Design and Devotion: Surges of Rational and Normative Ideologies of Control in Managerial Discourse

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This paper challenges the prevalent notion that American managerial discourse has moved progressively from coercive to rational and, ultimately, to normative rhetorics of control. Historical data suggest that since the 1870s American managerial discourse has been elaborated in waves that have alternated between normative and rational rhetorics. We sketch out the surges and contractions in the rhetorics of industrial betterment, scientific management, welfare capitalism/human relations, systems rationalism, and organizational culture/quality. Standard theories of ideological change are shown to be inadequate for explaining either the general pattern or the timing of the surges. We propose and find preliminary support for a theory that combines cultural constraints and material forces. Specifically, the tendency for innovative surges of managerial theorizing to alternate between rational and normative rhetorics of control appears to be rooted in cultural antinomies fundamental to all Western industrial societies: the opposition between mechanistic and organic solidarity and between communalism and individualism. The timing of each new wave is shown to parallel broad cycles of economic expansion and contraction.•

Modern American industrial history is marked not only by the rise of large corporations and the professionalization of management (Chandler, 1977) but by the formulation of theories that minister to one of management's central problems: the control of complex organizations. Although managerial theories can be assessed as sets of propositions, they may also be treated as rhetorics or ideologies. By an ideology we mean a stream of discourse that promulgates, however unwittingly, a set of assumptions about the nature of the objects with which it deals. In this sense, all theories have an ideological component, since all theorists must adopt some ontological stance in order to proceed with their work. The objects of rhetorical construction in managerial theories have typically been corporations, employees, managers, and the means by which the latter can direct the other two.

Although some scholars have suggested that managerial theorizing has produced little more than a plethora of perspectives (Koontz, 1961), most have detected more orderly development. In what may still be the most influential study of managerial ideology, Bendix (1956) wrote of an increasing preoccupation with the social-psychological aspects of work. Bendix argued that rhetorics of social Darwinism typical of the nineteenth century had gradually but steadily given way to the belief that managers could better secure compliance by shaping workers' attitudes and sentiments. A number of managerial theorists have offered similar readings of managerial history (Scott, 1959; Wren, 1972), as have some of management's most vociferous critics (Mills, 1951; Whyte, 1956; Edwards, 1979). In fact, despite serious theoretical and political differences, scholars have converged on a common vision of how American managerial thought has evolved.

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The dominant view posits a succession of phases (Jacoby, 1991) that parallels Etzioni's (1961) taxonomy of compliance and control. During the first phase, which ended in the late 1800s, managerial discourse sought to legitimate coercive shopfloor practices (Bendix, 1956; Nelson, 1975; Edwards, 1979). The rhetoric of this early regime justified harsh discipline and even threats of violence by appealing to an individualistic ethic of success. By the turn of the century, early forms of mass production and a wave of corporate consolidations had set the stage for a second phase, during which utilitarian rhetorics became increasingly popular (Haber, 1964; Wren, 1972; Edwards, 1979). Culminating in the work of Frederick Taylor, rational theories of management dominated managerial discourse by World War I. The workforce was now said to be more effectively controlled by streamlining production processes and by appealing to the worker's self-interest. The Depression is widely held to mark the beginning of the third phase (Bendix, 1956; Wren, 1972). As the white-collar labor force grew, managerial discourse began to emphasize normative control: the idea that managers could more effectively regulate workers by attending not only to their behavior but to their thoughts and emotions. By winning the hearts and minds of the workforce, managers could achieve the most subtle of all forms of control: moral authority. Although developments in managerial thought since the 1950s have yet to be rigorously analyzed, the recent explosion of interest in schemes for increasing employee loyalty and commitment are often read as evidence for the continuing vitality of the normative orientation that began with the human relations movement.

Although the thesis of a progressive shift toward normative control has considerable elegance, it rests on a reading of history that underplays events in the late nineteenth century and that ignores streams of thought that gained prominence after World War II. Rectifying these oversights warrants a different interpretation of the historical record. Rather than having evolved linearly, managerial discourse appears to have alternated repeatedly between ideologies of normative and rational control. Table 1 summarizes our thesis.

