Chester Barnard and the Systems Approach to Nurturing Organizations

Andrea Gabor
Baruch College, City University of New York

Joseph T. Mahoney
University of Illinois at Urbana−Champaign, College of Business

Abstract

Chester Barnard was best known as the author of The Functions of the Executive, perhaps the 20thcentury's most influential book on management and leadership. Barnard offers a systems approach to the study of organization, which contains a psychological theory of motivation and behavior, a sociological theory of cooperation and complex inter−dependencies, and an ideology based on a meritocracy. Barnard's teachings drew on personal insights as a senior executive of ATTin the 1920s and 1930s, and he emphasized the role of the manager as both a professional and as a steward of the corporation. For leadership to be effective, it had to be perceived as legitimate, Barnard maintained. Barnard sensed that the central challenge of management was balancing both the technological and human dimensions of organization. The challenge for the executive was to communicate organizational goals and to win the cooperation of both the formal and the informal organization; but he cautioned against relying exclusively on incentive schemes to win that cooperation. Responsibility—in terms of the honor and faithfulness with which managers carry out their responsibilities−−is the most important function of the executive.

Chester Barnard and the Systems Approach to Nurturing Organizations

Andrea Gabor
Associate Professor, and Michael R. Bloomberg Professor of Business Journalism,
Department of Journalism
Baruch College
City University of New York
One Bernard Baruch Way
55 Lexington at 24th St.
New York, NY 10010
(646) 312-3970
AAGabor@aol.com, andrea.gabor@baruch.cuny.edu

Joseph T. Mahoney
Investors in Business Education Professor of Strategy, &
Director of Graduate Studies,
Department of Business Administration
College of Business
University of Illinois at Urbana-Champaign
350 Wohlers Hall
1206 South Sixth Street
Champaign, IL 61820
(217) 244-8257
josephm@illinois.edu

Chester Barnard (1886-1961) was best known as the author of *The Functions of the Executive,* perhaps the 20th century's most influential book on management and leadership.[1]   The book emphasizes competence, moral integrity, rational stewardship, professionalism, and a systems approach, and was written for posterity. For generations, *The Functions of the Executive* proved to be an inspiration to the leading thinkers in a host of disciplines. Perrow writes that: "This ... remarkable book contains within it the seeds of three distinct trends of organizational theory that were to dominate the field for the next three decades. One was the institutional theory as represented by Philip Selznick [1957]; another was the decision-making school as represented by Herbert Simon [1947]; the third was the human relations school [Mayo, 1933; Roethlisberger & Dickson, 1939]" (1986: 63).[2]   Barnard's work also influenced sociology's Parsons and Gouldner and informed the institutional economics of Williamson (1975, 2005). Indeed, Andrews states that: "*The Functions of the Executive* remains today, as it has been since its publication, the most thought-provoking book on organization and management ever written by a practicing executive" (1968: xxi). Barnard combined the capacity for abstract thought

---

[1] As of July 25th 2010, Barnard's (1938) *Functions of the Executive* had been cited over 8,000 times (*Google Scholar*). See Bedeian and Wren (2001) for their ranking of the top 25 most influential management books of the 20th century with Taylor (1911) and Barnard (1938) occupying the top two positions.

[2] Classic works influenced by Barnard's *The Function of the Executive* include: Boulding (1956), Coser (1956), Cyert & March (1963), Dalton (1959), Downs (1967), Gouldner (1954), Homans (1950), Katz & Kahn (1966), Likert (1961), March & Simon (1958), Mayo (1945), McGregor (1960), Merton (1949), Mintzberg (1973), Selznick (1957), Simon (1947), Thompson (1967), and Williamson (1975). Of particular note is the Barnard-Simon connection (Simon, 1991, 1994; Wolf, 1995a). It is worth nothing, however, that although Barnard knew both Roethlisberger and Mayo, he later claimed to have known little about the Hawthorne studies, which were completed before he wrote *Functions of the Executive.* Barnard did serve as a major influence on Likert (1961) and McGregor (1960).

with the ability to apply reason to professional experiences toward developing a "science of organization" (1938: 290).[3]

Barnard (1938) emphasized the role of the manager as both a professional and as a steward of the corporation. Barnard's (1938) teachings drew on personal insights as a senior executive of AT&T, which saw good governance as the primary means of winning public acceptance of its telecommunications monopoly. Barnard's thinking also reflected a growing interest in social systems and a concern about how society, in the 1930s, would cope with the growing technological complexity of industrial life and the emergence of ever larger-scale institutions. Barnard's (1938) book, which was compiled from a series of lectures delivered in Boston during the 1930s, also sought to provide answers to the concerns of management practitioners, as well as the intellectuals who were transforming the Harvard Business School into a "West Point of Capitalism." Further, the scientific and industrial boom of the early 20th century was fomenting a political, economic, and spiritual crisis, and Barnard's (1938) vision of professional, managerial stewardship promised to serve as a stabilizing influence on a corporatist American democracy.

Barnard (1938) articulated the principal defense of managerial capitalism, and maintained that management possessed the "moral authority" to both run and modernize the nation and to harness the forces of technological change for the public good. Barnard (1938) provides the Progressive case for the consistency of the American dream with

---

[3] In addition to developing the science of organization, Barnard also wanted to convey the art of organizing and the aesthetics of management, although he felt his shortcomings here: "Still more do I regret the failure to convey the *sense* of organization, the dramatic, and aesthetic feeling that surpasses the possibilities of exposition, which derives chiefly from the intimate, habitual interested experience. It is evident that many lack an interest in the science of organization because they are oblivious to the arts of organizing, not perceiving the significant elements. They miss the structure of the symphony, the art of the composition, and the skill of its execution, because they cannot hear the tones" (1938: xxxiv).

managerial order (Scott 1992).[4] Moreover, Barnard (1938) maintains that professional managers needed to be as dedicated, energetic, and committed to reform as their administrative counterparts in government in order to reassert their rightful leadership.[5]

In almost every respect, *The Functions of the Executive* was decades ahead of its time. For one thing, in sharp contrast to the mechanistic conceptions of earlier management thinkers, such as Frederick Winslow Taylor, Barnard (1938) viewed the organization as a complex social system. Barnard (1938) showed a unique ability to traverse back and forth between the empirical and theoretical realms and to weave together the latest developments in psychology, sociology, and human relations. Barnard (1938) focused on the complexities of the human element in organization, on the psychological forces of human behavior, and on developing ways to manage the complexities of human behavior and to cope with its limitations (Gabor, 2000).

Barnard emphasizes that formal organizations are "organic and evolving social systems" (1945: 178), and that management's main challenge is achieving cooperation among the groups and individuals within this social system, in the interests of achieving

---

[4] Mahoney (2002, 2005) rejects, however, the thesis of Perrow (1986) and Scott (1992, 1994) that Barnard's (1938) thinking was elitist. Indeed, Barnard's (1948) own account of "the riot of the unemployed at Trenton, N.J. 1935" shows an ability to connect with workers and a sensitivity to maintain the reciprocal acknowledgment of personal integrity. For convincing critiques of Scott (1992), see Pauchant (1994) and Wolf (1995b).

