspended in language. Terms like the “behavioral sciences,” in short, do more than designate. They are the raw material that scholars use to fashion their intellectual self-concepts.¹ As tokens of allegiance, labels help to organize academic space into distinguishable (and simplified) groupings. Descriptors like “behavioral sciences” provide, to those who don the labels, orientation and membership—and for dissenters something similar, an identity-affirming contrast. Some terms, “behavioral sciences” included, have messy backstories and connotative associations that linger to significant effect.

The “behavioral sciences” label is an especially rich case, given its supernova-like arc: sudden prominence followed by slow decline. The term’s fortunes, moreover, were yoked to the Ford Foundation’s BSP, which skittish trustees shuttered in 1957. With Ford sponsorship effectively withdrawn, the term’s strategic value to fund-seeking scholars waned even as the label remained prominent throughout the 1960s. In other words, the history of the “behavioral sciences” term implicates a mix of overlapping factors: funding and the Cold War, certainly, but also intellectual

¹ On the importance of intellectual self-concepts for academic identity, see Gross (2008), ch. 1.



commitment. In that sense the now-orphaned term reflected—and also reinforced—the curious blend of opportunism, genuine excitement and geopolitical resolve that characterized American social science in the early Cold War.

The sudden and widespread adoption of the term is testimony to the enormous influence of patronage, at least in this instance and within the relatively narrow context of nomenclature. Other scholars had promoted the “behavioral science” moniker before Ford, but the term’s remarkable 1950s purchase was the direct result of the foundation’s surprisingly insouciant language choice. So successful was Ford’s lexical alternative that scholars unconnected to the foundation were already employing the phrase without comment—as authorless doxa—by the early 1950s. For two decades the label served as a viable rival to the established “social science” terminology. By the time Ford withdrew its funds in 1957, moreover, the term was already sufficiently lodged to thrive without the foundation’s sponsorship. It was only with the waning of what Hunter Heyck has recently called the era of “high modern social science” in the 1970s that the label’s hold began to weaken.²

The article proceeds in four parts. First, I trace the term’s early history to political scientist Arthur Bentley and psychologist Clark Hull. Next, I detail the debate that led to the adoption of the term at the Ford Foundation in the late 1940s and early 1950s. The article then turns to frequency-of-use data from Google Books Ngram Viewer and JSTOR, to help establish the foundation’s major role in propagating the term. In the paper’s last section, I track the term’s medium-term durability in the face of often virulent criticism, even after the Ford crutches had been kicked away in 1957.

I. ‘The So-Called Social Sciences’: Arthur Bentley and Clark Hull

When the Ford Foundation launched the “behavioral sciences” terminology into wide circulation in the early 1950s, the phrase was received as a heavy-handed neologism. Ford did not, however, coin the term. Political scientist Arthur Bentley (1870–1957) had already peppered his writings with the “behavioral science” label more than 15 years before Ford’s adoption. With no apparent link to Bentley, Yale psychologist Clark Hull (1884–1952) was also using the label as early as 1940, a full ten years before Ford.

Neither Bentley nor Hull is credited with inventing the term. Instead, existing histories mistakenly trace the label’s origins to James Grier Miller’s late 1940s plans for the Committee on the Behavioral Sciences at the University of Chicago.³ One reason is that Miller, on behalf of the Chicago Committee, claimed credit for the “behavioral sciences” terminology. “To refer to the biological and social fields involved,” he wrote in 1955, “we coined the term ‘behavioral sciences’” (Miller 1955: 513). A number of tributes and obituaries repeated the erroneous assertion after Miller’s 2002 death (Pickren 2003: 760; Harris 2003: 227; Swanson 2007).

But Bentley and Hull were already using the term in the late interwar years. Both scholars turned to “behavioral science(s)” because they found the prevailing “social sciences” catch-all to

² Heyck argues that post-war social science—with its embrace of mathematics, modeling, general theory, and systems conceptions—constituted a “high modern” era (roughly 1955–1975), itself rooted in a broader and older set of social and intellectual changes that Heyck labels the “organizational revolution.” See Heyck (2014) and Heyck (2015).

³ Berelson (1968), 43; Crowther-Heyck (2005), 154; Hammond and Wilby (2006), 431; Somit and Tanenhaus (1982), 183. A partial exception is Senn (1966), 110, 113, which mentions Hull’s 1943 use.



have problematic connotations. Both Bentley and Hull, moreover, sought to signal the distinctiveness of their respective intellectual projects.

Neither scholars’ deployment of the term caught on at the time. Instead, these early uses constituted a kind of linguistic time-capsule. Post-war scholars, averse to “social science” for their own intellectual and strategic reasons, would go on to pluck the pre-existing but dormant “behavioral science” label among alternative candidates also already in limited circulation—including “human relations,” “social relations,” and “human resources.”

ARTHUR BENTLEY COINS “BEHAVIORAL SCIENCE”

Though Hull’s use of the “behavioral sciences” label was probably the direct antecedent to post-war adoptions, Bentley introduced the term first. In his 1935 book *Behavior, Knowledge, Fact*, Bentley repeatedly referred to “behavioral science” to designate his idiosyncratic vision for the study of man.⁴

Bentley was a committed neologizer. A curious figure in the history of American social science, he is normally remembered as a political scientist despite his repudiation of the discipline (Kress 1970). Bentley earned his doctorate from Johns Hopkins in 1895 after studying with Georg Simmel and Wilhelm Dilthey in Germany (Menand 2002: 379–380). Like many other social scientists trained in the late 19th century, he initially identified as an economist (Ward 1981: 222). His 1908 book *The Process of Government* was neglected by the then-emerging discipline of political science, but later helped seed interwar interest in groups and pluralism (Hale 1993: 2). In the 1950s, *The Process of Government* was embraced by David Truman and other quantitative political scientists as a key proto-behavioralist tract.⁵ (I address the complex overlap between “behavioralism” in political science and the broader “behavioral sciences” below.)

In his own lifetime Bentley was estranged from organized academic life. He fell into depression after publishing *The Process of Government*, and soon retired to an Indiana fruit farm where he spent the rest of his life (save a brief stint at Columbia in the 1940s) writing with promiscuous range on philosophical and social scientific problems (Kress 1970). His main project, arguably, was developing an original philosophy of social science, the context that gave rise to the “behavioral science” terminology.

Bentley, like Harvard philosopher Alfred North Whitehead, regarded the relativity revolution in physics as a crucial watershed for academic inquiry in general. He rejected the imitative scientism of many interwar social scientists who sought to mimic the natural sciences with verifiable, quantitative methods. Instead, in *Behavior, Knowledge, Fact* and follow-up work, he asserted that the validity of any given science rested on the internal consistency of its own categorical schema. Mathematics was an exemplary model of formal consistency, but only a model: each science required its own categorical system.

4 Bentley (1935). Of course, there may be uses of the term that predate Bentley. My comprehensive, full-text search included Google Books, JSTOR, and PsycARTICLES.

5 Truman (1951); Hale (1993), 2–3. An excerpt from Bentley’s book was published as the second chapter in the leading behavioralist reader Eulau (1956). Owing to Bentley’s influence on interwar pluralists and post-war behaviorists, Bevir positions Bentley’s 1908 book as pivotal in the discipline’s shift from “developmental historicism” to “modern empiricism”: Bevir (2012), 61–63, 134–136.



“Behavioral science” was Bentley’s self-conscious neologism for his recast science of man, designed to distance his approach from the more common “social” and “psychological” labels.⁶ The book is filled with an absurd-seeming parade of new terms chosen, he explained, to free his scheme from the lexical baggage of prevailing academic language. Bentley rejected the idea of static facts and social entities, and insisted instead on a processual—his word was “transactional”—ontology. The task of “behavioral science” was to systematize its own categories into an internally coherent system—the only knowable truth about human life in a relativistic world.

Though *Behavior, Knowledge, Fact* was well-received by philosophers of science, Bentley’s 1935 book was ignored by contemporary social scientists.⁷ It probably did not help that the book’s key section was presented in the form of a dialogue. He was, moreover, bucking the pronounced empiricist orientation of interwar social science. If anything, his philosophy of social science was ahead of its time, anticipating the full-fledged analytic realism of Talcott Parsons after the war.

Indeed, even as Parsons was working with Edward Shils and others on the late-1940s Carnegie-funded work summarized in *Toward a General Theory of Action*, Bentley published a high-profile book with John Dewey, *Knowing and the Known*.⁸ Dewey’s concept of “trans-action” (elaborated in *Experience and Nature*) had been a major influence on Bentley, and Dewey claimed that his 1938 *Logic* was influenced by Bentley’s *Behavior, Knowledge, Fact* (Ward 1981: 224). In their 1949 collaborative book, Dewey and Bentley argued for a post-Newtonian “transactional” epistemology largely consistent with Bentley’s earlier work (though shorn of analytical realism). Notable is the authors’ insistence on new, unencumbered terminology, prominently including “behavioral science.”⁹

The collaboration with the famed philosopher was a career-capping vindication for Bentley, and soon enough his 1908 book would get rediscovered by Truman and other behavioralists. Even so, the Dewey-Bentley book was not a major factor in the postwar vogue for the “behavioral sciences” label. By 1949 the post-war adoption of the label was already in motion, and none of the relevant figures cited *Knowing and the Known* as inspiration.¹⁰ The more direct link to Miller, Marquis, and the Ford Foundation was probably Clark Hull’s use of the term at Yale in the early 1940s.

CLARK HULL AND THE YALE INSTITUTE OF HUMAN RELATIONS

Clark Hull, the neo-behaviorist psychologist, arrived at Yale in 1929, the same year that the university opened its ambitious, lavishly-funded Institute of Human Relations. Hull was the central intellectual figure in the Institute’s mid-1930s crisis-driven overhaul after an amorphous and ineffectual first five years of operation. Under Hull’s de facto leadership, the Institute embarked on a remarkable 15-year effort to generate a unified theory of social life. Though dominated by experimental psychologists like Hull, the initiative was characterized by an organized division of theoretic-

6 Part III of *Behavior, Knowledge and Fact* elaborates his categorical schema. See the excellent summary in Ward (1981).

7 See Ward (1981), 224. George Lundberg, the sociologist and quantitative evangelist, did review the book enthusiastically: Lundberg (1936).

8 Parsons and Shils (1951); Dewey (1925); Dewey (1938); Dewey and Bentley (1949). See also Dewey and Bentley (1964).

9 The term, and the general insistence on new terminology, is also prominent in Dewey and Bentley (1947).

10 Bernard Berelson did later refer to the Dewey-Bentley book to establish the term’s legitimacy at the time of Ford’s adoption, but—in the absence of other evidence—the claim comes off as an ex-post facto justification, Berelson (1968), 41.



cal labor that mixed Hull’s learning theory with psychoanalysis and—later and less resolutely—social and anthropological theory.¹¹

As early as 1940, passing references to the “behavioral sciences” began to appear in the Institute’s published work. Institute scholars later considered labeling their unified theoretical approach “behavioral science,” but could not agree. Instead the Institute’s published summaries employed unwieldy terms like “the unified science of behavior and social relations” and even—half in jest—“lesocupethy” (from LEarning, SOciety, CUlture, and PErsonality THeorY).¹²

Still, the “behavioral sciences” language was in relatively wide circulation at Yale. Donald Marquis, the architect of the term’s embrace at the Ford Foundation, was a member of Hull’s circle in these years. It is likely, though far from certain, that Marquis inherited the term from Hull and the Institute. Casting about in the late 1940s for an alternative to “social science,” Marquis—on this theory—seized on a lexical remnant from his Yale years.

The Yale Institute, founded in 1929, was successor to a near-decade’s worth of initiatives and programs at the university, most funded by Rockefeller philanthropies.¹³ When James Rowland Angell, the functional psychologist and past president of the Carnegie Corporation, was named the university’s president in 1921, he set out to recast Yale as a research university in the mold of Chicago or Johns Hopkins. His plan involved expanding Yale’s professional schools and integrating them with university’s then-languishing Graduate School (Geiger 1986: 203–206). In the early 1920s, Angell helped secure grants from Rockefeller philanthropies for an Institute of Psychology (founded in 1924) and a new Department of Psychiatry and Mental Hygiene with an unusual social science mandate.¹⁴ In 1926, Angell began talks with Rockefeller officials to expand the Institute of Psychology to encompass the “fundamental problems of behavior” (Biehn 2008: 30). Soon two professional school deans, Robert Hutchins in Law and Milton Winternitz in Medicine, took an avid interest in the idea and spearheaded an application for an “Institute of Human Behavior” to serve as the research hub of a sprawling Human Welfare Group to include most of the university’s professional schools, social science departments, and biology programs. In 1929 the newly merged and reorganized Rockefeller Foundation awarded Yale an enormous 10-year, \$4.5 million grant to much fanfare and press attention.¹⁵

The prominent involvement of the Law School’s Hutchins, who left in 1929 to become president of the University of Chicago, is curious. Hutchins’ advocacy for the planned Institute was coupled with published calls for a reimagined legal training that stressed the importance of “scientific data” and the study of “individual behavior and social behavior in all their aspects” (see Morawski 1986: 228 and May, 1950: 46–47). At Chicago in the 1930s, however, Hutchins would go on to aggres-

11 On the Institute’s history, see the superb treatment by Morawski (1986). Mark May, the Institute’s director from 1935 to 1960, provides a detailed narrative in the appendices of May (1950), 35–70. A revised version appeared as May (2012).

12 Anthropologist George Peter Murdock (1949: 377) proposed “lesocupethy” for the Institute’s “emerging unified science,” adding, “Perhaps it will irritate some reader into proposing a more satisfactory name.”

13 On the Institute’s 1920s labyrinthine history of forerunners, and its early years, see Morawski (1986), 225–232; May (1950), 35–61; Biehn (2008), 22–33; and Visel tear (1984).

14 Angell was well-connected in the foundation world. He was a trustee of Rockefeller’s General Education Board, which seeded the new Psychiatry Department (Biehn 2008: 31). The Institute of Psychology was funded by the Laura Spelman Rockefeller Memorial’s Beardsley Ruml, who had been Angell’s assistant at Carnegie (Geiger 1986: 149).

15 On the application process and negotiations with Rockefeller, see especially Morawski (1986), 227–230; Biehn (2008), 30–33; and May (1950), 39–40.



sively challenge the university’s quantitative social scientists, leading to several high-profile departures (Dzuback 1991: 172–174). In the early 1950s, Hutchins—by then a Ford Foundation’s associate director—was the chief internal critic of the foundation’s planned BSP.

In its first five years, Yale’s new Institute of Human Relations—“Behavior” was dropped from the title on the objection of an unnamed dean¹⁶—was a failure on its own terms. Plans for interdisciplinary research were thwarted by the Institute’s funding structure (direct disbursements to individual departments and programs) and by senior scholars’ apparent indifference (May 1950: 54–61). In 1935 the Institute was overhauled, with support from Rockefeller officials. Administration and funding were centralized under a director, psychologist Mark May, while the Institute’s ties to other, chiefly biological units were largely severed. Clark Hull, with May’s support, soon emerged as the central figure in an Institute now dominated by experimental psychologists.¹⁷

Under Hull’s leadership, an aggressive and coordinated theory-building initiative began, centered on weekly seminars and multiple-author research projects. From the beginning the group’s goal was a unified science of human behavior on the model of the physical sciences. Hull furnished both the theoretical framework and philosophical underpinnings. He had elaborated his neo-behaviorist learning theory in a series of papers from the early 1930s, on the conviction that the theory could be expanded to cover human behavior in general.¹⁸ He also established at the center of the Institute’s approach his nomothetic and deductivist philosophy of social science—resembling, but developed independently of, European logical empiricism.¹⁹

The Institute’s mid- to late 1930s theory-building included a highly organized effort to absorb and operationalize psychoanalytic theory into Hull’s schema.²⁰ Later, the group incorporated social and anthropological theory, yielding a “unified” four-theory synthesis.²¹ But the core of the Institute’s theoretical project was always Hull’s learning theory. In the late 1930s, Hull began to lay out his fully elaborated theory of behavior, first in the co-authored *Mathematico-Deductive Theory of Rote Learning* (Hull et al. 1940) and then in his magnum opus, *The Principles of Behavior* (Hull 1943). Both books include prominent references to the “behavioral sciences.”

Hull’s core claim was that a mechanistic account of conditioned habits and adaptations could account for purposive, creative behavior, without recourse to “the old idealistic philosophy and its various modern attenuations.”²² His long-held view was that a set of logical postulates, tested by experiments, could describe overarching laws of behavior. In *Mathematico-Deductive Theory*, he moved to express those laws in terms of symbolic logic. The book’s elaborate equations, in fact, were explicitly modeled on Alfred North Whitehead and Bertrand Russell’s *Principia Mathematica*.