Table 1

The Succession of Managerial Ideologies since 1870

Ideology	Era of ascent	Tenor
Industrial betterment	1870–1900	Normative
Scientific management	1900–1923	Rational
Welfare capitalism/human relations	1923–1955	Normative
Systems rationalism	1955–1980	Rational
Organizational culture	1980–present	Normative

Since 1870 five distinct rhetorics have left their mark on American managerial thought and practice. The second column of the table provides a rough estimate of the period during which each rhetoric surged into managerial discourse. Although it is difficult to date the beginning and end of such surges with precision, the notion of a surge corresponds roughly to the era when a rhetoric was articulated and

diffused to a wider audience. However, unlike a passing fad, the five rhetorics with which we are concerned have never disappeared. Instead, images and practices central to each rhetoric were gradually institutionalized. It therefore seems that American managerial discourse has been elaborated in consecutive waves.[1] Moreover, as the final column of Table 1 suggests, these rhetorical waves seem to have been of two broad types. The three that we label "industrial betterment," "human relations," and "organizational culture" were grounded in an ideology of normative control. In contrast, "scientific management" and "systems rationalism" reflected an ideology of rational control. Even more critically, the two ideological orientations seem to have alternated through time, at least insofar as instances of one or the other were considered to be at the cutting edge of managerial thought. Each of the rational rhetorics surged to prominence in the wake of a normative rhetoric's heyday, and vice versa. Consequently, at least in broad contour, the history of American managerial thought appears less a progression than a continued wrestling with counterpunctual themes.

The remainder of this paper explains and justifies the categorizations of managerial thought summarized in Table 1. Our aim is to substantiate the timing of each rhetoric's surge, to identify its ideological underpinnings as either normative or rational, and to explain why the alternations occurred and what might have triggered them.

ERAS OF MANAGERIAL IDEOLOGY SINCE 1870

Industrial Betterment, 1870–1900

Surge. Historians concur that, with few exceptions, American employers paid little attention to working conditions or to the welfare of employees prior to the Civil War (Baritz, 1960; Cameron, 1960; Wren, 1972; Nelson, 1975; Jacoby, 1991). During the first half of the nineteenth century a handful of visionaries such as Robert Owen and James Montgomery wrote tracts espousing the ethos that would become known as "industrial betterment," and, later, "welfare capitalism" (Owen, 1813; Montgomery, 1832). However, industrialists largely ignored Owen's and Montgomery's message until the 1870s, when a generation of reformers popularized their work as part of a movement to alter industrial conditions. The movement consisted of a loose coalition of clergy, journalists, novelists, academics, and capitalists. Prominent among the early spokespersons was Washington Gladden, a Congregationalist minister who linked religious visions of morality to a "new stage of industrial evolution" premised on the "principle of co-operation" and characterized by "industrial partnerships" that would improve "the mental and moral qualities of the working-people" (Gladden, 1876: 44–50). Similar ideas appeared in widely read novels of the time, such as Charles Reade's, *Put Yourself in His Place,* which is reputed to have influenced a number of prominent businessmen (Buder, 1967: 36). However, industrial betterment's most important advocates were without doubt the prominent industrialists who sought to apply Gladden's philosophy in their own businesses.

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The relation between managerial ideology and practice is hotly contested. Some historians argue that despite shifting rhetorics, managerial motives and practices have remained stable (Braverman, 1974). Others argue that ideological fads only affect the practices of the largest corporations (Brody, 1968) or those in innovative sectors of industry (Edwards, 1979). Still others suggest that practices have varied so widely in all eras that any generalization is unwarranted (Licht, 1991). Our own view is that managerial practice is now, and always has been, highly variegated. Yet a disjuncture between ideology and practice does not invalidate the study of ideology itself. On the contrary, studies of managerial rhetoric are important, for they enable scholars to link the world of business to the larger culture of which it is a part. Examining this link is our primary objective. Consequently, although we use data on events and practices to identify eras, we certainly do not intend to imply that managers have practiced what they have preached.

Experiments with industrial betterment began in the railroad industry. During the 1870s Cornelius Vanderbilt and other railroad magnates began founding Young Men's Christian Associations (YMCAs) along trunk lines to minister to the railroaders' physical and spiritual needs. The railroads hoped that the YMCAs would stem drunkenness and foster a more reliable workforce (Latta, 1906; Hopkins, 1951). By 1879, thirty-nine YMCAs employing twenty full-time welfare secretaries had been founded (Brandes, 1970: 15).[2] During the 1880s and 1890s, industrial betterment spread beyond the railroads to a variety of industries. Popular activities included building libraries and recreational facilities, offering classes for employees and their families, establishing social clubs, instituting profit sharing and benefit plans, and improving the aesthetics and sanitation of factories (Gilman, 1899; Olmstead, 1900). Some industrialists, such as George Pullman, founder of the Pullman Palace Car Company, and N. O. Nelson, owner of the N. O. Nelson Manufacturing Company, went so far as to build entire communities for their employees (Buder, 1967).