[5] Barnard's thinking was influenced by classic Greek philosophy such as that of Plato (Godfrey, 1994) and Aristotle (Heyl, 1968), as well as by: Adams (1913), Bentley (1935), Bridgeman (1921), Brinton (1938), Brown (1934), Cardozo (1921), Commons (1934), Dewey (1938), Durkheim (1933), Ehrlich (1912), Follett (1924), Henderson (1935), Herring (1936), Homans & Curtis (1934), Humphrey (1933); Koffka (1935), Korzybski (1933), Lewin (1938), Mayo (1933), Merz (1904), Ogden & Richards (1936), Pareto (1935), Parsons (1937), Rivers (1924), Schumpeter (1934), Smith (1776), Weber (1930), and Whitehead (1929). Barnard also acknowledged his friendships and correspondences with such influential thinkers as Philip Cabot, Lawrence Henderson, George Homans, Elton Mayo, and Talcott Parsons (Wolf, 1994). In addition to Barnard (1948), other collected works of Barnard can be found in Wolf (1974) and Wolf & Iino (1986).

organizational goals. The magnitude of the cooperative challenge is such that "successful cooperation in or by formal organizations is the abnormal, not the normal condition. What are observed from day to day are the successful survivors among innumerable failures … Failure to cooperate, failure of cooperation, failure of organization, disorganization, disintegration, destruction of organization – and reorganization – are characteristic facts of human history" (1938:5). Barnard also recognized the link between authority and legitimacy.

As a systems thinker, Barnard's ideas drew on his own eclectic intellectual interests, his years at AT&T, and his exposure to the so-called Harvard Circle, which reinforced his interests in the psychological and sociological aspects of management. Although Barnard was educated at Harvard, he was not a Brahmin. He was born poor, the son of a mechanic; his mother died giving birth to his third sibling when he was just five years old. Yet the Barnards were not a typical working-class family. "I was raised into a family who were all poor people, but they were also quite intellectual. They used to argue, endless arguments for hours, on Herbert Spencer and other philosophers," Barnard recalled (Wolf, 1961: 168).[6] Upon graduating from grammar school in Cliftondale,

---

[6] Chester Irving Barnard was born on November 7, 1886 in Malden, Massachusetts. His father was a mechanic with grammar school education. His mother died when he was five years old and he spent a considerable amount of his childhood in the home of his grandfather who was a blacksmith (Wolf, 1961: 168). Family life for Barnard was filled with music and with discussions on philosophy and social views. Gabor writes that: "[Barnard's] personality reflected the contradictions of a poor boy who had grown up in a working-class household where 'endless hours of arguments' centered not on the perpetual lack of money but on books and philosophy" (2000:7). In fact, Barnard's interest in philosophy was a life-long hobby for him. He read widely in philosophy and he was a member of the American Philosophical Society (Wolf, 1973: 58). Barnard was also active in numerous scientific and educational organizations, and he was Director of the National Bureau of Economic Research (Wolf, 1961: 171). Barnard's other life-long interests included music and the arts, and he was active in the founding of the Bach Society of New Jersey and the Newark Art Theater. His repertory in music ranged from Bach to boogie woogie. While at the piano, upon request, Barnard would play from memory any classical composition named (Biles & Bolton, 1994).

Massachusetts, at the age of fifteen, Barnard worked in a piano factory, and learned the trade of piano tuning. He eventually earned enough to enroll at Mount Hermon school, a prep school in Northfield, Mass., and later at Harvard. Barnard continued to work odd jobs throughout his college career and finished most of the requirements for a bachelor's degree in economics in just three years. But a lack of funds forced him to drop out of Harvard before he completed a final science requirement in physics or chemistry (Wolf, 1961: 170).

Thus, Barnard had the number-one pedigree for joining the new managerial class, which held professional expertise and merit as its principal membership requirement. He went to work at AT&T, in 1909, as a statistician, right after leaving Harvard. Barnard analyzed foreign telephone rate systems for a salary of $11.50 a week (Wolf, 1973: 5). His chief mentor at AT&T was Walter S. Gifford, who ran the statistics department where Barnard worked and who would eventually become AT&T's longest-serving president. When Barnard joined the company, it was still run by the legendary Theodore Vail, who had undertaken a massive campaign to acquire numerous independent telephone companies and to consolidate them under the AT&T umbrella. At the same time, Vail was fighting efforts by the U.S. Post Office to nationalize the telephone system. The statistics department, one of the first of its kind in a U.S. corporation, was set up as a sort of propaganda department to collect data that would demonstrate the superiority of AT&T's performance.

Barnard, at age 41, was appointed President of New Jersey Bell Telephone (NJBT) in 1927 just two years after Gifford became president. NJBT was formed during the boom years of the late 1920s out of the merger of two regional operating companies, and

Barnard's first job involved the integration of the two companies and expansion of tele-

phone service in the rapidly growing state. [7] Barnard's second major challenge was to

convert NJBT to dial service. In this he was less successful. A conservative-leaning

executive, he put the brakes on dial conversion during the Depression. Thus, while NJBT

nearly quadrupled its conversion rate to 32 percent in 1933, up from just 8 percent in

1928, it lagged behind the rest of the Bell System average for years to come. NJBT's

slow conversion rate proved to be a problem during World War II, when the company

[7] Barnard's jobs before joining AT&T until then included tuning pianos while at Harvard
University, conducting a small dance orchestra, typesetting theses for students, and offering a
translation service (as he had learned Italian, French and German) (Biles & Bolton, 1994; Wolf,
1961). After departing Harvard in 1909 without completing all necessary requirements, Barnard
spent his entire business career in the telephone industry, beginning in 1909 as a statistician. In
1915, he became a commercial engineer, and in 1922 he was promoted to assistant vice president
of the Bell Telephone Company of Pennsylvania. Four years later he became general manager of
the Bell Telephone Company of New Jersey, and in 1927 Barnard was appointed to New Jersey
Bell's presidency. That same year he was also appointed a director of New Jersey Bell and a
director of the Fidelity Union Trust Company. He became a director of the American Insurance
Company in 1928 and of the Prudential Insurance Company of America in 1929.
    Barnard was also active in civic organizations. In 1928 he became a member of the New
York State Chamber of Commerce. In 1931 he organized and directed for 18 months New
Jersey's Emergency Relief Administration. Barnard became active in the Newark Community
Chest in the mid-1930s. At that time he also served on committees appointed by the Secretary of
Labor to study the problems of older workers in industry. He was also director of the Regional
Planning Association, and was a member of the board of managers of New Jersey Reformatory at
Rahway (Wolf, 1961: 171). From 1931 through 1934, Barnard represented New Jersey, New
York, Pennsylvania, and Delaware as a director of the United States Chamber of Commerce. In
1935, he served for the second time as State Director of the New Jersey Relief Administration. At
the outbreak of World War II, he was a trustee of the Rockefeller Foundation, the National Boys
Club Movement, and Air Youth of America, as well as Honorary Chairman of the Red Cross. In
1942, Barnard succeeded Thomas E. Dewey to become the second president of the United
Services Organization (USO), a morale-enhancing volunteer organization for the Allies' service-
men and -women during World War II, serving without monetary compensation (Biles & Bolton,
1994).
    After World War II, Barnard was a consultant to the United States representative on the
United Nations Atomic Energy Committee, and he co-authored the State Department report on
International Control of Atomic Energy. In 1946, he was appointed to the Presidential Special
Commission on Integration of Medical Services in the government. In 1948, Barnard left the Bell
System to become President of the Rockefeller Foundation, and in 1952 he retired from that post.
Barnard then became chairman of the National Science Foundation. In 1957, he was appointed to
the Board of Health of the City of New York, and he served as a member of the advisory
committee studying hospital administration under a program set up by the Sloan Foundation
(Wolf, 1961: 171). Barnard died on June 7, 1961, at French Hospital in Manhattan, in New York
City (Wolf, 1973).

struggled to provide adequate telephone service both for wartime production in the state and for business and private use.