16 Morawski (1986), 229. The dean complained that “behavior” was too Freudian.

17 May, accounts suggest, was Friedrich Pollock to Clark Hull’s Max Horkheimer. On the dominance of psychology—the only social science department physically housed in the Institute building—see Morawski (1986), 220; and May (1950), 54.

18 The best treatment of Hull’s theory of behavior, as it developed in the 1930s and 1940s, is Mills (2000), 83–122.

19 On Hull’s philosophy of social science, and his intellectual history more broadly, see Smith’s excellent (1988), 147–256.

20 The most prominent published result was Dollard (1939).

21 The four-theory synthesis was championed by anthropologist George Peter Murdock, and featured in the Institute’s summary publications. Murdock (1949); May (1950), 4–27.

22 Hull, quoted in Smith (1988), 156.



ca, though Hull required the help of a Yale logician to make sense of Whitehead and Russell’s system.²³

Hull’s turn to symbolic logic and mathematical expression was intended, at least in part, to produce an aura of scientific authority. As Laurence D. Smith discovered, Hull had once privately admitted that scholars are “impressed by the mere external appearance of rigor” in his equations: “This is a factor of considerable importance in the matter of propaganda. I shall certainly heed the evident moral by emphasizing this aspect when I write up the system as a whole.”²⁴ In that sense Hull’s mathematical expressions prefigured the manner in which the “behavioral science” phrase would be worn, in the postwar years, as a breastplate of scientific rigor.

Mathematico-Deductive Theory (1940) employs the “behavioral sciences” phrase just twice. In both cases, Hull is making a qualified prediction that his deductive approach could be successfully applied throughout the social sciences. In place of “social sciences” language, he substitutes “behavioral sciences,” though in the second instance with a mid-phrase parenthetical, “behavioral (social) sciences”—apparently to signal his synonymic intent (Hull et al. 1940: 12, 305).

In a conference paper delivered the same year, Mark A. May (the Institute’s director) repeatedly invoked the “behavioral sciences” phrase. Appealing to Hull’s formal logic approach, May argued that the “common problem” of the behavioral sciences is to “understand, control, and predict human behavior at all levels and in all complexities.”²⁵ May predicted that a “general theory of behavior,” once found, will “serve to unify the behavioral sciences as the biological theories have unified the structure of the medical sciences and as the theories of physics and chemistry have tied together the structure of the engineering sciences.”²⁶

In *Principles of Behavior* (Hull 1943), Hull issued an even more forceful call for the ascendent “behavioral sciences” to surpass and supplant the traditional “social sciences.” Hull first invokes the term to assert the unity of science: the difference between the physical and behavioral sciences, he writes, is “one not of kind but of degree—of the relative amount of the figure still embedded in the unhewn rock.” As long as behavioral scientists maintain a “consistent and rigorous objectivism,” they can aspire to match the progress of physics (Hull 1943:, 28).

The “behavioral sciences” label—along with “behavior sciences”—appears occasionally throughout the book, but moves to center stage in the book’s rousing conclusion. Hull asserts that the “systematization of the behavior sciences” requires fellow scholars to embrace the “incomparable technique of symbolic logic” and “precise mathematical statements.” He applauds the “increasing tendency, at least among Americans, to regard the ‘social’ or behavioral sciences as genuine natural sciences rather than as *Geisteswissenschaft*”—evoking the late 19th-century German *Methodenstreit*. Hull praises the “growing practice of excluding theological, folk, and anthropomorphic considerations,” in favor of “explicit and exact systematic formulation, with empirical verification at every possible point.” There is “good reason to hope,” he adds, that “the behavioral sciences will presently display

²³ Smith (1988), 165. See Whitehead and Russell (1910).

²⁴ Hull, quoted in Smith (1988), 168–169.

²⁵ Mark A. May, “Coordination of the Sciences of Behavior,” paper presented at the annual meeting of the American Sociological Association, Chicago, December 1940, box 11, folder 11, Mark A. May Papers, Ms 1447, Manuscripts and Archives, Yale University Library, New Haven, CT: 11. Thanks to Dennis Bryson for sharing this manuscript.

²⁶ *Ibid.*, 12. For an excellent account of May’s IHR directorship, see Bryson (2015).



a development comparable to that manifested by the physical sciences in the age of Copernicus, Kepler, Galileo, and Newton” (Hull 1943: 399–400).

With increasingly martial rhetoric, Hull reminds his readers that the task will be “arduous and exacting.” Behavioral scientists must “not only learn to read mathematics understandingly—they must learn to *think* in terms of equations and the higher mathematics.” Expect fierce resistance, he warns, from traditional scholars:

The so-called social sciences will no longer be a division of belles lettres; anthropomorphic intuition and a brilliant style, desirable as they are, will no longer suffice as in the days of Williams James and James [sic] Horton Cooley... There will be encountered vituperative opposition from those who cannot or will not think in terms of mathematics from those who prefer to have their scientific pictures artistically out of focus, from those who are apprehensive of the ultimate exposure of certain personally cherished superstitions and magical practices, and from those who are associated with institutions whose vested interests may be fancied as endangered.

“Hope lies,” he concludes, “as always in the oncoming youth” (Hull 1943: 400-401).

Hull’s history-on-the-cusp narrative anticipates postwar rhetoric, which similarly consigned “speculative” social science to a discredited past. Indeed, the Ford Foundation’s adoption of the “behavioral sciences” label was intended to signal the same kind of break with a pre-scientific legacy. For Hull, as for Ford, a new science called for a new name.

Hull continued to use the term (along with “behavior sciences”) until his 1952 death.²⁷ Nevertheless, the label did not catch on, even within the Institute. In the late 1940s Institute scholars did consider “behavioral science” as an overarching label for their four-theory synthesis, but ultimately rejected the term. “Behavioral science” was judged to be too psychological, with “too strong a connotation of behaviorism.” (The fear was prescient: The mistaken conflation of “behavioral sciences” with “behaviorism” would go on to plague the label in the 1950s and 1960s.) Institute members dismissed other candidates—“human relations,” “social relations” and even “social science”—for the opposite reason: slighting psychology. Hence the half-serious proposal for “lesocupethy” (Murdock 1949: 377).

By this time, the Institute was already in decline. Key figures had left campus for war service, and many—including Marquis—took up posts at other universities after the war. Rockefeller funds dried up in 1949, followed a few years later by Hull’s death.²⁸ Most of Hull’s “laws of behavior” were undercut by subsequent empirical work even as his brand of neo-behaviorism fell out of favor (Baars 1986: 60-61).

To a remarkable extent, the Yale Institute prefigured the values and practices of early Cold War social science: claims for the unity of science, interdisciplinary team research, aspirations to use mathematics and build general theory—even the physics envy. Though its intellectual influence was arguably weak, the Institute did serve as an organizational model for cross-disciplinary projects in the postwar years. Talcott Parsons, James Grier Miller, and the Ford Foundation planning team all

27 E.g. Hull (1944), 129n5 (as “behavior sciences”); Hull (1950), 83 (as “social or behavioral sciences”); Hull (1951), 2, 6, 116.

28 In 1939, the Rockefeller Foundation had awarded the Institute a greatly reduced (\$700,000) 10-year terminal grant. Morawski (1986), 239–240. The Institute did receive a BSP grant in the early 1950s that funded an interdisciplinary team of five post-doctoral researchers, leading to Logan et al. (1955).



studied the Institute precedent while preparing their own high-profile initiatives at Harvard, Chicago, and the foundation.²⁹ The Institute’s most important legacy, arguably, was its diaspora of distinguished psychologists, including Ernest Hilgard, Robert Sears, O. Hobart Mowrer, Neal Miller, and Marquis himself—all of whom would serve as APA president.³⁰

Marquis, who earned his PhD at Yale in 1933, taught in (and, after 1941, chaired) the Psychology Department before leaving for Washington war service. Since the Institute’s reorganization in 1935, he had been an active, though lesser, member until his departure from Yale.

As I have already suggested, Marquis may have carried the orphaned phrase with him to the Ford Foundation. It seems reasonable to conclude that he was at least exposed—in published work and in discussion—to the “behavioral sciences” label while at Yale. The fact that the term failed to gain purchase at the Institute may, ironically, have enhanced its appeal to Marquis and the other Ford planners. Here was a term mostly unencumbered with the freight of past associations, save a welcome residue of scientism. A phrase too closely identified with the Hullian project, after all, would have been disqualified by its particularity.³¹ Instead Marquis and his colleagues at Ford had at their disposal a layabout term, abandoned and forgotten, to put to their own uses.

Still, it is impossible to know for certain how Marquis came upon “behavioral sciences.” He may have independently invented the term, or else borrowed it from his friend James Grier Miller’s Chicago initiative. He could have picked it up from Bentley’s published work, or even from a few other scattered uses—unconnected to Bentley or Hull—that were beginning to appear in 1946 and 1947 in the published literature.³²

Marquis later claimed that he, or perhaps Miller, had coined the term. In a 1972 Ford Foundation oral history interview, Marquis was asked about the label’s origins. Ford’s use, he admitted, “was almost simultaneous with James Miller at Michigan [sic] who was also looking for this same class of areas, and he will probably say that he thought of it.”

“I’ll probably say I thought of it,” Marquis continued. “He and I are very close friends and were interacting much at that time, so I don’t know which is accurate.”³³

We know that neither man originated the term, but its path to Ford in the late 1940s remains a partial mystery. Far easier to establish is the Foundation’s outsized role in propagating the label.

29 On Parsons, see Lagemann (1992), 168; on Miller, see Fontaine (forthcoming).

30 Of the Institute’s younger generation of celebrated psychologists, only Carl Hovland and Leonard Doob finished their careers at Yale.

31 Indeed, the Yale-era book that Marquis co-authored with Ernest Hilgard cited Hull frequently but did not endorse Hull’s full-fledged theory of behavior: Hilgard and Marquis (1940).

32 The philosopher of science Charles Morris (1946) used the singular “behavioral science” label in his synthesis of pragmatism and logical empiricism. Arthur Bentley was among Morris’s chief critics. See Reisch (2005). In 1947, the philosopher Wilfrid Sellars also used “behavioral science” in apparent connection with, but without direct citation of, Morris (Sellars 1947: 197, 202). On Sellars’s engagement with Morris’s book in these years, see Olen (2012), 146–156. Generic uses of the “behavioral sciences,” with no cited link to Bentley, Hull, or even Morris, also first appear in 1947. See, for example, Harper (1947a), 297; Harper (1947b), 82; Curtiss (1947), 315, 317; Burns (1947), 156.

33 Oral history interview of Donald Marquis, 27 October 1972, Ford Foundation Oral History Project, Ford Foundation Archives (hereafter FFA), Rockefeller Archive Center, Sleepy Hollow, NY: 8.



II. ‘Becoming More Scientific all the Time’: The Ford Foundation and the ‘Behavioral Sciences’

During the war and into the early postwar years, the behavioral sciences remained a stowaway term. The intellectual movement that “behavioral sciences” sought to name, after all, predated the Ford Foundation. Its roots were in shared World War II service, which furnished for many campus-bound scholars a sense of methodological and intellectual excitement.

Even before Pearl Harbor, social scientists were flocking to Washington to service a fast-expanding morale and propaganda bureaucracy.³⁴ The networks formed through overlapping collaboration at over two dozen government and military agencies—cross-pollinated by frequent re-assignments and the spread of new methods—in essence brought the post-war behavioral sciences into existence. Virtually every important figure in the post-war social sciences—certainly among quantitatively oriented psychologists, political scientists, and sociologists—served at some point in the federal government’s wartime propaganda effort.

The quantitative social scientists of the early postwar years were optimistic, but wary about prospects for continued funding. Genuine excitement about wartime methodological innovations—best exemplified by Edward Shils’ heady survey of the postwar landscape (Shils 1948)—was tempered by persistent doubts internal to the disciplines and among key foundation figures. Social scientists’ confidence was, if anything, anticipatory: excitement about incipient technical breakthroughs and emerging generalizations. They harbored no illusions about public or Congressional esteem. After halting attempts to tout wartime achievements on the model of Vannevar Bush’s 1945 *Science: The Endless Frontier*, they emerged from the debates surrounding a proposed National Science Foundation chastened by dismissals not just from conservative Congressional quarters but from key figures in the natural science establishment (Klausner 1986). In the first few postwar years, federal funding had slipped back to stingy pre-war levels, and grant-making by Carnegie and Rockefeller—although significant—could not make up the difference (see Solovey 2012 and Solovey 2013).

Though not yet fully expressed, a set of intellectual “family resemblances” linked early postwar social scientists to one another, with roots in the shared war service. These included (1) an embrace of new and established quantitative methods; (2) a preference for abstract, often formal, general theory; (3) faith in mathematics as a key social science tool; (4) enthusiasm for cross-disciplinary team research, (5) often organized around applied problems which, however, were deemed conducive to theoretical and substantive progress.³⁵

When heightened Cold War tensions in 1947 and 1948 convinced military and government officials to, in effect, re-mobilize the wartime morale and propaganda networks, social scientists who shared these convictions found themselves in a stronger patronage position. The Ford Foundation would soon provide more funds, along with the “behavioral sciences” label itself.

34 On the Rockefeller Foundation’s investments from 1939 through 1941 in propaganda and morale activities that were, at the time, politically unacceptable for the Roosevelt administration, see Gary (1996).

35 The best summary is Crowther-Heyck (2005), ch. 5.



ROWAN GAITHER'S STUDY COMMITTEE AND THE MODERN FORD FOUNDATION

The Ford Foundation's decision to establish a "Behavioral Sciences Program" originated in Ford's late 1940s transformation from a minor regional philanthropy into the world's largest foundation. To guide the transition, Ford commissioned a study team led by H. Rowan Gaither to plot a vision appropriate to the foundation's new wealth and national stature. Gaither's committee of academics quickly concluded that the social sciences should be Ford's main focus. From the beginning, however, committee members expressed discomfort with the prevailing "social science" terminology. Their meetings in 1948 and 1949 coincided with dramatic and fast-developing Cold War escalations. The geopolitical backdrop was a decisive influence on their overall plans, but also affected word choice. Conservatives in Congress, and even some natural scientists, had repeatedly conflated "social science" with "social reform" and "socialism." Committee members, already eager to promote the quantitative and "scientific" end of the social science spectrum, cast about for alternative language. After considering a number of candidates, the foundation ultimately settled on "behavioral sciences."

The "behavioral sciences" choice solved two overlapping problems: (1) the term could not be confused for "socialism," and (2) signaled an intellectual break with a "speculative," pre-scientific social science past. There were other advantages: (3) the label was judged more palatable to potential participation from biologists and other non-social scientists, and (4) inclusive of those psychologists who remained resistant to the "social science" moniker. It was, however, the first two benefits—cover from the "socialism" charge and the linguistic mark of intellectual leave-taking—that proved decisive for Ford's embrace.

The Ford Foundation, created in 1936, was for its first decade a relatively small, Detroit-based regional philanthropy. This all changed in 1947, when Henry Ford's death left the foundation with 90 percent of Ford Motor Company's stock. With the dramatic recovery of Ford Motor's fortunes in the immediate postwar years, the foundation instantly became the world's wealthiest philanthropy by far, with an estimated \$417 million in assets by 1951 (compared to the Rockefeller Foundation's \$122 million and Carnegie Corporation's \$170 million) (Sutton 1987: 52).

In the fall of 1948 Karl Compton, Ford trustee and president of MIT, recommended H. Rowan Gaither to preside over a Study Committee charged with generating a plan to recast the suddenly gigantic foundation. Gaither, an attorney who had served as Compton's assistant at MIT's wartime Rad Lab, had just led the process to recharter what had been Project RAND into the nonprofit RAND Corporation. He remained chair of the Air Force-funded think tank throughout the Study Committee period (Kaplan 1991: 60–62; Smith 1966: 56–60).

Gaither soon recruited the Committee's six members, all academics and each charged with representing a topical "division." For our purposes the key selection was Donald Marquis, who—along with Gaither and his staff assistant William McPeak—were the pivotal figures in the foundation's social science thinking and "behavioral sciences" word choice.³⁶

36 In addition to Marquis (social science), the other five committee members were Thomas Carroll (business), Peter Odegard (political science), Charles Lauritsen (natural science), Francis Spaulding (education), and T. Duckett Jones (health). A seventh member, Yale's William DeVane, was later named to represent the humanities, in response to public complaints about the Committee's neglect of the humanities. Gaither, "Activity Report for the Period Ending January 31, 1949," 31 January 1949, folder 19, box 2, series I, 20003, FFA: 12.



