Organization Theory and Higher Education

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I have been a long-term student of organizations, but only an episodic student of educational organizations. I am the author or co-author of two texts that attempt to provide a comprehensive overview of the state of organizations, an early text written with Peter Blau (Blau and Scott 1962/2003), and a later text that first appeared in 1981 but has been updated periodically up to the present (Scott 1981; Scott and Davis 2007). I have focused most of my empirical research on professional organizations—including welfare agencies, health care organizations, mental health systems, research institutes, non-profit advocacy organizations, engineering construction projects, and also, from time to time, schools and colleges. Also, during the past three decades, I have reframed much of my work to emphasize the large role played by the institutional environment in shaping organization structures and processes. These interests were reported in a text first appearing in 1995 but updated regularly up to the most recent edition appearing this year (Scott 2013).

My early research on educational organizations was conducted during the late 1970s and 1980s, in collaboration with Elizabeth Cohen, Terry Deal, Sandy Dornbusch, and John Meyer, among others, as we studied elementary and secondary schools (e.g., Cohen, Deal, Meyer and Scott 1979; Dornbusch and Scott 1975; Meyer and Scott 1983; Scott and Meyer 1994). We examined a wide array of empirical issues, including teaming in elementary schools, effects of fragmented centralization of funding on schools and school district organization, and the loose coupling of formal structures to the work of teachers. These studies contributed to the emergence of neoinstitutional theory as an important framework allowing organization researchers to rediscover the

importance of cultural and symbolic environments in the structuring of organizations (Meyer and Rowen 1977; Scott 2013).

More recently, I have returned to the study of educational organizations in work carried out in collaboration with Mitchell Stevens and Michael Kirst. In a project funded by the Gates Foundation, we developed a research agenda for examining higher education using a wider lens that draws attention to the changing ecology of higher education in the U.S., although we recognize that these trends are global (see Stevens and Kirst, forthcoming). In particular, we refocused attention on the important, and overlooked, role of "broad access colleges"—colleges admitting most of their applicants—that are responsible for educating more than 80 percent of students enrolled in higher education. I will say more about this and related work below.

Since I have returned, after a long absence, to the world of education, the editors of this journal asked me to offer my reflections on (1) recent developments in organization theory; (2) current and emerging topics for organizational research in higher education; and (3) some comments on the direction of my own current and future research.

Recent Developments in Organization Theory

The theoretical revolution associated with the introduction of general (or open) systems perspectives into organization studies beginning during the late 1950s (see Scott and Davis 2007: chap. 4) has continued apace. Broadly sketched, organizations were found to be affected by environmental complexity and turbulence and the state of technology (contingency theory), by power processes (resource dependency), by

relational system within and among organizations (network theory), by competition for resources among organizations of the same type and by the stage of organization population development (population ecology), and by cultural and symbolic systems (institutional theory). Of equal importance, units of study in organization studies have expanded from exclusive attention to individuals within organizations to include organizations as collective entities; organization "sets"—organizations connected by critical exchanges to other organizations; organization "populations"--organizations of the same type; and organization "fields"--organizations sharing relational and symbolic systems.

These broader and more encompassing units of study have become ever more necessary to enable our scholarship to keep pace with the changing reality of organization structures and processes. Over the past half century, organizations that endeavored to internalize and integrate the full range of activities involving acquisition, production, distribution and sales of specific types of services and products have been unbundled and disassembled, giving way to flexible supply chains and distributed networks (Harrison 1994; Miles and Snow 1992). Downsizing and outsourcing are contemporary strategies pursued by many organizations that elect to organize their systems around and restrict their attention to some delimited "distinctive competence." In a time when conventional boundaries are regularly ignored or changed and when meaningful activities transcend these boundaries, we observe organizational scholars who increasingly shift their focus from "organizations" to "organizing", from structure to process, from attributes to mechanisms. And these same scholars are likely to

embrace broader units of study, including organization populations, networks, and fields (Davis and Marquis 2005; Scott 2013: chap, 8; Scott and Davis 2007: chap. 14).