While Barnard might have lacked technological vision, he excelled at organization-building—and a commitment to corporate welfare policies. His tenure at NJBT was marked by a sense of public service and personal integrity (Gabor, 2000: 73). For example, at the height of the Depression in 1933, he announced a no-layoff policy — a major accomplishment even within the Bell System — choosing to reduce employees' working hours instead. Combined with his penchant for personally negotiating labor disputes, such policies inspired employee loyalty. Though never an ardent opponent of unions, Barnard believed that they were useful only in competitive businesses where "bad treatment" of employees is forced on companies by "chiseling" competitors. By contrast, he believed that AT&T was in a position to persuade employees to prefer cooperation to confrontation (Gabor, 2000).

Barnard believed that a central challenge for management was balancing both the technological and human dimensions of organization. Moreover, he understood that this was a dynamic process, in need of constant attention and fine-tuning. Yet there is a curious discrepancy in Barnard's career at AT&T. While Gifford was almost certainly behind Barnard's promotion to the presidency of NJBT, Gifford also kept Barnard away from the "Valhalla" of AT&T: corporate headquarters in New York. There is probably some truth to Peter Drucker's contention that Gifford considered Barnard's strength as a philosopher-king superior to his performance as a hands-on executive (Gabor, 2000).

Indeed from his earliest days at AT&T, Barnard also spent a good bit of his time at Harvard, becoming involved with several leading intellectuals in the social sciences,

including Wallace B. Donham (dean of the Harvard Business School [HBS]), pioneers of human relations, Elton Mayo and Fritz Roethlisberger, and Lawrence J. Henderson. The Harvard man who influenced Barnard the most was Henderson, a biologist who became intrigued with the sociological-physiological analogies in the work of Vilfredo Pareto, the Italian sociologist who emphasized both the dynamic nature of organizations and the impact of emotions on human behavior. Pareto (1935) emphasized the concept of mutual dependence of variables, and maintained that social systems, like their biological counter-parts, have regulatory processes that tend to stabilize them. Henderson (1935) shared Pareto's (1935) belief in the non-logical nature of most human behavior, and also in the human need for such sentiments as duty, honor, and loyalty (Gabor, 2000). Barnard had already read Pareto on his own in French, but he also served as a "sounding board" for Henderson subsequent to their meeting in January, 1937.[8]

In the early 1930s, Barnard participated in a series of Henderson-led seminars on Pareto that attracted an interdisciplinary group of Harvard intellectuals. They shared a conservative outlook and a desire to better understand social and organizational systems and to develop a counterweight to the growing appeal of socialism. The participants included anthropologist Clyde Kluckhohn, Harvard economist Joseph Schumpeter, historians Crane Brinton and Bernard DeVoto, Boston lawyer, Charles Curtis,

---

[8] Novicevic, Hench and Wren note that: "Pareto's influence on social thought in the 1930s was especially strong -- not only for Barnard, but also for those involved in Harvard's "Pareto Circle" who invited Barnard to participate in their meetings and who, ultimately, figured so prominently in the ultimate publication of *The Functions of the Executive* (2002: 994). Further, Barnard's (1938) appendix on "Mind in Everyday Affairs" incorporated Pareto's notion of non-logical mental processes as an explanation of human behavior. Although Mayo and Roethlisberger completed their work on the famous Hawthorne studies before he published *The Functions of the Executive,* Barnard said it was Pareto's teachings, via Henderson, that influenced his thinking on the pivotal role of the "informal organization"—the round-the-water-cooler conversations and relationships that often determine how the real work of the corporation gets done.

mathematician & philosopher, Alfred North Whitehead, psychologist Henry Murray, sociologists Talcott Parsons and Robert Merton, as well as George Homans, Elton Mayo, Wallace Donham, and Lawrence Lowell, the president of Harvard (Heyl, 1968; Keller, 1984; Novicevic, Hench & Wren, 2002).

Within this circle, Barnard was a great admirer of Parsons (1902-1979), and he and Parsons corresponded often from the late 1930s until Barnard's death in 1961. They exchanged manuscripts for commentary to each other and wrote long letters containing much theoretical discussion (Heyl, 1968). Another important influence on Barnard's thinking was the work of Kurt Lewin, a Jewish refugee who emigrated to the U.S. from Germany in the 1930s, and a founder of the field of social psychology. As part of his work on group dynamics, Lewin (1938) studied how disparate leadership styles—autocratic, democratic, or laissez faire—influenced employee behavior.

The onset of facism in Europe and the Depression created fresh challenges for the "*new managing class*" that was represented by HBS and of which Barnard was a model exponent. Donham encouraged Barnard to publish *The Functions of the Executive,* in part, to answer the escalating anti-big-business rhetoric, which was brought on by the economic crisis and a wave of business closures. In 1932, Adolf Berle and Gardiner Means published *The Modern Corporation and Private Property,* which maintained that the interests of managers were divorced from those of owners and concluded that the nation would best be served if business were guided by public policy. They called for government to impose more effective regulation of industry to safeguard public interests.

Although Barnard never held a faculty position at Harvard, his book grew out of a series of lectures at Boston's Lowell Institute, which had been founded by Lawrence

Lowell, who served as president of Harvard until 1933. *The Functions of the Executive* is an abstract and theoretical book and that would frustrate contemporary readers in many respects. To give his ideas greater precision, Barnard (1938) invented terminology that, rather than clarifying matters, made the book an especially difficult read. The seriousness of purpose that Barnard brought to the project is indicated by the fact that he rewrote the book "about eighteen or twenty times" (Wolf, 1973: 15), and his work schedule while writing the book involved 18-hour days between business and other obligations, writing the book, and maintaining critical thinking (Wolf, 1973: 48). Yet the hands-on experience of the working executive emerges between the lines.

The impact of Barnard (1938) on strategic management and organization theory is well documented (McMahon & Carr, 1999; Scott, 1987; Williamson, 1995). At a broad level, Barnard (1938) reflects his wide reading in psychology, sociology, economics, anthropology, law, political theory, and philosophy of science. Importantly, Barnard presents a ***systems approach*** to the study of organization, which contains a psychological theory of motivation and behavior, a sociological theory of cooperation and complex interdependencies, and an ideology based on a meritocracy.[9] Scott submits that: "The uniqueness of Barnard's contribution stemmed from placing the concepts of behavior, motivation, and group processes into systems frameworks" (1992: 116).

