Before the Ford Foundation:

Development of the Research Based Model of Business Education

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Conventional history of the predominant, research based model (RBM) of business education traces its origins to programs initiated by the Ford Foundation in the 1950’s. Working forward in time from World War I, this paper maps the elite network responsible for developing social science and the Ford Foundation agenda. Archival records of the actions taken by central nodes in the network document the evolution of their thinking about RBM and the actions they took to support it. Business education was married to social science from the earliest stages of development; it was a fundamental promise of the advocates for social science funding. Any appraisals of the RBM and recommendations for change should consider its full history, accomplishments, and failures not the partial, distorted view that is the conventional history. The motives of the early visionaries and the motives of those who have altered the RBM model in implementing it also require careful consideration.
Recent scandals involving prominent executives coupled with a decline in applications to MBA programs have prompted fresh calls for reform of the institutions of business education. A number of senior figures within the industry have argued for a sharp break with what will be referred to here as the research based model of business education (RBM) (e.g., Bennis & O’Toole, 2005; Ghosal, 2005; and Mintzberg, 2003). Others have called for a renewed effort at more effectively implementing the RBM in a truly rigorous fashion (Cooley, 2005; Zimmerman, 2001) while others (Pfeffer & Fong, 2002) have proposed altering the emphasis on the particular social sciences represented in the research based model. Greenbaum (2005) argued that all these critiques have overlooked significant achievements in the industry including its successful export overseas to Europe and Asia.

While the various critiques have not produced consensus regarding reform, they have revealed a striking degree of consensus about the historical development of the RBM. As we will endeavor to show, this consensus reflects an incomplete view of the historical development of the model among even the most experienced and well-informed within the scholarly community. This blind spot renders the task of accurately evaluating purpose, progress, accomplishments, failures, and digressions virtually impossible. Those who have attempted to undertake such an appraisal have worked with a cramped, severely truncated impression of the enterprise.

The purpose of this paper is to begin to close this blind spot, one that hinders reasoned appraisal and thoughtful deliberation about the industry, its development, and its accomplishments. The research strategy will begin with an examination of the early development of social science working forward to understand origins of the partnership with business education through the use of multiple sources of data and multiple modes of analysis.

Rapid growth in the social sciences during the interwar period of the 20’s and 30’s coincided with the birth of numerous institutions for policy analysis and formulation, of “organized intelligence” (Lippmann, 1922; Fisher, 1999; Merriam, 1944). Examination of the
interlocking membership of these diverse organizations will be used to identify the central figures behind the expansion of social science as well as the character of their social ties. But measures of network centrality can provide only an indicator of potential influence. Archival research on the interwar activities and correspondence between central members in this network was also undertaken to determine the actual influence activities undertaken by key members in this network during the drive to promote growth and expansion of social science. The analysis reveals a broad coalition of academics, professionals, business leaders, and government officials. Others (Baritz, 1953; Djelic, 1999; Freeman, 2004; Heaney & Hansen, 2006) have mapped different branches of this emergent coalition. However their analysis has been limited in scope and, with the exception of Heaney & Hansen, very informal. Baritz focused on the origins of industrial-organizational psychology. Freeman (2004) examined the evolving web of researchers responsible for the development of social network analysis. Heaney and Hansen formally modeled the emergent professional network of scholars comprising the Chicago School of Political Science. None have yet connected these disparate analyses nor examined connections to the propagation of RBM or other professional schools. Before detailing the more systematic analysis undertaken here, we begin with a brief review of the conventional history of the RBM.

**The Conventional History of RBM and Its Shortcomings**

Histories of both business education and the research field of organization studies consistently cite the same major forces and critical events. History stresses events within the post-World War II era, noting, if at all, only a few seemingly isolated events predating that period. The RBM is traced to the work of the Ford Foundation in the 1950’s (Bennis & O’Toole, 2005; Cooley, 2005; Ghoshal, 2005; Jeuck, 1986; Leavitt, 1989; Miner, 2000; Mintzberg, 2003; Porter & McKibbin, 1989). Zimmerman (2001)’s account is both representative and suggestive, “during the Korean War, the Ford Foundation became interested in enhancing American management via improved professional education as a means to stem communism (p. 2).”
The lengthy report “Higher Education for Business” commissioned by the Ford Foundation and authored by two professors of economics, Robert Gordon and James Howell (1959), is universally cited as providing the RBM blueprint. Some, though certainly not all (Zimmerman makes no reference to it) acknowledge the added contribution provided by “The Education of American Businessmen,” a contemporaneous volume commissioned by the Carnegie Foundation and edited by Frank Pierson, a Dartmouth professor of economics.

According to Pfeffer and Fong,

“The Gordon and Howell report and funding from the Ford Foundation and the Carnegie Council (Pierson, 1959) started business schools on their continuing trajectory to achieve academic respectability and legitimacy on their campuses by becoming social science departments, or perhaps, applied social science departments…

“The studies of business education in the 1950s (e.g., Gordon & Howell, 1959) and the accompanying foundation support to "improve" business education, came to define a normative structure for what business education should be--research-based, analytical, and founded in economics and other social sciences, teaching people general knowledge that they could use throughout their working lives. The best business schools thus attracted people from social science departments and had faculty that won awards in the social sciences, including the Nobel Prize in Economics (Pfeffer & Fong, 2002).”

Both the Ford and Carnegie reports urged widespread adoption of a model of professional business education founded on basic social science. Both urged the investment as a means of re-integrating veterans of the recent World War into the American economy. Zimmerman’s account actually goes further than most in suggesting a political motive in anti-communism but makes no attempt to understand either the political or economic reasons for Ford interest. Given the controversial social history of this Foundation (Bird, 1999; Domhoff, 2002; Fisher, 1999; Micklethwait & Wooldridge, 2004; Parmar, 1999; Wormser, 1958), the failure to look more deeply at its motives is puzzling. Examining the post-war reconstruction of Europe, Djelic (1999; see also Carew, 1987) identified what was a contemporaneous political role played by the Ford Foundation, in coordination with the Marshall Plan, in combating communist influence in post-war Europe. The coordination between the two was considerable. The Ford Foundation
chairman in the early 1950’s had actually been recruited from his previous position as head of the
Marshall Plan organization, the ECA (Schlossman, Sedlak, & Wechsler, 1987). Marshall
Program initiatives to stimulate productivity and diminish the influence of communist affiliated
labor groups entailed what Djelic referred to as exporting “the American Model” of professional
management. As Carew (1987) observed, the long term transformative impact of educational
institutions such as INSEAD (one of the RBM export success stories that Greenbaum, 2005
identified) that emerged in the wake of the Marshall program significantly extended the impact of
this American model on European practices. These events raise questions regarding the timeline
of the RBM development and connections between the various aspects of the Ford agenda. If
RBM truly began with the Gordon and Howell report, then where would Marshall program
planners find “an American Model” of management sufficiently coherent to export to Europe?

Schlossman’s (Schlossman, Sedlak, & Wechsler, 1987) detailed history of the Ford
Foundation program on business education clarifies the timeline and some key aspects of the
“American Model”. Ford actually began its funding of business education programs over a
decade before the Gordon and Howell report. A draft agenda for the foundation in 1947 called
for investment in “social engineering” that would involve the application of social science to
business education (Schlossman et al., 1987, p. 4). Philanthropy researchers and critics
(Domhoff, 2002; Fisher, 1999; Parmar, 1999; Wormser, 1958) have noted considerable ties
between the Ford Foundation leadership and other foundations established earlier, such as
Carnegie and Rockefeller. These latter funds, particularly the Rockefeller philanthropies, were
instrumental in the rapid growth of the social sciences during the 1920’s and 30’s (Fisher, 1999).
Developing the capability for social engineering, through investment in social science, was
central to their philanthropic missions. Appraising the source of the Ford Foundation’s interest in
marrying social science to business education may be facilitated by working forwards from this
erlier period of growth in social science. Understanding the origins of the RBM requires an
understanding of the development of this progressive era social movement, an era in which the American public elected a scholar as President.