News of such experiments spread by word of mouth and by the popular press. Not only did newspapers and magazines such as *Scribners* and *Harpers* routinely extol the virtues of industrial betterment but, by the turn of the century, several books and governmental reports on betterment programs had been published in hope of promoting similar experiments elsewhere (Gilman, 1889, 1899; Olmstead, 1900; Tolman, 1900; Stevens and Hatch, 1904). Associations formed to promote reform further disseminated the betterment movement's philosophy. Alfred T. White, a noted architect who wrote an influential tract on building homes for the "laboring classes" (White, 1879), began the Model Tenement Movement in the 1880s (Buder, 1967). In 1898 Josiah Strong and William Tolman founded the League for Social Service, later named the American Institute for Social Service (Brandes, 1970). The National Civic Federation, which served in part as a clearinghouse for information on industrial betterment and which administered an employment service for welfare secretaries, was chartered in 1904 (Nelson, 1975). By the turn of the century, industrial betterment had become so widely touted as the wave of the future that the Paris Exposition of 1900 showcased an exhibit on the betterment practices of American corporations (Tolman, 1900).

Although records of industrial practices were collected far less systematically during the late 1800s than today, a sense for industrial betterment's acceptance can be gleaned from several publications from the turn of the century that include rosters of firms that had established some type of betterment program. Gilman (1899) mentioned 76 companies, while Olmstead (1900) named 41 additional firms. Several years later, Stevens and Hatch (1904) surveyed 110 firms that had instituted some type of welfare program in New York State alone. Many of these firms were among the largest and best known of the day: for instance, National Cash Register, U.S. Steel, McCormick, and Pullman.

Rhetoric. The rhetoric of industrial betterment reflected the context in which it evolved. The late 1800s were a time of

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A welfare secretary functioned much like a social worker. During the late 1800s welfare secretaries were often employed by industries. Ultimately the job of the welfare secretary evolved into that of personnel director (see below).

considerable social change. The period witnessed a revolution in technology that enabled mass manufacturing and, ultimately, corporate growth and consolidation (Hounsell, 1984). As firms grew, owners found face-to-face management more difficult. To meet the spiralling demand for labor, owners turned to recent immigrants, who often brought with them foreign customs and behaviors, including alien notions of work and employment relations (Korman, 1967). Labor relations became increasingly confrontational: Not only were strikes and lockouts relatively common, but radical labor unions, influenced by the immigrants' European notions of socialism, emerged. As a result, many prominent Americans began to fear social upheaval.

Because the ferment seemed to revolve around employment relations, reformers maintained that modifying industrial conditions would alleviate the threat to society. However, because most reformers accepted the sanctity of private property and an ethic of individualism (Laslett and Lipset, 1974; Davis, 1986), they sought to assuage the situation without challenging the prerogatives of free enterprise. For instance, Gilman (1899: 2–3) began his influential book on welfare capitalism by assuring his readers that he was no "advocate of the workingman" and that he considered factory owners to be a "natural aristocracy" based on "the leadership of the competent." When linked to religious and moral values, the objective of preserving the prerogatives of ownership forged the rhetoric of industrial betterment.

Industrial betterment's rhetoric pivoted on several themes that were loosely knit into a vision for what George Pullman heralded as "a new era . . . in the history of labor" (Buder, 1967: 45). At its core was a decidedly Protestant notion of duty. Because industrialists had achieved wealth and position through the work of others, they were morally bound to shoulder responsibility not only for the economy but for the individual and collective well-being of their employees. Gladden (1876: 175–181) preached:

> So long as the wage system prevails . . . employers of labor will be, to some degree, responsible for the well-being of the mechanics and operatives. The power that wealth gives them . . . is a power that carries with it heavy obligations. . . . First among them is the obligation to care for the physical health and comfort of his work-people. . . . The Christian law is, that we are to do good to all men as we have the opportunity; and certainly the employer's opportunity is among his employees.

