



How Foundations Think: The Ford Foundation as a Dominating Institution in the Field of American Business Schools

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ABSTRACT

The question of institutional change has become central to organizational research (Powell, 2008). Recent scholarship has demonstrated, often through carefully researched cases, that institutions can and sometimes do change. According to this research, there are two primary factors that can cause institutions to change. First, institutional entrepreneurs, including individual actors or small group of actors, are able to think and act outside the confines of their institutional context, and therefore, mobilize change in directions that favor new sets of interests (for a review, see Battilana, 2010). A second factor which contributes to institutional change are the processes endogenous to the everyday functioning of institutions, such as the loose coupling between formal and informal practices or the contested meanings in the adoption of new practices (Leblibici, et. al, 1991; Lounsbury and Pollack, 2001). While both research approaches have been quite productive and provocative, some scholars have raised concerns about this turn in institutional research. They point out that there is a theoretical inconsistency between the strong reliance on individuals as the primary unit of analysis and the examination of endogenously generated processes to explain institutional change (Scott, 2008). For example, the practical deficiencies of individual agency and endogenous processes as the primary sources of institutional change become especially apparent when one considers large-scale institutions such as healthcare, academic disciplines, or social services, which are nested within or cut across a variety of institutional sectors. These institutions either operate within a highly constrained environment of norms, regulations, and practices that are taken-for-granted or in a context of pluralistic and contested demands, (D'Aunno, Succi & Alexander, 2000; Denis, Lamothe & Langley, 2001; Abbott, 1988; D'Aunno, Sutton, and Price, 1991).

This research modestly attempts to explore a decidedly more organizational and exogenous perspective to explain institutional change. We start with a construct called dominating institutions, a class of formal organizations that are purposively designed to change other institutions. We suggest that such organizations exist and provide us with a stepping stone

toward a more theoretically consistent and empirically grounded explanation for how large-scale institutional change sometimes occurs.

The goal of this paper is to describe the structural characteristics and associated behaviors of dominating institutions as they incite change within other institutions. Their primary structure can best be described as adjacency, a space between institutional fields that provides these organizations with the advantages of connectivity across a wide variety of institutions and with a vantage point that allows them to think strategically about key intervention points for changing an institution. However, while adjacency is an important structural position, it is not, by itself, dominance. Dominance requires action. Dominating institutions exercise dominance by: (1) brokering across different institutional sectors, (2) legitimizing or stigmatizing organizations and/or their practices, and (3) creating resource dependencies with the key organizations they are trying to change.

We carry out this research by examining a large-scale foundation and its approach to reshaping one of the largest institutional sectors within higher education. Specifically, through a historical analysis, we document the Ford Foundation's organizational characteristics, its modes operandi, and substantive decisions for reshaping America's graduate schools of management between 1952 to 1965 from a vocationally, disparate, but 'successful' field to a more academically and discipline based orientation. We frame two questions in order to anchor the scope of our investigation: What are the structural characteristics of a dominant institution? What key behaviors do dominant institutions use to allow them to significantly reshape an existing institution?

Our paper is organized in four parts. Part one describes, in greater detail, the constructs of dominating institutions, adjacency, and dominating behaviors. Part two introduces our research context, data sources, and research methods. Part three presents the key findings of how the Ford Foundation dramatically shifted the nature of business education. Part four discusses the implications of our findings and the potential for future research on institutional change.

FOUNDATIONS AS DOMINATING INSTITUTIONS

Foundations are an ideal research setting in which to study the processes of institutional change (Dimaggio, 19xx). The general-purpose foundation, like the limited liability corporation, is a legal form. Its roots can be traced to English law. During the 18th century, endowing a

charity—or trust—was a common means of providing economic support for collectively valued institutions, such as churches and charities. In the early 20th century, as a consequence of changes to United States tax laws and new federal statutes, the philanthropic foundation or general-purpose foundation, as it is commonly described in the scholarly literature, became a new organizational form with a distinct legal and social identity.¹ Its purpose was to improve the “public welfare” and work for the “benefit of humanity.”

General-purpose foundations have a unique legal designation and they operate differently from other non-profit organizations that are aimed at positively affecting societal institutions. In their basic approach to fulfilling their broad missions, foundations are less constrained than government bureaucracies, more organized than social movements, and more purposeful than universities. They are not special interest groups, despite their engagement of grass roots issues with a political stake. Also, although they almost always invoke a national purpose or aim, they cannot be mistaken for government agencies because their leadership is not selected through a democratic process. Finally, foundations are often preoccupied with research, pedagogy, and curriculum, and employ former academics in key leadership and staff positions. Nevertheless, they are unlike universities since they neither teach nor conduct research themselves. The earliest examples of these general-purpose philanthropic foundations include the Rockefeller, Ford, Sage and Carnegie Foundations. More recently, the Gates, Skoll, and Broad Foundations, have been designated as general-purpose foundations, and like their earlier brethren, have a broad aim to improve the well-being of society.

Historically, foundations have used education to reshape institutions (Langemann, 1983). Former academics and staff members with strong academic credentials constitute a major contingent in foundation leadership (Langemann, 1983). By focusing on changing educational structures, research agendas and curriculums, foundations have been able to catalyze wide-ranging as well as long-term institutional change in arenas as diverse as healthcare, social welfare programs, labor relations, and civil rights. For instance, the Carnegie Foundation

¹ For example, the Carnegie Corporation’s founding charter states its purpose as: “to promote the advancement and diffusion of knowledge and understanding among the people of the United States, by aiding technical schools, institutions of higher learning [*sic*], libraries, scientific research [*sic*], hero funds, useful publications, and by such other agencies and means as shall from time to time be found appropriate therefore.” *Source*: Lester, Robert M., *Forty Years of Carnegie Giving* (New York: Scribner, 1941), p. 93. The Ford Foundation’s mission in 1948 is to “advance human welfare” [Ken--check wording here and put in citations for FF using annual report].

published the Flexner Report on medical education as a means of altering the entire field of medicine. This report impacted medical schools as well as the organization of hospital systems, healthcare, and insurance delivery (Rueff, 2004). Langemann (1995) found that the Carnegie Foundation's classification of research universities served to modify the broader research and development field. Seybold (19xx) has shown how during the 1960s, the Ford Foundation reshaped the discipline of political science away from its historical normative concerns of the field, such as the health of a democracy and the nature of a good civil society, with a new quantitative approach rooted in rational choice theory and a positivist approach to theory, thereby changing public discourse about the meaning of low voter turnout.

Foundations have modified the trajectory of existing educational programs in their attempts to change institutions, and in some instances, they have also created new forms of higher education programs and professional schools in order to facilitate the creation of new institutions and academic disciplines. The Rockefeller Foundation funded the creation of historically black colleges and financed the founding of schools of public health at major universities. Both the Laura Spellman Foundation and the Sage Foundation provided funding for universities to create departments of social sciences during the 1910s and 1920s. Today, the Gates Foundation and Broad Foundation are trying to reshape the entire field of primary education by creating new degree programs for school superintendents, funding charter schools, introducing national testing, and de-legitimizing teachers' unions. The Skoll Foundation is helping to construct the field of social enterprise through supporting academic research on the subject, as well as funding programs to integrate teaching about climate change into school science curriculums. The Ford Foundation has recently undertaken a project to encourage colleges and universities to increase awareness among undergraduates and professional school students about the issue of growing inequality in American society.