DONALD MARQUIS AND EARLY COLD WAR SOCIAL SCIENCE

As in the case of Gaither, it was Compton who recommended Marquis.³⁷ A year earlier Compton, also chair of the military’s Research and Development Board (RDB), had recruited Marquis to chair the RDB’s new social science section, the Human Resources Committee.³⁸

In these years Marquis’s career was in the ascendance, owing in part to his multiple connections to the military’s emerging constellation of Cold War social science projects. During the war Marquis had led the Office of Psychological Personnel before accepting the chair of Michigan’s struggling psychology department.³⁹ He successfully revived the department, helping to bring Kurt Lewin’s group dynamics team to Michigan in 1948 and later helping James Grier Miller to reconstitute his stalled behavioral sciences project as Michigan’s Mental Health Research Institute (Capshew 1999: 195–198).

1947 was an important year for Marquis. He was appointed chair of the Human Resources Committee, elected president of the American Psychological Association (APA), and awarded a \$10,000 Carnegie grant to produce a “fresh appraisal of the place and functions of the social sciences” (Carnegie Corporation 1947: 32). He was one of just two psychologists—the other was Hull—to attend the Cold War–drenched Project RAND “Conference of Social Scientists” in 1947 that led to the establishment of RAND’s Social Science Division, directed by Hans Speier—who would soon join Marquis in 1951 as a consultant-planner for the BSP. (Bernard Berelson, the future BSP head, was also in attendance.)⁴⁰

Throughout his Ford Foundation service Marquis was an active participant in Cold War psychological warfare research, at the RDB, as a member of Project Troy, and as a consultant to the Psychological Strategy Board (Needell 1993: 401–408; Lucas 1996).

Marquis delivered his 1948 APA presidential address, “Research Planning at the Frontiers of Science,” just three months before joining the Ford Study Committee. The address, a heady manifesto for postwar quantitative social science, served as a blueprint for his Study Committee work. He laid out a six-stage process—“scientific method in its full and complete form”—for coordinated, cross-disciplinary team research, citing Hull’s work as an example. Noting that the military branches are “now the biggest customers for research of all kinds,” Marquis counseled psychologists to seize the opportunity with an “increased number of large and well planned research programs” to contribute

37 Oral history interview with Donald Marquis, 27 October 1972, Ford Foundation Oral History Project, FFA: 1.

38 The many-hatted Compton was also on RAND’s board (Cochrane 1979: 21–22; Lowen 1997: 197–199). On Marquis and the Human Resources Committee, see Simpson (1996), 57–59; and Lanier (1949): 131.

39 Marquis (1944) reported on an Office of Psychological Personnel survey that documented the massive mobilization of psychologists for war service.

40 Conference of Social Scientists [R-106] (1948), 20. The conference’s verbatim transcript shows that Marquis was an especially active participant. He called for a public opinion study of Americans’ goals and values: “[S]uch a study seems to be absolutely basic for any planning of, not mere propaganda, but what can one get away with in national policy, and what are the best approaches” (118). Later he proposed an opinion study to identify “the extreme pro-Russian group” in the U.S. population (123), and endorsed a proposal by Harold Lasswell for a compendium of anti-Marxist arguments: “People have recognized the need for it ever since Marx threatened our stable institutions” (161). For an excellent history of the conference and RAND’s Social Science Division, see Bessner (2015). Speier’s Washington-based Social Science Division, Bessner shows, dissented from the quantified systematicity prevailing at RAND’s Santa Monica headquarters—notably including the institute’s Economics Division, based in California. Speier and his Washington colleagues were far more open to historical analysis and close textual reading. The relative ecumenism of RAND’s Social Science Division, established in 1948, may help explain why the unit never adopted the “behavioral sciences” language.



to the "growing integrated body of scientific knowledge."⁴¹ In Ford memos and statements Marquis inserted passages from this address word for word, and the Study Committee's final report would bear its verbal stamp.⁴²

SOCIAL SCIENCE BY ANOTHER NAME

Beginning in late 1948 and into spring 1949, the Committee convened for four three-day meetings.⁴³ Though Gaither and his small staff were frustrated by Committee members' posturing and lack of focus, the meetings did produce an early and surprising consensus that the Ford Foundation's mission should center on the social sciences.⁴⁴

The decision was apparently reached at the Committee's second meeting in January 1949. Notes from the meeting report a "strong and virtually universal feeling" that "the place to work is in the social sciences."⁴⁵ Throughout the spring, the social science focus was justified, obliquely but unmistakably, by the Cold War context; the Berlin Blockade ended just days before the Committee's final meeting in May.⁴⁶

In justifying the social science recommendation, committee members also repeatedly cited the likely exclusion of the social sciences from the planned National Science Foundation. At Marquis's suggestion, the Committee commissioned a funding report, completed by sociologist John Riley, that concluded as expected that the social sciences were grossly underfunded.⁴⁷

The Committee's consensus on social science was tempered by unease with the prevailing "social science" label. Notes from the January meeting hasten to stress that the "term 'social science' is used here in its true sense, however, and is not narrowly restricted to a few disciplines." By this broad definition, the notes continue, "the social sciences are in the middle of all disciplines, from business to health."⁴⁸ In his official "Business Division" report, Committee member Thomas Carroll

41 Marquis (1948a), 430, 433–435, 438. A companion paper published the same year stressed similar themes, including the six-stage research process (Marquis 1948b: 412–413).

42 See "Staff-Committee Memorandum No. 4," 27 December 1948, folder 1, box 1, series I, 20003, FFA: 3; Marquis, "Report of the Social Science Division," January 1950, FFA: 10–15; and Gaither et al. (1950), 95–96.

43 For a more detailed account of the deliberations, see Pooley and Solovey (2010), 202–215.

44 On Gaither's frustration, see Gaither, memo to McPeak and Dyke Brown, 28 April 1949, folder 25, box 3, series I, 20003, FFA; and Gaither to Thomas Carroll, 20 April 1949, folder 23, box 2, series I, 20003, FFA.

45 "Notes for Discussions with Trustees," 14 January 1949, folder 19, box 2, series I, 20003, FFA: 2. The social science focus remained constant throughout the four meetings. In the fourth and last, the minutes conclude that the final report will "indicate the importance of operation in the general area of the social sciences." "Staff-Committee Memorandum #14," 12 May 1949, folder 1, box 1, series I, 20002, FFA: 6.

46 Notes prepared for Gaither's presentation to Ford trustees at their April 4 meeting—on the same day the NATO Treaty was ratified—refer to the "war of ideologies [sic], protracted period of armed truce... Stresses and strains upon our political and economic strength extend to roots of our democratic concepts: the dignity of man and freedom of thought, expression, worship and opportunity." "Notes on Mr. Gaither's Report to the Board of Trustees of The Ford Foundation, Meeting of April 4, 1949, in Detroit," 4 April 1949, folder 20, box 2, series I, 20003, FFA.

47 "Staff-Committee Memorandum No. 8," 15 January 1949, folder 1, box 1, series I, 20003, FFA: 3; "Activity Report #2 (February and March, 1949)," 30 March 1949, folder 20, box 2, series I, 20003, FFA; McPeak, "Presentation of Program Five," 13 February 1950, folder 74, box 7, series V, 20046, FFA: 14.

48 "Notes for Discussions with Trustees," 14 January 1949, folder 19, box 2, series I, 20003, FFA: 2.



observed that "prevailing attitudes and some misunderstandings of 'social research' on the part of business men create special problems of terminology and sensitivity."⁴⁹

A key fear was plainly the recurrent conflation of "social science" with "socialism," especially by anti-New Dealers in Congress (Solovey 2012: 410; Solovey 2013: 44, 53; Miller 1955: 513). The Committee's allergic response to "social science" was closely tied to the socialism slander. As Marquis observed in his "Social Science Division" writeup, there is a "fairly common confusion of social science with 'social reform' or even 'socialism.'" In the report, he aggressively refutes the association: the "spirit" of a "total system" like Marxism is "foreign to that of the social scientist," who is "more akin to the physician ... sober, pedestrian, undramatic."⁵⁰ In a 1972 oral history interview Marquis confirmed that the Committee had worried that the "word social would be confused with socialism and so for [sic] and tried to come up with something else."⁵¹ Other accounts confirm the central role that the socialism conflation played in the foundation's search for alternative language.⁵²

The other major motivation for a new label—clearly related to the first—was the Committee's desire to signal a clear intellectual break with the body of social science they deemed speculative and historical. In an early 1948 talk Marquis had referred to the "traditional social sciences" as a "mixture of common sense, speculative philosophy, historical scholarship, religion, wise advice, and some science."⁵³ The identical sentence appeared in Marquis's "Social Science Division" report.⁵⁴ Talking points prepared for a presentation to Ford trustees refer to the "many shortcomings" of the existing social sciences. "In many ways they are not scientific enough... consist[ing] of ordinary common sense or personal views rather than verified knowledge," the document reads. "Too frequently" social scientists have proposed "some sweeping world reform which they thought good."⁵⁵

Throughout the spring meetings the Committee deployed terminological stand-ins—though not as yet "behavioral sciences." Instead, the most frequently proposed candidates were "human relations" and "social relations."⁵⁶ Both terms were already in wide circulation by the late 1940s, in part due to the Yale Institute of Human Relations and Harvard's post-war Department of Social Relations. Marquis had repeatedly favored the "human relations" term in his 1948 publications, and

49 Carroll, "Report of the Business Division," October 1949, FFA: 56.

50 Marquis, "Report of the Social Science Division," January 1950, FFA: 20–23. The metaphor of the physician—and the broader claim that social scientists can provide technical advice, but not guidance on ultimate values—has roots in the "liberal managerialism" of interwar social science. See Crowther-Heyck (2005), 43–47.

51 Oral history interview of Donald Marquis, 27 October 1972, Ford Foundation Oral History Project, FFA: 8.

52 Berelson et al., "Proposed Plan for the Development of the BSP," December 1941, Report No. 002072, FFA: 14. In a 1964 talk Ralph W. Tyler, director of the Center for the Advanced Study of the Behavioral Sciences, admitted, "Another reason for seeking a substitute for the older terminology is the identification on the part of some laymen of the social sciences with social work and with socialism. In several situations, this confusion has had irritating consequences. One way of avoiding this misunderstanding is to rename this group of academic disciplines" (Tyler 1964: 28). James Grier Miller also pointed to the problematic association with socialism as a key factor in his Chicago initiative's choice of "behavioral sciences": "we foresaw a possibility of someday seeking to obtain financial support from persons who might confound social science with socialism" (Miller 1955: 513).

53 The February 1948 talk was published as Marquis (1948b).

54 Marquis, "Report of the Social Science Division," January 1950, FFA, 10. The only change was that scholarship was, in this version, misspelled as "scholarship."

55 William McPeak, "Presentation of Program Five," 13 February 1950, folder 74, box 7, series V, 20046, FFA: 8–9.

56 Thomas Carroll was already using the "human relations" terminology in the Committee's initial December meeting. "Staff-Committee Memorandum #4," 27 December 1948, folder 1, box 1, series I, 20002, FFA: 4.



Committee member Thomas Carroll had been affiliated with Harvard Business School’s Committee on Human Relations.⁵⁷

Carroll—Gaither’s cousin and an especially active participant in the Committee’s deliberations⁵⁸—soon proposed the awkward “social (human) relations” phrase.⁵⁹ A lengthy memo jointly authored by Carroll and Marquis in advance of the Committee’s final meeting in May continued to employ the “social (human) relations” language.⁶⁰ That term’s obvious inadequacy prompted the Committee and its staff to generate a parade of increasingly cumbersome prospective labels. In May, as Gaither prepared to brief trustees on the Committee’s social science vision, his staff floated “social relations and human behavior.”⁶¹ Gaither’s late May memo to trustees referred to “human relations and social organization.”⁶² As if to exhaust every possible permutation, a June staff memo made use of “human relations, social organization and human behavior.”⁶³

THE GAITHER REPORT AND THE TURN TO “BEHAVIORAL SCIENCES”

William McPeak and a hired staff writer labored on a draft of the Committee’s final report over the summer. In addition to the social science focus recommended by the Committee, the draft report called for an expanded program to include economic, political, educational, and international issues. In the new plan proposed by the draft report, support for social science shared billing with four other named programs: Area One (“The Establishment of Peace”), Area Two (“The Strengthening of Democracy”), Area Three (“The Strengthening of the Economy”), and Area Four (“Education in a Democratic Society”). To designate the social science–oriented Area Five, Gaither and his staff selected yet another compound phrase: “Individual Behavior and Human Relations.”⁶⁴ Area Five was positioned as a basic scholarly unit intended to service the other four, more substantive areas.

57 Marquis (1948a); Marquis (1948b). On Carroll’s Harvard Business School tenure, see Khurana (2007), 240. On Carroll’s later, and highly successful, effort to remake business education in a behavioral sciences mold under Ford Foundation auspices, see Khurana (2007), 233–288, and the summary in Pooley and Solovey (2010), 213n13.

58 Carroll drafted the economics section of the Study Committee’s final report, and later helmed Ford’s economics division. See Pooley and Solovey, (2010), 206–207, 210–214, 222–229. On his family relation to Gaither, see Cochrane (1979), 50.

59 Carroll, “Skeletal Report,” March 1949, folder 28, box 3, series I, 20004, FFA.

60 Carroll and Marquis, “Suggested Program Area- Social (Human) Relations,” May 1949, folder 26, box 3, series I, 2004, FFA. Aside from a brief introduction written by Carroll, the document’s sections were drafted separately: a lengthy write-up from Carroll and three short memos by Marquis. Marquis’s memos are suffused with a familiar mix of unqualified scientism and applied Cold War urgency. He called for a “systematic attempt to formulate” principles “in rigorous fashion,” while also nodding to heightened geopolitical tensions: “Such slowness in the acquisition of new information in this area and slowness in application of what is known is tolerable in stable times. It could be disastrous in the present unstable ones. The deliberate modification of some aspects of the behavior of large segments of the population of the world may be the best answer to some of the threatening aspects of the world situation.” Ford support is vital, Marquis wrote, because of the military’s fixation on short-term results, but also because “government agencies are peculiarly vulnerable to charges of promoting propaganda.” Marquis, “Modification of Behavior through Education and Training,” 26 April 1949, folder 35, box 3, series I, 20004, FFA: 1.

61 Dyke Brown, memo to Gaither, 20 May 1949, folder 20, box 2, series I, 2003, FFA: 2.

62 Gaither, memo to trustees, 23 May 1949, folder 20, box 2, series I, 20003, FFA.

63 Dyke Brown, memo to Gaither, 10 June 1949, folder 20, box 2, series I, 20003, FFA.

64 An undated “Table to Rank Program Areas,” circulated by Gaither at some point in the summer, refers to “Individual Behavioral and Human Relations.” Table to rank program areas, n.d., 1949, folder 25, box 3, series I, 20004, FFA.



Archival records do not detail the reasoning that led Gaither and his small staff to expand the plan's scope beyond the social science focus recommended by the Study Committee. It is likely that the change was prompted by the revelation that the foundation would possess far greater resources than Gaither or the Committee originally assumed (cf. Sutton 1987: 47, 52–53). It is also possible that trustees had insisted on a broader, more substantive mandate, though memos exchanged between Gaither and his staff in early summer still indicate an exclusive focus on social science.⁶⁵ Perhaps the task of translating the Committee's disjointed recommendations into a coherent narrative persuaded Gaither and the staff to rethink the structure of the report.

Regardless, by the fall of 1949 a draft of the Committee's final report was completed. It was William McPeak who wrote the social-science oriented Area Five narrative, and who emerged as its most effective champion.⁶⁶ A former journalist, McPeak had served as field staff director in Samuel Stouffer's wartime Army Research Branch.⁶⁷ The Research Branch's four-volume *American Soldier* study, published after the war with Carnegie Corporation support, served as a celebrated model for large-scale cross-disciplinary research projects.⁶⁸

McPeak had written a spirited defense of the Study Committee's social science vision in preparation for Gaither's May appearance before the trustees.⁶⁹ McPeak later wrote and delivered the key pitch on behalf of Area Five to trustees in February 1950.⁷⁰ On his return to the foundation in 1953, he served as the BSP's supervising officer until its 1957 closure, winning plaudits for his effective oversight.⁷¹

Though the fall 1949 draft of the final report does not survive, it is unlikely that the document made explicit reference to the "behavioral sciences."⁷² The term appears nowhere in the Committee deliberations nor in the staff correspondence exchanged during the report's drafting. The published version of October 1950 does mention "behavioral sciences," though otherwise hews to the "indi-

65 E.g. Dyke Brown, memo to Gaither, 10 June 1949, folder 20, box 2, series I, 20003, FFA.

66 On McPeak's authorship, see McPeak, "BSP [1951–1957]: Report and Appraisal," December 1961, Report No. 003156, FFA: 5; and oral history interview with Donald Marquis, 27 October 1972, Ford Foundation Oral History Project, FFA: 5.

67 "Background on Personnel- Study Organization for The Ford Foundation," 20 December 1948, folder 12, box 2, series I, 20003, FFA; Clausen (2012), 212.

68 The first volume was Stouffer (1949). On the volumes' significant impact, see Schweber (2002); and Converse (1987), 217–223.