However, a related but reactive, trend deserves attention. During the period 1970-2000, the most active arenas within organization studies were those privileging macro structures with attendant "top-down" processes shaping organization structures and actions. Whether because of attention to power-dependence relations, ecological forces, or institutional constraints, organizations and their participants were often treated as submissive subjects of wider external systems. But the tide has turned in recent years so that more scholars are stressing the ways in which individual and organizational actors shape wider ecological and institutional systems. Early work in this reversal stressed that organizational actors could react strategically to external pressures, not simply conforming to them but shaping them and, if necessary pushing back (Oliver 1991). Others theorists pointed to the important role played by organizational and institutional entrepreneurs—individuals and processes introducing novelty and variety into existing arrangements (Ruef and Lounsbury 2007; Sine and David 2010). More recent scholars have fostered the study of institutional "work" emphasizing that all organization and individual actors must engage in work, whether their efforts are directed toward constructing new types of organizations and institutions, reproducing those which exist, or resisting and working to change and/or reform those which they inhabit (Lawrence and Suddaby 2006; Lawrence, Suddaby and Leca 2009).

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Past and Ongoing Research

As noted, I have not been a close observer of developments in organization research as they relate specifically to education. It is my impression that much more attention has been devoted to the study of primary and secondary schools than to higher education, and that in the former case, the lion's share of sociological research has focused more on stratification issues—inequality in treatment and/or outcomes related to class, ethnicity and gender—than to organization concerns (although organizational factors surely shape these processes). Focusing on organizational research within K-12 systems I know of considerable research relating to bureaucratic and professional tensions (Bidwell, 1965; Callahan 1962), student and academic culture (Coleman 1961), loose and tight coupling between organizational levels or between structures and activities—with coupling becoming more tight after the adoption of federal standards and standardized testing (Coburn 2004; Firestone 1985), federal and state systems as they relate to district and school organization structures (Meyer, Scott and Strang 1987; Meyer, Scott, Strang and Creighton 1988), and varying school responses to efforts by external interests groups to influence school curricula (Binder 2002).

With respect to organizational approaches to higher education, although there have been important and ongoing contributions by these researchers to organization studies, I believe that my colleague Mike Bastedo (2012: 3) wildly overstates its importance when he asserts that "Modern organization theory is built upon the study of colleges and universities." It is true that a cadre of distinguished social scientists, including Blau, Cole, Lazarsfeld, March, Parsons, and Riesman at one time or another turned their focus on higher education, but none of these expended much sustained

effort on this arena. A second cluster of scholars that followed in their footsteps, including Ben-David, Brint, Clark, Meyer, Peterson, and Trow, concentrated more attention on higher education, but with the exception of March and Meyer, this group has not exercised substantial influence on the trajectory of organization studies more generally.

Favored area of research pursued by organization students of education during the past few decades include:

- inequality as affected by college characteristics (e.g., Bowen and Bok 1988;
 McDonough 1997; Rosenbaum, Deil-Amen, and Person 2006)
- elite colleges and the reproduction of inequality (e.g., Kingston and Lewis, 1989;
 Karabel 2006; Stevens 2007)
- organizational ambiguity and leadership (e.g., Cohen and March 1974;
 Ehrenberg 2004)
- strategy in decision making (e.g., Brewer, Gates and Goldman 2002; Chaffee and Tierney 1988; Gumport 2012)
- organization governance: within and external to colleges (e.g., Baldridge 1971;
 Clark 1983; Hearn and McLendon 2012; Richardson and Martinez 2009)
- organization culture (e.g., Becker, Geer, Hughes and Strauss 1961; Clark 1970;
 Clark 1987)
- academic departments, differentiation, prestige, and power processes (e.g., Blau
 1973, Pfeffer and Salancik 1974; Pfeffer, Leong, and Strehl 1976)
- effects of types of revenue on organizational mission (e.g., Weisbrod, Ballou, and Asch 2008)