ADJACENCY AND THE EXERCISE OF DOMINANCE- BROKERING, LEGITIMATING AND CREATING RESOURCES DEPENDENCE

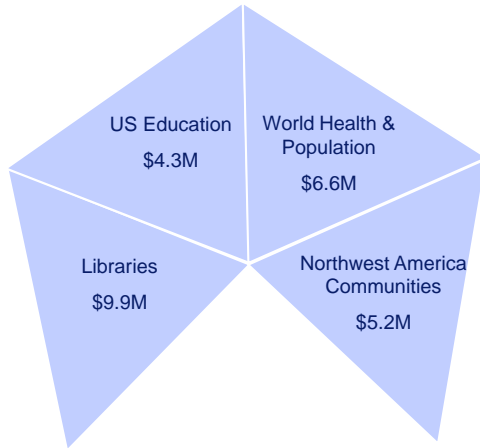
Adjacency

The goal of improving human welfare is broad in nature, and this allows foundations to occupy an intermediate space rarely occupied between institutions which we call adjacency. Adjacency provides foundations with a unique positional and perceptual vantage point. By

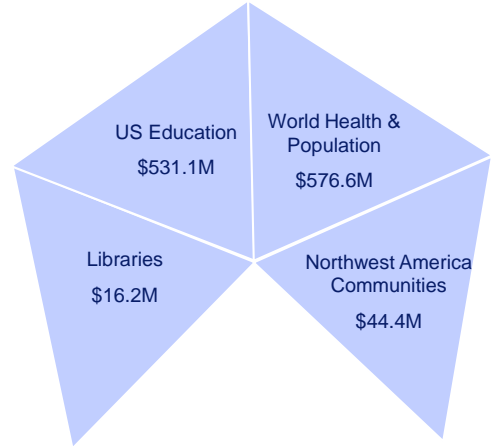
inserting themselves *between* many institutional fields, foundations are not *from* any particular field, thereby allowing them to simultaneously exert dominance and yet integrate seamlessly among institutions and across institutional fields. Foundations preserve their unbiased appearance, as neutral outsiders, while inhabiting this space. Yet the space functions as a nexus, linking otherwise disparate institutions that otherwise would not be directly connected. For example, the Rockefeller Foundation supported medical research, Baptist churches, social science scholarship, and historically black colleges and universities. Similarly, in our contemporary era, the Gates Foundation promotes malaria treatment, small learning communities in K-12 education, population control, and internet broadband availability. Figure 1 (below) illustrates the Gates Foundation's primary adjacencies to institutional fields.

FIGURE 1:

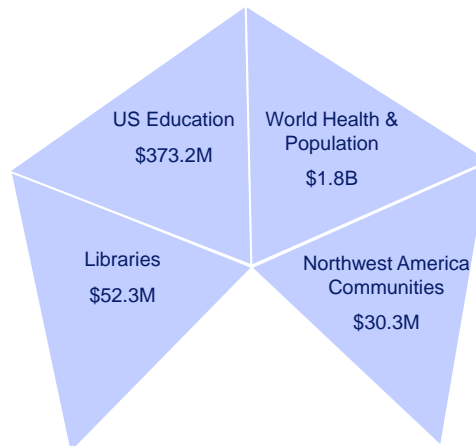
The Gates Foundation Adjacencies in 1998
(Gates Foundation, 1998: 4-12)



The Gates Foundation Adjacencies in 2003
(Gates Foundation, 2003: 18)



The Gates Foundation Adjacencies in 2009
(Gates Foundation, 2009: 13-14)



Adjacency offers foundations a unique positional advantage because they operate at the intersection of numerous institutions. This also offers a unique perceptual vantage point that allows foundations to peer across multiple institutional contexts thereby allowing for a rare comparative view of institutions and their practices. Foundations perceive how fields settle on purposes, value various qualitative and quantitative data, and stabilize interactions. They sit at the intersection of fields and peer across macro structures. Foundations dominate intra-field coalitions by developing a comparative macro-structural perspective, projecting the image of an

outside observer, wielding the power of suggestion, and deploying it to initiate field level change through examples of best practices and analogy. For example, foundations are able to collect knowledge about how fields, such as medicine, education, and business operate. Moreover, as organizations founded for perpetuity, they survey and store a heterogeneous mix of practices that they often use to justify reform. Once a foundation has decided to change an institution, in relatively short order, they can quickly identify the critical members of a field, strategize about the organizations and practices they wish to broker, legitimate or stigmatize, and provide resources to the organizations that they believe are exemplars in a particular field, and then follow or model themselves after such organizations.

Exercising Dominance

Brokering

According to Burt (1992), there are often weak connections or no connections at the boundaries of firms and fields. Such structural holes offer an advantage to those who broker the exchange of ideas and resources. Those that span holes accrue information and control because information that is embedded in previously closed networks can be unlocked and shared. Also, control over communication can enable or limit access to ideas and resources (Burt, 2002:155-158). Podolny (2001) studies the positive relationship between disparate investment networks connected by venture capital firms, and the resilience of their early-stage investments that last until IPO. Foundations migrate toward structural holes when they declare that new agendas in different institutional fields will improve society. Foundations broker structural holes when they attract participants in different fields to receive grants. For instance, in the late 1990s and early 2000s, the Gates foundation linked previously disparate leaders of charter schools, traditional districts, and technology firms in order to transfer knowledge about creating small learning communities for K-12 students. In this way, foundations are themselves brokers positions and also facilitate other institutions to act as brokers, thereby redirecting information and resources across a variety of fields.

Foundations' ability to broker across disparate fields and to facilitate brokerage among individuals across fields often shows us that it is not the people that are changing, but their positions. As people move from one social context to another, they also take their world view, skills, and beliefs about how work should be conducted. For the person who spans these

contexts, the things that seem obvious and conventional, now appear to those in the new environment as being novel and innovative. Thus, brokers succeed in transferring knowledge from one context to another. As Fourcade and Khurana (2011, forthcoming) explore these ideas, they discovered that the founders of the Carnegie Tech Graduate School of Industrial Administration (GSIA) pursued a vision of business education that seemed natural to them but that was new to other schools of management. As outsiders, with backgrounds in behavioral sciences and quantitative methods, these academics had almost no experience in managerial education (Simon, 1991: 138-139). They never viewed basic and applied research as antithetical and they helped to popularize a new approach to managerial science in business schools (Fourcade & Khurana, 2011 forthcoming: 19).

Bourdieu (1988) observes the potential for brokerage across institutional fields. He emphasizes “habitus” as a crucial tie between individuals and institutions. Habitus focuses on individuals and their non-conscious adaptation to the social settings in which they are born, work in, and experience as formative events over time (Khurana, Fourcade, & Kimura, forthcoming). Bourdieu also discusses how professionals and academics in France are born into class positions and careers by charting how children eventually reproduce similar characteristics of parental class, education, and occupation. Foundations are keenly aware of how institutional fields reproduce themselves when they hire professionals and academics to do their work. Such actors are selected because they possess much of the same general *habitus* as those in a foundation’s fields of interest. As such, they will be well received by the field. These foundation leaders are chosen for their specific experience vis-à-vis class, careers, and life events which prepare them to promote the rhetoric, evaluation, and knowledge creation that will best serve the foundation’s agendas for reform. Thus, as we will later show, the Ford Foundation hired two economists to produce the Gordon-Howell Report (1959) on business schools, and it subsequently recommended economics as the primary lever for improving the rigor and institutional status of business education.

Legitimizing and Stigmatizing

Foundations legitimate and stigmatize organizations, as well as their practices, in intricate and powerful ways. They approach institutional fields as disinterested and objective observers who do not stand to materially gain from their recommendations. This impression is conveyed

through their legacies. Foundations were founded by socially conscious elites who often made their money in industries that were unrelated to their philanthropic fields of interest. For instance, Carnegie was a steel mogul who founded a series of libraries for the public. Foundations broadcast an image of being magnanimous, unbiased, reasonable, and critical by removing the appearance of overt self-interest from their philanthropic interactions. This image is anchored to their observations as well as their recommendations for how a field will improve. In other words, their ability to choose the best course of action for a field is respected and therefore, whatever decision they make becomes equally valid. Thus, foundations are perceived as being legitimate, and in a position to legitimize the institutions and practices that they favor.

What is legitimacy and how does it conceptually as well as empirically work? More specifically, how do foundations possess legitimacy and eventually confer it to members of an institutional field? Weber (1947) argues that institutions are legitimate if they participate in socially shared maxims, laws, and values. Meyer and Rowan (1977) expand on Weber's argument and specify that legitimacy is acquired by adhering to myths of rational effectiveness stemming from legal mandates, professional associations, and the best practices of peer institutions. We see that legitimacy comes from several different directions within an institutional field and promotes similar organizational practices. Scott (2008) further discusses how an institutional field subjectively creates legitimacy and states that legitimacy can be possessed as an object. Legitimacy is sometimes exhibited visibly, through awards, and other times communicated verbally, as a reputation (Scott, 2008: 60). Empirically, professional trade associations endorse companies and certify practitioners, thereby transferring visible signs of legitimacy (Rueff & Scott, 1998). Deephouse (1996) illustrates the ramifications of denying legitimacy, as regulatory decisions and media scrutiny hamper the reputation of commercial banks, constraining their ability to make strategic decisions.