This Protestant vocabulary of motive was entwined with a second theme that signaled the movement's goal: to change the employee. Early advocates of industrial betterment spoke of improving the "conditions of the workingmen" (Olmstead, 1900: 1117) rather than of improving working conditions. Reformers argued that a lack of frugality, industriousness, and temperateness lay at the root of industrial unrest (Gladden, 1876: 44–50). Hence, it was the employer's duty to educate the workforce and, if necessary, "Americanize" the worker's habits and character (Korman, 1967). As the following excerpt from an 1883 article published in the *New York Sun* illustrates, advocates of industrial betterment routinely drew their readers' attention

to the middle-class demeanor of employees who had been bettered:

> The scenes which the streets and public resorts of the village present after nightfall are entertaining in the extreme and prove perhaps more conclusively than anything else the fact that Mr. Pullman's estimate of human nature is far from wrong. After the evening meal the people made their appearance on the streets. They are presentable almost without exception and most of them are surprisingly neat in their dress and circumspect in their manners. The women and children in clothing and deportment present such a striking contrast to the people of their class in the noisy and dirty city that having seen the two modes of life, an observer may be pardoned for doubting that Pullman is made up almost exclusively of mechanics and laborers and their families. (cited in Buder, 1967: 93)

The goal of remaking workers was cast as the path to a new order whose tenor was captured by a third motif: systems based on cooperation are more advanced than systems based on conflict. Reformers argued that if the firm could become the hub around which the employee's life revolved, communal order and industrial peace could be achieved. Accordingly, the most celebrated experiments sought to create total institutions by furnishing the infrastructure of community: houses, schools, churches, libraries, stores, and recreational facilities.

Industrial betterment's final motif was profitability. As the treasurer of the Waltham Watch factory proclaimed in the late 1890s, "Anything that tends to lighten the strain of labor upon the mind, or serves to promote cheerfulness and contentment, is an economic advantage" (Gilman, 1899: 211). Similar sentiments were echoed by almost every advocate of industrial betterment who put pen to paper. In short, the path to profit, control, and industrial peace lay in bringing the workers' interests, values, and beliefs in line with those of the owner.

Challenge to the rhetoric. The spread of industrial betterment brought with it growing criticism. The violent strike at the Pullman Palace Car Company in 1894 strengthened the hand of those who questioned the utility of betterment programs. Doubters observed that Pullman had done more for his employees than almost anyone else, yet it appeared that even his efforts were insufficient to avert the rising tide of labor militancy (Buder, 1967). The depression of 1896 cast further doubt on the promise of an economic utopia, since reform-oriented firms appeared to weather the depression no better than less enlightened firms.

By the 1890s journalists, academics, and trade unionists had begun to attack industrial betterment on moral grounds. For instance, in 1885 Richard T. Ely, professor of economics at Johns Hopkins and founder of the American Economic Society, published an early critique of Pullman in *Harpers New Monthly Magazine*. Ely warned that Pullman was a "gilded cage" for the workingman, "a benevolent, well wishing feudalism which desires the happiness of the people but in such a way as shall please the authorities" (Ely, 1885: 466). However, no challenge to industrial betterment was more significant than that mounted by the growing cadre of industrial and mechanical engineers.

Scientific Management, 1900–1923

Surge. While industrialists such as Pullman were busy promulgating industrial betterment, a radically different response to contemporary trends was brewing on the shopfloor. Known as the "systematic management" movement, the response consisted of attempts by managers with engineering backgrounds to apply the principles of their discipline to the organization of production. The experimenters claimed that industry's growing complexity had undermined management's ability to plan and regulate. Firms were losing control, not because social conditions were deteriorating but because administration had become "increasingly chaotic, confused, and wasteful" (Litterer, 1963: 15). Accordingly, industry's problems could be solved by developing more rational methods for managing the shopfloor.