Barnard (1938) provides a conceptual scheme of the theory of organization based on the following structural concepts: The Individual and Bounded Rationality; Cooperation; Formal Organization; and Informal Organization. The principal dynamic concepts

---

[9] Barnard was highly influenced by the systems approach. In a talk to students at Johns Hopkins University in 1953 he noted that: "I have read [Ross Ashby's *Design for a Brain]* five times and I am certainly going to read it five more times (Andrews, 1968: xiii). To Barnard, a system is characterized by the fact that the components to a system are interdependent variables (1938: 77-78).

include: Communication; Consent Theory of Authority; Free Will; The Decision Process; Dynamic Equilibrium & the Inducement-Contributions Balance; and Leadership, Executive Responsibility & Moral Codes. We discuss each of these concepts in turn.

The Individual and Bounded Rationality. The individual is posited to be involved in activities that are the result of psychological factors. Every person has the power of choice, the capacity of determination, and the possession of free will (Pye, 1994). Individual judgments come from the heart or from the deepest depths of our experience (Barnard, 1948; Gehani, 2002).[10] However, the individual is limited in terms of biological faculties or capacities (Barnard, 1938: 23). The organization as a cooperative system is seen as overcoming an individual's physical and cognitive limitations (bounded rationality).

The Cooperative System. Barnard states that: "Cooperation ... means genuine restraint of self in many directions, it means actual service for no reward, it means *courage* to fight for principles rather than for things; it means genuine subjection of destructive personal interest to social interests" (Scott, 1992: 119). Barnard comments on the risks of standing up for principles: "The people who haven't got guts enough to face [personal risks], just finally don't have guts enough to do anything" (Wolf, 1963: 93).

When the purpose of a system of cooperation is attained, then the cooperation is said to be effective (1938: 43). Cooperative effort is greatly limited if there is a lack of confidence in the sincerity and integrity of management. Such a lack of confidence in the

---

[10] That Barnard placed great importance in experience there can be no doubt. Barnard states that: "The subtle effect of the education process, which is necessarily logical in its form, I think obviously leads to a false sense of intellectual superiority which closes the mind of many to the powers and the merits of others, either of inferior formal education or of education in other fields. This produces a kind of conceit. It leads to serious misjudgment of the importance of personal experience and of deliberately acquiring it" (1938: 321).

sincerity and integrity of management insidiously thwarts cooperation.[11] Barnard submits that: "When a condition of honesty and sincerity is recognized to exist, errors of judgment, defects of ability, are sympathetically endured. They are expected. Employees don't ascribe infallibility to leaders or management. What does disturb them is insincerity and the appearance of insincerity when the facts are not in their possession" (1948: 11).[12]

Formal Organization. Barnard provides a rational systems view of formal organization as "the concrete social process by which social action is largely accomplished … [and] that kind of cooperation among men that is conscious, deliberate, purposeful" (1938: 3-4). Barnard views the formal organization as "a system of consciously coordinated activities or forces of two or more persons" (Barnard, 1938: 73). Noting the fragility of many formal organizations, Barnard also observes that: "The creative side of organization is coordination ... [and] under some circumstances … the quality of coordination is the crucial factor in the survival of organization" (1938: 256). Scott submits that while Barnard's views contain many ideas that are consistent with a "rational system conception of organizations; what sets them apart is his insistence on the non-material, informal, interpersonal, and, indeed, moral basis of cooperation" (1987: 63).

Informal Organization. Barnard maintains that: "'Learning the organization ropes' in most organizations is chiefly learning who's who, what's what, why's why, of its

---

[11] Barnard affirms cooperative effort, stating that: "I have myself seen large groups of employees voluntarily and wholeheartedly cooperate to increase individual and collective efficiency and production in order to reduce expenses when it was recognized that the immediate effect was to the pecuniary disadvantage of the employees themselves. The importance of such collaboration to all involved is incalculable. It is neither justified, nor can it be obtained, except on the basis of a confidence inspired by experience" (1948:12).

[12] Barnard further notes that: "I know of nothing more difficult to check in a management organization of tried, experienced men of integrity and of fine purpose in personal relations than this sporadic propensity to be smart, to avoid an issue, to withhold an unpleasant truth, to decline to admit an error, when honesty, sincerity, and even good sense clearly condemn such lapses" (Barnard, 1948: 11-12).

informal society" (1938: 121). Barnard's informal organization is closely connected to the concept of organizational character (Wright, 1994), and would likely be termed by many managers today as organization culture. Informal organization can be seen in "mores, customs, commonly held aversions, persistent beliefs, conventions, codes of morals, institutions, [and] language" (Barnard, 1948: 145).

Barnard saw the role of the informal organization as complementary to the formal organization, and conceived of the informal organization as a far more positive force in the life of an organization than it was in Roethlisberger and Dickson's (1939) view. For Barnard, the informal organization improves communication, enhances cohesiveness within the formal organization, and protects the integrity of the individual (Gabor, 2000). Informal organization "is to be regarded as a means of maintaining the personality of the individual against certain effects of formal organizations which tend to disintegrate the personality" (1938: 122). To Barnard it is the responsibility of management to strike a balance between maintaining the individual and improving organizational effectiveness. Barnard submits that the element of the individual is of central consideration in the management of personnel and must be genuine rather than a high-sounding fiction for stimulating production. Hypocrisy, Barnard warns, is fatal in all personnel work (1948: 9).

Communication. Barnard points out that a common purpose in an organization can only be achieved if it is commonly known, and to be known it must be communicated effectively in language, oral and written (Barnard, 1938: 89). Tacit understandings are also often essential (Barnard, 1938: 301-322).

Consent Theory of Authority. Swimming against the stream of the dominant flood-tide of scientific management (e.g., Taylor, 1911), management's authority,

Barnard realized, rests in its ability to persuade, rather than to command (Golembiewski & Kuhnert, 1994; Rabin, 1994).[13] Further, Barnard emphasized that legitimate management authority is based on functional skills and not hierarchical position (Gabor, 2000). A person in an organization accepts a communication as authoritative when: he can under-stand the communication; he believes that it is not inconsistent with the purpose of the organization; he believes it to be compatible with his self-interest as a whole; he is able mentally and physically to comply with it; and there exists a *zone of indifference* in each individual within which orders are acceptable without conscious questioning of their authority (1938: 165-167). Barnard notes that: "Either as a superior officer or as a subordinate, however, I know nothing that I actually regard as more 'real' than 'authority'" (1938: 170).[14]

Free Will. The concept of free will is central to Barnard's theory of behavior and is derived from those moral and legal doctrines that stress personal responsibility for actions. Endorsement of the free will doctrine underpins all his arguments concerning management's moral obligations. To Barnard, "the idea of free will is inculcated in doctrines of personal responsibility, of moral responsibility, and of legal responsibility. This seems necessary to preserve a sense of personal integrity" (1938: 13). Barnard's experience during World War II, when he served with the USO, which he called "the

---

[13] Wolf notes that: "It should be pointed out that Barnard's thinking about authority was stimulated by Eugene Ehrlich's *Fundamental Principles of the Sociology of Law ...* The theme of this work is that the sources of law lie in the people and not in the legislatures, courts, or formally designated rulers" (1974: 83).