Foundations recognize that their ability to convey legitimacy on organizations and their practices is one of their most important currencies when changing the status order of organizations that operate within an institutional field, and thereby introducing institutional change. In contrast to typical strategies of gaining legitimacy, such as conforming to existing practices, foundations frequently turn away from routines that are already well entrenched, and instead concentrate their efforts on legitimizing new rational myths or popularizing often overlooked myths. Foundations are not forced to rely on professional associations, peers, or

even governments to provide them with legitimacy. Rather, they stand outside fields in which they will intervene, in a position to either provide or withhold legitimacy. As an example, the Carnegie Foundation categorizes universities and provides comprehensive research universities with the highest level of classification, while omitting trade and technical schools from their classification system. We believe foundations give order to institutional fields by conferring legitimacy. Foundations become dominant by portraying their self-interested behavior as inherently disinterested and objective. They operate on behalf of society but their missions are coordinated by elites who consciously advocate for normative positions. Legitimacy is a delicate and intangible resource. Foundations jeopardize the credibility of philanthropy when they do not appear to strike the correct balance between their self-interested motives and purportedly unbiased agendas. For example, in the 1950s, Congress established hearings on Foundation activity because their work was feared as overstepping the bounds of social engineering.

Creating Resource Dependence

For many years, organizational scholars have studied firms' dependence on material resources. Yet they have not made strong efforts to integrate resources into an institutional framework. A firm's dependency on tangible resources, such as funding, and intangible resources, e.g. legitimacy, are often treated separately for analytic purposes. Our research on foundations presents institutional theorists with an opportunity to rethink how resources are used alongside symbolic forms of influence. The sheer amount of resources that foundations deploy, roughly \$42 billion annually, as of 2007, (Hammack & Anheir, 2010: 4) requires that institutional theory broach discussions about resources.

Traditionally, resource dependence theory holds that the concentration or dispersal of power and authority, the availability or scarcity of resources, and the interconnectedness of firms creates severe environmental uncertainty (Pfeffer & Salancik, 1978: 68). Firms must adeptly manage their dependencies on resources or they will find themselves at the wrong end of power relationships when they transact with other firms. For instance, the field of community colleges has been treated as low status because it has been embedded with contradictory missions (transfer, remediation, vocational training, lifelong learning, etc.) due to its dependence on resources from federal, state, and local government as well as businesses (Dougherty, 1994).

A firm can manage its dependencies by bridging resources with other firms, through mergers, outsourcing, etc. However, when power asymmetries favor a single institution, and the

“legitimate right to use that power” is universally appreciated, then that institution will likely attempt to and succeed at exerting control over surrounding firms (Pfeffer, 1985: 418). Here lies the point at which scholarship about institutionalism complicates resource dependence. Foundations are “legitimate” and “exert control,” but if a resource dependence model were enough to explain the behavior of foundations, we would see dependence become direct and sustainable over time. That is to say, foundations create a relationship of dependence that is often less stable than what resource dependence theory envisions between key suppliers and firms. For instance, in the 1870s, the Peabody Education Fund initiated a strategy of “partial succor,” which entailed giving a portion of funds to local K-12 schools and districts in the South after the Civil War. The fund also promised to offer greater sums of money if the local, state, and federal government matched or exceeded their donations. Over time, Peabody withdrew its money from the field because the schools became sufficiently self-supported by government funds (Barnhouse-Walter & Bowman, 2010: 37). Thus, foundations lack the desire to make other firms entirely dependent, as well as perpetually under their control, by creating conditions that diversify the recipients’ dependence on other institutions. Religious philanthropy provides us with another example of the ways in which foundations use resources that do not fit a resource dependence model. Grant making in religion is, what Wuthnow and Lindsay (2010) term, “countercyclical.” Religious foundations do not force religious institutions by encouraging dependence; rather they position themselves as a temporary stop-gap, when religious traditions are jeopardized by secularization. The funding is not intended to create dependence, but it is used to promote preservation as a last resort. To prevent the erosion of religious practices, a foundation’s giving is defensive and temporary in nature (Wuthnow & Lindsay, 2010, 318-319).

RESEARCH SETTING AND METHODS

Social and Historical Context: Institutional Change in American Schools of Management

To pursue our research questions, we study the Ford Foundation’s operations in the field of management education from 1951 to 1961. Following WWII, the Ford Foundation was not yet considered to be a well-established, general-purpose foundation and it was not active in American philanthropy relative to other foundations, such as Rockefeller and Carnegie. In fact, in the immediate post-war years, the Ford Foundation’s work had less to do with domestic

reform and more to do with international projects (Ford Foundation, 1951). By 1953, the Ford Foundation's giving shifted, along with the administration and board members who participated in decision making. Economists and quantitatively oriented business practitioners migrated into the foundation's leadership ranks. Subsequently, the foundation took an interest in altering managerial education to make its research and teaching more rigorous. They promoted quantitative methods and economic ideologies at business schools.

Before the Ford Foundation's intervention, the American Association of Collegiate Schools of Business (AACSB) maintained a weak hold over its membership. The AACSB lacked a strong centralized administrative function because it had anemic funding at a \$25 annual due from each member. Also, the provisions in its mission did not constrain the actions of its members. The organization of the AACSB proved to be problematic as membership grew from 16 to 55 schools from 1916-1941. When the GIs returned after WWII and demanded business education, the limitations of the AACSB's social control over schools of management was further exacerbated. Between 1946 and 1951, the membership of the AACSB increased from 56 to 70 institutions (Khurana, 2007: 226-227). As a result, the field became stratified in terms of status and prestige, given the uneven levels of educational quality between old and new members. These discrepant approaches were noticeable to several outside observers, such as corporations and traditional university academic departments (Pfeffer, 2008). In effect, the AACSB was reduced to an accreditation agency that focused on ensuring very minimal standards for facilities, personnel, instruction, and research (Khurana, 2007: 230). The resulting landscape of instruction and research in the field of business schools was a mishmash of vocational, general management, and case study methods.

As the AACSB continued its minimal oversight into the 1950s, two macro-historical conditions in the United States helped enable the entry of the Ford Foundation into their field. First, during WWII, the military, private, and public sector became familiar with quantitative methods. President Kennedy's New Frontiersmen, such as John Galbraith, Charles Hitch, and Robert McNamara came from academic, industrial, and research corporations who employed cost-benefit analysis in a variety of ways to assist the wartime and post-war efforts. For instance, one such firm in which McNamara was involved, the RAND Corporation, employed cost-benefit analyses for decision making about weapons acquisition in WWII, but later developed similar government techniques, such as the Policy Planning Budgeting System (PPBS), in the 1950s.

PPBS measured policy proposals against alternatives by weighing projected implications of decisions versus their resource requirements (Allison, 2006: 63-64). These quantitative tools proved their worth in the campaign to defeat the Nazis and were becoming popularized in the 1950s. Then, the second development emerged from the U.S.'s competition with the Soviet Union in the early Cold War era. The province of managers was economic prosperity. This placed schools of management in a unique position, given an historical environment where the economic ideology of the free market and its success was a national imperative (Schlossman, Sedlak, & Wechsler, 1987). Perfecting the free market, as well as the economic skills of its managerial class, was a patriotic duty, guaranteeing that American capitalism would thrive as a counterpoint to communism.