- effects of federal and corporate support on research universities (e.g., Cole 2009;
 Geiger 1993; Leslie 1993)
- institutional environments and organizational processes and structures (e.g., Meyer, Ramirez, Frank, and Schofer 2007; Rowan 1982)

Emerging Research Directions

More recent research has introduced some new themes:

- difficulties posed by the increased diversity of student populations in colleges
 (Deil-Amen and DeLucca 2010; Goldrick-Rab 2006)
- effects of external college ranking systems on colleges (Bastedo and Bowman 2011; Ehrenberg 2003; Wedlin 2006)
- heightened effects of market processes on colleges, including the growth of forprofit entities (e.g., Berman 2012; Kraatz, Ventresca and Deng 2112; Ruch 2001; Slaughter and Rhoades 2004; Tierney and Hentschke 2007),
- university partnerships in networked systems for knowledge creation (e.g., Powell, Koput and Smith-Doerr 1996; Powell, White, Koput. and Owen-Smith 2005)
- globalization processes affecting colleges (e.g., Frank and Gabler 2006; Moon and Wotipka 2006; Ramirez 2006)
- digitalization and higher education (e.g., Allen et al. 2011; Kamenetz 2010)

In many ways, the emerging new agenda is daunting: both challenging and exciting for leaders and scholars in higher education. In addition, it begins to bring

scholarship in higher education into closer alignment with the recent developments in organization theory as briefly described above. Research that my colleagues and I have undertaken attempts to advance this development.

Direction of My Own Research

For the last three years I have been engaged in a effort with my colleagues at the Stanford Graduate School of Education to direct research and policy to focus more on "the changing ecology of higher education" in the U.S." The leaders of this effort, Mitchell Stevens and Michael Kirst, with support from the Gates foundation, organized a series of workshops, seminars, and conferences intended to shift attention from individual students (for example, income and status attainment) or colleges (usually focusing on elite colleges and universities) to examine broader changes in the characteristics of student bodies and to the wide variety of types of colleges and the multiplex nature of their missions. Higher education is too often thought of as made up of unitary forms serving cohorts of late-adolescent students. The reality is that most current students are to be found in a wide variety of "broad-access" colleges that includes small religious schools, huge public systems, both state and city, community colleges, specialized colleges and institutes, and for-profit entities. These schools serve a large number of "non-traditional" students—ethnically diverse, older and poorer, with reduced academic experience and widely varying goals. Unpacking and understanding the diverse world represented by higher education today provides a new agenda for scholars and policy-makers, as described more fully in a series of essays commissioned by the project (Stevens and Kirst, forthcoming).

Pursuant to this agenda, Stevens is spearheading a series of lectures, seminars, and studies intended both to understand and to shape the "digital future" of higher education. And Kirst and I. in collaboration with the staff of the John W. Gardner Center for Youth and their Communities, have designed and are in the process of conducting an empirical study of the higher education field as it has evolved during the past four decades in the San Francisco Bay Area. The field perspective emphasizes that (1) there are many types (or populations) of colleges, (2) these are surrounded by and embedded in complex networks of relations involving a wide range of other kinds of organizations, including federal, state, and local regulatory and funding agencies, professional and business associations, unions, philanthropic and other nonprofit organizations, alumni associations, and (3) all of these contain actors playing diverse roles driven by differing "institutional logics"—assumptions, belief systems, and identities—and often commanding differing types of capital (e.g., land, financial, social or cultural expertise) (DiMaggio and Powell 1983; Meyer and Rowan 1977; Scott, Ruef, Mendel, and Caronna 2000). We can obtain great insight into any given arena of social life by asking how the social structures created to carry out these activities change over time in the composition of their actors, institutional logics, and governance systems.