**Large Scale Social Science**

Prior to the election of Woodrow Wilson as President, academics played little active role in the policy formulation process in the United States. Wilson’s subsequent decision to commit American forces to the cause of winning the war in Europe for France, Great Britain, and Italy was the catalyst for fundamental social change. Wilson recognized the urgent need to mobilize the nation’s resources behind the war effort (see Link, 1965-1992). A former President of Princeton and a highly respected Professor of Politics, Wilson understood the potential value of enlisting the academic community, including physical and social scientists, in this initiative. By Executive Order, Wilson established the National Research Council (NRC) in 1918 (National Research Council, 1919). The purpose of the NRC was to “promote research in the mathematical, physical, and biological sciences, and in the application of these sciences to engineering, agriculture, medicine, and other useful arts, with the object of strengthening the national defense, and of contributing in other ways to the public welfare.” The council originally consisted of 13 divisions including a Division of Anthropology and Psychology.

During the war, several anthropologists conducting fieldwork provided on the ground intelligence to a government that lacked a standing intelligence service or trained agents (Price, 2000). The psychological branch of NRC organized human factors studies, training programs, and the first large-scale application of psychological tests to the task of making personnel decisions – the Army Alpha and Beta tests (see Baritz, 1953; Brief, 2000; Highhouse, 2002; Yerkes, 1919). Social scientists also contributed to the War Trade Board (WTB), the Committee for Public Information (CPI), the Inquiry (the team charged with preparing plans for post-war peace-making, and the American Commission to Negotiate the Peace (ACNP, the group that accompanied Wilson to Paris to negotiate a peace treaty) (Bottom, 2003).
Appraising Wilson’s Experiment

Social scientists generated a mixed wartime record. The Army testing program demonstrated the potential use of psychometric instruments to inform personnel decisions. Though its impact on military effectiveness was unclear, the method demonstrated sufficient promise to warrant further attempts at government and commercial applications (Baritz, 1960; Highhouse, 2002; Yerkes, 1919). Veterans of the military program such as James Cattell, Walter Dill Scott, and Walter Bingham established consulting businesses to commercialize psychological testing during the 1920’s.

The CPI, or “Creel Committee”, succeeded at turning American public opinion toward enthusiastic support of the war. The task was complicated; Wilson had just won re-election the previous year on a neutrality platform, “he kept us out of the war” (Creel, 1920; Lasswell, 1927; Merriam, 1919). The sophisticated multi-media marketing campaign waged by the CPI incorporated literature, pamphlets, visual art, songs, and a coordinated campaign of respected local speakers addressing a focused set of topics. The work of the Inquiry assisted the propaganda effort. A product of Inquiry research, President Wilson’s eloquent and idealistic statement of American war aims, the 14 Points became one of the most powerful American propaganda tools (Gelfand, 1962; Nicolson, 1933; Noble, 1935). The intrinsic appeal of Wilson’s goals undermined German citizens will to continue a seemingly futile war (Klein, 1998; Luckau, 1941). The idealism of his call for open diplomacy, a global association of nations, and national self-determination (“‘Peoples and provinces must not be bartered about from sovereignty to sovereignty as if they were chattels or pawns in a game’”, cited by Nicolson, 1933; p. 41) roused nationalist movements in the Middle East and Southeast Asia, an unintended consequence with far-reaching repercussions.

If the CPI was an evident success, the ACNP represented tragic failure. Before the peace treaty with Germany was even signed, a large segment of the American delegation were
convinced that the document they had negotiated was “thoroughly dangerous to the interests of the United States,” in the words used by Adolf Berle in a request to be relieved from his posting as an advisor to the commission in May of 1919 (see Berle to Grew, May 15, 1919 reprinted in Berle, 1973 p. 13). Nor was this a purely American perspective. Resignations of expert advisors from the British delegation included John Maynard Keynes, who served as advisor on the financial aspects of the settlement, particularly German reparations payments to the Allies:

“I can do no more good here. I’ve gone on hoping even through these last dreadful weeks that you’d find some way to make of the treaty a just and expedient document. But now it’s apparently too late. The battle is lost.” (Keynes to Lloyd George, June 5 1919, reprinted in Johnson, 1977: 469).

**Institution Building**

Before the Paris conference concluded, disaffected members from the American and British delegations met to plan continued collaborations in the post-war environment (Dockrill, 1980; Parmar, 2004). They intended to gain improved understanding and correct the missteps of the Paris Treaties, developing a system of expert policy advising that would also prevent future mistakes. The two loosely coupled organizations that emerged, the Royal Institute for International Affairs in London (CH; [http://www.riia.org/](http://www.riia.org/)) and the Council on Foreign Relations (CFR; [http://www.cfr.org/](http://www.cfr.org/)) in New York were dedicated to collaborative study of international relations by leaders of business, politics, and academia. The purpose to be served by these bodies was articulated by Lionel Curtis from the British delegation at a meeting held in the Hotel Majestic on May 30, 1919 to discuss the organizational concept:

“*the settlements being made in Paris were mainly the resultant of the public opinions of various countries concerned … Right public opinion was mainly produced by a small number of people in contact with the facts who had thought out the issues involved. In Paris, a number of men, partly permanent officials and partly specialists attached to the delegations had been brought into close contact with facts…also … into close contact with each other. When the Conference closed they would constitute the most valuable factor in the production of sound public opinion. But their value would deteriorate unless steps were taken to keep them abreast of the facts and to enable them to *think out the issues by discussion with each other.*’” *italics added; Minutes of a Meeting at the Hotel Majestic, Foreign Office Archives document 608/152 cited by Dockrill, 1980, p. 666-667.*
Most present endorsed the idea of an elite policy group with enthusiasm.

“Curtis and I agreed this morning that we must look to the Royal Society as a model, for if the thing is to be effective, admission must be difficult so as to avoid a great mass of incompetent members…We should start as a nucleus with members of the Delegation here, and this should give the personal element which would help to get the thing going.” (italics added; extract from a diary, 5/31/19, Headlam-Morley, 1972).

The birth of these groups dedicated to coordinate expert opinion on policy, was succeeded in rapid succession by several new organizations that provided an infrastructure for social science. The Hoover Institution on War, Revolution, and Peace (founded in 1919; http://www.hoover.org/main/brochure/history.html), The National Bureau of Economic Research (NBER, founded in 1920; Fabricant, 1984, http://www.nber.org/nberhistory/sfabricantrev.pdf), and the Social Science Research Council (SSRC, founded in 1923) continue in the present day to shape basic social science and social policy around the globe.

The founding membership, officer structures, and board composition of these organizations contained many interlocks. They were interlocked with the membership of the Wilson’s administration’s war time agencies, particularly the ACNP. The interlocks in the membership base provide an opportunity to formally map the social network that shaped the early development of social science and its application to policy issues.

“Joint participation in events not only provides the opportunity for actors to interact, but also increases the probability that pairwise ties (such as acquaintanceship) will develop between actors… Overlap in group membership allows for the flow of information between groups, and perhaps coordination of the groups’ actions. (Wasserman and Faust, 1994, p. 293).

**Methods**

**Constructing an Affiliation Matrix**

An affiliation matrix, \( A = \{a_{ij}\} \) was constructed to map associations between the \( g \) individual actors and the \( h \) wartime agencies and the post-war institutions responsible for promoting social science. Table 1 contains a listing of the selected organizations. The \((i, j)\)th cell in the \( g \times h \) matrix is equal to 1 if actor \( i \) was affiliated with organization \( j \), and equals 0 if \( i \) was
not affiliated with j. This two-mode matrix was input to the program UCINET (Borgatti, 2002) in order to create from it two new one-mode matrices. The \( g \times g \) matrix \( B \) was a one mode matrix of shared associations between pairs of individuals that reflects the total number of organizational associations they shared out of \( h \). The \( h \times h \) matrix \( C \) reflects the total number of individual actors in the set \( g \) shared by pairs of organizations.

Figure 1 contains a visual representation generated by NetDraw of the matrix of associations between organizations. At the center of this matrix lies the CFR and the SSRC. These two organizations are flanked by Wilson’s wartime CPI and ACNP reflecting their origins as successors to the wartime collaboration.