During this period of general enthusiasm for economic ideas about unregulated markets and quantitative techniques, the Ford Foundation inserted itself into the field of management education and engaged in the assessment, as well as the redirection, of elite business schools with regard to their pedagogy, curriculum, and research. From 1956 to 1959, the Ford Foundation supported Carnegie Tech's Graduate School of Industrial Administration (GSIA) as well as the Harvard, Columbia, University of Chicago, and Stanford business schools in an effort to make them centers of excellence for research and teaching in managerial education (Howell, 1966). The Ford Foundation financed instruction and research that applied statistics, economic analysis, and mathematical models to managerial problems. Moreover, the hegemonic role allocated to the discipline of economics in the Ford Foundation's funding template, introduced a new pathway for economists to ascend in the ranks of business school faculty (Schmotter, 1984). In 1959, the Ford Foundation commissioned and published the Gordon/Howell Report on the field of business schools. It recommended the use of economics as a lever to increase the quality and status of business schools in the academia.

The centers of excellence and the Gordon/Howell Report did not elevate the entire field as intended, but quite oppositely, it stratified the field even further in the short term. Nevertheless, over the next thirty years, the rest of the AACSB accredited schools would begin to migrate away from purely vocational orientations and embrace the central place that the Ford Foundation had recommended for economic and quantitative approaches in business education. Moreover, the free market ideology, which was embedded in the disciplinary shift toward neo-classical economic thought, facilitated the rise of the manager as a subordinate to the delivery of

shareholder value in a system of investor capitalism, rather than the manager being a professional or corporate statesman.

Data

The data predominately consisted of original primary source research of historical documents from 1951 to 1964. These primary sources included published and internal material from the Ford Foundation, business school, and newspaper media archives, as well as biographical sources. Ford Foundation sources were comprised of internal memos among board members and administrators, external correspondence with universities, annual reports, and grant applications. Business school material included annual reports, faculty publications, and video interviews of faculty members as well as a discussion with one of the Ford Foundation Report authors who retrospectively discussed the Ford Foundation and the rise of economics. One of the authors also attended a retrospective life celebration and conversation about Lee Bach, a former administrator at Carnegie Tech's Graduate School of Industrial Administration (GSIA). News media sources primarily included a three part New Yorker article on the Ford Foundation as well as obituary descriptions. We also collected information from a secondary source biography about Paul Hoffman, an administrator at the Ford Foundation in the 1950s, and an autobiography from Herbert Simon, a faculty member at GSIA.

Analytic Process

The approach we took to assessing the data was to avoid simply displaying a traditional chronological history of what transpired and use our historical data to present an analysis of institutional domination. As such, we focused intently on mapping people, agendas, and events; in short, we connected institutional behavior to the three pillars of structures, legitimacy, and resources. This allowed us to examine the various ways in which the Ford Foundation became adjacent to elite business schools and dominated them in the short-term, with the intention of extending that domination to the entire field over time.

First, we examined Ford Foundation annual reports from 1950-1956, in order to show how activities were configured across different institutional fields. This entailed a review of the foundation's organizational missions across five areas and the foundation's sprawl over time. Being able to chart the Ford Foundation's internal organization, and how it linked administration to area 3, economics, rather than to area 5, or behavioral sciences, helped us to see how

adjacency can create proximity and distance between academic disciplines and institutional fields.

In the second stage, we compiled biographical data from key actors at the Ford Foundation and among elite business schools to assess social structures being the catalyst for the brokerage of ideas between foundation and field. This included characteristics of education and careers for administrators and academics who participated at the Ford Foundation and the schools. By juxtaposing the social structures of the Ford Foundation leadership with the leadership of elite business schools we were left in a position to display alignment between them. Next we developed a small sample of the same level individual characteristics for the leadership of the Rockefeller foundations to show how structural similarity facilitates brokerage and how dissimilarity forecloses the opportunity.

In the third stage, we conducted a close reading of the Gordon-Howell Report to understand the stance being taken by the authors on the state of business education and how it should be reformed. We asked: how did the Gordon-Howell Report frame business education in a way that would legitimize economic and quantitative teaching and research methods? What does this tell us about how foundations operate in their assessment of fields and in terms of the legitimacy they wield? How do foundations present themselves as neutral arbiters and succeed to greater or lesser degrees at advocating their views while attempting to maintain their impartiality. The major subject of this stage of analysis was to better understand the nature of legitimacy in adjacent institutions.

Fourth, we concentrated on data that pertained to the Ford Foundation's funding of elite business schools. We considered how the Ford Foundation's behavior was an example of strategic as well as adjacent thinking about how to deploy resources and encourage change without stimulating permanent dependence in the field of business education. We analyzed how the Ford Foundation, by targeting only four elite business schools, sought to make the field of managerial education dependent not on foundation giving itself, but on the elite exemplars that it was meant to imitate.

FINDINGS

The conceptual framework outlined above was developed through the study of the complex set of relationships between the Ford Foundation and the field of American business

schools from 1948 to 1965. We conceptualize the Ford Foundation as becoming adjacent to an array of different fields in addition to business schools. We then show how the Ford Foundation exerted its dominance through: (1) brokering across academic fields in a way that led to economics and economic methods to become the disciplinary core of business education; (2) legitimizing and stigmatizing specific business schools that resulted in their shifting their core practices such as faculty hiring and curriculum; and (3) created resource dependencies that ensured adherence to new practices over an extended period of time. By describing these activities, we illustrate how an adjacent position and the three pillars of domination shaped substantive institutional change in the field of management education.

Adjacency

The Ford Foundation's portfolio of activities is typical of most large multi-purpose foundations. Its activities represented a diversity of interests and it varies in its level of engagement with reform efforts. These agendas have spanned several institutional fields in both domestic and international contexts. After reviewing the Ford Foundation's projects and support across these fields from 1950-1956, we summarized, in chronological order, several examples of our findings about their activities.

In 1950, the Ford Foundation's study committee to the Trustees recommended its central goal as advancing the welfare of society and improving mankind. Its initial report sought to "block out in general terms those critical areas where problems were most serious and where the Foundation might make the most significant contributions to human welfare" (Ford Foundation, 1950: 4). The committee believed that most problems were rooted in issues related to human welfare and human needs. These included living standards, dignity through equal rights, religion and speech, world peace, disease, and the free exchange of ideas (Ford Foundation, 1950: 5-10). The five basic tenants were world peace, democracy, economic well-being, education, and scientific study.

There were three funds established by 1951. These encompassed the Fund for the Advancement of Education, the Fund for Adult Education, and the East European Fund. These funds allowed the Ford Foundation to enter numerous fields, for example, the fund focused on food supply problems in India, the training of agriculture colleges, support of the All-Pakistan Women's Association to undertake foreign exchanges, and publishing efforts in the Soviet