[14] Barnard writes that: "In healthy organizations, a superior will override the judgment of a group of subordinates at his peril and only in a crisis or emergency or where a decision must be made in some new field outside their competence. The problem is not one of potential insurrection. It is rather one of maintenance of free communication between superior and subordinate men and of a workable distribution of responsibility. This is seriously injured if authority is overridden arbitrarily" (Barnard, 1948: 163).

most difficult single organization and management task in [his] experience" (1948: vi-vii), helped confirm his philosophy of management—especially the link between free will and acceptance of authority. At the USO, getting an organization that, at any given moment, relied on literally hundreds of thousands of volunteers to work required the *voluntary* consent of the governed. Authority had to be *accepted*; it could not be dictated. Nearly everything depended upon the moral commitment as opposed to a formal requirement (Gabor, 2000; Smith, 1994).

Decision-making and the Decision Process. Although the organization theory literature on decision-making from Simon (1947) to the present is expansive, Barnard provides us with his unique perspectives: "The making of decisions, as everyone knows from personal experience is a burdensome task. Offsetting the exhilaration that may result from correct and successful decision and the relief that follows the terminating of a struggle to determine issues is the depression that comes from failure or error of decision and the frustration that ensues from uncertainty" (1938: 194).

Barnard warns of a tendency for personnel to avoid responsibility (due in part to fear of criticism) and that an executive must distribute responsibility, or otherwise run the risk of being overwhelmed with the burdens of decision. Barnard writes that: "The fine art of executive decision consists in not deciding questions that are not pertinent, in not deciding prematurely, in not making decisions that cannot be made effective, and in not making decisions that others should make" (1938: 194). Barnard returns to this theme in an interview granted in 1961 stating that: "You put a man in charge of an organization and your worst difficulty is that he thinks he has to tell everybody what to do; and that's almost fatal if it's carried far enough" (Wolf, 1973: 30).

Barnard also makes clear that while there is a need in developing a "science of organization" (1938: 290), such an effort will not typically be sufficient for success. An appreciation of the art of organizing is also necessary. Barnard pushes the boundaries of exposition to join the "two cultures" of the science and the art of organizing in conveying the aesthetic element in the decision-making process, which is derived from the "intimate habitual, interested experience" (1938: 235) (Levitt & March, 1995; Mahoney, 2002). Barnard writes that the decision-making process "transcends the capacity of merely intellectual methods and techniques of discriminating the factors of the situation. The terms pertinent to it are 'feeling,' 'judgment,' 'sense,' 'proportion,' 'balance,' [and] 'appropriateness.' It is a matter of art rather than science, and [it] is aesthetic rather than logical" (1938: 235).

Dynamic Equilibrium and the Inducement-Contributions Balance. To Barnard the efficiency and effectiveness of an organization depends upon what the organization secures and the personnel produce (the contributions) and how the organization distributes its resources (the inducements). The contributions and inducements are always dynamic (1938: 57-59). Inducements include: material inducements, personal non-material opportunities, desirable physical conditions, ideal benefactions, association attractiveness, adaptation of conditions to habitual methods and attitudes, the opportunity of enlarged participation, and the condition of communion (1938: 142). Barnard emphasized non-economic motives. A passage contained in a volume of his collected papers explains: "Prestige, competitive reputation, social philosophy, social standing, philanthropic interests, combativeness, love of intrigue, dislike of friction, technical interest, Napoleonic dreams, love of accomplishing useful things, desire for regard of

employees, love of publicity, fear of publicity—a long catalogue of non-economic motives actually condition the management of business, and nothing but the balance sheet keeps these non-economic motives from running wild. Yet without all these incentives, I think most business would be a lifeless failure" (Barnard, 1948: 15).[15]

Significantly, Barnard understood better than most executives — then or now — the importance and difficulties of conventional "incentive" schemes. Barnard (1938) anticipated the sophisticated psychological reasoning of Maslow's (1954) *hierarchy of needs* and of Herzberg (1959) who referred to money as a *hygiene factor* and noted that not enough of it will cause dissatisfaction, but money alone does not serve as a motivator. Indeed, Barnard (1938) perceived that the logic of conventional incentive schemes was, in essence, a self-fulfilling prophecy, and maintained that beyond a certain level of equitable compensation, employees are not necessarily driven by financial incentives. Rather, elaborate rituals of bonuses and incentives devised by management create a

---

[15] Barnard goes on to note that: "If you will stop taking the business man at his word and quietly watch him when he is off guard, you will find he is taking care of poor old John who couldn't be placed anywhere else, that he is risking both profit and failure rather than cut wages, that he continues an unprofitable venture on nothing but hope rather than throw his men out of work. Much of this is unsound. It would be better if economic motives did operate more effectively, but the point is that is impossible to get to the root of personnel relations or understand labor troubles or successes on the unrealistic assumption that economic motives exclusively govern. They merely limit and guide. They control more in some cases or some businesses than others" (1948: 15). Barnard also emphasizes the desire to build personal integrity, prestige, and status and states that: "At the present time it appears to me that a large part of social discord and friction is due to the illusion that economic interests govern behavior almost exclusively in business, industrial, and political situations" (1948:78).

Viewed from the perspective of the early 21st century, Barnard's ideas about the importance of personal integrity and the danger of over-emphasizing economic interests, seems almost prophetic. Many of the most recent catastrophes, including the financial meltdown—in so far as it was produced by perverse economic incentives that led to the proliferation of collateralized debt obligations—or the slap-dash corner-cutting (including ignoring maintenance protocols) that led to the BP-Transocean-Deepwater-Horizon oil-rig explosion off the coast of Louisiana, appear to be the direct result of putting economic incentives ahead of the long-term health of the organizations—and systems— involved. In particular, the finger pointing among the three companies involved in the Louisiana explosion shows a stunning lack of awareness of the rig—and the entire drilling enterprise—as an exceptionally complex, interconnected system.

culture of avarice in which money becomes the prevailing symbol of success.

Barnard understood the magnitude of the challenge involved in balancing organizational and individual needs: "To establish conditions under which individual pride of craft and of accomplishment can be secured without destroying the material economy of standardized production in cooperative operation is a problem in real efficiency. To maintain a character of personnel that is an attractive condition of employment involves a delicate art and much insight in the selection (and rejection) of personal services offered…To have an organization that lends prestige and secures the loyalty of desirable persons is a complex and difficult task in efficiency—in all-round efficiency, not one-sided efficiency" (1938: 94). A corollary point, Barnard (1938) recognized, was that the efficacy of an individual's effort can be no greater than the capability of the system, or environment, in which employees work.[16] And the development and training of employees are, according to Barnard (1938), of paramount importance (Gabor, 2000).