69 McPeak: "In effect, we would say to a foundation: 'You are a foundation. You have money. You propose to tackle the major problems of mankind. You propose to avoid support of those things so certain of success as to attract the support of other givers. You prefer not to climb onto popular bandwagons. In other words, you intend to display courage, to play the long odds, and to tackle the most important problems at or near their source. If you really mean what you say; if you really want to hew to the line and let the chips fall where they may; if you are really willing to work very hard, then we can suggest nothing more suitable to your purposes than the programs we are outlining in the problems of human, national and international relations. These problems are so stubborn and so touchy that you will have relatively little competition. In fact almost all of it, especially on the more important and more controversial issues, will come from the few other large foundations, since government and many of the less free and less courageous institutions will not join you in the battle.'" "Memo for Rowan Gaither, Subject: Strategy of Program Area Presentation," 20 May 1949, folder 25, box 3, series I, 20004, FFA: 2.

70 McPeak, "Presentation of Program Five," 13 February 1950, folder 74, box 7, series V, 20046, FFA.

71 Francis X. Sutton, a BSP staff member, described McPeak as "almost universally regarded as the outstanding official in the Foundation's early history" (Sutton 1987: 77).

72 Though the published version of the final report lists November 1949 on its title page, Henry Ford II's preface is dated October 1950, and trustees issued their formal approval of the plan in September 1950 (Sutton 1987: 48, 87n; Gaither et al. 1950).



vidual behavior and human relations” language (Gaither et al. 1950: 94). The “behavioral sciences” references were probably the result of a later edit, since the term only appears in the archival record in early 1950.

It was Marquis who seems to have introduced the “behavioral sciences” label. In preparation for his “Social Science Division” report, he organized a small conference of social scientists in August at the offices of the SSRC in New York and interviewed a series of leading scholars.⁷³ Marquis’s division report, dated January 1950, contains the first recorded reference to the term. In the report’s conclusion, Marquis writes, “If a program of research in the behavioral sciences of any considerable magnitude is contemplated, it is necessary to consider the resources available” (Gaither et al. 1950: 34). It is unlikely that McPeak or Gaither suggested the label, since Marquis later confirmed that he had introduced the term, and archival evidence supports his claim.⁷⁴

In his 1972 oral history interview, a somewhat regretful Marquis recalled that he selected “behavioral sciences” to avoid the socialism conflation, and also to mark off Ford’s science-oriented approach. “I was eager,” he said,

to make a distinction between soft science and hard science. That happens to be my bias to approach psychological and social problems with the standard methods of science and a different label enabled us to define an area rather than to accept largely defined areas. So, behavioral science, was in our thinking, in fact, interpreted as a scientific approach to social problems and originally much too narrowly. This view was shared by [Bernard] Berelson who was appointed to head it [in 1951]. I wouldn’t try to do that now, I would put in things like policy and history and so forth. But I was young, eager, overconfident, and not nearly as disillusioned as I am now that the scientific approach to social problems would be the best way to attack them. I wouldn’t defend that now.

As already noted, Marquis was equivocal about the term’s origins, conceding that his friend James Grier Miller might have coined the label. In an oral history interview, he observed that Ford’s use was “almost simultaneous” with Miller’s Chicago initiative, and that the two were “interacting much at that time.”⁷⁵

Miller was among the social scientists that Marquis had consulted for his division report.⁷⁶ As Philippe Fontaine has detailed, Miller was the central figure (along with neurophysiologist Ralph Gerard) in a cross-disciplinary University of Chicago “Committee on Neural-Mental Problems” convened the same fall to foster conversation among the “mental sciences.” By November 1949, the nascent Chicago group had changed its name to the “University Committee on Mental and Behav-

73 On the conference, see Odegard, “Report of the Political Science Division,” November 1949, FFA: 11–12. On Marquis’s interviews, see Marquis, “Report of the Social Science Division,” January 1950, FFA: 1–4. Among the many scholars that Marquis consulted were Dorwin Cartwright, James Grier Miller, Talcott Parsons, Kenneth Boulding, J.M. Clark, Philip Hauser, and former Yale colleagues George Peter Murdock and Robert Sears. Marquis also appointed an “advisory panel” consisting of sociologist Robert Merton, economist Theodore Schultz, and political scientist Pendleton Herring, the SSRC president.

74 A 1951 BSP planning memo implied that Marquis had introduced the term. Included among a list of remaining tasks for the summer of 1951—as the BSP plan was being developed—is: “Try to secure memo from Marquis defining behavioral science.” Hans Speier, Marquis, Dyke Brown, memo to Gaither, 12 June 1951, folder 75, box 7, series V, 20046. There is no evidence that Marquis ever furnished a definition.

75 Oral history interview with Donald Marquis, 27 October 1972, Ford Foundation Oral History Project, FFA: 7–8.

76 Marquis, “Report of the Social Science Division,” January 1950, FFA: 2–3.



ioral Sciences,” and by mid-December Miller had drafted a proposal for an “Institute of the Behavioral Sciences” (Fontaine forthcoming). Marquis’s division report, with the first recorded Ford mention of “behavioral sciences,” appeared the next month.

Through a number of permutations Miller’s much smaller initiative—the planning group for these was often called the “Committee on the Behavioral Sciences” after 1952—was eventually reconstituted in 1955 as the University of Michigan’s Mental Health Research Institute.⁷⁷ Fittingly, Marquis played a key role in facilitating the move and securing funds for the Michigan Institute (Capshew 1999: 197–198). Miller’s idiosyncratic definition of “behavioral science”—with its biological, “living systems” inflection—would help sow confusion over the already-nebulous term, especially after Miller co-founded the systems science–focused journal *Behavioral Science* in 1956.⁷⁸

By February 1950, Gaither, McPeak and Marquis had settled on the “behavioral sciences” label to describe Area Five. Judging by the 18-page script he prepared, McPeak issued a hard-sell brief for the social science initiative.⁷⁹ He pointed to the social sciences’ likely exclusion from the planned NSF, and claimed that Rockefeller might reduce its support by half. Citing the Committee’s social science funding report, he asserted that Carnegie would only fund applied, and not basic, research—a dubious assertion given Carnegie’s ongoing funding for both the *American Soldier* series and Talcott Parsons’s major theory-building initiative (Lagemann 1992: 168–172). With the government and the other big foundations bowing out, “[t]here is no one else to look out for” the social sciences. McPeak pointedly quoted James Conant—chemist, Harvard president and major figure in the natural science establishment—endorsing more investment in social science research.⁸⁰

McPeak also stressed the Cold War urgency of “scientific and systematic” knowledge. Because of the “extreme differences between our beliefs and those of others,” we will, he said, “have to get to the bottom of such differences by understanding.” Armed with that knowledge, he continued, “we will be better equipped to deal with either peace or war.”⁸¹

At this point in the script, McPeak offered a somewhat tortured explanation for the Committee’s aversion to the “social science” label. “Just as those who do research to get knowledge of nature are called natural scientists, those who try systematically to learn about man and his behavior are frequently called social scientists,” he admitted. But “here the parallel breaks down,” because the “social sciences” term, “as we would like to use it, appears to be loosely constructed.” He noted that in addition to the five major academic social science disciplines, the term often refers to a broad range of professionals, including lawyers, accountants, public relations counselors, “or many other things.” But since Area Five’s emphasis is on knowledge of “human behavior,” the Study Committee is “not concerned with all of these groups to the same extent.” Rather, the focus is on those social scientists who are “becoming more scientific all the time,” who have “borrowed many techniques from the natural sciences, and ... devising more of their own.” Rather than refer to “social scientists,” McPeak explained, “we would like to use the term behavioral scientists.” In a nod to

⁷⁷ Ibid.

⁷⁸ “Editorial,” *Behavioral Science* 1, no. 1 (1956): 1–5; and Hammond (2003), 143–196; Hammond and Wilby (2006). Marquis was among the 10 scholars who signed the initial editorial in *Behavioral Science*, though does not seem to have been otherwise involved.

⁷⁹ William McPeak, “Presentation of Program Five,” 13 February 1950, folder 74, box 7, series V, 20046, FFA.

⁸⁰ The quote is from Conant (1948), 80.

⁸¹ McPeak, “Presentation of Program Five,” 5. From there also the following quotations.



trustees’ likely disinterest in such terminological nuances, McPeak half-apologized: “If you will let us use this term for the rest of the discussion, we won’t use more technical terms.”

McPeak, however, offered two additional justifications. He noted, first, that the foundation hoped to also support “certain medical men, and psychiatrists, geneticists and other natural scientists, and social workers”—all of whom research behavior, but do not identity with the “social science” label.

He also justified the new term by restricting its application to just three of the social science disciplines, to the exclusion of economics and political science. “We are,” he said, “very much interested in the sociologists, the anthropologists and the psychologists, particularly the more scientific ones.” Tellingly, economics and political science had appeared on the longer list of “various interpretations” of “social science” that McPeak had already cited as evidence of the term’s overly broad connotations. The Area Five write-up in the published Study Committee report also explicitly lists sociology, psychology, and anthropology, with no mention of the other two disciplines (Gaither et al. 1950: 92).

There was precedent for the three-field restriction: the Yale Institute (which, however, included few sociologists) and Harvard’s Social Relations department. But for reasons that Mark Solovey and I have detailed elsewhere, the exclusion of economics and political science was almost certainly the result of internal Ford Foundation politics. Political science and economics had, in effect, already been “claimed” by Area Two (“The Strengthening of Democracy”), and Area Three (“The Strengthening of the Economy”). We concluded that the anthropology-sociology-psychology formulation was likely a post-hoc rationalization.⁸²

The three-field formula introduced a definitional ambiguity that would go on to plague the BSP throughout its existence.⁸³ At many other points, after all, the “behavioral sciences” term was plainly defined to include *all* the social sciences, or at least their “scientific” wings. The exclusion of economics proved less problematic, if only because economists secured their own substantial funding stream for basic research through Area Three, after resisting overtures from the BSP. The Area

82 Pooley and Solovey (2010), especially 213–217. Bernard Berelson, in his 1957 postmortem on the BSP, also suggested that turf disputes were responsible for the narrow, three-field definition. He observed that the “behavioral sciences” term was chosen over “social science” because other foundation program areas had jurisdiction over key social science fields: “The familiar term ‘social sciences’ includes at least three major disciplines—economics, political science, and history—that were not typically included in the ‘behavioral sciences,’ if for no other reason simply because they were dealt with elsewhere in the Foundation.” Berelson, “The Ford Foundation BSP Final Report, 1951–1957,” September 1957, Report No. 010548, FFA: 3.

83 One example of the staying power of the three-field definition—with influence, perhaps, from Miller’s definition—from 1964: “In some circles, membership in the behavioral science club is limited to psychology, sociology and anthropology. In other circles, membership is extended or perhaps limited to mathematics, psychiatry, and neuron-physiology. In many circles, however, membership is denied to such fields as history, economics and political science” (Kramer 1964: 192). In its 1965 official report to a Congressional science committee, the National Academy of Sciences adopted the three-field definition, complete with awkward qualification: “The term behavioral sciences is of relatively recent origin and emphasizes those parts of social science that attempt to solve their problems by empirical and scientific methods. It includes most of contemporary psychology, sociology, anthropology, and certain aspects of political science and economics” (National Academy of Sciences Committee on Science and Public Policy 1965: 203). Even the History of the Behavioral Sciences Newsletter—predecessor to the Journal of the History of the Behavioral Sciences—used a modified form of the three-field formulation: “It deals only with historical aspects of the behavioral sciences and is directed toward all those working in this area—primarily anthropologists, psychiatrists, psychologists, and sociologists, but also biologists, neurologists, historians and any other interested individuals.” See Senn (1966), 107–108.



Three opportunity, along with pre-existing professional and intellectual cleavages centered on the rationality assumption, convinced many economists to reject the "behavioral sciences" label.⁸⁴

For political scientists, however, the quasi-exclusion from Area Five proved more troubling. Political scientists, after all, were fully integrated into the World War II network of propaganda and morale service that formed the core of elite postwar social science.⁸⁵ A younger generation of empirically inclined political scientists were caught up in the same intellectual currents captivating other social scientists. Soon after the appearance of Ford's published report in 1950, complaints about the discipline's apparent exclusion began to surface. Confusingly, however, political scientists were relatively well-funded by the BSP. Indeed, they received a far larger proportion of grants than anthropologists.⁸⁶

Later documents associated with the BSP try to resolve the discrepancy—between the definition referring to science-oriented social science writ large and the other definition referring to just three disciplines—by designating anthropology, sociology, and psychology as the "core" behavioral sciences.⁸⁷ Still, Ford's definitional gymnastics may have contributed to political scientists' terminological exceptionalism—their preference for the "behavioralism" label that in most respects designated an intellectual worldview common to self-described "behavioral scientists." As Emily Hauptmann has recently concluded, "The story of the rise of behavioralism in political science ... is best told as a subplot in the bigger story of the rise of the behavioral sciences."⁸⁸

At their February 1950 meeting, Ford trustees formally approved Area Five. The Study Committee's final report—*The Report of the Study for the Ford Foundation on Policy and Program*—was finally published in the fall of 1950.⁸⁹ The Gaither Report, as it came to be known, struck a delicate balance between stated commitments to peace and universal welfare, on the one hand, and the escalating Cold War conflict, on the other. The "individual behavior and human relations" language remained dominant, but "behavioral sciences" appeared four times—all on a single page (Gaither et al. 1950: 94).

THE BEHAVIORAL SCIENCES PROGRAM

By the time that planning for Area Five picked up in the spring of 1951, the "behavioral sciences" label was already established as Ford's term of choice. Throughout 1951 Gaither shepherded the program's planning process, retaining Marquis and Hans Speier—the head of RAND's Social Science division—as consultants. In late summer, Gaither, Marquis and Speier were joined by Bernard Berelson, the library scientist hired to lead the program. The four men collaborated on a detailed planning document, whose extensive revisions were informed by a frenetic series of cross-country

84 Pooley and Solovey (2010), 219–230. Cherrier (2009), however, argues that we over-emphasize the unity of economists in this period, in her own analysis of episodes in Ford's early history.

85 Farr et al. (2006), 580–583. The political scientists who worked with Harold Lasswell, principally at his Library of Congress content analysis operation, constituted a significant share of the early behaviorists in political science, including Heinz Eulau, David Truman, Ithiel de Sola Pool, and Sebastian de Grazia.

86 Berelson, "The Ford Foundation BSP Final Report, 1951–1957," September 1957, Report No. 010548, FFA: A1–A12.

87 Ibid., 4; Carroll, "Report of the Advisory Group on Economics and the Behavioral Sciences, 18 February 1953," Report No. 0101822, FFA: 2–3.

88 Hauptmann (2012), 156. See 159–162 for a critical survey of the large historiography on behavioralism. Especially useful is Adcock (2007). On the BSP's influence on behavioralism, see Hauptmann (2012); Seybold (1980); and (on Stanford's department) Lowen (1997), 120–146.

89 "Grants Applications Pending," April 1950, folder 56, box 4, series I, 20007, FFA: 17–18; Gaither et al. (1950).



interviews and conferences in the fall of 1951. Ford trustees formally approved the plan in early 1952, and the new Behavioral Sciences Program (BSP) was announced to the world.

With his Study Committee duties complete, Gaither agreed to lead the planning effort for Area Five.⁹⁰ Throughout the planning process Gaither was an aggressive advocate for the program, in the face of indifference and outright hostility from the foundation’s newly appointed leadership. Gaither had no formal social science training, but for reasons that remain unclear he repeatedly protected the program, first in the planning process and the BSP’s early years, and later as the foundation’s president from 1953 to 1956 (Sutton 1987: 84; Solovey 2013: 112–127). Berelson, in a 1972 oral history, speculated that Gaither’s exposure to social scientists at RAND—notably Speier—and his Study Committee experience had cultivated his “deep faith” in the BSP. “If it hadn’t been for Rowan [Gaither] at that time, I think it’s very likely that the behavioral sciences part of the Foundation program wouldn’t have got activated at all.” Throughout his tenure at Ford, Berelson recalled, Gaither “protected,” “nurtured,” and “ran interference for” the BSP in response to internal and external critics alike. One reason that trustees succeeded in closing the BSP in 1957 was that Gaither had by then stepped down.⁹¹

Gaither’s early protection was necessary because the foundation had appointed, in late 1950, Paul Hoffman as its first president. Hoffman, a former businessman and administrator of the Marshall Plan, was by all accounts indifferent to, and perplexed by, the developing behavioral sciences program.⁹² He even referred to the behavioral sciences as a “good field” to “waste millions and get nothing” (Raucher 1985: 85, cited in Solovey 2013: 116). Though he grudgingly supported the BSP establishment, a memo from the period notes that “[i]n his questions and comments Mr. Hoffman indicated that he was not clear in his own mind about the limitations to be placed upon the subject matter covered by” the BSP.⁹³

Robert Maynard Hutchins, meanwhile, was in open revolt. Hoffman had appointed Hutchins, the former University of Chicago president, as one of his associate directors. Hutchins was withering in his criticism of plans for Area Five, calling the behavioral sciences “utter nonsense” (Sutton 1987: 72). He opposed Berelson’s hiring, even insisting that the foundation document his objection.⁹⁴ By the early 1950s Hutchins had long since abandoned the quantitative evangelism that characterized his Yale Institute proposals from the late 1920s.