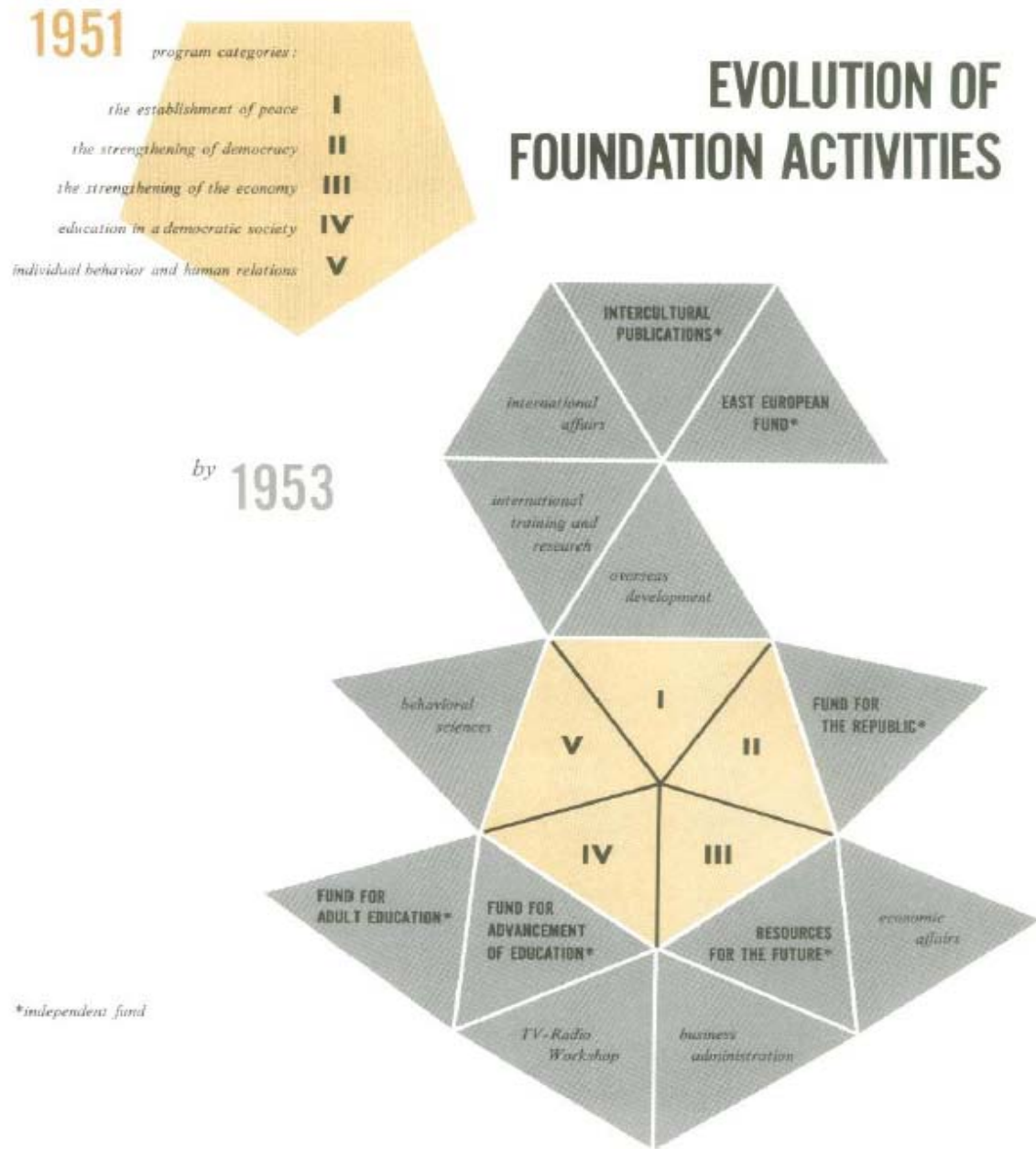
Union. The foundation entered the field of teacher colleges in Arkansas and the fields of television and radio to better understand how to educate adults (Ford Foundation, 1951, 12-19). By 1952, the work in India and Pakistan expanded to encompass polytechnic and industrial training. Also, the fund supported the study of economic growth of the near east at the American University in Beirut, and funded 4-H clubs in order to bring farmers from 40 countries to the US and vice versa.

By 1953, the Ford Foundation was internally organized into five distinct areas that corresponded to the five issues initially identified by the Trustees. The five areas included - the establishment of peace, democracy, the economy and administration, education, and human relations. The annual reports reported on these areas as separate chapters (See figure 1 below). Much of the work in India and Russia continued under Area 1. It also grew to include work with the American Board of Commissioners for foreign missions in Turkey as well as the American Colony Charities in Africa and Asia. The work within Area 3, on the economy, began very small with eight grants that were intended to improve research on administration and organizational performance as well economic relations among nations (Ford Foundation, 1953:46). At this point, it is important to note that economics and the behavioral sciences were separated from one another in the Ford Foundation's approach. The Ford Foundation also looked at the issue of administration as a natural fit with area 3 rather than with the behavioral sciences of area 5. Thus, the pursuit of improving American administration was made synonymous with the discipline of economics.

FIGURE 2:

Ford Foundation Adjacencies in 1951 and 1953

(Ford Foundation, 1956:16)



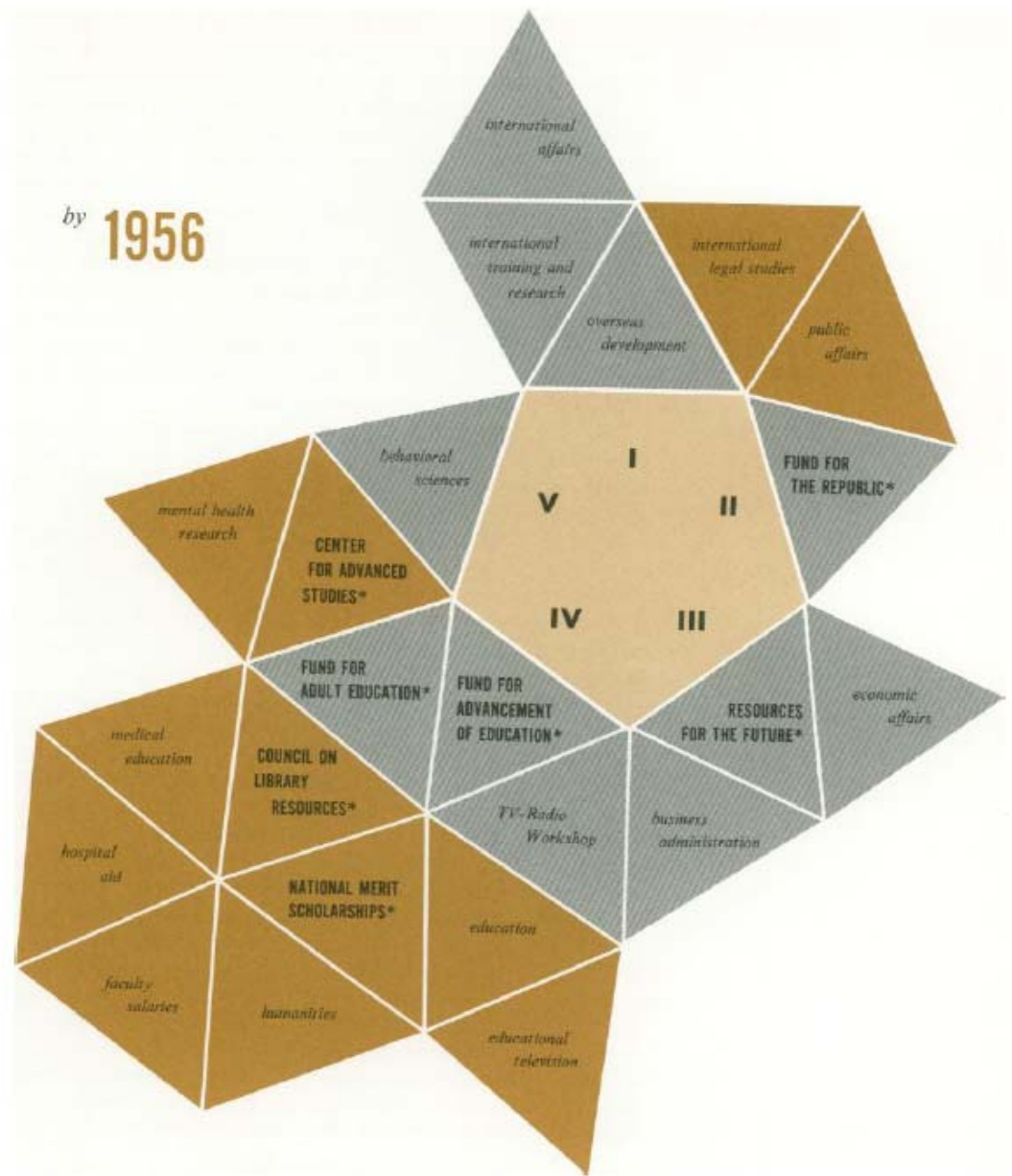
By 1956, the Ford Foundation had focused on connecting the behavioral sciences to mental health and child health, while closely linking economic affairs to business administration. In other words, we observe in Figure 3 that the internal reorganization of the Areas meant that the Ford Foundation separated administration from the behavioral sciences and gave it to economics. This shows us that a foundation can become adjacent to several institutional fields at the same time, and that they evaluate how they are establishing connections between them while developing crucial assumptions about what connections make sense.

In Area 3, the Ford Foundation supported post-doctoral fellowships in business administration, dissertation fellowships, faculty conferences on economic issues, a survey of the Wharton School, and research on the case method of instruction and the problems of small business management. Yale, the University of Chicago, and the Harvard economic research project promoted training for economics researchers and professors. Additionally, the Ford Foundation commissioned reports on consumer behavior and economic stability.