Indices of degree and betweenness centrality (see Wasserman and Faust, 1993) were computed for each individual to better understand which persons had the greatest opportunity for communication and influence with others. The 20 most central individuals (by betweenness) are ranked in Table 2. The full network is sufficiently large that it precludes publishing a visual representation of all ties.

The list of central members includes a diverse mix of politicians (such as Franklin Roosevelt) professionals (such as Walter Lippmann) and business leaders (including Owen Young of General Electric and Thomas W. Lamont from J.P. Morgan and Company). A number of figures from the academic world occupied central positions in this network – Edwin Gay, Isaiah Bowman of Johns Hopkins, and Charles Merriam of the University of Chicago. Gay, a Political Economist, was founding dean of the Harvard Business School and the originator of the case method of instruction (Copeland, 1958; Heaton, 1952). Several others in the table also had ties to Harvard Business School. Lamont, the Morgan banker, was enlisted by Gay to teach Corporate Finance on a part time basis; he turned down an offer to become a full time faculty member. Lamont led the HBS board of business advisors, personally facilitating the establishment of the first endowed professorship there (Copeland, 1958). Berle taught Corporate Law at HBS during the 1920’s before taking a position with the Columbia Law School. Young
was a personal friend of Gay’s successor, Wallace Donham; he was named honorary alumnus in 1924 (Case & Case, 1982). Dedicating the new HBS facility, Young (1926) called for a generation of business professionals trained to wisely manage relations with customers, shareholders, and employees in the broader interest of society. He specifically urged the democratization of the workplace with participation of employees in decision-making and risk-taking.

The several connections of this elite network to the Harvard Business School provide prima facie evidence that the enterprise of business education was connected to the larger growth of social science long before the Ford Foundation was established. Affiliative ties reflect only the potential for communication and influence. To assess whether and how these individuals utilized their central positions in this network to influence events, will require a study of their actions, influence attempts, and collaborations.

Archival Research

To understand the beliefs, attitudes, intentions, and actions of the central players in this network I examined archival records provided by published sources and private collections. The published record includes memoirs and biographical references of central players (from Table 2 and some ranked below the level of 20) including Woodrow Wilson (Auchincloss, 2000; George & George, 1964; Link, 1965-1992), Franklin D. Roosevelt (Schlesinger, Jr., 1958), Edwin Gay (Heaton, 1952), Thomas W. Lamont (Chernow, 1992; Lamont, 1951), Charles E. Merriam (Karl, 1973; Simon, 1985), Walter Lippmann (Steel, 1992; Blum, 1981), Adolf Berle (Berle, 1969, 1973), and Owen Young (Case & Case, 1982). In addition to published sources, I consulted the Archives of the Council on Foreign Relations, as well as the personal papers of John Foster Dulles and Allen W. Dulles at the Seeley G. Mudd Library at Princeton University. The Baker Library at the Harvard Business School provided access to the papers of Thomas W. Lamont. The Special Collections Department at Regenstein Library at the University of Chicago provided access to the papers of Charles E. Merriam and Beardsley Ruml. The Archives of the Rockefeller
Foundations provided access to materials from their collection on the Laura Spelman Rockefeller Memorial, the Social Science Research Council, and Elton Mayo.

**Key Nodes in an Expanding Network**

In the interest of economy, this section will examine the actions, influence tactics, and collaborations between several of the central players in this network. Rather than attempt an exhaustive account, selections were made to highlight the mutual development of social science and business education. Discussion will focus primarily on the actions of Walter Lippmann, Charles Merriam, and Beardsley Ruml. However the network effects were substantial, individual action and influence can only be understood through examination of connections with other actors in the network. Prominent figures in this account will also include those directly connected to the Harvard Business School - Edwin Gay, Adolf Berle, Thomas Lamont, and Elton Mayo.

The contentious and ultimately unsuccessful campaign waged by the Wilson administration and other members of the ACNP (eg. Dulles, Hoover, and Lamont) to persuade the Senate to ratify the Treaty of Versailles extended and deepened collaboration among core network members. It complicated the task of implementing the open-ended provisions of the Treaty, including the financial section that stipulated Germany pay an un-determined amount in reparations (Bottom, 2003). Early CFR activity focused on this set of issues. In 1922, the CFR devised “the study group method” for conducting on-going research about subjects of special importance. Members began publishing accounts of wartime activities and the peace conference highlighting aspects of the collaborations with social science. This body of work addressed both the successes of the propaganda programs (Creel, 1920; Merriam, 1919) and the failures of the peace negotiations (House and Seymour, 1921; Keynes, 1920, 1923; Lansing, 1921; Nicolson, 1933).

**Walter Lippmann’s Influence.** Lippmann had occupied a unique role bridging and brokering several wartime initiatives. An advisor to President Wilson, he had been an early advocate for creation of the CPI. He later served as a propaganda agent attached to the CPI in
Lippmann organized and served as administrator for “the Inquiry”, personally shaping the drafting and interpretation of the 14 Points (see Memorandum from Lippmann to Edward M. House, October 28, 1918, reprinted in Blum, 1985, p. 97-105). In Paris for the early weeks of the Peace Conference, he was unsuccessful in gaining an official position within the commission but developed enduring friendships with members of the different delegations (Steel, 1999). In Public Opinion, Lippmann (1922) provided a general theory to explain both the CPI’s propaganda success and the negotiating mistakes made at the Peace Conference. The theory, which provided a foundation for social psychology and behavioral science (Katz & Schank, 1938; Katz & Kahn, 1966; Simon, 1986), drew on his personal experiences, professional work in the news business, and academic studies in psychology and political science.

Lippmann emphasized the limited capacity of individual citizens to process information, form judgments, and reach decisions. Solving complex problems about an actual environment requires us to construct “pseudo-environments”, mental models we can manipulate to reason about possible consequences of different courses of action. Using a term that originally referred to a crude printing process, Lippmann noted that “stereotypes” (“pictures in our heads”) form the building blocks for these mental models. The very first example of a stereotype that he provided was by way of explaining the obstacle to success in the peace negotiations in Paris.

Of the great men who assembled at Paris to settle the affairs of mankind, how many were there who were able to see much of the Europe about them, rather than their commitments about Europe? Could anyone have penetrated the mind of M. Clemenceau, would he have found there images of the Europe of 1919, or a great sediment of stereotyped ideas accumulated and hardened in a long and pugnacious existence? Did he see the Germans of 1919, or the German type as he had learned to see it since 1871? He saw the type, and among the reports that came to him from Germany, he took to heart those reports, and, it seems, those only, which fitted the type that was in his mind. If a Junker blustered, that was an authentic German; if a labor leader confessed the guilt of the empire, he was not an authentic German.

The “blind spots” introduced into the mental models by stereotypes, Lippmann concluded, create opportunities for leaders, whether in business or in government. By carefully censoring the information they share, a shrewd leader shapes the mental models of citizens or employees to “manufacture consent” for a given policy initiative. While working for the CPI, Lippmann had
Research Based Model

personally employed this process generating propaganda to convince Americans to back and Germans to quit the war effort. As Lippmann’s example illustrated, leaders must rely on their own stereotypes and mental models to solve complex problems of formulating policy and negotiating far reaching peace settlements. The blind spots in their models create the potential for mistakes with tragic consequences.

Social psychologists quickly “confirmed Lippman’s contention about the nature and extent of stereotypes” (Katz & Schanck, 1938, p. 79). His explanation of their failures also rang true with CFR colleagues who had been the lead American negotiators at the peace conference, particularly John Foster Dulles:

“The participants suffered from blind spots. The most serious of these was the so-called ‘war guilt clause’... “It is easy ... to draw the conclusion that those who then played important parts on the world’s stage were blind and stupid. Such a conclusion is warranted, but it is unimportant. What is important is to find the reasons for this blindness and stupidity which are now apparent. This, I think, cannot be adequately explained in terms merely of individual deficiencies. Rather it seems consequent upon the operation of general principles. There are usually blindness and inadequate perception when emotion becomes the directive of human action” (Dulles’ Preface to Burnett, 1940, xiv).