Our study, with funding from the S. D. Bechtel, Jr. Foundation, will focus broadly on four questions:

1. How have the numbers and types of colleges in the 7-county Bay Area changed over the period 1970-2010?

We know that during this period, *communities colleges* came into widespread use as a way to increase access to higher education for the growing

numbers of students unable to gain direct access to the more established 4-year programs These colleges pursue diverse missions, including preparing students for transfer to 4-year programs and providing technical training for terminal degrees (Brint and Kerabel 1989). Four-year public colleges and universities have also grown in size and complexity, with many adding professional schools and research components to their programs. While undergraduates still take liberal arts courses, practical, vocationally oriented programs have grown rapidly (Brint, Riddle, Turk-Ricakci, and Levy 2005). Religious colleges have not increased in numbers, but many have grown in size as they have become more secular in orientation. *Non-profit elite colleges and universities* are more highly selective and geared to liberal arts or pre-professional training. The universities also operate highly-endowed professional schools and advanced graduate and research-training programs. A wide range of special focus institutions exists. Many provide vocational training (e.g., cosmetology); but others offer more advanced training in areas such as paraprofessional health services, engineering and technology, business and management, and art/music/design. Since the 1980s, we have witnessed the emergence and rapid growth of a new class of post-secondary education providers, the for-profit college (Tierney and Hentschke 2007). These colleges have grown rapidly in the Bay Area. Some offer home campuses, student dorms, and face-to-face training; others operate primarily on-line services. Most emphasize specialized, technical training, stressing clarity of student goals and curricular requirements.

The point to be emphasized is that most colleges are not elite 4-year residential programs and most students in higher education programs in recent decades are not in colleges offering liberal arts degrees but in a much larger and broader range of organizations more likely to offer vocational and practical training.

2. What are the major changes in the context of these colleges and to what extent are they reflected in college characteristics?

Multiple contexts are relevant: national, state, and regional. At the *national level*, there have been important changes in federal policies and programs affecting higher education, including those of the Department of Education, Veterans' Administration, and Labor. In addition, we can track the levels of public support for and perceived value of higher education as these have changed over time. At the *state level*, California has made a variety of important structural changes affecting college governance creating, a three-tier structure of governance for public programs (Richardson and Martinez 2009); at the same time, public funding for colleges at all levels has declined over recent decades. Also, at both national and state levels, a wide range of structures exist to exercise influence over colleges—e.g., disciplinary and managerial professional associations, unions, non-profit groups lobbying for varying constituencies—creating a complex infrastructure of support and constraint.

At the regional level, all colleges are subject to controls exercised by accreditation bodies. Also, colleges are strongly affected by the demographic changes occurring in local populations, and by local immigration rates. Of

course, the economy of the Bay Area, hosting Silicon Valley industries, must be regarded as a central element affecting the development of higher education. Regional economies vary greatly in their industrial and occupational composition and Silicon Valley is distinctive (if not unique) in the diverse range of electronic, semiconductor, computer, and social media companies it has spawned and nurtured (Lee, et al. 2000; Saxenian 1994). The role played by elite research universities such as Stanford and University of California, Berkeley in helping to create this economy is well documented, but the part played by other parts of the higher education remain understudied, leading to a third question:

3. What are the ways in which the various colleges have connected to firms involved in the Silicon Valley economy? What changes in the colleges were associated with these involvements?

To examine these questions, we will utilize in-depth studies of selected types of colleges, ascertaining what types of schools have been more proactive and, within these schools, which programs have been more innovative. Because the Silicon Valley economy is so volatile, we will attempt to identity a set of "flexibility mechanisms" which allow colleges and their component programs to adapt rapidly to changing needs and demands of local labor markets.

4. What types of labor intermediary organizations are active in the Silicon Valley economy and to what extent do they mediate between colleges and employers vs. offer alternative modes of connecting workers and jobs?