FIGURE 3:

Ford Foundation Adjacencies in 1956

(Ford Foundation, 1956:17)



In summary, our findings indicate that the Ford Foundation's efforts to internally reorganize itself led to the inclusion of business administration within area 3 instead of within area 5 on behavioral sciences, an equally viable candidate. Although we learned that the Ford

Foundation became adjacent to various domestic and international institutional fields, the decision to entwine economics and business administration was a definitive first step in a pattern of thinking that would elevate the discipline of economics into a hegemonic position at schools of management.

Brokerage

In the years leading up to the Ford Foundation's support for centers of excellence in business education and its report on the field of business schools, a shift was underway in the social structure of its leadership. The period of 1950-1964 was marked by the transition between three foundation presidents who took an increasing interest in business education. We observed that Ford Foundation leaders became concentrated with high level personnel who had backgrounds that frequently related to business, economics, and quantitative methods to administration. We found that these backgrounds were similar to a contingent of professors and administrators at several elite business schools, allowing the Ford Foundation to pursue brokerage opportunities to transfer ideas and support, thereby making economics a strong component in business education and research. We also learned that the Ford Foundation's social structure was different in this respect from other multi-purpose foundations at the time, such as the Rockefeller Foundation.

The Social Structure of the Ford Foundation from 1950-1964

In the 1950-1953 period the Ford Foundation's economics and administration, area 3, was not always a prominent division of activities. The first President of the Ford Foundation, following its resurgence after WWII, was Paul Hoffman. Hoffman had attended the University of Chicago, had worked in the Studebaker Corporation, and was a close advisor during and after WWII President Truman. Most notably, Hoffman was the Marshall Plan Administrator in the post-WWII reconstruction of Europe. In addition, one of his associate directors, Milton Katz, had been a Harvard undergrad and J.D. who was a former ambassador and lecturer who had worked at the Harvard Law School, and in the Economic Commission of Europe. Though much of the Foundation's activities were devoted to global affairs in this period, which is consistent with Hoffman and Katz's background, most of Hoffman's other associate directors, who were put into place by Hoffman and Henry Ford II., were well suited from their personal histories to

eventually redirect the Foundation's giving to business education (MacDonald, 1955). These associate directors were Rowan Gaither, Robert Hutchins, and Thomas Carroll.

In the aftermath of the congressional hearings on Foundations, Hoffman stepped aside, which opened the presidency of the Ford Foundation to Rowan Gaither. Gaither had been a lawyer, with a BA in History and J.D. from the University of California at Berkeley. His father founded the Pacific National Bank of San Francisco and though Gaither pursued a career as a partner in a law firm, he served the WWII effort by working at MIT with the RAND Corporation as a liaison between academics, government, and the private sector on research applications for the military (MacDonald, 1955: 57-64). "He became an organizer of research and middlemen between brains and capital," it was later characterized (MacDonald, 1955: 60). This background impressed Henry Ford II as he prepared to take the Ford Foundation into a new era of major gift giving in the late 1940s and early 1950s, and Gaither was highly sought after to help with the foundation. The experience at RAND also impressed upon Gaither a strong view of what research ought and ought not to be. Not only should it be applied, but much could be learned from the hard sciences of chemistry, physics, and biology that were relevant to the war. He saw the type of behavioral sciences that figured in business education, and their general state to be in disarray (MacDonald, 1955: 96-98). Gaither's aversion for the state of many of the academic fields outside of the natural sciences made him sympathetic to a social science that might offer verifiable theories and predictions with a hard science or rigorous approach than many of the behavioral sciences.

Gaither was also surrounded by Robert Hutchins and the foundation's eventual Vice President Thomas Carroll. Hutchins was formerly a Yale J.D, professor, and Dean. He went on most notably to becoming President at the University of Chicago and the leader of a revolution to raise academic standards and increase the quantitative rigor of university studies (Cohen, 1964). Thomas Carroll had been an MBA and doctorate in commercial science, who was an under-Dean at HBS prior to joining the Ford Foundation. In these years, Donald David, the former Dean of HBS became a member and Chairman of the Ford Foundation Executive Committee (Ford Foundation Annual Report, 1956). Much of these characteristics of the Ford Foundation's social structure make its foray into business education and support of HBS that started in 1954, and will be elaborated upon in the resources sub-section of our findings, a natural point of brokerage.

Henry Heald took over as president from 1957-1964 as Carroll and David continued. Heald had a B.S. from Washington State and an M.S. from the Illinois Institute of Technology had been a civil engineer and eventual academic who would be president of Armour Institute of Technology and Chancellor of NYU (Time Magazine, 1957). In 1956, Gaither, Heald, and Carroll had initiated the Ford Foundation's push for centers of excellence in business education and had commissioned a report on the entire field of schools of management. The production of the report entailed hiring a team to compile and analyze data and publish findings as well as recommendations. The Ford Foundation's leadership enlisted two economists for this task Aaron Gordon and James Howell. Gordon was a professor of economics at Berkeley, with a BA from John's Hopkins and a PHD from Harvard. Howell was a junior faculty member in economics at Stanford University, who held a BA from Fresno State College, and a PHD from Yale (Pfeffer, 1998).

Structural Similarity between the Ford Foundation and Business Schools: An Opportunity to Broker the Idea of Using Economics and Quantitative Analysis as Levers for Improvement

Several members of key business schools holding economic and quantitative backgrounds migrated into faculty and administrative ranks and were receptive to a brokerage of ideas with the Ford Foundation with respect to its reform agenda for managerial education. Among several assorted examples, we highlighted four major instances where structural similarity was high and brokerage occurred, including Lee Bach, Herbert Simon, Allen Wallis, and George Lombard. Lee Bach was the founding dean and Herbert Simon was a professor at Carnegie Tech's Graduate School of Industrial Administration (GSIA). Bach was an economist with a PHD from the University of Chicago who published one of the world's most popular basic economic textbooks that went through eleven editions. He was a research economist for the Federal Reserve Board in WWII, and he came to found GSIA with an agenda to improve the standards of business education and help improve its reputation as a rigorous academic institution (Lee Bach Celebration of Life, 2009). Bach originally recruited Herbert Simon who was a broad scholar in economics, political science, and psychology. Simon eventually won a noble prize. He studied mathematics and social sciences at the University of Chicago and from 1950-1955 focused on mathematical economics (Simon, 1992). Simon was the example of a

rigorous and quantitatively oriented scholar conducting research that applied decision science to administrative contexts.

Wallis was a Dean of the University of Chicago's Graduate School of Business who applied for the school's funding and status as a center of excellence from the Ford Foundation. Wallis was a renowned free-market economist who rejected the notion of government intervention. He was a former economic statistician for the Natural Resources committee in the 1930s. He was an undergraduate major in economics from the University of Minnesota and PHD from the University of Chicago (University of Rochester, 1998). George Lombard was a founder of the study of organizational behavior and an associate Dean at HBS who devoted much time to research at Macy's, GM. Lombard had a BA from Harvard College and an MBA, and doctorate from HBS. He was instrumental in reorganizing HBS so that faculty would focalize around teaching and research areas (HBS News, 2004).

The similarity between the Ford Foundation's social structure and the structure of business schools, and the interplay of ideas and desires to strengthen business schools made the selection of economics and quantitative analysis an agreed upon lever for improvement. The Ford Foundation was unique in this regard. For instance, during the same period, the Rockefeller Foundation was headed by Dean Rusk, a former secretary of state, who directed attention toward international affairs and was surrounded by directors such as Robert Lovell, a former Secretary of Defense, and Charles Fah, an expert on Japan and the Far East (Rockefeller Annual Report, 1951-1959). With no structural similarity between the Rockefeller Foundation and members of business school administrations as well as faculty, no attraction occurred or agreement was made on the same issues that the Ford Foundation identified.

Legitimacy

The Ford Foundation's Gordon-Howell Report was published in 1959. The report gave the Ford Foundation the opportunity to survey the entire field of business schools. It also went much further by identifying strong and weak members, recommending best practices, discouraging bad practices, and discussing the qualities of a successful business school that should be revered and reproduced. By reviewing various sections of the report, our findings show that the Ford Foundation legitimized aspects of business education that it believed would improve the entire field and stigmatized many of the popular ways of teaching and conducting

research in business administration at the time. The document was more than a summary, it was a roadmap. The Gordon-Howell report was normative and promoted disciplinary analyses of business, especially in economics but also in the behavioral sciences, as the basis for re-conceptualizing business education.