Leadership, Executive Responsibility and Moral Codes. For Barnard much is given to leaders and much is expected. Leadership is the factor of chief significance in human cooperation (Novicevic, et al., 2009). While cooperation is the creative process, leadership is the "indispensable fulminator of its forces" (Barnard, 1938: 259). The fundamental function of a leader is to create meaning for followers that will facilitate

---

[16] In recognizing that the individual employee can have only limited impact on the system, Barnard also anticipated the quality management work of W. Edwards Deming (1986, 1994) who himself was influenced by the statistical theories of Walter Shewhart. Shewhart worked at AT&T during the 1920s—though it is unclear whether Barnard was aware of Shewhart's work, which focused on quality improvement at the Western Electric plant in Chicago. Deming observed that a system can only be improved if it is "in control," i.e., when the variation inherent to every system is predictable. Deming's observation provided an important statistical foundation for the systems view of organizational improvement. Deming maintained that an individual's performance could not be evaluated independently of the system within which he or she worked.

their commitment and identification. Barnard writes that: "The inculcation of belief in the real existence of a common purpose is an essential executive function" (1938: 87). Leadership, to Barnard, seems "connected with knowing whom to believe, with accepting the right suggestions, with selecting appropriate occasions and times ... — an understanding that leads to distinguishing effectively between the important and the unimportant in the particular concrete situation, between what can and what cannot be done, between what will probably succeed and what will probably not, between what will weaken cooperation and what will increase it" (Barnard, 1948: 86-87).

Leadership then must go beyond deciding what the right thing to do is, and to move onto the job of getting it done (Barnard, 1952). Barnard states that: "An executive is a teacher; most people don't think of him that way, but that's what he is. He can't do very much unless he can teach people. ... You can't just pick out people and stick them in a job and say go ahead and do it. You've got to give them a philosophy to work against, you've got to state the goals, you've got to indicate the limitations and the methods" (Wolf, 1973: 7-8). Leadership then involves the guidance of conduct of others and it requires "wide imaginations and understanding" (Barnard, 1945: 176). Indeed, leaders need to be more effective than others both in conveying meanings and intentions and in receiving them with sympathetic understanding (1948: 97-99). Barnard (1948: 109-110) describes the nature of leadership, stating that:

> It is in the nature of a leader's work that he should be a realist and should recognize the need for action, even when the outcome cannot be foreseen, but also that he should be idealist and in the broadest sense pursue goals some of which can only be attained in a succeeding generation of leaders. Many leaders when they reach the apex of their powers have not long to go, and they press onward by paths the ends of which they will not themselves reach. In business, in education, in government, in religion, again and again, I see men who, I am sure, are dominated by this motive, though unexpressed, and by some queer twist of our present attitudes often

disavowed. Yet, 'Old men [and old women] plant trees.'... to shape the present for the future by the surplus of thought and purpose which we now can muster seems the very expression of the idealism which underlies such social coherence as we presently achieve, and without this idealism we see no worthy meaning in our lives, our institutions, or our culture.

In the expression, "old men [and old women] plant trees" Barnard indicates that the moral factor is real and articulates the theme of Durkheim (1933) that organic solidarity may be based on the flimsiest of grounds and yet continue to exist.[17] Within the cooperative system, the moral factor finds its concrete expression and suggests the necessity of leadership and "the power of individuals to inspire cooperative personal decision by creating *faith* (emphasis added): faith in common understanding, faith in the probability of success, faith in the ultimate satisfaction of personal motives, faith in the integrity of objective authority, faith in the superiority of common purpose as a personal aim of those who partake in it" (Barnard, 1938: 259).

For Barnard, the part of leadership that determines the quality and morality of action is responsibility. Responsibility is the "quality which gives dependability and determination to human conduct, and foresight and ideality to purpose" (1938: 260). Responsibility is the most important function of the executive.[18] Responsibility means honor and faithfulness in the manner that managers carry out their duties. Barnard defines

---

[17] These timeless themes can be found in economics (Arrow, 1974), law (Macneil, 1980), organization theory (Ouchi, 1980), philosophy (Rorty, 1989), political science (Mansbridge, 1990), and sociology (Etzioni, 1988).

[18] The sense of responsibility was one that Barnard emphasized in an interview one month before his death in 1961 (see Wolf, 1973) and was inculcated at a young age. In his letter of application to prep school at Mount Hermon School to his headmaster, Barnard wrote: "this dormant thirst for a larger education was awakened by my conversion to the Lord Jesus Christ, when I felt that I had capabilities which needed developing for his use. And that is now my ultimate aim --- to be used of Him and to make the most of my life for Him" (Scott, 1992: 62). Indeed, Chester Barnard's writings may be interpreted as an attempt to connect ethical and practical teachings (Mahoney, 2002). Barnard states that: "responsibility is the property of an individual by which whatever morality exists in him becomes effective in conduct" (1938: 267).

responsibility as an "emotional condition that gives an individual a sense of acute dissatisfaction because of failure to do what he feels he is morally bound to do or because of doing what he thinks he is morally bound not to do, in particular concrete situations" (1948: 95). Carrying out this function also helps build the character of the executive who must practice deciding and acting under the burden of responsibility. Barnard in 1961, looking backward on his classic states that: "In my opinion, the great weakness of my book is that it doesn't deal adequately with the question of responsibility and its delegation. The emphasis is too much on authority, which is the subordinate subject. ... The emphasis is put on authority which, to me now, is a secondary, derivative setup" (Wolf, 1973: 15).

Ultimately, Barnard maintains that: "nearly everything depends upon the moral commitment. I'm perfectly confident that, with occasional lapses, if I make a date with you, whom I have never met, you'll keep it and you'll feel confident that I'll keep it; and there's absolutely nothing binding that makes us do it. And yet the world runs on that—you just couldn't run a college, you couldn't run a business, you couldn't run a church, couldn't do anything except on the basis of the moral commitments that are involved in what we call responsibility. You can't operate a large organization unless you can delegate responsibility, not authority but responsibility" (Wolf, 1973: 35). Ethical practice determines management's moral authority and the capability of managers to pass their power on to the next generation.

For Barnard (1938) to a large extent management decisions are concerned with moral issues, and the survival of the organization as a going concern depends on moral

commitment.[19] Barnard writes that: "Organizations endure, however, in proportion to the breadth of morality by which they are governed. This is only to say that foresight, long purposes, high ideals are the basis for the persistence of cooperation" (1938: 282). Organizations that can build a culture that inspires members to transcend short-term interest will have a distinct advantage (Mahoney, Huff & Huff, 1994a, b; Miller, 1992).

Finally, we emphasize here that Chester Barnard as a participant observer was at home in both the real world of business and in the theoretical realm of academia; he had the unique ability to make connections between the latest developments in psychology, sociology and the emerging discipline of organizational behavior. Barnard strived to combine the two cultures of management— its science and its art—and called for "a social anthropology, a sociology, a social psychology, an institutional economics, a treatise on management" (1938: 293) in developing the "science of organization" (1938: 290). However, Barnard warns that we should not deceive ourselves by thinking that a science of organization will be enough: "Inspiration is necessary to inculcate the sense of unity, and to create common ideals. Emotional rather than intellectual acceptance is required" (1938: 293). Barnard concludes his classic work with this observation: "I believe that the expansion of cooperation and the development of the individual are mutually dependent realities, and that a due proportion or balance between them is a necessary condition of human welfare" (Barnard, 1938: 296).[20]

---

[19] Barnard writes that: "I mean by moral behavior that which is governed by beliefs or feelings of what is right or wrong regardless of self-interest or immediate consequences of a decision to do or not do specific things under particular conditions" (1958: 4).