In the late 1880s and early 1890s a number of books and papers appeared outlining schemes for improving management's coordination and control (Metcalfe, 1885; Towne, 1886, 1889; Halsey, 1891). These schemes were of three types: cost accounting systems, production control systems, and wage payment plans (Litterer, 1963). As Shenhav (1994) suggested, their common denominator was an attempt to enhance productivity by specifying cause and effect in the production process. Significantly, the drive for systematics occurred in conjunction with mechanical engineering's emergence as a distinct occupation. Founded in 1880, the American Society for Mechanical Engineers (ASME) rapidly became the primary forum for disseminating information on systematic management. In 1886, Henry Towne argued before the ASME that because no management associations existed, the ASME should fill such a role (Towne, 1886). By 1900, Towne's vision was largely fact. Most papers on systematic management appeared in such engineering journals as the *American Machinist* and the *Transactions* of the ASME. Nelson (1975: 45) has documented the increasing frequency of such papers during the late 1800s: "Only 15 articles appeared before 1880. After that . . . the number increased rapidly. From 1880 to 1885, 60 articles appeared, between 1885 and 1890, 93, in the next five years, 68, and in the last five years of the century, 185." Yet, despite the movement's growing influence, its impact before 1900 was largely confined to managerially oriented members of the ASME. The situation changed with the advent of "scientific management."

Fathered by Frederick Taylor and nurtured by a loose band of disciples during the first decades of the twentieth century, scientific management supplied the systematic management movement with a coherent ideological foundation. By 1885 Taylor had worked his way to the position of chief engineer at the Midvale Steel Company. Like many of his contemporaries, he had devised various schemes for improving shopfloor production. Taylor claimed that his ideas for broader industrial reform crystallized around 1882. However, he did not begin to disseminate his views until 1895, when he published an article on the piece rate, the text of a talk delivered to the ASME (Taylor, 1895).

Scientific management subsequently become influential in three stages. From 1895 to 1901 Taylor and his associates worked with few firms and published exclusively in engineering journals. After 1901, Taylor began to promulgate his ideas more widely (Nelson, 1980). During the first decade of the century, Taylor delivered numerous public lectures and attempted to sell scientific management to interested industrialists. He published his first book, *Shop Management,* in 1903. It was also during this period that Henry Gantt, Carl Barth, Harrington Emerson, and other of Taylor's protégés and admirers began to market their own variants of scientific management (Nelson, 1980: 120–136). Between 1901 and 1911 at least 18 firms adopted some variant of Taylor's system (Nelson, 1975: 71). In 1908 the Harvard Business School declared Taylor's approach the standard for modern management and adopted it as the core around which all courses were to be organized. Taylor himself began to lecture at Harvard in 1909 (Nelson, 1980). In 1910 the Carnegie Commission drew on Taylor's work to prescribe reform in higher education, thereby proclaiming the philosophy's utility beyond the factory (Cooke, 1910). Thus, by the end of the first decade of the twentieth century scientific management had gained considerable support among the industrial elite. However, it did not obtain widespread notoriety until after 1910.

A series of events between 1910 and 1912 transformed scientific management almost overnight into what may have been the first American business fad. In 1910, the Eastern Railroad requested a rate increase from the Interstate Commerce Commission. The request caused widespread anger among the middle class and among industrialists who felt that rates were already too high. Louis Brandeis agreed to represent a group of industrialists who challenged the increase before the ICC. Brandeis argued that had the railroad been managed more efficiently it could have met its costs without raising prices (Nelson, 1980). To support his claim, Brandeis solicited testimony from key Taylorites. Their testimonies not only became the centerpiece of the hearings and created a national audience for Taylor's ideas but the term "scientific management" was apparently coined during the hearings (Haber, 1964).

Taylor and his protégés used the Eastern rate case to further popularize their views. Immediately afterward, Taylor (1911) published *The Principles of Scientific Management,* which became a best seller. Emerson, by now a self-proclaimed spokesman for the movement, published two even more popular books lauding the benefits of efficiency (Emerson, 1912, 1914). The Society to Promote the Science of Management (later called the Taylor Society) and Emerson's Efficiency Society were both founded in 1911.

These and other developments occasioned a public mania known among historians as the "efficiency craze." Rhetorics of efficiency became so popular in America that in 1914 an "efficiency exposition" was held in New York City with Taylor as the keynote speaker. The exposition drew a crowd estimated at 69,000 (Haber, 1964: 61). The Progressives, in particular, saw in Taylor's ideas a platform for promoting their political agenda (Haber, 1964). Taylor's emphasis on the

superiority of scientific reasoning and his insistence on the authority of expertise lent credence to the Progressives' claim that society would be better governed by a college-trained elite. By embracing scientific management, the Progressives ushered Taylor's ideas into the mainstream of American political thought during the second decade of the century.