Legitimation and Stigmatization in the Gordon-Howell Report 1959

The report begins with a quote from the 1930s about the need to apply science to modern life in an effort to ensure economic progress and quickly transitions into a section titled “Business Education Adrift” and describing business education as an “uncertain giant” that had grown large as a field with little coherence driving the professional education. The authors were well aware that the field was searching for “academic respectability” and was sensitive to critique (Gordon & Howell, 1959: 3-4). The main problem, in their view, was that there were few businessmen who were truly well educated, and while some schools provided such an education, far too many did not (Gordon & Howell, 1959: 7). Those worth mentioning in the report would receive an enhanced reputation while those omitted would be painfully obvious. And though the authors did not want to impose a uniform standard they felt that the weaker institutions would learn from the report and adopt some recommendations (Gordon & Howell, 1959: 10). The dividing line between schools doing a good job and those that were remiss hinged on their faculty and curricular focus. The authors find that as information about business and economic activities had grown, business schools had yet to develop a “body of knowledge” from which “significant generalizations” about management could be made (Gordon & Howell, 1959: 12). They argue that the primary responsibility of the business leader is to increase shareholder value and the predicament facing business schools is that the practice of management required a balance of general and specialized learning (Gordon & Howell, 1959: 13-17).

The authors present the state of business education in the late 1950s as spanning three major approaches to teaching and research which consisted of descriptive, managerial-clinical, and analytical work (Gordon & Howell, 1959: 135). The lowest stratum was descriptive research and instruction and the authors see most schools at the time as too heavily bent toward vocational courses and research (Gordon & Howell, 1959: 360). This entailed research and teaching on the most specialized tracks, such as fire insurance. The report discourages courses

taught with a single textbook. Not only did the authors call for a drastic consolidation if not elimination of most of these tools courses from the construction of a core, they asked that faculty teaching and researching in these areas “look for underlying principles that govern the procedures and factual detail they have been teaching” (Gordon & Howell, 1959: 136-140). Specialized business teaching and research describing the procedure of a business function received the greatest stigma from the Gordon-Howell Report. The middle stratum, involving the managerial-clinical approach is another way of referring to the case study method. The report depicts this type of teaching and research as acceptable but with caution. Clinical teaching with role playing and cases would help acclimate students to real world dilemmas but curriculum should be “careful not to overdo the use of cases” and drown out the more general and analytic principles of management (Gordon & Howell, 1959: 136).

The authors frame the problem of business schools as rooted in their inability to shift attention to an analytical basis for managerial education and research. They note faculties at the time were deficient in producing generalizable and rigorous research which limited their ability to teach analysis to students. “The business literature is not, in general, characterized by challenging hypotheses, well developed conceptual frameworks, the use of sophisticated research techniques, penetrating analysis, the use of evidence drawn from the relevant underlying disciplines-or very significant conclusion,” the authors observe (Gordon & Howell, 1959: 379). Disciplines like economics, the behavioral sciences, and mathematics were pointing the way to game theory, decision theory, and linear programming which the authors felt could lead to important applications in the field of business research and teaching (Gordon & Howell, 1959: 384-385).

The authors distinguish doctoral programs in business treating management as a subject within applied economics. These programs “evolved out of the traditional PHD in economics” and had the highest tradition of analytical scholarship, in their estimation (Gordon & Howell, 1959: 401-402). The report legitimizes economics and quantitative analysis at the curricular level for non-doctoral students as well. For example, the authors promote an undergraduate business education with a core of management accounting and statistics, advanced economics with applications to internal economic management and the external economic environment of the firm, and organization and administration (Gordon & Howell, 1959: 134).

The report is strategic when legitimating and stigmatizing actual institutions. Harvard was being heavily funded as a center of excellence and was publicly recognized as the leader in case study research. The report took a moderate view of case studies but legitimized this work because of its potential rather than its achievement at that point. Cases could fuel systematic research, yet “neither Harvard nor elsewhere has there been much of an attempt to systematically analyze and draw generalizations from this storehouse of raw material” (Gordon & Howell, 1959: 385). The report was reinforcing institutions that it was funding, highlighting Carnegie Tech’s GSIA as an “outstanding example” in preparing doctoral students for examinations in quantitative analysis, organization and administration, business institutions, and a social science. The University of Chicago was also singled out for its content in behavioral sciences and quantitative methods (Gordon & Howell, 1959: 406-407). Conspicuously absent as both a center of excellence and a highlight of the report was America’s first university based school of commerce and business, the Wharton School at the University of Pennsylvania. Wharton had historically focused on specialized tracks, such as finance and accounting, but also many of the vocational subjects, and was thus denied the legitimacy of being highlighted in the report. Further, since programs in Wharton’s mold were “disparaged” by the Ford Foundation Report and “with such pressure all around, the Wharton School was now forced to come to terms with its destiny” (Sass, 1982: 251-252).

Resources

The Ford Foundation’s intervention in business education to fund centers of excellence began in 1956. Thus, to help illustrate the transformation in the Ford Foundation’s prioritization of resources, both in expenses and grants, between the behavioral sciences and economics and administration divisions, it is important to offer a snapshot of grant making operations before 1956, and afterward, especially with an emphasis on the development of centers of excellence in the field of business schools.

Brief Overview of Grants and Expenses on Grant Making before 1956: Behavioral Sciences, Economics, and a Growing Interest in Business Schools

In 1951, the Ford Foundation paid \$30 million in grants and roughly \$50,000 went to universities. For example, these funds were distributed between projects like Stanford’s investigation of East Asian studies, and the University of Chicago-University of Frankfurt

professor and doctoral student exchange (Ford Foundation Annual Report, 1951: 21). It was not until 1952, that the Ford Foundation would begin to more clearly divide its grant making between economics and the behavioral sciences. The total amount of grant making had increased to nearly \$38 million. Nearly \$1.65 million went to behavioral science funding for programs, such as the \$30,000 allocated to the University of Chicago's inventory of knowledge on social stratification and the nearly \$26,000 given to the University of Michigan's summer seminar on behavioral science methods training. In contrast, economics and business administration projects received grants totaling nearly \$830,000. Examples of funded work include close to \$8,000 for Harvard's study of economic theory and the \$100,000 going to the MIT's foreign economic policy research program (Ford Foundation Annual Report, 1952: 57-63).

By 1955, a shift had occurred in the funding between behavioral sciences and economics and business administration. The Ford Foundation questioned the quality of business schools and sought to improve faculty and research as well as curricula and students. The foundation began to prioritize the increase of faculty with doctorates and to promote quantitative analyses and disciplinary research, with grants totaling \$3.3 million for doctoral programs in business and economics at schools like HBS and Columbia, among others (Khurana, 2007, 247).

Overall, out of approximately \$65 million in total grants made that year, \$3.2 million went to behavioral sciences and \$6.3 million went to economics and administration. For instance, the University of Illinois received \$75,000 to develop strategies for making the behavioral sciences more of an applied science, and the London School of Economics was given \$10,000 to convene a conference on sociology. The Ford Foundation's giving to the field of economics and administration continued to find broad economic projects, such as giving \$850,000 to the Brookings institution for research on the economy and government, as well as business school specific programs, in addition to the doctoral grants previously mentioned. The American Association of Collegiate Schools of Business received \$25,000 to convene a conference on faculty requirements and standards in managerial education. Another example is that HBS was granted \$100,000 to assist training in graduate business education at the University of Istanbul (Ford Foundation Annual Report, 1955: 135-162).

Reflecting on the period of 1951-1955, it appears the Ford Foundation began to alter the proportion of its resources allocated to behavioral sciences and economics as it took began to

first pay attention to the general state of business education. This alteration reached a point where the deployment of funds for economics was nearly double the resources of the behavioral sciences. This represented a complete reversal in the proportion of grant making that was seen between these two areas just three years earlier in 1952, when behavioral sciences was the dominant recipient at nearly double the funds of economics. At the same time, a concentration was developing in the sub-field of managerial education by 1955 that would become even more refined as the Ford Foundation made the transformation of business schools a top priority.