This was a personally damning admission by Dulles since he was among those who played important parts on the world stage; the “war guilt clause” was a creative construction he himself invented to break a serious impasse in negotiations over financial reparations. Hitler skillfully used this clause as evidence of “Der Dolschtoss” (the stab in the back), a central theme in Nazi propaganda during his rise to power (see Bottom, 2004; Mommsen, 1998).

Public Opinion concluded with an ambitious social agenda, one echoed by Dulles in his call for better understanding of the general principles that cause blindness and stupidity among decision makers. The chapter on “Organized Intelligence” called for investment in basic research on the development of stereotypes, the construction of pseudo-environments, and the impact of blind spots on decision making. The agenda also called for investment in training a future generation of experts and leaders who would understand the basic psychology of decision-making, individual limitations, and the means of recognizing and closing their own blind spots.
**Merriam’s Influence.** Based in Italy, Merriam, (1919), a professor of political science at Chicago and a professional politician, had been one of the CPI’s more innovative practitioners during the war.

“It was Captain Merriam, too, who thought of suggesting to General Pershing that wounded Americans of Italian birth or descent be invalided to Italy for convalescence. These men turned out to be our best propagandists, preaching the gospel of democracy with a fervor and understanding that would have shamed many an heir of Plymouth Rock” (Creel, 1919, p. 244-45).

After the war, Merriam was favorably impressed by Lippmann’s analysis of the craft of propaganda they had practiced. His review of *Public Opinion* concluded that “this brilliant study is indispensable to any serious student of politics and of great value to the citizen without special interest in scholarship. It points the way toward the new politics and new social science that are now slowly taking shape (p. 211-212)”.  

In a series of published articles, Merriam (1921, 1922, 1923) pushed the American Political Science Association towards the new social science, emphasizing the need for interdisciplinary collaboration with other social sciences, particularly psychology. Through correspondence and meetings, Merriam sought Lippmann’s advice regarding how to shape “the new social science.”

“I have been going over your “Public Opinion” with great interest. I have been reading with particular care Part VIII on Organized Intelligence. I hope to discuss this section with you … in the summer”. (Merriam letter to Lippmann, June 19, 1922, Box X, Folder Y, Papers of Charles E. Merriam, University of Chicago).

In return correspondence, Lippmann indicated a preference to discuss the issue in person so there is no record of the specific advice he provided. By January 1923, Merriam could report significant progress toward the establishment of the Social Science Research Council:

“you will be interested to know that the economists, the sociologists, and the political scientists have each appointed two members to confer on the creation of a Social Research Council… Perhaps some day in the remote future we might be able to put into practice some of the suggestions in the last part of your ‘Public Opinion’”. (Merriam letter to Lippmann, January 18, 1923, Box X, Folder Y, Papers of Charles E. Merriam, University of Chicago).
The connections and resources provided by the Social Science Research Council gave Merriam leverage to build the political science department at the University of Chicago around Lippmann’s agenda. A series of Merriam’s doctoral students furthered this behavioral revolution in political research (Dahl, 1961; Lowi, 1972). Early students in the pipeline – Harold Gosnell, Harold Lasswell, and Leonard White – joined the faculty to further advance the research program while simultaneously training the next generation. The establishment of Policy Centers in the Department, (particularly the Public Administration Clearinghouse) connected the School to policy planning at the community and federal level. Milestones included President Hoover’s commission of a group of scholars to catalog “Recent Social Trends” and President Roosevelt’s establishment of a “National Resource Planning Board” in the Executive Branch. Merriam worked on both ventures.

Merriam built alliances with faculty in other social sciences at Chicago to advance interdisciplinary research. A major focus of Merriam’s projects concerned measurement, measuring public opinion and measuring effectiveness of public administration. Among many other accomplishments, Merriam was instrumental in the appointment of L. L. Thurstone to a professorship in the interdisciplinary School of Social Relations at Chicago (Thurstone, 1952). That appointment would soon create innovations in opinion measurement.

Backed by funds from the SSRC, Thurstone applied psychophysical theory to develop rigorous measures of social attitudes, creating the first standard technique for attitude scaling. Reflecting Merriam’s interests in public opinion, the earliest “Thurstone Scales” included measures of “Attitude toward German War Guilt”, “Attitude toward the League of Nations”, and “Attitude toward the Monroe Doctrine” (Thurstone and Chave, 1929). For his dissertation research, Likert (1932, 1934) set out to simplify Thurstone’s effective but cumbersome methodology, creating what is today the most widely used methodology for attitude scale construction.
The first of the now-ubiquitous Likert scales was a measure of “Internationalism” reflecting the central importance of the Paris Peace Conference to the social science agenda. Contrasting isolationists and globalists, it contained the following items: “Do you favor the early entrance of the United States into the League of Nations?”, “Should the Treaty of Versailles be reconsidered, with greater leniency given to Germany?”, “Should the United States cancel a large part of the Allied war debt in return for concessions as to disarmament and economic reconstruction abroad”, “Should the United States enter the World Court?” and other like questions (Likert, 1932, p. 15-16).

Later students in the Chicago pipeline learned from the interdisciplinary network Merriam had crafted between psychology, sociology, anthropology, and economics. They made rapid progress, spreading the behavioral model of research further into other disciplines. With his dissertation, Simon (1947; also Simon, Smithburg, & Thompson, 1950) formalized Lippmann’s concept of the limits on rationality, extending it to explain complex problems of public administration. Simon’s research program at Chicago started with attempts to rigorously measure the effectiveness and efficiency of public administration (Crowther-Heyck, 2005). After World War II, his approach to developing a general science of administration attracted the interest of Leland Bach, the Dean of the new Graduate School of Industrial Administration at Carnegie Tech (Crowther-Heyck, 2005; Schlossman, et al. 1988; Simon, 1992). Simon was Bach’s first hire. The new program at Carnegie, backed by Ford Foundation funds, gave Simon the opportunity to generalize and extend the theory of public administration to the firm.

**Beardsley Ruml’s Influence.** Merriam’s entrepreneurial success was in many respects a partnership with Ruml. Though he is little known in the field of applied psychology today, Ruml may have been its most influential practitioner. However his contributions were reflected not in academic scholarship but through institution building and leadership in business and government.
Ruml worked on the Army psychological testing program during World War I. After the war he joined the Scott Company, an innovative consulting firm that applied the Army testing methods to solve personnel problems in industry for such clients as Armour, Goodyear Tire, Mead Pulp and Paper, Hart, Schaffner & Marx, and the U.S. Civil Service Commission (Clothier letter to Ruml, “Morituri Salutamus”, 5/31/23, Papers of Beardsley Ruml, University of Chicago Library Special Collections, Box I, Folder I). He was named director of the Laura Spelman Rockefeller Memorial (LSRM) at the age of 27. “The LSRM, with a total endowment of $74 million, initially targeted medical research but actively took up the cause of social research under Ruml’s direction. Ruml poured Rockefeller resources into the social sciences in general and the SSRC in particular.” (Worcester, 2001). The ambitious vision he articulated, “Memorial Policy in Social Science” (From “General Memorandum”, October 1922, Personal Papers of Beardsley Ruml, University of Chicago Library, Special Collections, Box I, Folder 4) effectively persuaded influential Rockefeller board members, particularly Raymond Fosdick, on the wisdom of this large scale investment.

“The need for knowledge of social forces is certainly very great. Not only is it required by social welfare organizations but by business and industry, and by the agencies of government as well. It is becoming more and more clearly recognized that unless means are found of meeting the complex social problems that are so rapidly developing, our increasing control of physical forces may prove increasingly destructive of human values.” (p. 2)

Ruml envisioned four phases of program development with specific reference to the problems of business education.

“It has also become clear during the year that not only must scientific work in the social subjects be stimulated, but the results and training in method should be carried to those who will use it… Attention should also be paid to Schools of Social Work, Schools of Business Administration, Schools of Public Administration, and Schools of Journalism. It is still too early to take up these educational institutions as an active field of interest, although they will follow logically a successful cultivation of the sciences themselves.” (emphasis added, p. 8).

Having constructed the financial and organizational basis for social science, Ruml left the Foundation for positions as Dean of the School of Social Sciences at the University of Chicago, CEO and Chairman of Macy’s, and Chairman of the Board of Governor’s of the New York
Federal Reserve Bank. As an advisor to Roosevelt, he conceived the “pay as you go” system of income tax withholding responsible for underwriting American participation in World War II (Shlaes, 1999).