In conventional markets, college placement services play an important role in connecting students with employment, but in many advanced economic regions, other kinds of labor intermediaries, including placement firms, temporary employment agencies, and online services, have emerged that increasingly substitute for school-company connections (Autor 2009; Barley and Kunda 2004). Indeed, the role of these intermediaries has expanded to include, not only worker placement, but also occupational coaching and training.

In addition, other intermediaries such as "user groups" and immigrant associations self-organize to provide worker support and training programs.

The kinds of questions listed above mask a broader set of theoretical issues that we hope to explore with our research. These include:

- How have the structural vocabularies of organizations providing higher education changed over time? (e.g., in some types of schools, students have been replaced by clients or customers and teachers by tutors, coaches, and course aides)
- What are the attributes that make for flexibility in organization response?
- How are we to distinguish organization adaptation from capitulation—failure to protect important 'precarious" values (Kraatz, Ventresca, and Deng 2012)
- What are the types of "boundary spanners" that connect colleges to broader social and economic players in the regions served?
- What constitutes evidence of "organization learning", both from one's own past and from other's behavior?
- Can we identify structures or processes associated with effective organization learning?

 How do we systematically study changes in the institutional logics underlying curricular and program-design decisions by colleges?

Concluding Comment

My message is that the world of higher education today is substantially different from the one in which many of us were trained. In particular, it is composed of a broader and more diverse range of organizational forms and types of actors that vary greatly from the traditional "cloister" model closeting a small body of residential students. Colleges today are generally larger, more complex, serve more diverse students, and pursue a larger range of objectives. There are signs that colleges and their components are becoming more flexible, and there is evidence of the employment of both more "corporate" models with centralized administrative units ("headquarters") and "branch offices" as well as "network" models with cooperative frameworks devised to connect diverse partners. Given such changes, resource dependence, organization ecology and organization field perspectives have increased utility as a guide to these systems. The connections between higher education and organization theory may become even more productive in the coming decades.

References

- Allen, Elaine et al. 2011. *Going the Distance: Online Learning in higher Education.*Babsen Survey Research Group.
- Autor, David H., ed. 2009. *Studies of Labor Market Intermediation*. Chicago: University of Chicago Press.
- Baldridge, J. Victor 1971. Power and Conflict in the University. New York: John Wiley.
- Barley, Stephen R., and Gideon Kunda 2004. *Gurus, Hired Guns and Warm Bodies: Itinerant Experts in a Knowledge Economy.* Princeton, NJ: Princeton University

 Press.
- Bastedo, Michael N. 2012. "Organizing higher education: A manifesto," in *The Organization of Higher Education*, 3-17, ed. Michael N. Baastedo. Baltimore, MD: Johns Hopkins University Press.
- Bastedo, Michael N., and N. A. Bowman 2011 "College rankings as an interorganizational dependency: Establishing the foundation for strategic and institutional accounts. *Research in Higher Education*, 52:3-23.
- Becker, Howard S., Blanche Geer, Everett C. Hughes, and Anselm Strauss 1961. *Boys in White: Student Culture in Medical School.* Chicago: University of Chicago

 Press.
- Berman, Elizabeth Popp 2012. Creating the Market University: How Academic Science

 Became an Economic Engine. Princeton, NJ: Princeton University Press.
- Bidwell, Charles E. 1965. "The school as a formal organization," in *Handbook of Organizations*, pp. 972-1022, ed., James G. March. Chicago: Rand-McNally.