90 An outline of pending grants from the spring of 1950 records that trustees, when they approved Area Five in February 1950, had appointed Gaither to head the project. “Grants Applications Pending,” April 1950, folder 56, box 4, series I, 20007, FFA: 18. Largely at Compton’s urging, Gaither was formally appointed as a (part-time) Associate Director in 1951, with oversight of the BSP. See Sutton (1987), 62, 71–72.

91 Gaither was the “one who protected [the BSP] always,” Berelson added. Oral history interview of Bernard Berelson, 7 July 1972, Ford Foundation Oral History Project, FFA: 3–6. Solovey (2013: 125–127) confirms Gaither’s advocacy but questions how effective his protection was as McCarthyite pressure on the BSP mounted in the mid-1950s. Soon after leaving Ford, Gaither chaired the Security Resources Panel, the Eisenhower administration task force that produced the secretive Deterrence & Survival in the Nuclear Age (Washington, DC: Science Advisory Council, 1957)—the other “Gaither Report.”

92 Francis Sutton, based on Ford documents, his own experience, and a number of interviews, recalled that Hoffman had “little understanding or sympathy” for Area Five (Sutton (1987: 62, 71–72). See also Berelson, oral history, 5; and Solovey (2013), 119.

93 Speier, Marquis, and Berelson, memo to Gaither, 20 December 1951, folder 75, box 7, series V, 20046, FFA.

94 In his oral history interview, Berelson read from a May 1951 staff memo: “Mr. Hutchins requested that the record note that he had nothing to do with this appointment.” Berelson, oral history, 1–3.



By spring 1951 Marquis and Speier had begun meeting to discuss the plans for Area Five.⁹⁵ Gaither had come to respect Speier—the Karl Mannheim student turned avid Cold Warrior—through RAND. Gaither had even consulted Speier, a political sociologist, on the plans for the Study Committee before its members were appointed in late 1948.⁹⁶

The Speier-Marquis conversations were marked by undisguised Cold War concerns.⁹⁷ The Korean War was in full swing, and both men had been working on the State Department’s Project Troy (Needell 1993: 401). In early exchanges the two scholars discussed how the behavioral sciences program could collaborate with Troy and the government’s Psychological Strategy Board.⁹⁸ Much of Speier’s attention was trained on developing a proposal for an “Institute of International Communication” focused on psychological warfare research.⁹⁹ The next year Ford approved \$875,000 for what became the Center for International Communication, led by political scientist Ithiel de Sola Pool as a division of MIT’s Center for International Studies (CENIS).¹⁰⁰

By September, Speier, Marquis, Gaither and Berelson—who had been hired in August—completed a draft plan for a “Program in Behavioral Science Research.”¹⁰¹ The four men, and especially Gaither and Berelson, spent the fall soliciting feedback on the draft and making revisions. After five full revisions and a pair of late November conferences in New York and Chicago, Gaither finally submitted the “Proposed Plan for the Development of the Behavioral Sciences Program” to officers.¹⁰² Early the next year trustees gave their formal approval to the Behavioral Sciences Program.

Later Berelson would refer to “behavioral sciences” as a “not particularly felicitous” phrase, but as it turned out the label proved far more durable than the short-lived BSP.¹⁰³

III. ‘A Genuine Need for a Collective Term’: Tracking the Term’s Rise

The advent in recent years of large-scale, full-text databases has drastically simplified the process of tracing the careers of specific terms. An often-overlooked application is the ability to trace the aggregate spread of phrases over time—until recently, an impractical task. By tallying the use of

95 Marquis, memo to Gaither and Speier, 24 April 1951, folder 74, box 7, series V, 20046, FFA.

96 “Memo: Conference—November 18,” 19 November 1948, folder 19, box 2, series I, 20003, FFA. As Berelson later observed, “At RAND they developed a Social Science Division, [Gaither] became relatively close, I think, to Hans Speier, came to have a very great respect for such people—and followed very closely what went on at RAND along this line as a kind of counter to the hardware aspect of RAND.” Oral history interview, 3–4.

97 They were well primed by Gaither. In an early 1951 memo to Hoffman, Gaither wrote, “War is not necessarily inevitable or immediately imminent; however, the threat of total war is so great that the United States and the free peoples of the world must mobilize their economic and human resources to deter aggression, to achieve peace, and to assure victory should war come.” Gaither, memo to Hoffman, 2 January 1951, folder 57, box 4, series I, 20007, FFA.

98 “Notes for Rowan Gaither on Program Five Conference,” 2 May 1951, folder 74, box 7, series V, 20046, FFA: 8; Speier, Marquis, and Dyke Brown, memo to Gaither, 12 June 1951, folder 75, box 7, series V, 20046, FFA. On the Psychological Strategy Board, see Lucas (1996).

99 Speier, Marquis, and Dyke Brown, memo to Gaither, 12 June 1951, folder 75, box 7, series V, 20046, FFA. In Gaither’s summary report, the name had shifted to “Research Center on International Communication.” Gaither, “Program Five Activities,” 19 December 1951, Report No. 002922, FFA: 2.

100 See Anonymous (1954), 358; Schwach (2009), 62–65. On the larger CENIS context, see Blackmer (2012).

101 “Report on ‘A Program in Behavioral Science Research,’” September 1951, Report No. 010818, FFA. On Berelson’s hiring, see Gaither, “Program Five Activities,” 19 December 1951, Report No. 002922, FFA: 1.

102 See Gaither’s exhaustive account. *Ibid.*

103 Berelson, “The Ford Foundation BSP Final Report, 1951–1957,” September 1957, Report No. 010548, FFA: 3

“behavioral sciences” in databases like JSTOR and Google’s massive book corpus, it is possible to chart the label’s rapid uptake in the early 1950s. The resulting data strongly support the claim that the “behavioral sciences” term was launched into wide academic circulation by Ford’s BSP.

GOOGLE BOOKS NGRAM VIEWER

One useful measure is supplied by Google Books Ngram Viewer tool, which plots terms’ frequency of use over time within the more than 20 million English-language scanned books in the Google Books corpus.¹⁰⁴ The results as plotted are normalized by the number of books published in each year.

Fig. 1 shows the relative frequency of “social sciences,” “human sciences,” and “behavioral sciences” from 1890 to 2000, with the y-axis displaying the percentage of matches among the entire corpus. The consistent dominance of “social sciences” is notable, as is the term’s steady increase in the early 20th century. In the late 19th and early 20th centuries, the “social sciences” label was itself a contested and unstable term, even as the individual disciplines were establishing themselves from diverse origins (see Manicas 1990: 45–48).

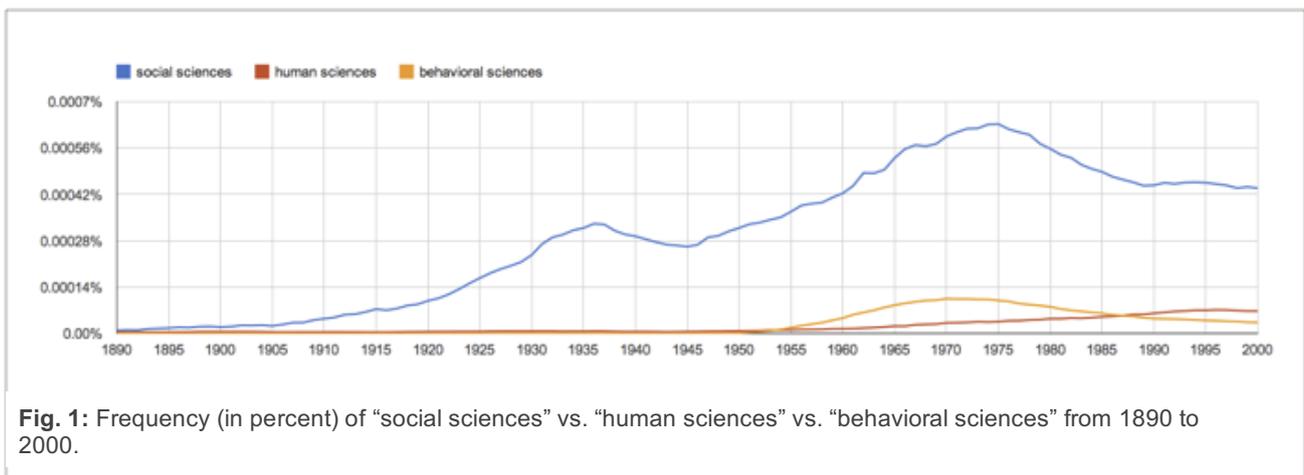


Fig. 1: Frequency (in percent) of “social sciences” vs. “human sciences” vs. “behavioral sciences” from 1890 to 2000.

The “human sciences” term is used relatively infrequently, though it has registered significant gains in recent decades—a rise that partly reflects, perhaps, the term’s softer, more humanistic connotations as an alternative to the more scientific associations of “social sciences” and especially “behavioral sciences.”

The “behavioral sciences” label, as already discussed, did not surface until 1935, with a trickle of appearances over the next 15 years. The Ngram Viewer records near-zero use up until the 1950s.

Fig. 2 displays the frequency with which either “behavioral sciences” or “behavioral science” appeared in Google’s corpus, from 1940 to 2000.

104 “Google Books Ngram Viewer,” Google, Inc., accessed February 29, 2016, <http://books.google.com/ngrams>. See <http://books.google.com/ngrams/info> for information about the corpora and other technical details.



Fig. 2: Frequency (in percent) “behavioral sciences” OR “behavioral science” from 1940 to 2000. **Source:** “Google Books Ngram Viewer,” Google, Inc., accessed February 29, 2016, <http://books.google.com/ngrams>

The term first registers in 1951, and appears with increasing frequency over the next two decades. The label’s frequency of use—normalized for the total number of books published—plateaus in the 1970s, followed by a definite decline over the 1980s and 1990s. The sharp increase in the term’s early 1950s use closely tracks the BSP’s 1951 establishment and its active advocacy for the term.

Fig. 3 tells a similar story, with results from 1945 to 1960. The term’s use suddenly accelerates in concert with the Ford program.

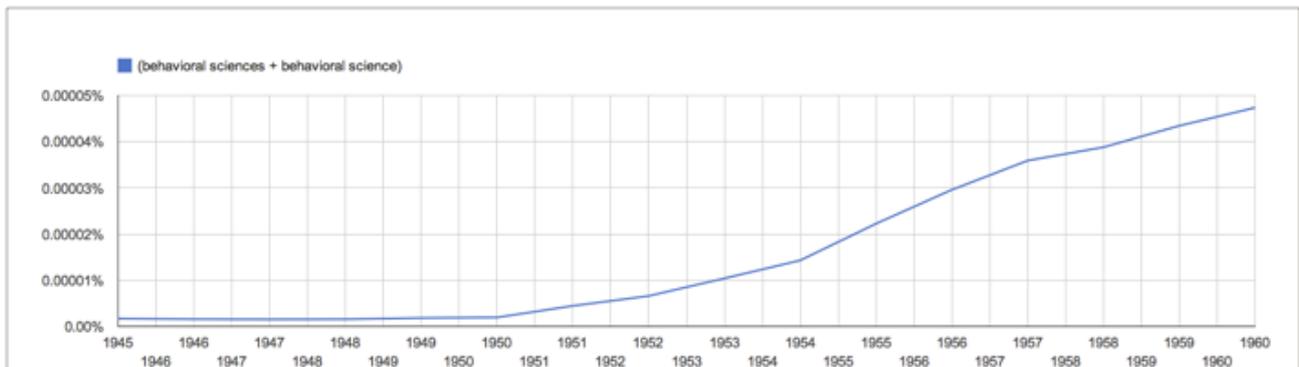


Fig. 3: Frequency (in percent) “behavioral sciences” OR “behavioral science” from 1945 to 1960. **Source:** “Google Books Ngram Viewer,” Google, Inc., accessed February 29, 2016, <http://books.google.com/ngrams>

JSTOR

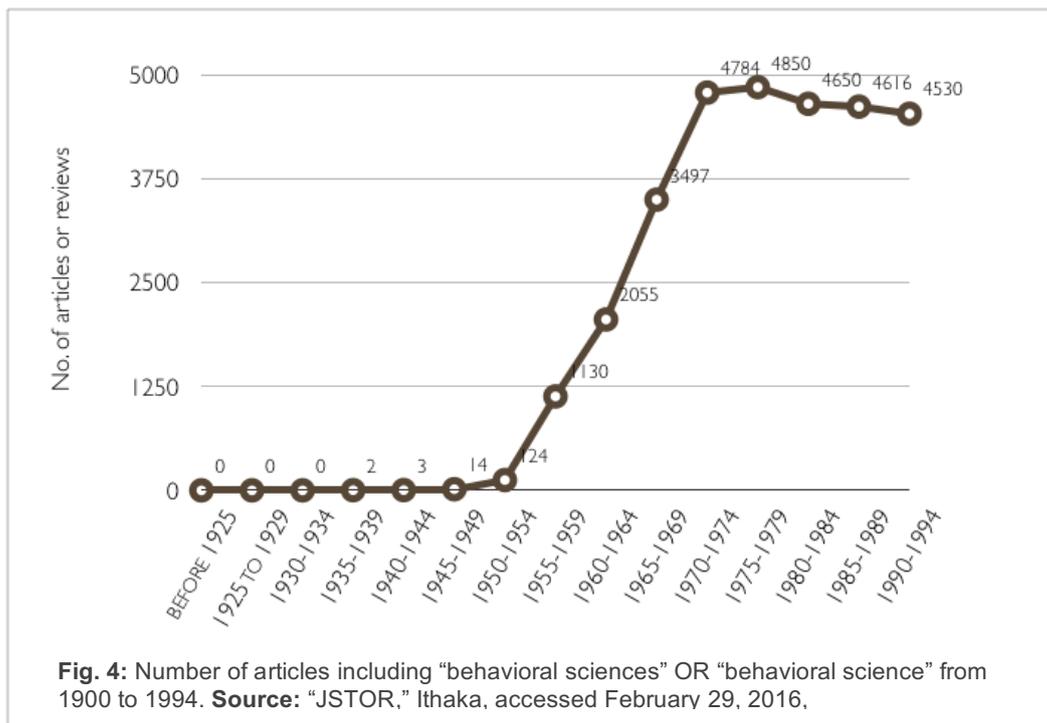
Another useful database is JSTOR, which provides a digital archive of over 1,600 academic journals.¹⁰⁵ One benefit of JSTOR is that its results are confined to scholarly research. JSTOR’s full-text

¹⁰⁵ “JSTOR,” Ithaka, accessed October 2, 2012, <http://www.jstor.org>. Psychology journals are not well-represented in JSTOR, but the overall pattern would not likely change significantly were more psychology journals included.

results, moreover, include links to each item’s matched pages whose contents can then be subject to traditional close readings with links to each item’s relevant pages.

Fig. 4 plots the sheer frequency of articles or reviews in the full JSTOR database that include “behavioral sciences” or “behavioral science” in their contents. (Note that the results are absolute, and have not been normalized by the total number of database items each year.) As expected, there are very few articles or reviews that include the phrase up through 1945.