As Fisher (1999) documented, in constructing and coordinating the social science network, Merriam and Ruml worked in partnership to connect funding from the Rockefeller, Carnegie, and Russell Sage philanthropies to a coordinated group of social scientists interested in bridging disciplines. This diverse coalition would later construct a Canadian version, the CSSRC, on the same model. Among the Merriam/Ruml innovations were the series of yearly interdisciplinary summer meetings held at Dartmouth University from 1925 to 1933 (Karl, 1974; Worcester, 2001). These meetings brought together the elite of each discipline with philanthropists for an extended period of set lectures and more open ended discussions. They mixed these with recreational activities designed to open communications and build lasting ties. These Spelman Memorial funded events provided opportunities for SSRC organizational development. A leadership group emerged that developed a system for reviewing and funding worthy applications for grants to support promising research initiatives with funds provided primarily by the Spelman Memorial.

The SSRC and Business Research. Business research and business application were an ongoing part of the SSRC’s agenda. Merriam and Ruml involved business school scholars in the work of both the SSRC and the Rockefeller Foundation from the inception. SSRC advisory committees on research included a committee on Industrial Relations chaired by industrialist Henry Dennison with a membership that included John Commons, Walter Bingham (an applied psychologist, mentor to both Thurstone and Ruml), and Joseph Willits, a faculty member at Wharton. The advisory committee on “Business Research” was chaired by Gay. Members included Willits, Walter McNair of the Harvard Business School, and Franklin Roosevelt, then Governor of New York. Initial rounds of funding for SSRC projects included funding for
attitude measurement projects undertaken by Floyd Allport. It also provided support for two specific research projects related to business, both connected to the Harvard Business School.

The first such grant supported Adolf Berle’s application to study the implications of the growing separation between ownership and control in corporations. The Modern Corporation and Private Property (Berle & Means, 1932) identified “the corporate control dilemma” created by the growing dispersion of stock holdings, thereby providing a foundation for current conceptions of agency theory and corporate governance (Williamson, 1985).

Berle (Proceedings of the Hanover Conference, August 24, 1928, The Papers of Charles E. Merriam, University of Chicago Library, Special Collections, Box 138, Folder 1) presented an early version of the evolving project at the annual Hanover meetings to an enthusiastic audience. He proposed four relationships that required further research to provide the foundation for “the political economy of our time”: (i) relations between manager and owner, (ii) relations between manager, peers, and subordinates in the enterprise, (iii) relations between the enterprise and customers, (iv) relations between the enterprise and society concluding that effective management “is becoming more and more what you might call, for the want of a better term, political” (p. 114). In the forward of the book, Berle acknowledged that the genesis of the project stemmed from his work as a faculty member at Harvard Business School. The interdisciplinary collaboration he attributed to the suggestions of Edwin Gay and the SSRC that “a lawyer and an economist working hand and hand might secure a more fertile result than either working alone” (Berle and Means, 1932, p. v).

The second stream of business research funding and support initiated by the Ruml/Merriam partnership established the Human Relations School of management that would address Berle’s second set of relations - relations of the manager within the enterprise. The Laura Spelman Rockefeller Memorial “appropriated to Harvard University for its ongoing work in industrial psychology for the period beginning June 1, 1926 and ending May 31, 1931” (letter from Ruml to A. Lawrence Lowell, May 1, 1926, Harvard Industrial Research Papers,
Rockefeller Archive Center), a total of $60,000. These funds made possible the appointment of Elton Mayo to a position at the Harvard Business School.

As Gillespie (1991) noted, Merriam and Ruml were convinced from early meetings that Mayo’s resourcefulness could create breakthroughs in social science and business application. They had sought opportunities for a permanent appointment for him, first through Willits at Wharton, finally succeeding at Harvard Business School, though only by providing Harvard with the funds necessary to pay for Mayo’s appointment. The new Dean at HBS, Wallace Donham explained the situation to Ruml, “

The thing that bothered him (President Lowell of Harvard) is that Dr. Mayo’s work is so experimental that any approach to it which contemplates continued permanency is intrinsically objectionable. He feels that the question whether the experiment should keep on at the end of five years should be entirely left to the University and the results which may be obtained.” (Donham to Ruml, March 30, 1926, Harvard Industrial Research Papers, Rockefeller Archive Center).

The role that Merriam and Uml envisioned for Mayo was evident from Merriam’s letter to Ruml:

“Malinowski has been here this week and I have seen something of him. He and Mayo are rare birds, and ought to be together in fact as they are in spirit. Although I am a relatively domesticated fellow, I should like to be with them, and if we had a few more like Malinowski and Mayo, something might be started in the good old field of social science.” (Merriam to Ruml, April 24, 1926, Papers of Charles E. Merriam, University of Chicago Special Collections, Box 137, Folder 6).

One of Mayo’s more promising suggestions to Merriam had involved the value of applying Malinowski’s observational methods to the factory floor. Both Merriam and Ruml took additional steps to facilitate Mayo’s success at HBS. Merriam sought Mayo’s assistance in a multinational study of civic socialization practices that included Germany, Soviet Russia, and fascist Italy. He also sent his most promising doctoral student, Harold Lasswell to study with Mayo at HBS and to provide him with research assistance there\(^8\). Ruml set out to connect Mayo to the Industrial Relations specialists in the Rockefeller businesses, in particular Arthur Young. As Gillespie (1991) documented, in November 1927 Young put Mayo in contact with T. K. Stevenson, then personnel director at the Western Electric Company and the ongoing experiments on industrial lighting at the Hawthorne Works. Young subsequently took steps to insure that the
research Mayo and his rapidly growing research team conducted at the Hawthorne Plant was understood and appreciated by “Rockefeller officials, Bell executives, and corporation personnel directors” (p. 124).

Four years into the experiment at HBS, foundation administrators reviewed the progress of their experiment. They agreed to appropriate Harvard a further $875,000 for a seven year period to support what they called “an exceptionally important program of research over the entire field of industrial hazards.” Noting the collaboration of the Western Electric Company, the report commented favorably on the developing ties between Mayo, Lawrence Henderson, and Henry Murray in the psychology department. It urged further coordination between HBS, the Medical School, the School of Public Health, the Engineering School, and Harvard College to insure the success of the project (Memorandum on Harvard University Research in Industrial Hazards, 4/16/30, Archives of the Rockefeller Foundation).

Mayo’s (1933) interpretation of the Hawthorne studies ranged widely across the social sciences, reflecting his interests and the SSRC agenda. Many accounts of the impact of the Hawthorne studies, its varied interpretations, and controversies have been published (Baritz, 1960; Gillespie, 1991; Miner, 2002; Sonnenfeld, 1982 are a few of many worthy sources). The studies and the wide recognition they attracted solidified Mayo’s position at the Harvard Business School and legitimized the HBS Industrial Research Division, while providing invaluable training for a group of social scientists who would do a great deal to develop the Merriam/Rumil SSRC agenda. This group clearly included Fritz Roethlisberger, George Lombard, and Thomas North Whitehead of the Harvard Business School. It also included sociologists George Homans and William Foote Whyte, as well as anthropologist Lloyd Warner, a student of Malinowski’s who designed the crucial Bank Wiring Room Observation Study (Roethlisberger, 1977).9

Mayo’s book and other accounts by his research associates (Roethlisberger & Dickson, 1939; Homans, 1952) established the human relations movement, a precursor to Organizational Behavior as a field of study. The movement identified the antecedents and consequences of
employee morale as a focus for research. Social norms and the informal relationships among employees were identified as critical determinants of productivity and morale. Participation and voice, particularly through the small work group, were identified as key tools for managers to use to improve morale, decision making, and productivity.