- Blau, Peter M. 1973. *The Organization of Academic Work.* New Brunswick, NJ: Transaction.
- Blau, Peter M., and W. Richard Scott 1962. *Formal Organizations: A Comparative Approach.* San Francisco: Chandler. Reprinted as a Stanford Business Classic, Stanford University Press, 2003.
- Binder, Amy J. 2002. *Contentious Curricula: Afrocentrism and Creationism in American Public Schools*. Princeton, NJ: Princeton University Press.
- Bowen, W., and Derek Bok 1998. *The Shape of the River: Long-term Consequences of Considering race in College and University Admissions.* Princeton, NJ: Princeton University Press.
- Brint, Stephen, and Jerome Karabel 1989. *The Diverted Dream: Community Colleges*and the Promise of Educational Opportunity in America, 1900-1985. New York:

 Oxford University Press.
- Brint, Stephen, Mark Riddle, Lori Turk-Bicakci, and Charles S. Levy 2005. "From the liberal to the practical arts in American colleges and universities: Organizational analysis and cultural change," *Journal of Higher Education* 76:151-80.
- Callahan, R. E. 1962. *Education and the Cult of Efficiency*. Chicago: University of Chicago Press.
- Chaffee, E. E., and W. G. Therney 1988. *Collegiate Culture and Leadership Strategies*.

 New York: Macmillan.
- Clark, Burton R. 1970. *The Distinctive College.* Chicago: Aldine.
- Clark, Burton R. 1983. *The Higher Education System: Academic Organization in Cross-National Perspective*. Los Angeles: University of California Press.

- Clark, Burton R. 1987. *The Academic Life: Small Worlds, Different Worlds.* Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.
- Coburn, Cynthia E. 2004. "Beyond decoupling: Rethinking the relationship between the institutional environment and the classroom," *Sociology of Education* 77:211-244.
- Cohen, Elizabeth G., Terrence E. Deal, John W. Meyer, and W. Richard Scott 1979.

 "Technology and teaming in the elementary school," *Sociology of Education* 52: 20-33.
- Cohen, Michael D., and James G. March 1974. *Leadership and Ambiguity: The American College President*. New York: McGraw Hill.
- Cole, Jonathan C. 2009. The Great American University: Its Rise to Preeminence, Its Indispensable National Role and Why It Must be Protected. New York:

 PublicAffairs.
- Coleman, James S. 1961. *The Adolescent Society.* New York: Free Press.
- Davis, Gerald F., and Christopher Marquis 2005. "Prospects for organization theory in the early 21st century: Institutional fields and mechanisms," *Organization Science* 16:332-43.
- Deil-Amen, Regina J., and S. DeLuca 2010. "The underserved third: How our educational structures populate an educational underclass, *Journal of Education for Students Placed at Risk* 15:27-50.
- DiMaggio, Paul J., and Walter W. Powell 1983. "The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields," *American Sociological Review* 48: 147-60.

- Dornbusch, Sanford M., and W. Richard Scott 1975. *Evaluation and the Exercise of Authority*. San Francisco: Jossey-Bass.
- Ehrenberg, R. G. 2003. "Reaching for the brass ring: The U.S. News and World report rankings and competition," *Review of Higher Education* 26:145-62.
- Firestone, William A. 1985. "The study of loose coupling: Problems, progress, and prospects," *Research in the Sociology of Education and Socialization* 5:3-30.
- Frank, David A., and J. Gabler 2006. Reconstructing the University: Worldwide

 Changes in Academic Emphasis over the Twentieth Century. Stanford, CA:

 Stanford University Press.
- Friedland, Roger, and Robert R. Alford 1991. "Bringing society back in: Symbols, practices, and institutional contradictions," in *The New Institutionalism in Organization Analysis*, 232-63, ed. Walter W. Powell and Paul J. DiMaggio. Chicago: University of Chicago Press.
- Geiger, Roger L. 1993. Research and Relevant Knowledge: American Research
 Universities since World War II. New York: Oxford University Press.
- Goldrick-Rab, Sara 2006. "Following their every move: An investigation of social class differences in college pathways," *Sociology of Education* 79:61-79.
- Gumport, Patricia J. 2012. "Strategic thinking in higher education research," in *The Organization of Higher Education: Managing Colleges for a New Era,* 18-41, ed., Michael N.Bastedo. Baltimore: Johns Hopkins Press.
- Harrison, Bennett 1994. Lean and Mean: The Changing Landscape of Corporate

 Power in the Age of Flexibility. New York: Basic Books.