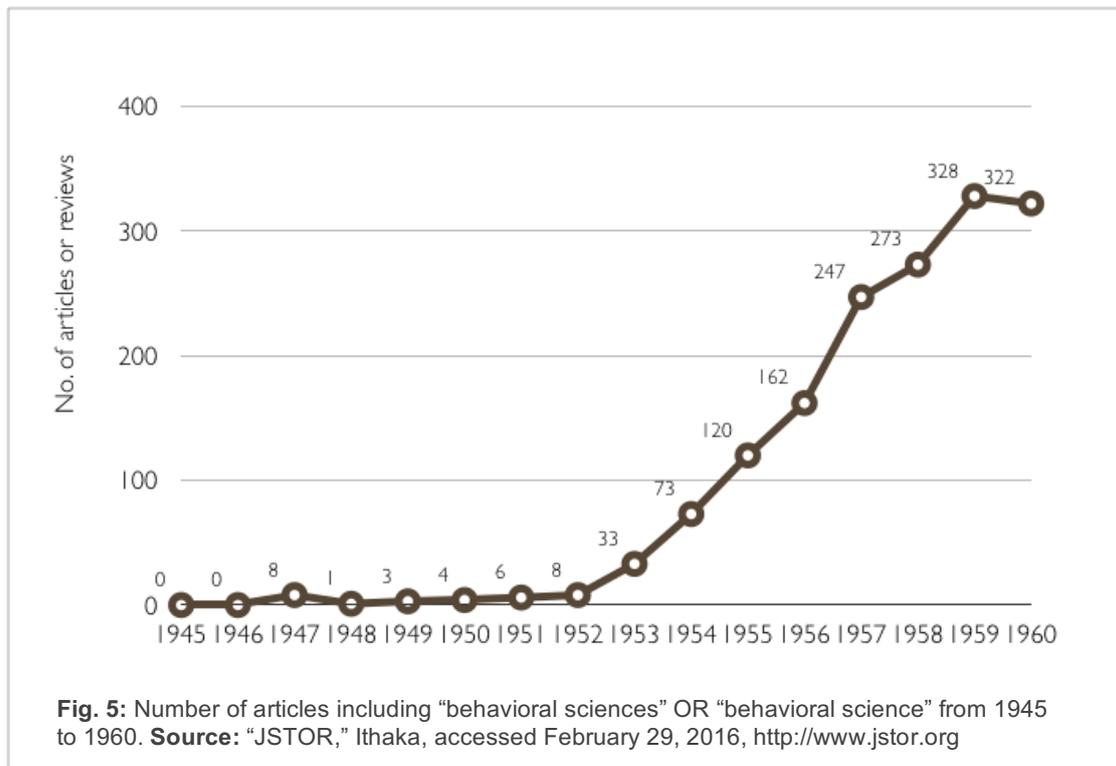
The chart provides striking evidence for a Ford-linked upsurge in the term’s use: In the five post-war years, there were under 15 mentions of the term. The next five years, up through 1954, registered almost 125 uses. That number jumped to 1130 over the second half of the decade, and then on



to over 2000 appearances from 1960 to 1964. The “behavioral sciences” matches continued to rise steeply from 1965 to 1969, with well over 4500 mentions in the period. The term’s use plateaued in the 1970s with slight declines through 1994, even as the total number of annual items in the JSTOR database grew steadily.¹⁰⁶

106 Results after 1994 are not included, since many publishers opt out of JSTOR to restrict access to recent journal issues.

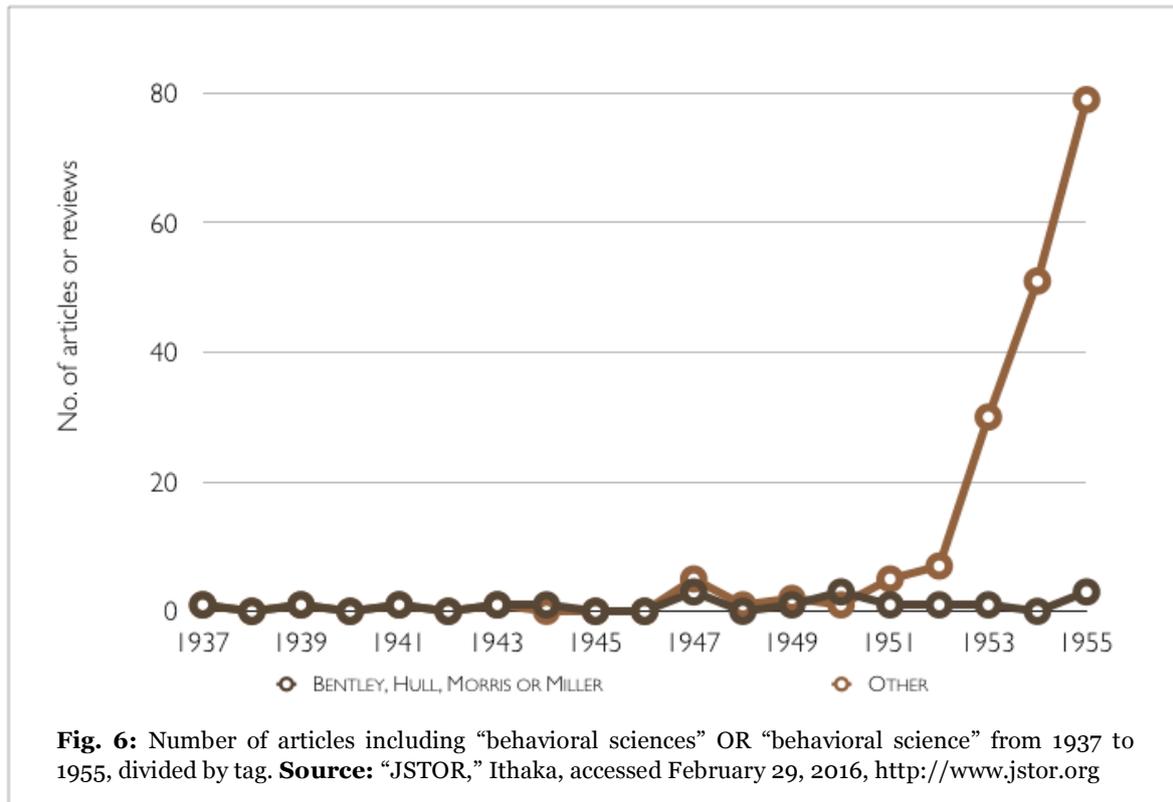
Fig. 5, a year-by-year picture of the term’s uptake from 1945 through 1960, provides a more granular view. Published mentions of “behavioral sciences” jump significantly in 1953 and continue to grow sharply for the remainder of the decade. The 1953 uptick is consistent with a significant Ford



role, taking into account the time lag from submission to publication typical in academic publishing.

The dramatic upswing in the “behavioral sciences” language could reflect uses linked to Bentley, Hull, philosopher Charles Morris (whose 1946 book featured the term prominently; see note 32), or even James Grier Miller’s behavioral sciences initiative at Chicago and Michigan. That is, the surge of mentions may have little to do with Ford’s early 1950s embrace of the term. To test that possibility, I tagged each matched article or review up through 1955, to record those items related to Bentley, Hull, Morris, and/or Miller. An item was judged “related” if the “behavioral sciences” use was authored by, or explicitly cited to, or plainly implied, one of the four scholars or their projects.

Fig. 6 displays the results of the tagging, plotted year by year. Because there were so few items “related” to any of the four scholars, the Bentley, Hull, Morris, and Miller totals were combined, and plotted against the untagged items.



In no single year did the total number of items linked to any of the four authors ever exceed three. The first two items, in 1937 and 1939, are a review of Bentley’s *Behavior, Knowledge, Fact* and an article authored by Bentley (Eldridge 1937: 440, 442; Bentley 1939: 412). Only seven of the additional 17 articles or reviews appearing in the 1940s are linked to Bentley, Hull, Miller or Morris. Beginning in 1951 and sharply accelerating in 1953 are reviews and items that make no explicit or implied reference to the four scholars. Indeed, by the mid-1950s the vast majority of matched JSTOR items are generic and uncited. It was Ford that introduced and popularized the relatively inclusive definition of the “behavioral sciences.” Of Bentley, Hull, Miller, and Morris, only Hull’s sometime use of the term is comparatively catholic;¹⁰⁷ Bentley, Miller and Morris each advanced much more particularized meanings.

The “behavioral sciences” label, in short, was in limited circulation many years before the Ford embrace. Indeed, I have argued that one of those early uses—Hull’s—was the likely source for Marquis and the other Ford planners. Even so, the evidence suggests that “behavioral sciences” only gained significant traction after—and arguably as a result of—Ford’s decision to champion (and underwrite) the term.

107 Of course both Hull and Ford still used the term to exclude social science work judged to be “unscientific.”



IV. 'The So-Called Behavioral Sciences': The Term Spreads Despite Objections

Over the course of its brief lifespan, the Behavioral Sciences Program managed to disburse almost \$42 million.¹⁰⁸ Still, the program largely failed to fulfill its initial aims. Ironically, it was the Cold War—or at least its McCarthyite by-product—that sealed the BSP's fate. The "behavioral sciences" language—chosen to avoid the "socialism" conflation and to signal scientific rigor—failed to shield the program. The socialism accusation was made anyway, and the avowed objectivity only attracted charges of amoral "scientism" from right-wing critics. In the mid-1950s, aggressive scrutiny from conservative lawmakers in Congress and controversy over a handful of BSP grants and proposals convinced skittish trustees—with no Gaither to convince them otherwise—to shutter the program in 1957.¹⁰⁹

In a bitter postmortem, Berelson laid some of the blame on the "behavioral sciences" term itself. Since it was "not only unfamiliar but associated with a center of power, it disturbed a number of people and undoubtedly made a certain amount of trouble for the Program both in and out of the Foundation."¹¹⁰ Ford's sponsorship of the term—so plainly the source of its widespread adoption—also contributed to the demise of the program it named.

Indeed, the term generated suspicion from the beginning, even among social scientists otherwise sympathetic to the foundation's vision. For scholars already hostile to what they viewed as a spreading scientism, Ford's "behavioral science" neologism was an especially loathsome metonym.

And yet the term gained purchase anyway. Withering denunciation from opponents—and a lukewarm, half-sincere embrace from its putative supporters—were not enough to stall its momentum. More surprising still, the term survived the BSP closure. By 1957, and despite the criticism, the label had already settled into the linguistic sediment.

RESISTANCE FROM WITHIN

The term's early uptake undoubtedly benefitted from the strategic calculation of would-be grantees, some of whom concealed their otherwise tepid reaction to the new label. The muted resistance was already evident in the program's very first initiative, issued before the BSP was formally established. In the summer of 1950 the foundation had awarded unsolicited grants of \$100 to \$300 thousand to 13 universities to conduct "self-studies" of existing and planned initiatives related to the "behavioral sciences."¹¹¹ Each grant recipient was asked to convene a committee responsible for a report which, in turn, would get reviewed by a visiting panel of outside scholars. Outside this

108 McPeak, "BSP [1951–1957]: Report and Appraisal," December 1961, Report No. 003156, FFA: 14. See Berelson, "The Ford Foundation BSP Final Report, 1951–1957," September 1957, Report No. 010548, FFA: A1–A12 for a list of BSP grants.

109 See Solovey's detailed account in (2013), 119–127. In the Reece Committee hearings Berelson himself was labeled one of the foundation's "dubious staff," for once serving on a committee at the University of Chicago that welcomed the "Red dean of Canterbury," Hewlett Johnson. U.S. Congress, House, Special Committee to Investigate Tax-Exempt Foundations and Comparable Organizations, Tax-Exempt Foundations, Hearings, 83d Cong., 2d sess. (Washington, DC: GPO, 1954), 36.

110 Berelson, "The Ford Foundation BSP Final Report, 1951–1957," September 1957, Report No. 010548, FFA: 3.

111 The \$3 million grant, known as the "5.1 Program," was administered by the SSRC. "Grants Applications Pending," April 1950, folder 56, box 4, series I, 20007, FFA. Pendleton Herring, memo to Gaither, 25 September 1951, Report No. 010834, FFA.



framework the foundation did not provide detailed guidance, not even a definition of “behavioral sciences”—perhaps because Gaither and the others had not yet settled on one.¹¹²

Neither Ford nor the universities were satisfied by the results. Though all 13 accepted the grant, a few of the schools evidently bristled at Ford’s unsolicited approach and vague instructions. Many, and perhaps most, likewise failed to meet Ford’s high expectations for the self studies.

In an early evaluation, Ford claimed that the program “stimulated a great deal of faculty thinking about the development of the behavioral sciences,” but that in “some cases ... it seems that the spirit of the grant, if not the letter, was not observed.” Some of the funds granted to Yale and Chicago were applied to “routine expenses,” Harvard used some of its monies for “overhead,” and a number of other universities spent funds outside the scope of the grant. As a group, moreover, the schools employed wildly different criteria for classifying faculty as “behavioral scientists.” Of the \$3 million grant, the evaluation concluded, “at least one-fourth (guess) is not in accord with intent.”¹¹³ One recipient, UC Berkeley, even sat on its grant for eight years, only organizing a report after a reminder from an irritated Berelson (Hauptmann 2012: 166).

Ford followed up in 1953 with \$50,000 grants to five of the original 13 universities—Chicago, Harvard, Michigan, UNC, and Stanford—to underwrite more comprehensive reports. Even in 1953 Ford’s “behavioral sciences” definition remained vague—“all those intellectual activities which contribute to the scientific study of human behavior”—with a sweeping call for recipients to catalog their “total resources for the scientific study of man’s behavior.” The Michigan report noted, pointedly, that the “behavioral sciences” term is “of recent coinage, and its meaning is neither precise nor stable.” The label was “still in process of creation and definition,” Chicago’s committee reported, with a trace of pique.¹¹⁴

Berelson judged the university self-studies a “failure.” In his “Five-Year Report,” he listed the self-studies and various other efforts to stimulate interdisciplinary research as “particularly disappointing.”¹¹⁵ The initiative was based, he later concluded, on an inflated sense of Ford’s sway that probably backfired. He cited his own

amateurishness in not knowing that you can’t do that in universities—you can’t reform universities in that way.... the University Survey was a disappointing and, in a way, traumatic episode. It wasn’t a good idea. It got a lot of people sore. The Foundation was trying to tell the universities how to reform themselves. It was bringing outsiders in to look over their shoulder and push them around. The outsiders weren’t going to do it; they were their colleagues, they weren’t mine.... They thought they had to do this in order to get our money.

112 Ibid.

113 “Report on ‘A Program in Behavioral Science Research,’” September 1951, Report No. 010818, FFA: 1–3. The Ford comments are a sober rejoinder to a much more upbeat report from the SSRC, which had received \$300,000 to administer the grant. Pendleton Herring, memo to Gaither, 25 September 1951, Report No. 010834, FFA.

114 On the second round of grants, see Macmahon (1955), 857–863. In his thorough review, Macmahon noted the “vogue of the term ‘behavioral sciences,’” adding that Ford “notably helped to give it currency by applying the name Behavioral Sciences Division [sic].” 859. Harvard University published its report as *The Behavioral Sciences at Harvard* (1954).

115 Geiger (1993), 102–103. As Geiger concludes, the five-year report’s stated disappointments “seem to be associated with the original, rather ambitious Foundation aims for reforming the behavioral sciences; the successes largely buttressed existing practices in the disciplines.”



Despite the push-back, and Berelson’s regrets concerning Ford’s heavy hand, the self-studies may have succeeded on a more a basic level, at least in linguistic terms: Elite social scientists around the country were talking about the “behavioral sciences,” however grudgingly. What started as grant-seeking opportunism could become, with enough repetition, a worn piece of the lexical furniture.

The BSP’s most high-profile project was the Center for the Advanced Study for the Behavioral Sciences (CASBS), which opened near Stanford in 1954 under director Ralph Tyler. Despite the \$10 million that the BSP spent to establish and endow the Center—easily its biggest outlay—Berelson considered it an unhappy legacy.¹¹⁶ “I meant [CASBS] to be a seminal spearhead of new developments in the behavioral sciences,” he stated later. Instead, the Center “became a kind of retreat. And Ralph [Tyler] made it into that.”¹¹⁷

Here again, though Berelson’s ambitions were unrealized, the Center’s high-profile existence in itself probably helped spread the “behavioral sciences” phrase. Even today the Center—which indeed functioned more like a scholars’ colony—is perhaps the most prominent linguistic remnant of the “behavioral sciences.”

By 1953, with Hoffman and Hutchins gone, Gaither newly installed in the presidency, and much of the original Study Committee staff—including William McPeak—in officer slots, the BSP had every reason to thrive. Social scientists otherwise sympathetic to the foundation’s initiatives, however, continued to express misgivings about the “behavioral sciences” label—even as the term spread.

The same year, social scientists affiliated with Michigan’s Institute for Social Research published a methodology collection, *Research Methods in the Behavioral Sciences* (Festinger and Katz 1953). The book’s title signaled acceptance for the new term beyond immediate Ford circles, though Marquis was linked to the project.¹¹⁸ The collection was well-reviewed, though in some cases otherwise positive reviews singled out the “behavioral sciences” language for criticism. One reviewer expressed a wish for a different name, “for the actual title seems merely to capitalize on a new and popular term.”¹¹⁹

Prominent Harvard psychologist Gordon Allport—another presumed ally—instead danced around the label. In a 1955 speech, Allport said, “Personally, I am not entirely happy with [the term] since the science we seek is a science of feeling, of thought, of dreams and of silence, quite as much as of behavior. But philanthropic foundations seem to like the name *behavioral science*, and we shall raise no objection to it lest Cinderella miss her chance to ride in a golden coach provided by the Foundation” (quoted in Herman 1996: 133).