Testing the Social Science Model

The rapid growth of social science during the interwar period met its critical test with the collapse of the League of Nations and the complete unraveling of the Treaty of Versailles (see Bottom, 2004). That these events had been foretold by the founding members of the CFR gave them additional confidence in their convictions; it also burnished their reputations for expertise. In 1916, when Lippmann attempted to identify scholars to create the panel of experts that constituted the Inquiry, he met a serious obstacle. “On problems of first-rate importance there is a real famine of men, and we have been compelled practically to train and create our own experts” (Lippmann to Secretary of War Newton Baker, quoted by Steel, 1999, p. 129). Due to the massive investment in research and training that he and others in Table 2 had worked to facilitate, the Roosevelt administration faced no personnel shortage in 1941.

The mobilization of social science was both rapid and comprehensive. During the years prior to Pearl Harbor, the CFR worked closely with the State Department, developing plans for both war and post-war environments (Parmar, 2004). Coordinated planning accelerated once the U.S. joined the conflict. The Army initiated an Army Research Branch in October 1941 to advise the Secretary of War. A research team that included Samuel Stouffer, Leonard Cottrell, Carl Hovland, and Irving Janis organized information on troop training, readiness, and morale. Their post-war analysis of the data gathered by the Branch, "The American Soldier in World War II," was greeted with critical acclaim and has had a lasting impact on social science research (Bruner, 1982; Clausen, 1984; Wormser, 1958).

Several agencies conducted the propaganda functions the CPI had performed during World War I. They employed such social scientists as Jerome Bruner, Donald Fiske, Hadley
Cantril, Clyde Kluckhohn, Harold Lasswell, Rensis Likert, and Henry Murray (Bruner, 1982; Doob, 1947). The newly created Office of Strategic Services (forerunner of the CIA) recruited “an elite professoriate” (Katz, 1989, p. 5; Helms, 2003; O.S.S. Assessment Staff, 1948) to gather information and conduct political and psychological warfare. The faculty of the Harvard Business School became closely tied to various programs of the federal government (Cruikshank, 1987). HBS faculty initially worked on military training then directly applied statistical analysis and logistics management to a variety of military problems such as procurement and strategic bombing surveys (Roethlisberger, 1977; McNamara & Blight, 2003).

As the war unfolded, CFR study groups continued to analyze and prepare for post-war scenarios. Lasswell’s (1943) lengthy report to the CFR’s Economic and Financial Study Group and Paul Hoffman’s Committee for Economic Development examined the critical post-war tasks necessary to insure “the future of optimum employment and productivity in a free American society” given the challenge of ideological conflict with Russia. Lasswell made a priority of the training of managers capable of building up the “middle enterprise sectors of American and other economies (p. 14)”. In his vision, “the training of managers can be broad enough to include basic understanding of the policy problems that confront the economy as a whole” because “anybody who has a hand in the making of important decisions is a policy maker”. (p. 15). To facilitate large scale training, Lasswell called for “refresher courses” for the use of management in war industries. Conferences would be held to deepen contacts between business, government, and the universities. “Special institutes may be organized to stand between the existing structure of professional schools and the top policy making posts. In many ways the most productive student body is composed of junior executives who have been out of school long enough to demonstrate their worth, and who can profit by an intensive period of study and discussion.” (p. 15-16).

As Lasswell’s report anticipated, the successful conduct of the hot war with Germany was succeeded by ideological struggle with Soviet Russia. The techniques and professionals who
assisted in the rapid mobilization and successful prosecution of the war with Germany and Japan. Continued to work on related projects with generous financial support from various agencies of the federal government. The network of elite philanthropic foundations, now financially dominated by the newer Ford Foundation, provided support for projects that could not be funded directly by the Defense Department or the Central Intelligence Agency. Projects supported in this manner included Hadley Cantril’s Institute for International Social Research, Clyde Kluckhohn’s Russian Research Center at Harvard, the MIT Center for International Studies, and various area studies programs that have provided much of the intellectual foundation for present day cross-cultural research (Simpson, 1994). Personnel management techniques designed during the war, including the stress interview and the assessment center, were transferred to the private sector for business application (U.S. Office of Strategic Services, 1948; Bray & Campbell, 1968).

Programs of aid-giving for reconstruction in Europe and Japan were critical early moves in the cold war. The construction of the United Nations, the development of the World Bank, the International Monetary Fund, and the European Economic Community represented additional steps. As in World War II, all these programs employed veterans of the Wilson administration’s failures and the generation of social scientists trained during the 1920’s and 30’s. Inquiry veteran Isaiah Bowman was an architect of the U.N., for example. World Bank President John McCloy noted that “What took place after World War I was the forerunner of the Marshall Plan. But back then the rehabilitation of Europe was done in a private capacity.” (cited by Chernow, 1990, p. 488).

Djelic (2002) informally mapped the “bridging network” responsible for using the Marshall Program as a vehicle to reshape the French and German political economies to adapt them to American practices (See Figure 2). Key players on the American side of this bridge included Walter Lippmann and John Foster Dulles (ranks 11 and 16 on betweenness centrality in Table 2). On the French side, they included Georges Doriot, a Professor of Business Administration at Harvard Business School and founder of INSEAD. In Djelic’s map, the two
central figures were Paul Hoffman (future head of the Ford Foundation) and Jean Monnet, a merchant whose rise to prominence in French political circles began at the Paris Peace Conference. There he formed lasting friendships with Lippmann, Dulles, Berle, Herter, and other individuals associated with the ACNP. Hoffman’s Economic Cooperation Administration, the primary conduit for Marshall Program funding, employed a number of social scientists, including economist and OSS veteran Richard Bissell and two future Nobel Prize winners, Thomas Schelling and Herbert Simon (Crowther-Heyck, 2005; Simon, 1991).

ECA funding paid for training programs and study trips from European managers and labor leaders. The content of the “American Model” the ECA transferred to Europe coupled Keynesian macro-economic policies with aspects of scientific management (which the labor leaders in Europe resisted) and the Human Relations model of management developed at HBS (Carew, 1987; Djelic, 1999, 2002). American labor leaders trained at HBS and closely associated with Elton Mayo (most notably Clinton Golden) were employed by Hoffman’s ECA to sell these programs. They succeeded in dividing the European labor movement, persuading skeptical European colleagues who might otherwise be open to influence from Communist labor leaders. Communists had gained considerable influence in the immediate post-war labor movement because of their active leadership of the war-time resistance movement (Carew, 1987). The efforts undertaken by the large network of Wilson-era veterans yielded significant results in both the War and the Post-War environment. While exporting the “American model” to Europe through the Marshall Plan, many of these same individuals were involved in efforts to further institutionalize the model in the U.S. The Carnegie and Ford Foundations provided the financial resources to accomplish these goals. Bissell11, for example, led the behavioral sciences program at Ford that made the all important investments in business education.

Conclusions

The purpose of this project was to enhance understanding of the marriage of business education and social science. By consensus, traditional histories begin with the work of the Ford
Research Based Model

Foundation in the 1950’s. Taking a different approach, this project worked forward in time from the Wilson administration’s sponsorship of social science. The analysis took two forms. Systematic examination of memberships in the various institutions created during World War I by Woodrow Wilson and in the interwar decades by those seeking to promote social science revealed the dense pattern of interlocks between these diverse enterprises. Indices of centrality revealed potential influence wielded by individuals with ties to business education, particularly the Harvard Business School. Interlocking configurations create opportunities for information flow and “perhaps coordination of the groups’ actions’ (Wasserman & Faust, 1994, p. 293).

The secondary analysis of archival material related to the central members of this elite network revealed not merely potential, but rather a very high degree of coordination. The Ruml-Merriam partnership successfully married interdisciplinary social science to philanthropy. The concept of applying the insights gleaned from social science to administration was central to their vision from the very beginning of their partnership. For Merriam, public administration of the kind studied by doctoral students like Herbert Simon was the first priority. But, as he noted in 1944, “the problem of the state is no different from that of the family, or the church, or the industry, or the union, or the social club – for all alike deal with the same human material, looked at from different points of view. Insight into human nature is equally indispensable in all these categories, and intelligence may play the same role in the various groups of mankind (p. 268).”