- Hearn, James C., and Michael K. McLendon 2012. Governance research: From adolescence toward maturity," in The Organization of Higher Education:

 Managing Colleges for a New Era, 45-85. Baltimore: Johns Hopkins University

 Press.
- Kamenetz, Anya 2010. DIYU: Edupunks, Edupreneurs, and the Coming Transformation of Higher Education. White River Junction, VT: Chelsea Green Publishing
- Karabel, Jerome 2006. *The Chosen: The Hidden History of Exclusion and Admission at Harvard, Yale, and Princeton.* Boston: Houghton Mifflin.
- Kingston, Paul William, and Lionel S. Lewis, ed. 1989. *The High-Status Track: Studies of Elite Schools and Stratification.* Albany: State University of New York Press.
- Kraatz, Matthew S., Marc J. Ventresca, and Linda Deng 2012. "Precarious values and mundane innovations: Enrollment management in American liberal arts colleges,"

 Academy of Management Journal 53:1521-45.
- Lawrence, Thomas B., and Roy Suddaby 2006. "Institutions and institutional work," in The Sage Handbook of Organization Studies, 2nd ed. 215-254, ed. Stewart R. Clegg, Cynthia Hardy, Thomas B. Lawrence, and Walter R. Nord. London: Sage.
- Lawrence, Thomas B., Roy Suddaby, and Bernard Leca, ed. 2009. *Institutional Work:*Actors and Agency in Institutional Studies of Organizations. Cambridge, UK:

 Cambridge University Press.
- Lee, Chong-Moon, William F. Miller, Marguerite Gong Hancock, and Henry S. Rowan, ed. 2000. *The Silicon Valley Edge: A Habitat for Innovation and Entrepreneurship.* Stanford, CA: Stanford University Press.

- Leslie, S. 1993. *The Cold War and American Science: The Military-Industrial-Academic Complex at MIT and Stanford.* New York: Columbia University Press.
- McDonough, Patricia M. 1997. *Choosing Colleges: How Social Class and Schools Structure Opportunity*. Albany, NY: State University of New York Press.
- Meyer, John W., and Bryan Rowan 1977. "Institutionalized organizations: Formal structure as myth and ceremony," *American Journal of Sociology* 83:340-63.
- Meyer, John W., and W. Richard Scott 1983. *Organizational Environments: Ritual and Rationality*. Newbury Park, CA: Sage.
- Meyer, John W., W. Richard Scott, and David Strang 1987. "Centralization, fragmentation, and school district complexity," *Administrative Science Quarterly* 32:186-201.
- Meyer, John W., W. Richard Scott, David Strang, and Andrew L. Creighton 1988.

 "Bureaucratization without centralization: Changes in the organizational system of U. S. public education, 1940-80, in *Institutional Patterns and Organizations: Culture and Environment,* pp. 139-68, ed., Lynn G. Zucker. Cambridge, MA: Ballinger.
- Miles, Raymond E., and Charles C. Snow 1992. "Causes of failure in network organizations," *California Management Review* 34:53-72.
- Moon, Hyeyoung, and Christine Min Wotipka 2006. "The worldwide diffusion of business education, 1881-1999: Historical trajectory and mechanisms of expansion," in *Globalization and Organization: World Society and Organizational Change*, 121-36, ED. Gili S. Drori, John W. Meyer, and Hokyu Hwang. Oxford, UK: Oxford University Press.

- Oliver, Christine 1991. "Strategic responses to institutional processes," *Academy of Management Review* 16:145-179.
- Pfeffer, Jeffrey, A. Leong, and K. Strehl 1976. "Publication and prestige mobility of university departments in three scientific disciplines," *Sociology of Education* 49:212-18.
- Pfeffer, Jeffey A., and Gerald R. Salancik 1974. "Organization decision making as a political process: The case of a university budget," *Administrative Science Quarterly* 19:135-51.
- Powell, Walter W., Kenneth W. Koput, and Laurel Smith-Doerr 1996.