116 Hauptmann (2012), 167. The story of the contentious formation of the Center has yet to be told. An ambitious proposal by Paul Lazarsfeld and Robert Merton—in practice championed by Lazarsfeld—to establish a training institute for advanced graduate students and junior scholars was successfully opposed by Herbert Simon, Edward Shils, and others. The Ford Foundation Archives, along with the digitized Herbert Simon Collection, document the dispute. Herbert Simon Collection, Carnegie Mellon University Libraries, Pittsburgh, PA, <http://diva.library.cmu.edu/Simon>. A condensed version of Lazarsfeld’s proposal is published as Lazarsfeld (1972). See also Thackray (1984), 59-71; and Crowther-Heyck (2005), 152–156.

117 Oral history interview of Bernard Berelson, 7 July 1972, Ford Foundation Oral History Project, FFA: 57.

118 “We are indebted,” the editors wrote, “to Donald Marquis, who participated in the planning of the project and who bears much of the responsibility for the circumstances which made the book possible” (Festinger and Katz 1953: viii).

119 Price (1954), 919. Another reviewer made a very similar observation: Chapanis (1955), 199.



The term, in short, continued to circulate despite an ambivalent reaction from its intended audience. That ambivalence was on awkward display in *The State of the Social Sciences*, a 1956 collection based on a symposium at the University of Chicago (White 1956). The book included a version of Miller's 1955 "Toward a General Theory of the Behavioral Sciences" essay, along with a chapter from Berelson. Referring to public opinion research, Berelson contrasted "today's specialist" with bygone scholars who "learnedly" studied in "broad, historical, theoretical and philosophical terms and wrote treatises." The field has become—in Berelson's enthused serial—"technical and quantitative, atheoretical, segmentalized and particularized, specialized and institutionalized, 'modernized' and 'groupized'—in short, as a characteristic behavioral science, Americanized" (Berelson 1956: 300, 304).

The book's editor, Chicago political scientist Leonard D. White, struck a different note. In his introduction, White observed that the "contemporary scene" emphasizes "the scientific rather than the humanistic or the prudential aspects of the subject matter. The center of the stage is now held by the so-called behavioral sciences." White, whose historical method had fallen into disfavor, registered the slightest unease with the "so-called" behavioral sciences. "Older forms of inquiry," he wrote, "will nevertheless persist, for wisdom and understanding come from other sources as well as mathematical analysis" (White 1956: xi).

Another prominent Chicago figure, anthropologist Robert Redfield, tied the new phrase to the "millennialistic myth" that the social sciences will one day mirror the natural sciences. "In a time when men become like machines and machines are made like men," he wrote, "behavioral scientists find it easy to think of the two as much the same" (Redfield 1954: 37, 38).

RESISTANCE FROM WITHOUT

Despite misgivings from within the social science community, the term continued to diffuse rapidly—appearing, for example, in the titles of a number of late 1950s books. In 1962, the "Behavioral Sciences Subpanel" of the President's Science Advisory Committee published a statement on "Strengthening the Behavioral Sciences" in *Science* (Behavioral Sciences Subpanel 1962). In the statement, the subpanel of social-science luminaries called for a boost in research funding and policy consultation, with "behavioral sciences" defined in vague but resolutely scientific terms.¹²⁰ The next year, the National Academy of Sciences renamed its Division of Anthropology and Psychology to the Division of Behavioral Sciences (Gordon and Negri 1966: 48).

The term survived often savage criticism from non-social scientists, too, none of whom were restrained by grant-seeking opportunism. The critic Dwight Macdonald, in his popular book on the Ford Foundation, dismissed the program and label as modish and incoherent (Macdonald 1956: 7, 80–85). Hannah Arendt, the emigre philosopher, attacked the "all-comprehensive pretension of the social sciences which, as 'behavioral sciences' aim to reduce man as a whole, in all his activities, to the level of a conditioned and behaving animal." The rise of "the 'behavioral sciences,'" she continued, "indicates clearly the final stage of this development, when mass society has devoured all strata of the nation and 'social behavioral' has become the standard for all regions of life" (Arendt 1958: 41–42).

¹²⁰ The statement concedes the "enormous scope and variety of its problems and its methods," but insists that the "general aims and criteria of evidence of the behavioral sciences are the same as they are in other sciences." Subpanel members included Neal Miller, James S. Coleman, Leon Festinger, George A. Miller, and Herbert Simon (Behavioral Sciences Subpanel 1962: 233).



The bilious ridicule that often trailed the term is captured by this 1965 parody:

- B—Be sure to give esoteric names to pedestrian notions—
- E—Even if you must adulterate the notion in the process.
- H—Have as little empirical correspondence as possible;
- A—Avoid pragmatism as it may be useful.
- V—Violate all rules of logic—unless they will prove your point.
- I—Invent your own logic—you too can be a scholar!
- O—Objectivity is to be ignored. It may prove you wrong.
- R—Rationalization is a good word; it describes other people quite well.
- A—Always dwell on exceptions. Normality is so boring.
- L—Leave the study of business to the trade schools; we would rather be educated.
- S—Scientific means hard to understand.
- C—Clinical means rats and monkeys—never people.
- I—Isn't this stuff interesting?
- E—Even though it's useless.
- N—Neuroses is what we all have. Except me.
- C—Culture is different in Scarsdale and Samoa.
- E—Emotions are important—especially on quizzes.
- S—Stratification, as in social. Looking up, it's caste. From above, it's class.

(Kernan 1965: 20, quoted in Senn 1966: 117).

Pitirim Sorokin, the Russian-born Harvard sociologist, attacked the term as an example of "obtuse jargon and sham-scientific slang" (Sorokin 1956: 12, 28). A scathing review of Berelson's *Human Behavior: An Inventory of Scientific Findings* ("what the behavioral sciences now know") quipped that the book should be called "The Nature of Intellectual Failure in the Behavioral Sciences."¹²¹

In 1963—six years after the BSP closure—a clearly defensive Berelson was still trying to justify the term's ongoing relevance. Conceding that Ford launched the label—"it was then that some people began to wonder whether they too were not behavioral scientists after all!"—Berelson complained that it has often produced "unduly hostile counteractions." It is true that the "edges" of the concept are "fuzzy," but no more so than other terms including "social science" itself. "Accordingly," he

¹²¹ Berelson and Steiner (1964); Henry (1964), 129. Berelson's book grew out of his failed "inventories" BSP project, which commissioned a series of "systematic inventories" of established postulates from high-profile social scientists including Robert Merton, Paul Lazarsfeld, and Herbert Simon. "None of them came off, none of them," Berelson recalled, "and in the end I did it for the whole damn field." Oral history interview of Bernard Berelson, 7 July 1972, Ford Foundation Oral History Project, FFA: 46–47.



pleaded, "I ask for my colleagues here the same detachment and sympathy that are given to students of other subjects that do not carry the emotional load of this effort ..." (Berelson 1963: 3–4).

Despite the criticisms from within and without, the term remained in wide and growing use throughout the 1960s. Berelson himself remarked on the term's durability. The label, he wrote in 1968, "survived the termination" of the BSP, probably because of a "genuine need for a collective term in addition to the traditional 'social sciences'" (Berelson 1968: 43).

Conclusion

As Kurt Danziger has observed, the word "behavior" has long been favored for its scientific sheen. By the second decade of the twentieth century, psychologists were already splicing the word into book titles. Far from being a "neutral category," Danziger wrote, "behavior" had become the "flag of a *movement*... a quasi-political token." (Danziger 1997: 94–96).

For Marquis and the Ford Foundation, the "behavioral sciences" near-neologism accomplished something similar. A gathering movement of self-proclaimed scientific rigor secured itself a name and an identity. For opponents of postwar scientism, the same baptismal act helped draw the lines of battle.

Berelson once wrote that the "behavioral sciences" are "here to stay" (Berelson 1963, 11). He was at least partly right: the phrase, though in slow decline by the 1970s, remains in wide use. Nevertheless, the intellectual movement that "behavioral sciences" once named is mostly dissipated. Enthusiasm for quantitative methods, nomothetic theory, modeling or any of the other intellectual features of "high modern" social science remains high in many quarters. But the cross-disciplinary networks of war-trained behavioral scientists embraced them all, with an anticipatory confidence and faith in the reconcilability of science and service that their successors could never maintain. As Hunter Heyck has argued, the decline of the "behavioral sciences" formation began in the early 1960s as a new, more discipline-focused and basic-research-oriented patronage system started to displace the foundation- and military-funded, "broker"-driven system that characterized the early Cold War years (Crowther-Heyck 2006: 420–446).

Revelations about covert military and CIA entanglements in social science research in the mid-1960s, epitomized by the Project Camelot controversy, also contributed to the weakening of the "behavioral sciences" movement (Solovey 2001). By the early 1970s, New Left veterans had joined the faculty ranks, especially in sociology and anthropology. To the insurgents, behavioral scientists' Cold War service plainly contradicted their putative commitment to value freedom. At the same time a diverse set of challenges to postwar unity-of-science aspirations came to prominence, helping to establish "behavioral science" (and the catch-all "positivism") as pejorative refrains.

Beginning in the late 1970s, the label took on a ghost-like afterlife in federal funding nomenclature, as a pejorative, and in the vestigial names of journals and scholarly associations.¹²² The term remains in circulation, but mainly as an unreflective synonym for psychology (often with a biological inflection) or in conjunction with the wildly successful new field of behavioral economics.¹²³ In

¹²² E.g., *The Journal of the History of the Behavioral Sciences*, *the American Behavioral Scientist*, *Cheiron: The International Society for the History of Behavioral & Social Sciences*, and *CASBS* itself.

¹²³ An interesting example is the name that a group of social scientists aiding the 2012 Obama campaign playfully gave themselves: the "consortium of behavioral scientists" or COBS (Carey 2012: D1).



2015, President Barack Obama issued an executive order formally establishing a “Social and Behavioral Sciences Team” charged with improving government through behavioral science “insights”—defined as “research findings from behavioral economics and psychology about how people make decisions and act on them.”¹²⁴

In its period of ascendance, however, the “behavioral sciences” language was a viable alternative to “social science.” The fact that the term’s spread was almost certainly the direct result of Ford Foundation strategy makes its career an especially interesting case study in what Robert Merton called “sociological semantics.” Unlike, say, the lapidary fortunes of “serendipity,” as traced by Merton and Elinor Barber, “behavioral sciences” arrived in a Ford-sponsored big bang.¹²⁵ The term continued to thrive, moreover, in the face of criticism and long after the removal of the Ford training wheels.

In part owing to its sudden emergence and checkered afterlife, the label has been neglected by historians. This paper has sought to restore the term to its important place in the history of postwar American social science.

124 Obama (2015). The same month, the Social and Behavioral Sciences Team issued its first annual report, which uses the same definition (“research findings from behavioral economics and psychology about how people make decisions and act on them”) and whose first two citations are to Kahneman (2003) and to Thayer and Sunstein (2008) (Subcommittee on the Social and Behavioral Sciences Team 2015: xi). Sunstein, the University of Chicago law professor, famously served as head of the Obama administration’s Office of Information and Regulatory Affairs from 2009 to 2012.

125 Merton and Barber (2004). For complementary histories of Merton’s sociological semantics, see Camic, (2010) and Zuckerman (2010).



Bibliography

- Adcock, Robert (2007) Interpreting Behavioralism, in: *Modern Political Science: Anglo-American Exchanges Since 1880*, ed. Robert Adcock, Mark Bevir, and Shannon C. Stimson, Princeton, NJ: Princeton University Press.
- Anonymous (1954) A Plan of Research in International Communication: A Report, *World Politics* 6(3): 358–377.
- Arendt, Hannah (1958) *The Human Condition*, Chicago: University of Chicago Press.
- Baars, Bernard J. (1986) *The Cognitive Revolution in Psychology*, New York: Guilford Press.
- Behavioral Sciences Subpanel (1962) Strengthening the Behavioral Sciences, *Science* 136 (3512, April 20): 233–241.
- Bentley, Arthur F. (1935) *Behavior, Knowledge, Fact*, Bloomington, IN: Principia Press.
- Bentley, Arthur F. (1939) Postulation for Behavioral Inquiry, *The Journal of Philosophy* 36 (15): 405–413.
- Berelson, Bernard (1968) Behavioral Sciences, in: David L. Sills (ed.) *International Encyclopedia of the Social Sciences*, vol. 2:41–45, New York: MacMillan.
- Berelson, Bernard (1963) Introduction to the Behavioral Sciences, in: Bernard Berelson (ed.) *The Behavioral Sciences Today*, 1–11, New York: Basic Books.
- Berelson, Bernard (1956) The Study of Public Opinion, in Leslie White (ed.) *The State of the Social Sciences*, 299–318, Chicago: University of Chicago Press.
- Berelson, Bernard, and Gary A Steiner (1964) *Human Behavior: An Inventory of Scientific Findings*. New York: Harcourt, Brace & World.
- Bessner, Daniel (2015) Organizing Complexity: The Hopeful Dreams and Harsh Realities of Interdisciplinary Collaboration at the RAND Corporation in the Early Cold War, *Journal of the History of the Behavioral Sciences* 51(1): 31–53.
- Bevir, Mark (2012) *Modern Pluralism: Anglo-American Debates Since 1880*, Cambridge: Cambridge University Press.
- Biehn, Kersten Jacobson (2008) Psychobiology, Sex Research and Chimpanzees: Philanthropic Foundation Support for the Behavioral Sciences at Yale University, 1923–41, *History of the Human Sciences* 21 (2): 21–43.
- Blackmer, Donald L M. (2012) *The MIT Center for International Studies: the Founding Years, 1951-1969*, Cambridge, MA: MIT Center for International Studies.
- Bryson, Dennis (2015) Mark A. May: Scientific Administrator, Human Engineer, *History of the Human Sciences* 28 (3): 80–114.
- Burns, James J. (1947) Review of 'The Dynamics of Learning' by Nathaniel Cantor, *The American Catholic Sociological Review* 8 (2): 155–156.



- Camic, Charles (2010) How Merton Sociologizes the History of Ideas, in Craig Calhoun (ed.) *Robert K. Merton: Sociology of Science and Sociology as Science*, 273–296, New York: Columbia University Press.
- Capshew, James H. (1999) *Psychologists on the March: Science, Practice, and Professional Identity in America, 1929-1969*, Cambridge: Cambridge University Press.
- Carey, Benedict (2012) Academic 'Dream Team' Helped Obama's Effort, *The New York Times*, November 12, D1.
- Carnegie Corporation (1947) *Annual Report*, New York: Carnegie Corporation.
- Chapanis, A. (1955) Review of 'Research Methods in the Behavioral Sciences' ed. Leon Festinger and Daniel Katz, *Quarterly Review of Biology* 30 (2): 199–200.
- Cherrier, Béatrice (2009) Constructing Economists' Identity: the 'Economics and the Behavioral Sciences' Survey of the Ford Foundation, 1952, History of Political Economy Workshop, Duke University.
- Clausen, John A. (2012) Research on the American Soldier as a Career Contingency, *Social Psychology Quarterly* 47 (2): 207–213.
- Cochrane, James L. (1979) *Industrialism and Industrial Man in Retrospect: A Critical Review of the Ford Foundation's Support for the Inter-University Study of Labor*, New York: Ford Foundation.
- Conant, James B. (1948) The Role of Science in Our Unique Society, *Science* 107 (2769): 77–83.
- Conference of Social Scientists [R-106]* (1948) Santa Monica, CA: Project RAND.
- Converse, Jean (1987) *Survey Research in the United States: Roots and Emergence 1890-1960*, Berkeley, CA: University of California Press.
- Crowther-Heyck, Hunter (2005) *Herbert A. Simon: the Bounds of Reason in Modern America*. Baltimore: Johns Hopkins University Press.
- Crowther-Heyck, Hunter (2006) Patrons of the Revolution: Ideals and Institutions in Postwar Behavioral Science, *Isis* 97: 420–446.
- Curtiss, J H. (1947) Review of 'Statistical Analysis for Students in Psychology and Education' by Allen L. Edwards, *Journal of the American Statistical Association* 42, no. 238: 315–318.
- Danziger, Kurt (1997) *Naming the Mind: How Psychology Found Its Language*, Thousand Oaks, CA: Sage.
- Dewey, John (1925) *Experience and Nature*, Chicago: Open Court Publishing.
- Dewey, John (1938) *Logic: The Theory of Inquiry*, New York: Henry Holt and Company.
- Dewey, John, and Arthur F. Bentley (1947) Concerning a Vocabulary for Inquiry Into Knowledge, *The Journal of Philosophy* 44 (16): 421–434.
- Dewey, John, and Arthur F. Bentley (1949) *Knowing and the Known*, Boston: Beacon Press.