The vision that Ruml articulated to the Rockefeller philanthropists described the marriage of social science insights to both public and business administration. That promise was an important part of what persuaded industrialists like John D. Rockefeller Jr. (and advisors like Raymond Fosdick12) to finance this vision. Directly through his research and training program at the University of Chicago, Merriam developed behavioral science and behavioral scientists like Thurstone, Gosnell, Lasswell, Almond, and Simon. Indirectly, he and Ruml effected breakthroughs in business research through the SSRC and the Harvard Business School. Given the connections of that school to the rest of the network, this was a likely focal point for early
implementation of change. Their personal efforts to establish Elton Mayo as an industrial researcher bore fruit, bringing long term change at HBS. Their success depended on the efforts of business leaders capable of mobilizing vast financial resources and social influence. Rockefeller’s network paid HBS for Mayo’s expenses, connected him to the ongoing Hawthorne Studies, and publicized his research team’s analysis.

Less clear, but worthy of further research, is the precise role played by Owen Young, the chairman of General Electric and later the senior figure in Paul Hoffman’s “Committee for Economic Development”. Young’s (1926) dedication speech at the Harvard Business School in the mid-1920’s, called on HBS faculty to develop both a stakeholder theory of the firm and a human relations theory of industrial cooperation on the shop-floor. He emphasized the need to train a generation of business leaders with a strong sense of propriety and social responsibility to the general public. Young’s close personal friend Wallace Donham, the 2nd Dean of the Harvard Business School, both placed Mayo at HBS and became the greatest advocate for his research (Donham, 1952; Roethlisberger, 1977).

These two sets of analyses challenge the received consensus regarding the history of the RBM. That history places the genesis of the RBM in the research of a group of scholars – Gordon, Howell, and Pierson in the 1950’s (Bennis & O’Toole, 2005; Cooley, 2005; Mintzberg, 2003; Porter & McKibbin, 1988). Accomplishments and setbacks of the RBM must then be measured solely by examining the progress since 1960 when the reports began to be implemented. Funding credit for the RBM is accorded solely to the Ford Foundation, though Ford and its motives are typically treated as a black box. The Carnegie GSIA is accorded credit as the original model that transformed the industry. Harvard is viewed as a unique non-RBM alternative model that survived the RBM but was not broadly propagated through the rest of the education industry.

The archival record indicates the considerably longer history and the much slower implementation of RBM and vital links between the HBS and GSIA models. The marriage
between business education and social science began with the birth of large scale social science, indeed the promise of this marriage was a primary justification for the large financial investment required to conduct “the new social science”. While they worked with Mayo and Donham to make progress on the marriage in the short term, Ruml and Merriam envisioned the true fruits of the marriage would come only in the long run. During World War II, Merriam’s student Harold Lasswell reported to the Committee on Economic Development (led by Paul Hoffman and Owen Young) and to the Council on Foreign Relations that the looming ideological struggle of the post-war era would require the full implementation of Ruml’s vision, a large scale investment in training a new class of professional managers. Training efforts along these lines began at HBS soon thereafter (Roethlisberger, 1977). That the Ford Foundation Hoffman led in the early 1950’s put investing in RBM firmly on its agenda was a logical extension of the development path Ruml and Lasswell’s mentor Charles Merriam initiated in the early 1920’s, with support from Hoffman’s own mentor Owen Young.

The financial investment in social science in general, and in Elton Mayo and the human relations program in particular, received practical application during World War II and post-war reconstruction of Europe and Japan (Djelic, 1999; Tiratsoo, 2000). In the 1950’s reports for their philanthropic benefactors, Gordon, Howell, and Pierson advocated greater investment and propagation of both the Harvard and Carnegie models. The Carnegie model was predicated on interdisciplinary study of complex problems of administration – wedding economics, psychology, sociology, anthropology, and the emerging decision sciences. The first faculty member hired by the Dean of this new venture, Leland Bach was Merriam’s (and Lasswell’s) student Herbert Simon. Simon (1947) had already formalized and extended both Lippmann’s (1922) theory of limited rationality and human relations theories of management. He showed quite generally how organization could extend bounds on rationality and close blind spots in strategic thinking. In building a faculty at GSIA, Simon recruited a student of his own teachers at Chicago who had since moved to Yale, James March. Their collaboration with Harold Guetzkow produced one of
the foundational texts in organizational science (Kilduff, 1993). Their book, Organizations, was one of the models of proper business scholarship cited by the foundation reports.

The Ford Foundation philanthropists succeeded in remolding business education to the form Beardsley Ruml had persuasively sold to the Board of the Laura Spelman Rockefeller Memorial. Though they differ sharply on the merits of the transformation, even Sumantra Ghoshal and Thomas Cooley agreed on this fact. Evaluating the successes and the failures of this particular model, requires evaluating its full evolutionary history. That includes applications predating the Ford Foundation, during World War II, during post-war reconstruction, and during the conduct of the Cold War. The completion of that assessment is certainly beyond the scope of the present paper but an important subject for future study. That assessment will raise important questions about the values of those steering the educational mission and identifying how those values were reflected in and realized by the changes brought about by the development and application of social science (Brief, 2000).

A fruitful research question might entail comparing the current realization of the RBM with the model as actually envisioned by Ruml, Merriam, and business leaders like Owen Young. How was the RBM as it is currently practiced in business schools around the globe altered over time? Merriam’s insistence on the need for truly interdisciplinary collaboration and integration of psychology, economics, sociology, political science, and anthropology appears to have given way to specialized functional silos. Simon successfully implemented Merriam’s approach at GSIA initially, but even there the forces of specialization reshaped the model over time (Crowther-Heyck, 2005; Mintzberg, 2003). Owen Young’s (1927) call for HBS to develop both a stakeholder theory of the firm and a human relations approach to management also appear to have shifted over time in its implementation. What values were served and who benefited from the original vision and from altering Young’s vision of RBM, a vision that appeared closely attuned to Ruml’s? Answers to these questions may begin to provide clarity to the debate over the future direction of business education and the proper role of social science in that future.
Research must also rectify the limitations of the present design. The affiliation network analyzed here was roughly constructed and roughly analyzed for preliminary exploration. The recent development of core-periphery models of network structure (Borgatti & Everett, 1999) may provide a better representation of the structure underlying these particular social ties. Core and periphery memberships appear to be a promising approach for depicting ties within elite social networks.

Collapsing over the entire interwar period inaccurately represents opportunities for information flow. It obscures important distinctions. It would be instructive to examine the dynamics of network formation by refining the analysis temporally. Social ties of the World War I era organizations should be examined before study of the 1920’s connections that formed downstream in time. This analysis of dynamics could be extended to include formal assessment of World War II era organization of the CFR and the various wartime agencies. Additional organizations should be included in the analysis. Given the power and influence of the banking firm J. P. Morgan and Company, analysis should include the full set of partners from that firm. These analyses would permit a connection to the later networks informally studied by Clausen (1984) and Djelic (2004), i.e. to the more widely studied post-World War II era social science.

Formal analysis of Djelic’s network requires extending the affiliation matrix to European delegations at the Paris Peace Conference. An accurate representation of the coalition responsible for the Gordon and Howell report would require an examination of interlocks with Paul Hoffman’s (and Owen Young’s) Committee for Economic Development, the Marshall Plan Economic Cooperation Administration, and of course the Ford Foundation officers and board members of that era.

References


Likert, R. 1932. A technique for the measurement of attitudes, Archives of Psychology, 140: 52.


Table 1.

Selected organizations involved in the development of social science: 1919 to 1939.