Ford Foundation Funding for Centers of Excellence in Business Schools

The Ford Foundation began its agenda to create centers of excellence at HBS, Carnegie Tech's GSIA, Columbia, Stanford, and the University of Chicago from 1956 to 1964. Even prior to this period, the Ford Foundation had been a staunch supporter and funder of HBS to the extent that from 1953-1964 a total of \$5.3 million was allocated (Khurana, 2007: 250). Yet 1956 represented a point at which the Ford Foundation not only expanded to make a handful of other schools exemplars for the rest of the field to follow, but where it would move beyond supporting HBS's case method in order to finance the spread of economics and quantitative methods in business research and teaching. The funding for all of the centers of excellence began modestly at \$717,000 in 1956 (Ford Foundation Annual Report, 1956: 171-175). It peaked at \$2.8 million for the year of 1960 (Ford Foundation Annual Report, 1960: 139-145). By 1964, the Ford Foundation paid out \$2.2 million to their centers of excellence as the funding wound down (Ford Foundation Annual Report, 1964: 110-114). HBS was the greatest recipient over this period, at \$3.5 million (excluding funding for case study teaching and research which we see as being beside the point we are making about the rise of disciplinary teaching in economics and quantitative methods for business education). HBS was followed by the University of Chicago (\$3.3 million), Stanford (\$3 million), Columbia (\$2.6 million), and Carnegie Tech's GSIA (\$2 million). In total, after reviewing the financial statement sections for the Ford Foundation Annual Reports from 1956-1964, these five schools amassed \$14.4 million in total resources.

For the purposes of coding data, we broke grants into the promotion of five categories, including fellowships for graduate students and faculty, professorships, business administration and economics instruction, business school development, and research and methods. Outside of

business school development, which pertained to facilities and other related projects and was the largest contribution the Ford Foundation made to the centers of excellence (\$3.9 million) from 1956-1964, fellowships for masters and doctoral students as well as faculty led the way at \$3.8 million. For instance, in 1961, Carnegie Tech's GSIA gained Ford Foundation fellowship money in the sum of \$84,325, of which a portion of funds supported doctoral students whose dissertation topics and methods were consistent with making business education more quantitatively and economics oriented (Ford Foundation Annual Report, 1961: 136-143). Funding for research methods from 1956-1964 totaled \$2.7 million, for programs like the University of Chicago's research workshops on economics, which was offered from 1954-1963 and was funded at its highest level in 1960 at \$105,000 (Ford Foundation Annual Report, 1960: 139-145). Professorships totaled \$2.3 million for 1956-1964, allowing, for instance, Carnegie Tech's GSIA in 1957 to start a rotating research professorship in economics (Ford Foundation Annual Report, 1957: 71). Finally, instruction linking economics and quantitative analysis with business education was financed at \$1.6 million for the period of 1956-1964, which for example enabled Columbia to make \$65,000 of curriculum revisions and improvements in 1957 (Ford Foundation Annual Report, 70-72).

The issue of how resources were used by the Ford Foundation strategically and quite differently from other types of institutions that are typically studied in resource dependence theory becomes clear when focusing on the duration of dependence and size of dependence. The time horizon lasted for roughly eight years, before the foundation shifted attention away from business education. The grants were given in certain years and paid out at varying rates, over different periods during this time. For instance, after already receiving \$65,000 in 1957, Columbia's GSB curriculum revisions were allotted \$85,000 more in 1958 but only \$55,000 was paid that year, with \$30,000 remaining. But in 1959 a total of \$75,000 more was granted and paid to finish off the curriculum reform (Ford Foundation Annual Report, 1958 and 1959). The Ford Foundation used resource dependence at the level of projects that had beginnings and ends and this strategy leads grant recipients toward an ephemeral reliance on foundation resources rather than perpetual dependence on philanthropy. These resources were enough to jumpstart and give credence to the introduction of new quantitative methods and disciplinary applications of economics to business education.

The introduction of the Ford Foundation's gifts raises the question of their size relative to the income of these business schools. A helpful example is to view HBS's largest year of grant reception. In 1963, the Ford Foundations was paid \$712,480 (Ford Foundation Annual Report, 1963: 129-136). At the same time, HBS's tuition and other student income was \$4.4 million (Harvard University Financial Report, 1963-64: 12). The amount of Ford Foundation grant monies was nearly a sixth of the amount brought in by annual tuition income at the time. In a year where the Ford Foundation gave the least money to all schools, 1957, HBS earned \$2.3 million from student income and tuition (Harvard University Financial Report, 1957: 12). That year, HBS received \$250,788, or roughly one-ninth the amount made via tuition, from the Ford Foundation (Ford Foundation Annual Report, 1957: 171-175). The centers of excellence were mostly elite schools, and while these examples also do not necessarily indicate that dependence was essential to survival in the way that general tuition income was, they were not insubstantial sums of money.

CONTRIBUTIONS AND GENERAL IMPLICATIONS

This paper helps contribute to the growing literature on examining institutional change. We presented a theoretical model that emphasizes the role of dominating institutions, a class of organizations that defines its purpose as changing other institutions. Focusing on general purpose foundations like Carnegie and Ford we show the power of these institutions to change institutions resides in their position across a variety of institutional sectors and their ability to use these positions to change institutions through brokering personnel and practices across institutional sectors, elevating and legitimating particular practices, and providing resources in ways that increase the interdependence between the foundations and their beneficiaries.

Our paper demonstrates that examining dominant institutions allows for an examination of the broader relationships that sometimes exists between institutional fields. It suggests that organizations that operate in distinct fields are sometimes subject to similar gravitational forces in the form of dominating institutions. These institutions use their position and resources—both symbolic and substantive—to spread organizing principles, values and practices across institutional fields. As a result our findings suggest that large scale institutional change does not

occur in isolation and has to be understood in relation to what is happening in other institutional fields. Moreover, our analysis suggests that scholars studying institutional change should make an analytical distinction between the structure of the position of organizational actors in an institutional field and the interactions among the organizations in that field. We show that both are important in understanding the processes of institutional change.

By examining at a fine-grained level how dominating institutions change other institutions, our approach offers a relational (rather than an individual agency) mechanism for linking the micro-level actions of individuals to the broader problem of explain organizational and institutional change. Our approach shows that just as institutions are reproduced by the *habitus* of individual actions, institutional change may also be created through the *habitus* of individual action when it occurs in a new setting. What matters is the context within which the dispositions of individuals are exercised. An individual or group acting in known and familiar ways in one setting and then transporting those ways to a new setting can help catalyze a change process. Such a move can create dissonances in the new organizational setting and allow both the new and old organizational members to see windows of opportunity hidden to other members of their own organization. Such was the case when disciplinary trained faculties were suddenly imported into the setting of business schools in the empirical study we examined.

Our findings also show that the symbolic power of foundations to grant legitimize or stigmatize organizations and practices plays a significant role in institutional change. Dominant institutions use recognition, esteem, or honor by as a form of power to shape change in a particular direction. In the field of business education, they used linking managerial practices to academic disciplines and quantitative methods as a way to set parameters for knowledge production to which even high status institutions were forced to respond.

Our research also makes a contribution by examining how resources can be used in ways to initiate and sustain an institutional change process to a new equilibrium. Specifically, we show how foundations use financial capital in ways that are not simply to incent behavior, but rather were used symbolic and substantive ways to structure the field(s) in which it is deployed, and by emphasizing its relational capital. The relational nature of capital is only partially grasped by existing theorizing in institutional theory about the role of material resources.

Finally, much of the research on institutional change, our paper demonstrates the importance of developing deep historical knowledge about the institutional settings. As DiMaggio (1983) and others have argued, to understand institutional change a deep and comprehensive historical knowledge must be amassed by the researcher(s). Understanding institutional change requires understanding institutional fields which means that both the history of the field and its relations to the larger fields in which it is embedded must be considered. Our approach suggests that the process of understanding how large-scale institutional change occurs should not only incorporate case studies of particular change, but also be supplemented (as much as practicable) with archival research that situates the case within a field and even between fields.

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