 "Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology," *Administrative Science Quarterly* 41:116-45.
- Powell, Walter W., Doug White, Kenneth Koput, and Jason Owen=Smith 2005.

 "Network dynamics and field evolution: The growth of interorganizational collaboration in the life sciences," *American Journal of Sociology* 110:1132-1205.
- Ramirez, Francisco O. 2006. "The rationalization of universities," in *Transnational Governance: Institutional Dynamics of Regulation*, 225-44, ed. Marie-Laure Djelic and Kerstin Sahlin-Andersson. Cambridge, UK: Cambridge University Press.
- Richardson, Richard, J., and Mario Martinez. 2009. *Policy and Performance in American Higher Education: An Examination of Cases across State Systems.*Baltimore: Johns Hopkins University Press.
- Rosenbaum, James E., Regina Deil-Amen, and Ann E. Person 2006. *After Admission:*From College Access to College Success. New York: Russell Sage Foundation.

- Rowan, Brian 1982. "Organizational structure and the institutional environments: The case of public schools," *Administrative Science Quarterly* 27:259-79.
- Ruch, Richard S. 2001. *Higher Ed., Inc.: The Rise of the for-Profit University.* Baltimore: Johns Hopkins Press.
- Ruef, Martin, and Michael Lounsbury, ed. 2007. *The Sociology of Entrepreneurship:*Research in the Sociology of Organizations, vol. 25. Amsterdam: Elsevier.
- Saxenian, Annalee 1994. Regional Advantage: Culture and Competition in Silicon Valley and Route 128. Cambridge, MA: Harvard University Press.
- Scott, W. Richard 1981. *Organizations: Rational, Natural and Open Systems.*Englewood Cliffs, NJ: Prentice Hall.
- Scott, W. Richard 2013. *Institutions and Organizations: Ideas, Identities, and Interests.*Thousand Oaks, CA: Sage, 4th ed.
- Scott, W. Richard, and Gerald F. Davis 2007. *Organizations and Organizing: Rational, Natural and Open Systems Perspectives.* Upper Saddle River, NJ:

 Pearson/Prentice Hall.
- Scott, W. Richard, and John W. Meyer 1994. *Institutional Environments and Organizations: Structural Complexity and Individualism.* Thousand Oaks, CA: Sage.
- Scott, W. Richard, Martin Ruef, Peter J. Mendel, and Carol B. Caronna 2000.

 Institutional Change and Healthcare Organizations: From Professional

 Dominance to Managed Care. Chicago: University of Chicago Press.
- Sine, Wesley D., and Robert J. David, ed. 2010. *Institutions and Entrepreneurship:*Research in the Sociology of Work, vol. 21. Bingley, UK: Emerald.

- Slaughter, Sheila, and G. Rhodes 2004. *Academic Capitalism and the New Economy.*Baltimore: Johns Hopkins University Press.
- Stevens, Mitchell L. 2007. *Creating a Class: College Admissions and the Education of Elites.* Cambridge, MA: Harvard University Press.
- Stevens, Mitchell L., and Michael W. Kirst, ed. Forthcoming. *Remaking College:*Broad-Access Higher Education for a New Era. Stanford, CA: Stanford

 University Press.
- Tierney, William G., and Guilbert C. Hentschke 2007. New Players, Different Game:

 Understanding the Rise of For-Profit Colleges and Universities. Baltimore: Johns
 Hopkins University Press.
- Wedlin, Linda 2006. Ranking Business Schools: Forming Fields, Identities and

 Boundaries in International Management Education. Cheltenham, UK: Edward

 Elgar.
- Weisbrod, Burton A., Jeffrey P. Ballou, and Evelyn D. Asch. 2008. *Mission and Money: Understanding the University*. Cambridge, UK: Cambridge University Press.