[20] O'Connor's (2011) forthcoming book emphasizes Barnard's search for balance between individual growth and maintaining collective cooperation.

References

Adams, B. (1913). *The Theory of Social Revolution.* New York, NY: Macmillan.

Andrews, K.R. (1968). Introduction to the Thirtieth Anniversary edition of *The Functions of the Executive.* Cambridge, MA: Harvard University Press.

Arrow, K. J. (1974). *The Limits of Organization.* New York, NY: W. W. Norton.

Ashby, W.R. (1960). *Design for a Brain* (2nd edition). New York, NY: John Wiley & Sons.

Barnard, C.I. (1938). *The Functions of the Executive.* Cambridge, MA: Harvard University Press.

Barnard, C.I. (1945). Education for executives. *Journal of Business,* 18(4): 175-182.

Barnard, C.I. (1948). *Organization and Management: Selected Papers.* Cambridge, MA: Harvard University Press.

Barnard, C.I. (1952). Leadership and the law. *New York University Law Review,* 27(1): 112-116

Barnard, C.I. (1958). Elementary conditions of business morals. *California Management Review,* 1(1): 1-13.

Bedeian, A.G. & D.A. Wren (2001). Most influential management books of the 20th century. *Organizational Dynamics,* 29(3): 221-225.

Bentley, A.F. (1935). *Behavior, Knowledge, Fact.* Bloomington, IN: The Principia Press.

Berle, A. A. & G. C. Means (1932). *The Modern Corporation and Private Property.* New York, NY: Macmillan.

Biles, G.E. & A.A. Bolton (1994). Chester I. Barnard: President of the USO, 1942-1945. *International Journal of Public Administration,* 17(6): 1107-1124.

Bridgeman, P. W. (1938). *The Intelligent Individual and Society.* New York, NY: Macmillan.

Brinton, C. (1938). *Anatomy of Revolution.* New York, NY: Vintage Books.

Brown, J.F. (1934). *Psychology and the Social Order..* New York, NY: McGraw-Hill.

Boulding, K. (1956). *The Image.* Ann Arbor, MI: University of Michigan Press.

Cardozo, B.N. (1921). *The Nature of the Judicial Process.* New Haven, CT: Yale University Press.

Commons, J.R. (1934). *Institutional Economics.* New York, NY: Macmillan.

Coser, L. (1956). *The Function of Social Conflict.* New York, NY: The Free Press.

Cyert, R.M. & J.G. March (1963). *A Behavioral Theory of the Firm.* Englewood Cliffs, NJ: Prentice Hall.

Dalton, M. (1959). *Men who Manage.* New York, NY: John Wiley & Sons.

Deming, W.E. (1986). *Out of the Crisis.* Cambridge, MA: MIT, Center for Advanced Educational Services.

Deming, W.E. (1994). *The New Economics.* Cambridge, MA.: MIT, Center for Advanced Educational Services.

Dewey, J. (1938). *Logic, the Theory of Inquiry.* New York, NYL Henry Holt & Company.

Downs, A. (1967). *Inside Bureaucracy.* Boston, MA: Little, Brown & Company.

Durkheim, E. (1933). *The Division of Labor in Society.* New York, NY: The Free Press.

Ehrlich, E. (1912). *The Fundamental Principles of the Sociology of Law.* Cambridge, MA: Harvard University Press, 1936 edition. *Grundlegung der Soziologie des Recht,* translated by W.L. Moll.

Etzioni, A. (1988). *The Moral Dimension: Toward a New Economics.* New York, NY: The Free Press.

Follett, M. P. (1924). *Creative Experience.* New York, NY: Longmans, Green.

Gabor, A. (2000). *The Capitalist Philosophers: The Geniuses of Modern Business – Their Lives, Times, and Ideas.* New York, NY: Random House.

Gehani, R. R. (2002). Chester Barnard's "executive" and the knowledge-based firm. *Management Decision,* 40(10): 980-991.

Godfrey, P.C. (1994). The functions of the executive and the republic: Exploring the Platonic roots of Chester Barnard. *International Journal of Public Administration,* 17(6):1071-1901.

Golembiewski, R.T. & K. W. Kuhnert (1994). Barnard on authority and zone of indifference: Toward perspectives on the decline of managerialism. *International Journal of Public Administration,* 17(6): 1195-1238.

Gouldner, A. (1954). *Patterns of Industrial Bureaucracy.* New York, NY: The Free Press.

Henderson, L.J. (1935). *Pareto's General Sociology.* Cambridge, MA: Harvard University Press.

Herring, E.P. (1936). *Public Administration and the Public Interest.* New York, NY: McGraw-Hill Book Company.

Herzberg, F. (1959). *The Motivation to Work.* New York, NY: John Wiley & Sons.

Heyl, B.S. (1968). The Harvard "Pareto Circle." *Journal of the History of the Behavioral Sciences,* 4(4): 316-334.

Homans, G.C. & C.P. Curtis (1934). *An Introduction to Pareto: His Sociology.* New York, NY: Alfted A. Knopf.

Homans, G. C. (1950). *The Human Group.* New York, NY: Harcourt, Brace and Company.

Humphrey, G. (1933). *The Nature of Learning in Its Relation to the Living System.* New York, NY: Harcourt, Brace & Co..

Katz, D. & R.L. Kahn (1966). *The Social Psychology of Organizations.* New York, NY: John Wiley & Sons.

Keller, R.T. (1984). The Harvard "Pareto Circle" and the historical development of organizational theory, *Journal of Management,* 10(2): 193-203.

Koffka, K. (1935). *Principles of Gestalt Psychology.* New York, NY: Harcourt Brace..

Korzbski, A. (1933). *Science and Sanity: An Introduction to Non-Aristotelian Systems and General Semantics.* New York, NY: International Non-Aristotelian Publishing Company.

Levitt, B. & J.G. March (1995). Chester Barnard and the intelligence of learning. In O.E. Williamson (Eds.), *Organization Theory: From Chester Barnard to the Present and Beyond,* pp. 172-206. New York, NY: Oxford University Press.

Lewin, K. (1938). *The Conceptual Representation and Measurement of Psychological Forces.* Durham, NC: Duke University Press.

Likert, R. (1961). *New Patterns of Management.* New York, NY: McGraw-Hill.

Macneil, I. R. (1980). *The New Social Contract.* New Haven, CT: Yale University Press.

Mahoney, J.T. (2002). The relevance of Chester I. Barnard's teaching to contemporary management education: Communicating the aesthetics of management. *International Journal of Organization Theory and Behavior,* 5(1): 159-172.

Mahoney, J.T. (2005). *Economic Foundations of Strategy.* Thousand Oaks, CA: Sage.