<table>
<thead>
<tr>
<th>Group or Organization</th>
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<tbody>
<tr>
<td>1 War Trade Board</td>
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<tr>
<td>2 Price Control Section</td>
</tr>
<tr>
<td>3 Central Bureau of Planning and Statistics</td>
</tr>
<tr>
<td>4 American Commission to Negotiate the Peace</td>
</tr>
<tr>
<td>5 Anglo-American Planning Meeting, Hotel Majestic, 5/30/19</td>
</tr>
<tr>
<td>6 The Inquiry</td>
</tr>
<tr>
<td>7 Committee on Public Information</td>
</tr>
<tr>
<td>8 Council on Foreign Relations (Founding Members)</td>
</tr>
<tr>
<td>9 Council on Foreign Relations Directors 1919-1939</td>
</tr>
<tr>
<td>10 Council on Foreign Relations War &amp; Peace Studies</td>
</tr>
<tr>
<td>11 Hoover Institute</td>
</tr>
<tr>
<td>12 President's Committee on Business Cycles &amp; Unemployment</td>
</tr>
<tr>
<td>13 Rockefeller Foundation Officers 1919-1939</td>
</tr>
<tr>
<td>14 Committee on Political Research (APSA-1922)</td>
</tr>
<tr>
<td>15 Social Science Research Council Officers 1926-1930</td>
</tr>
<tr>
<td>16 Hanover Meeting Participants 1925</td>
</tr>
<tr>
<td>17 Hanover Meeting Participants 1926</td>
</tr>
<tr>
<td>18 President's Committee on Social Trends</td>
</tr>
<tr>
<td>19 National Resource Planning Board Members</td>
</tr>
<tr>
<td>20 National Bureau of Economic Research (Staff &amp; Board)</td>
</tr>
<tr>
<td>21 National Research Council: Division of Psychology</td>
</tr>
<tr>
<td>22 Roosevelt's Brains Trust</td>
</tr>
<tr>
<td>23 Scott Company: Board and Staff</td>
</tr>
<tr>
<td>24 The Psychological Corporation: Board and Staff</td>
</tr>
<tr>
<td>25 Harvard Business School Faculty 1919 to 1939</td>
</tr>
<tr>
<td>26 Committee of the Experts 1923 (&quot;Dawes Committee&quot;)</td>
</tr>
<tr>
<td>27 Young Committee on Reparations 1927 (&quot;Young Committee&quot;)</td>
</tr>
</tbody>
</table>
Table 2.
Measures of centrality for individuals in the selected interwar institutions. Only the 20 actors with the highest index of betweenness centrality are shown.

<table>
<thead>
<tr>
<th>Name</th>
<th>Lifespan</th>
<th>Position</th>
<th>Index 1</th>
<th>Index 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gay</td>
<td>1867-1946</td>
<td>Dean, Harvard Business Sch.</td>
<td>240713.5</td>
<td>22.632</td>
</tr>
<tr>
<td>Wilson</td>
<td>1856-1924</td>
<td>President of the United States</td>
<td>132818.6</td>
<td>12.488</td>
</tr>
<tr>
<td>Mitchell</td>
<td>1874-1948</td>
<td>Professor, Columbia Univ.</td>
<td>49326.88</td>
<td>4.638</td>
</tr>
<tr>
<td>Lamont</td>
<td>1870-1948</td>
<td>Partner, J. P. Morgan</td>
<td>47121.52</td>
<td>4.43</td>
</tr>
<tr>
<td>Bowman</td>
<td>1878-1950</td>
<td>President, Johns Hopkins</td>
<td>32728.14</td>
<td>3.077</td>
</tr>
<tr>
<td>Shotwell</td>
<td>1874-1965</td>
<td>Professor, Columbia Univ.</td>
<td>29936.57</td>
<td>2.815</td>
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Figure 1.
Spatial representation of the interlocking membership of selected wartime and post-war institutions, 1918 to 1930.

Notes. Brook = Brookings Institution; I = Inquiry; CPI = Committee on Public Information; WIB = War Industries Board; WTB = War Trade Board; NCRPsych = Psychological Branch of the National Research Council; ACNP = American Commission to Negotiate the Peace; HMMM = participants at the joint planning meeting for a post-war institute on international affairs held at the Hotel Majestic, Paris in 1919; CFR22 = founding members of the Council on Foreign Relations; CFRDir = Board of Directors of the Council on Foreign Relations; DawesCo = Committee of Experts to renegotiate the Versailles Treaty Reparations Clauses in 1923; HBS = Faculty of the Harvard Business School; APSAComm = Committee on political research of the American Political Science Association, 1922. ScottCo = Members of the Scott Company consulting firm; PsyCorp = founding members of the Psychological Corporation consulting company; RockFound = board members of the several Rockefeller philanthropies during the interwar period. PC1921 = President Harding’s Committee on Business Cycles; NBER = National Bureau of Economic Research.
Figure 2.
The bridging network responsible for transferring “the American Model” of Management to Europe through the auspices of the Marshall Plan (adapted from Djelic, 2001).
ENDNOTES

1 Berle was one of nine American delegates who resigned at the same time. Other members of the “Jeunesse Radicale” included Samuel Morison, Lincoln Steffens, and future Senator (R-Mass.) and Secretary of State Christian Herter.

2 The three initial study groups examined “Post-War Economic and Financial Problems” (Thomas Lamont, Wesley Mitchell, and John Foster Dulles were among the 10 members), Problems in Central Europe (chaired by Isaiah Bowman), and International Organization (Whitney Shepardson, Edwin Gay, Walter Lippmann, and Learned Hand were among the 8 members) (Archives of the Council on Foreign Relations, Box 38, Records of Study Groups).

3 As an undergraduate at Harvard, Lippmann studied psychology with William James and political science with Graham Wallas. Public Opinion clearly reveals the influence of the former’s Principles of Psychology and the latter’s Human Nature and Politics.

4 Bottom (2003) showed that this passage paraphrased, though did not cite, Keynes’ polemic “The Economic Consequences of the Peace”. Given their friendship and the aid Lippmann rendered to Keynes in publishing and promoting his book, the similarity cannot be coincidental, though the direction of influence remains a puzzle.

5 “I have a letter from Professor Woodward informing me about the promotion to a professorship. I want to take this opportunity to put in writing my appreciation of the confidence that you have expressed in my suitability for your social science projects. I shall of course do my best to live up to your expectations of me in these new relations. I shall probably always remain a psychologist but if, in that capacity, I can contribute anything to the development of other social sciences as well, that will be one of my keenest satisfactions. I am enclosing a carbon copy of my acknowledgement to Mr. Woodward. I am of course at your call concerning social science projects for next year.” (Letter from Thurstone to Merriam, 15 June 1927, The Charles E. Merriam Papers, Box XLI, Folder 11).

6 As a psychologist who was also the leader of a major retail department store chain, Ruml quickly grasped the practical commercial significance of “framing effects” and consumer’s mental accounting. The “Ruml Plan” for income tax withholding was an adaptation of the installment plan for encouraging consumer’s to make large purchases at Macy’s. Decades later, Thaler (1985; see also Prelec & Loewenstein, 1998) provided the formal behavioral decision theory of installment plans. Reflecting their own historical blind spots, behavioral decision theorists have not yet recognized Ruml’s revolutionary application of mental accounting concepts.

7 The SSRC specifically sought to involve both Columbia and HBS in the execution of the project. For reasons that are not clear from the archival record, the HBS administration eventually declined to participate. Berle does explicitly acknowledge his debts to both Gay and HBS for inspiring and shaping the project.

8 Lasswell’s studies with Mayo, culminated in a classic text of political psychology, “Psychopathology and Politics” (1932).

9 Warner took a position at the University of Chicago where he pioneered in the application of behavioral methods to the study of consumers (Easton, 2001; Freeman, 2004) and shaped the study Deep South (Davis, Gardner, & Gardner (1941), on the social system in a Mississippi town. As Becker (1999) pointed out, Warner was “the inspiration and principal advisor” to the authors. Gardner later collaborated in Warner’s market research firm.

10 This practice created a scandal when made public through a series of articles published by the magazine Ramparts during the late 1960’s (Stern, 1967a, b). The magazine showed that the CIA had used the
Rockefeller, Ford, and Carnegie Foundations as conduits for masking the source of funds underwriting social science research, non-governmental organizations, and certain journalists (Helms, 1999). Saunders (2000) provides a complete picture of the extent of CIA involvement in cultural and intellectual developments during the 1950’s and 60’s as well as the funding pipeline provided by the Ford Foundation.

11 Bissell left Ford to join Allen Dulles at the CIA. There he developed the U-2 spy plane and the ill-fated plan to invade Cuba that led to disaster at the Bay of Pigs (Helms, 2003).

12 Fosdick was an attorney who became involved with the Rockefeller philanthropies as a member of the New York City Board of Education. An aide to General Pershing during the Paris Peace Conference he later served as Under Secretary General for the League of Nations.