- Dewey, John, and Arthur F. Bentley (1964) *John Dewey and Arthur F. Bentley: A Philosophical Correspondence, 1932-1951*, edited by Sidney Ratner and Jules Altman, New Brunswick, NJ: Rutgers University Press.
- Dollard, John, Leonard W. Doob, Neal E. Miller, Orval H. Mowrer, and Robert R. Sears (1939) *Frustration and Aggression*, New Haven, CT: Yale University Press.
- Dzuback, Mary Ann (1991) *Robert M. Hutchins: Portrait of an Educator*, Chicago: University of Chicago Press.
- Farr, James, Jacob S. Hacker, and Nicole Kazee (2006) The Policy Scientist of Democracy: The Discipline of Harold D. Lasswell, *American Political Science Review* 100 (4): 579–587.
- Festinger, Leon, and Daniel Katz, eds. (1953) *Research Methods in the Behavioral Sciences*, New York: Holt, Rinehart, and Winston.
- Eldridge, Seba (1937) A Methodology of Psycho-Social Inquiry (Review of 'Behavior, Knowledge, Fact' by Arthur F. Bentley), *Social Forces* 15 (3): 440–443.
- Eulau, Heinz, Samuel J. Eldersveld, and Morris Janowitz (Eds.) (1956) *Political Behavior: A Reader in Theory and Research*, Glencoe, IL: Free Press.
- Fontaine, Philippe (forthcoming) The Committee(s) on the Behavioral Sciences: When Natural Scientists Talk about Society, 1949–1955, *Journal of the History of the Behavioral Sciences*.
- Ford Foundation Archives (FFA), Rockefeller Archive Center, Sleepy Hollow, NY.
- Gaither, H. Rowan Jr., Thomas H. Carroll, William C. DeVane, T. Duckett Jones, Charles C. Lauritsen, Donald G. Marquis, Peter H. Odegard, and Francis T. Spaulding [1950] *Report of the Study for the Ford Foundation on Policy and Program*, Detroit: Ford Foundation.
- Gary, Brett (1996) Communication Research, the Rockefeller Foundation, and Mobilization for the War on Words, *Journal of Communication* 46 (3): 124–147.
- Geiger, Roger L. (1986) *To Advance Knowledge: The Growth of American Research Universities, 1900-1940*, New York: Oxford University Press.
- Geiger, Roger L. (1993) *Research and Relevant Knowledge: American Research Universities Since World War II*, New York: Oxford University Press.
- "Google Books Ngram Viewer," Google, Inc., accessed November 18, 2012, <http://books.google.com/ngrams>.
- Gordon, John, and Rocco Negri (1966) *Report of the National Academy of Sciences*, Washington, DC: National Academies.
- Gross, Neil (2008) *Richard Rorty: The Making of an American Philosophy*, Chicago: Chicago University Press.
- Hale, Dennis F. (1993) Arthur F. Bentley: Politics and the Mystery of Society, *Political Science Reviewer* 13: 1–42.



- Hammond, Debora (2003) *The Science of Synthesis: Exploring the Social Implications of General Systems Theory*, Norman: University of Oklahoma Press.
- Hammond, Debora, and Jennifer Wilby (2006) The Life and Work of James Grier Miller, *Systems Research and Behavioral Science* 23 (3): 429–435.
- Harris, Philip R. (2003) Dr James Grier Miller: Psychiatrist, Scholar, University President, Author, *Systems Research and Behavioral Science* 20 (3): 227–228.
- Harper, Robert A. (1947a) The Present Status of Questionnaire-Derived Opinion Data, *Social Forces* 25 (3): 294–297.
- Harper, Robert A. (1947b) Is Conformity a General or a Specific Behavior Trait?, *American Sociological Review* 12 (1): 81–86.
- Hauptmann, Emily (2012) The Ford Foundation and the Rise of Behaviorism in Political Science, *Journal of the History of the Behavioral Sciences* 48 (2): 154–173.
- Harvard University (1954) *The Behavioral Sciences at Harvard*, Cambridge, MA: Harvard University Press.
- Henry, Jules (1964) Review of 'Human Behavior' by Bernard Berelson and Gary Steiner, *Scientific American* July: 129–133.
- Herbert Simon Collection, Carnegie Mellon University Libraries, Pittsburgh, PA, <http://diva.library.cmu.edu/Simon>
- Herman, Ellen (1996) *The Romance of American Psychology: Political Culture in the Age of Experts*, University of California Press.
- Heyck, Hunter (2015) *Age of System: Understanding the Development of Modern Social Science*, Baltimore, MD: Johns Hopkins University Press.
- Heyck, Hunter (2014) The Organizational Revolution and the Human Sciences, *Isis* 105 (1): 1–31.
- Hilgard, Ernest R., and Donald G. Marquis (1940) *Conditioning and Learning*, New York: D. Appleton-Century.
- Hull, Clark L. (1951) *Essentials of Behavior*, New Haven, CT: Yale Institute of Human Relations.
- Hull, Clark L. (1950) A Primary Social Science Law, in: *Toward a Science of Human Behavior: a Survey of the Work of the Institute of Human Relations Through Two Decades, 1929-1949*, edited by Mark May, 79–91. New Haven, CT: Yale University.
- Hull, Clark L. (1943) *Principles of Behavior: An Introduction to Behavior Theory*, New York: Appleton-Century-Crofts.
- Hull, Clark L. (1944) Value, Valuation, and Natural-Science Methodology, *Philosophy of Science* 11 (3): 125–141.
- Hull, Clark L., Carl I. Hovland, Robert T. Ross, Marshall Hall, Donald T. Perkins, and Frederic B. Fitch (1940) *Mathematico-Deductive Theory of Rote Learning: A Study in Scientific Methodology*, New Haven, CT: Yale University Press.
-



"JSTOR," Ithaca, accessed October 2, 2012, <http://www.jstor.org>.

Kahneman, Daniel (2003) Maps of Bounded Rationality: Psychology for Behavioral Economics, *American Economic Review* 93: 1449–1475.

Kaplan, Fred M. (1991) *The Wizards of Armageddon*, Palo Alto, CA: Stanford University Press.

Kernan, Jerome B. (1965) A Student's View of the New Business Education, *Collegiate News and Views* 18 (4): 20.

Khurana, Rakesh (2007) From Higher Aims to Hired Hands: The Social Transformation of American Business Schools and the Unfulfilled Promise of Management as a Profession, Princeton, NJ: Princeton University Press.

Klausner, Samuel Z. (1986) The Bid to Nationalize American Social Science, in: *The Nationalization of the Social Sciences*, edited by Samuel Z. Klausner and Victor M. Lidz, 3–40, Philadelphia: University of Pennsylvania Press.

Kramer, Bernard M. (1964) Social Context as a Determinant of Behavior, in: *Unfinished Tasks in the Behavioral Sciences*, edited by Arnold Abrams, Harry H. Garner, and James E. P. Toman, 191–194, New York: Williams & Wilkins Co.

Kress, Paul F. (1970) *Social Science and the Idea of Process: The Ambiguous Legacy of Arthur F. Bentley*, Urbana, IL: University of Illinois Press.

Lagemann, Ellen Condliffe (1992) *The Politics of Knowledge: The Carnegie Corporation, Philanthropy, and Public Policy*, Chicago: University of Chicago Press.

Lanier, Lyle H. (1949) The Psychological and Social Sciences in the National Military Establishment, *American Psychologist* 4 (5): 127–147.

Lazarsfeld, Paul F. (1972) A Professional School for Training in Social Research, in: *Qualitative Analysis: Historical and Critical Essays*, 361–391, Boston: Allyn and Bacon.

Logan, Frank A., David L. Olmstead, Burton S. Rosner, Richard D. Schwartz, and Carl M. Stevens (1955) *Behavior Theory and Social Science*, New Haven, CT: Yale University Press.

Lowen, Rebecca S. (1997) *Creating the Cold War University: The Transformation of Stanford*, Berkeley: University of California Press.

Lucas, Scott (1996) Campaigns of Truth: The Psychological Strategy Board and American Ideology, 1951–1953, *International History Review* 18 (2): 279–302.

Lundberg, George A. (1936) Review of 'Behavior, Knowledge, Fact' by Arthur F. Bentley, *American Sociological Review* 1 (2): 318–319.

Macdonald, Dwight (1956) *The Ford Foundation: The Men and the Millions*, New York: Reynal.

Macmahon, Arthur W. (1955) Review of five behavioral science reports, *American Political Science Review* 49 (3): 857–863.



- Manicas, Peter (1990) The Social Science Disciplines: The American Model, in: *Discourses on Society: The Shaping of the Social Science Disciplines*, edited by Peter Wagner, Björn Wittrock, and Richard Whitley, 45–71, New York: Springer.
- Marquis, Donald G. (1944) The Mobilization of Psychologists for War Service, *Psychological Bulletin* 41 (7): 469–473.
- Marquis, Donald G. (1948a) Research Planning at the Frontiers of Science, *American Psychologist* 3 (10): 430–438.
- Marquis, Donald G. (1948b) Scientific Methodology in Human Relations, *Proceedings of the American Philosophical Society* 92 (6): 411–416.
- May, Mark A. (1950) *Toward a Science of Human Behavior: A Survey of the Work of the Institute of Human Relations Through Two Decades, 1929-1949*, New Haven, CT: Yale University.
- May, Mark A. (2012) A Retrospective View of the Institute of Human Relations at Yale, *Behavior Science Notes* 6: 141–172.
- Menand, Louis (2002) *The Metaphysical Club: A Story of Ideas in America*, Farrar, Straus and Giroux.
- Merton, Robert K. and Elinor Barber (2004) *The Travels and Adventures of Serendipity: A Study in Sociological Semantics and the Sociology of Science*, Princeton, NJ: Princeton University Press.
- Miller, James G. (1955) Toward a General Theory for the Behavioral Sciences, *American Psychologist* 10 (9): 513–531.
- Mills, John A. (2000) *Control: A History of Behavioral Psychology*, New York: NYU Press.
- Morawski, Jill G. (1986) Organizing Knowledge and Behavior at Yale's Institute of Human Relations, *Isis* 77 (2): 219–242.
- Morris, Charles W. (1946) *Signs, Language and Behavior*, New York: Prentice-Hall.
- Murdock, George Peter (1949) The Science of Human Learning, Society, Culture, and Personality, *The Scientific Monthly* 69 (6, December 1): 377–381.
- National Academy of Sciences Committee on Science and Public Policy (1965) *Basic Research and National Goals: A Report to the Committee on Science and Astronauts*, U.S. House of Representatives, Washington, DC: National Academies.
- Needell, Allan A. (1993) 'Truth Is Our Weapon': Project TROY, Political Warfare, and Government-Academic Relations in the National Security State, *Diplomatic History* 17 (3): 399–420.
- Obama, Barack (2015) Executive Order -- Using Behavioral Science Insights to Better Serve the American People, Office of the Press Secretary, the White House (September 15).
<https://www.whitehouse.gov/the-press-office/2015/09/15/executive-order-using-behavioral-science-insights-better-serve-american>.
- Olen, Peter (2012) *Sellars in Context: an Analysis of Wilfrid Sellars's Early Works*, Doctoral thesis, University of South Florida.



- Parsons, Talcott, and Edward A. Shils (1951) *Toward a General Theory of Action*, Cambridge, MA: Harvard University Press.
- Pickren, Wade E. (2003) James Grier Miller (1916–2002), *American Psychologist* 58 (9): 760.
- Pooley, Jefferson and Mark Solovey (2010) Marginal to the Revolution: The Curious Relationship Between Economics and the Behavioral Sciences Movement in Mid-Twentieth-Century America, *History of Political Economy* 42(S): 199–233.
- Price, Daniel O. (1954) Review of 'Research Methods in the Behavioral Sciences' ed. Leon Festinger and Daniel Katz, *Journal of the American Statistical Association* 49 (268): 919–921.
- Raucher, Alan R. (1985) *Paul G. Hoffman: Architect of Foreign Aid*, Lexington, KY: University Press of Kentucky.
- Redfield, Robert (1954) Social Scientist: Man Between, *Chicago Review* 8 (3): 35–43.
- Reisch, George A. (2005) The Marginalization of Charles Morris, in: *How the Cold War Transformed Philosophy of Science: To the Icy Slopes of Logic*, 331–343, Cambridge: Cambridge University Press.
- Schweber, Libby (2002) Wartime Research and the Quantification of American Sociology: The View From "The American Soldier", *Revue d'Histoire Des Sciences Humaines* 1 (6): 65-94.
- Schwoch, James (2009) *Global TV: New Media and the Cold War, 1946-69*, Urbana: University of Illinois Press.
- Security Resources Panel (1957) *Deterrence & Survival in the Nuclear Age*, Washington, DC: Science Advisory Council.
- Sellars, Wilfrid (1947) Pure Pragmatics and Epistemology, *Philosophy of Science* 14 (3): 181–202.
- Senn, Peter R. (1966) What Is 'Behavioral Science?' — Notes Toward a History, *Journal of the History of the Behavioral Sciences* 2 (2): 107–122.
- Seybold, Peter (1980) The Ford Foundation and the Triumph of Behaviorism in American Political Science, in: *Philanthropy and Cultural Imperialism: The Foundations at Home and Abroad*, edited by Robert F. Arnove, 269–303, Boston: G.K. Hall.
- Shils, Edward (1948) *The Present State of American Sociology*, Glencoe, IL: Free Press.
- Simpson, Christopher (1996) *Science of Coercion: Communication Research and Psychological Warfare, 1945-1960*, Oxford: Oxford University Press.
- Smith, Bruce L R. (1966) *The RAND Corporation: Case Study of a Nonprofit Advisory Corporation*, Cambridge, MA: Harvard University Press.
- Smith, Laurence D. (1988) *Behaviorism and Logical Positivism: A Reassessment of the Alliance*, Palo Alto, CA: Stanford University Press.
- Solovey, Mark (2012) Riding Natural Scientists' Coattails Onto the Endless Frontier: The SSRC and the Quest for Scientific Legitimacy, *Journal of the History of the Behavioral Sciences* 40 (4): 393–422.



- Solovey, Mark (2013) *Shaky Foundations: The Politics-Patronage-Social Science Nexus in Cold War America*, New Brunswick, NJ: Rutgers University Press.
- Solovey, Mark (2001) Project Camelot and the 1960s Epistemological Revolution: Rethinking the Politics-Patronage-Social Science Nexus, *Social Studies of Science* 31 (2): 171–206.
- Somit, Albert, and Joseph Tanenhaus (1982) *Development of American Political Science: From Burgess to Behavioralism*, New York: Irvington.
- Sorokin, Pitirim A. (1956) *Fads and Foibles in Modern Sociology and Related Sciences*, Chicago: H. Regnery.
- Stouffer, Samuel (1949) *Studies in Social Psychology in World War II: The American Soldier*, Princeton, NJ: Princeton University Press.
- Subcommittee on the Social and Behavioral Sciences Team (2015) *Social and Behavioral Sciences Team Annual Report*, Washington, DC: National Science and Technology Council.
<https://sbst.gov/2015-annual-report/>.
- Sutton, Francis X. (1987) The Ford Foundation: The Early Years, *Daedalus* 116 (1): 41–91.
- Swanson, Gale Alden (2007) James Grier Miller (1916–), International Society for the Systems Sciences, Last modified June 10, 2007, http://projects.iss.org/James_Grier_Miller.
- Thackray, Arnold (1984) CASBS: Notes Toward a History, *Center for Advanced Study in the Behavioral Sciences Annual Report*, 59–71, Palo Alto, CA: CASBS.
- Thayler, Richard, and Cass Sunstein (2008) *Nudge*, New Haven, CT: Yale University Press.
- Truman, David B. (1951) *The Governmental Process: Political Interests and Public Opinion*, New York: Knopf.
- Tyler, Ralph W. (1964) Future Prospects of the Behavioral Sciences, in: *The Behavioral Sciences: Problems and Prospects: Three Papers*, edited by Paul F. Lazarsfeld, Lawrence R Klein, and Ralph W Tyler, 27–40, Boulder, CO: Institute of Behavioral Science.
- Visel tear, A. J. (1984) Milton C. Winternitz and the Yale Institute of Human Relations: A Brief Chapter in the History of Social Medicine, *Yale Journal of Biology and Medicine* 57 (6): 869–889.
- Ward, James F. (1981) Arthur F. Bentley and the Foundations of Behavioral Science, *Journal of the History of the Behavioral Sciences* 17 (2): 222–231.
- White, Leonard D. (1956) *The State of the Social Sciences*, Chicago: University of Chicago Press,.
- Whitehead, Alfred North, and Bertrand Russell (1910) *Principia Mathematica*, Cambridge: Cambridge University Press.
- Zuckerman, Harriet (2010) On Sociological Semantics as an Evolving Research Program, in: *Robert K. Merton: Sociology of Science and Sociology as Science*, edited by Craig Calhoun, 253–272, New York: Columbia University Press.



Jefferson Pooley is associate professor of Media and Communication at Muhlenberg College, USA. He is coeditor of *The History of Media and Communication Research* (2009) and *Media & Social Justice* (2011). His research interests include the history of media research, the history of social science, scholarly communications, and consumer culture and social media.