Mahoney, J.T., A.S. Huff & J.O. Huff (1994a). Toward a new social contract theory in organization science. *Journal of Management Inquiry*, 3(2): 153-168.

Mahoney, J.T. A. S. Huff & J.O. Huff (1994b). Management's search for balance. *Journal of Management Inquiry,* 3(2): 173-174.

Mansbridge, J. J. (1990). *Beyond Self-Interest.* Chicago, IL: University of Chicago Press.

March, J.G. & H.A. Simon (1958). *Organizations.* New York, NY: Wiley.

Maslow, A.H. (1954). *Motivation and Personality.* New York, NY: Harper.

Mayo, E. (1933). *The Human Problems of an Industrial Civilization.* New York, NY: Macmillan.

Mayo, E. (1945). *The Social Problems of an Industrial Civilization.* Boston: Harvard Graduate School of Business Administration.

McGregor, D.M. (1960). *The Human Side of Enterprise.* New York, NY: Macmillan.

McMahon, D. & J.C. Carr (1999). The contribution of Chester Barnard to strategic management theory. *Journal of Management History,* 5(5): 228-240.

Merton, R. K. (1949). *Social Theory and Social Structure.* New York, NY: The Free Press.

Merz, J. T. (1904). *A History of European Thought in the Nineteenth Century.* Edinburgh, UK: William Blackwood and Sons.

Miller, G. J. (1992). *Managerial Dilemmas: The Political Economy of Hierarchy.* Cambridge, MA: Cambridge University Press.

Mintzberg, H. (1973). *The Nature of Managerial Work.* New York, NY: Harper & Row.

Novicevic, M.M., T.J. Hench & D.A. Wren (2002). "Playing by ear" … "in an incessant din of reasons": Chester Barnard and the history of intuition in management thought. *Management Decision,* 40(10): 992-1002.

Novicevic, M.M. J.T. Heames, J.G.P. Paolillo & M.R. Buckley (2009). Executive development: History lessons learned from Barnard. *The Leadership Quarterly,* 20(2): 155-161.

O'Connor, E.S. (2011). *Management and New Knowledge: Integrating Research, Educators, and Responsibility.* Stanford, CA: Stanford University Press.

Ogden, C.K. and I.A. Richards (1936). *The Meaning of Meaning.* New York, NY: Routledge.

Ouchi, W. G. (1980). Markets, bureaucracies, and clans. *Administrative Science Quarterly,* 25(1): 129-141.

Pareto, V. (1935). *Mind and Society.* New York, NY: Harcourt Brace.

Parsons, T. (1937). *The Structure of Social Action.* New York, NY: McGraw-Hill.

Pauchant, T.C. (1994). Chester I. Barnard and the Guardians of the Managerial State. Book review of Scott, W.G., University Press of Kansas, 1992. *Academy of Management Review*, 19(4): 823-829.

Perrow, C. (1986). *Complex Organizations: A Critical Essay.* New York, NY: Random House.

Pye, A. (1994). Walking and talking Chester I. Barnard. *International Journal of Public Administration,* 17(6): 1125-1156.

Rabin, J. (1994). Barnard and morality in organizations. *International Journal of Public Administration,* 17(6): 1239-1297.

Rivers, W.H. (1924). *Instinct and the Unconscious.* Cambridge, UK: Cambridge University Press.

Roethlisberger, F.J. & W.J. Dickson (1939). *Management and the Worker.* Cambridge, MA: Harvard University Press.

Rorty, R. (1989). *Contingency, Irony, and Solidarity.* New York, NY: Cambridge University Press.

Schumpeter, Joseph A. (1934). *The Theory of Economic Development.* Cambridge, MA: Harvard University Press.

Scott, W.G. (1992). *Chester Barnard and the Guardians of the Managerial State.* Lawrence, KS: University of Kansas Press.

Scott, W.G. (1994). Who protects us from the protectors? *Journal of Management Inquiry,* 3(2): 169-172.

Scott, W.R. (1987). *Organizations: Rational, Natural and Open Systems.* Englewood Cliffs, NJ: Prentice-Hall.

Selznick, P. (1957). *Leadership in Administration: A Sociological Interpretation.* Berkeley, CA: University of California Press.

Simon, H.A. (1947). *Administrative Behavior.* New York, NY: The Free Press.

Simon, H.A. (1991). *Models of My Life.* New York, NY: Basic Books.

Simon, H.A. (1994). Foreword: Papers in honor of Chester I. Barnard. *International Journal of Public Administration,* 17(6): 1021-1031.

Smith, A. (1776). *An Inquiry into the Nature and Causes of the Wealth of Nations,* E. Cannan (1904 edition). London, UK: Methuen & Co.

Smith, E. B. (1994). Chester Barnard's concept of responsibility. *International Journal of Public Administration,* 17(6): 1157-1174.

Taylor F.W. (1911). *The Principles of Scientific Management.* New York, NY: W.W. Norton.

Thompson, J.D. (1967). *Organizations in Action.* New York, NY: McGraw Hill.

Weber, M. (1930). *The Protestant Ethic and the Spirit of Capitalism.* Translation of the 1904 edition by Talcott Parsons. New York, NY: Charles Scribner's Sons.

Whitehead, A.N. (1929). *Process and Reality,* New York, NY: Macmillan.

Williamson, O.E. (1975). *Markets and Hierarchies: Analysis and Antitrust Implications.* New York, NY: The Free Press.

Williamson, O.E. (1995). Chester Barnard and the incipient science of organization. In O.E. Williamson (Eds.), *Organization Theory: From Chester Barnard to the Present and Beyond,* pp. 172-206. New York, NY: Oxford University Press.

Williamson, O. E. (2005). Transaction cost economics and business administration. *Scandinavian Journal of Management,* 21(1): 19-40.

Wolf, W. B. (1961). Chester I. Barnard (1886-1961). *Academy of Management Journal*, 4(3): 167-173.

Wolf, W. B. (1963). Precepts for managers: Interviews with Chester I. Barnard. *California Management Review,* 6(1): 89-94.

Wolf, W.B. (1973). *Conversations with Chester I. Barnard.* Ithaca, NY*:* School of Industrial and Labor Relations, Cornell University, ILR Paperback Number Twelve.

Wolf, W.B. (1974). *The Basic Barnard: An Introduction to Chester I. Barnard and His Theories of Organization and Management.* Ithaca, NY: Cornell University Press, ILR Press.

Wolf, W.B. (1994). Understanding Chester I. Barnard. *International Journal of Public Administration,* 17(6): 1035-1069.

Wolf, W.B. (1995a). The Barnard-Simon connection. *Journal of Management History,* 1(4): 88-99.

Wolf, W.B. (1995b). Facts and fictions regarding Chester I. Barnard: A review of William G. Scott's Chester I. Barnard and the Guardians of the Managerial State. *International Journal of Public Administration*, 18(12): 1859-1904.

Wolf, W. B. & H. Iino (Eds.) (1986). *Philosophy for Managers: Selected Papers of Chester I. Barnard.* Tokyo, Japan: Bunshindo.

Wright, R.G. (1994). Organization character - Construct of Barnardian scholars. *International Journal of Public Administration,* 17(6): 1175-1193.