Rhetoric. Taylor explicitly forged scientific management as a two-edged sword to solidify the engineering movement while challenging the ideological underpinnings of industrial betterment. Taylor thought his perspective more reasonable than welfare capitalism: He not only cast his system as a "partial solution of the labor problem" (Taylor, 1895) but actively criticized betterment programs and their notion of charity. Taylor professed an intense dislike for welfare secretaries and considered welfare programs a "joke" (Nelson, 1975: 59). "No self-respecting workman," Taylor wrote, "wants to be given things, every man wants to earn things" (Taylor, 1903: 1454).

The philosophy of scientific management has been so well documented that little explication is required. Although at times more nuanced than critics admit, scientific management's rhetoric revolved around three tenets: (1) an unshakable belief in the utility and morality of scientific reasoning, (2) the axiom that all people are primarily rational, and (3) the supposition that all people view work as an economic endeavor. Drawing on these premises, Taylor argued that when placed in jobs appropriate to their abilities and when fairly paid, even the least-skilled worker could immediately recognize the superiority of rationally optimized work procedures. Rationalization would not only make work less arduous and more productive, it would result in greater earnings for workers and industrialists alike. The question of how to organize work properly was viewed as a technical problem whose solution could be obtained by following the canons of science, by applying the criterion of efficiency, and by offering a fair day's pay for a fair day's work. Because scientific solutions were, by definition, incontrovertible, effective management reduced to nothing more, or nothing less, than the exercise of demonstrably valid expertise. However, achieving such goals, Taylor insisted, would require a "mental revolution" especially among employers who had grown accustomed to managing by caprice (Taylor, 1911). Thus, for Taylor, scientific management was more a way of thinking than a set of techniques, however crucial these might be.

Challenge to the rhetoric. Enthusiasm for efficiency cooled after World War I. A number of developments indexed the cooling. The successful diffusion of practices popularly associated with scientific management gradually dulled the rhetoric's novelty. By the 1920s elements of Taylor's system, such as the piece rate and time-motion studies, had become widely accepted (Baritz, 1960). As the practices were institutionalized, they no longer required justification. Of equal importance, by the 1920s several widely publicized and respected government studies had cast doubt on Taylor's claims (Hoxie, 1915; Federated American Engineering Societies, 1921). The efficiency movement's

inability to substantially reduce waste and lower costs, as well as its more obvious failure to bring about an industrial utopia, led many advocates to modify their stance.

Even before the war a number of Taylor's devotees had begun to admit that scientific management was no panacea for industry's ills. Lillian Gilbreth and Henry Gantt, in particular, advocated paying more attention to "human factors." After the war, other Taylorites, notably Morris L. Cooke, broke dramatically with scientific management's orthodoxy by supporting collective bargaining and union participation in corporate governance (Cooke, 1920). By the early 1920s even the Taylor Society had begun to advocate a more conciliatory stance toward organized labor (Haber, 1964). The shift mirrored the changing concerns of the business community. Stimulated in part by fear of the Bolshevik revolution, industrialists evinced a new willingness to cooperate with labor. The Progressives also began to meld notions of expertise drawn from scientific management with the rhetoric of industrial betterment. As a result of the shift in climate, betterment practices enjoyed a resurgence. Data on the founding of betterment programs indicate that they enjoyed two periods of popularity: one that peaked in the early 1890s and a revival that peaked in the 1920s (Brandes, 1970). In fact, even though the rhetoric of industrial betterment was first articulated and disseminated during the late nineteenth century, its associated practices were more widely implemented in the 1920s.

Human Relations, 1925–1955

Surge. The resurgence of welfare capitalism after World War I marked the rekindling of interest in normative control. However, the revival of welfare practices was not accompanied by a revival of the rhetoric that had legitimated the industrial betterment movement. Instead of the old themes of communalism and improved workingmen, the new rhetoric focused on entitlements and improved working conditions. For instance, the U.S. Bureau of Labor Statistics' survey of welfare practices in 1919 concerned itself almost exclusively with vacations, sick leaves, health care, sanitation, and pension funds—topics we would now term employee benefits—rather than the social programs that attracted so much attention during the 1880s. More importantly, the report eschewed appeals to morality or duty in favor of appeals to efficiency, the watchword of scientific management. Thus the resurgence of welfare capitalism in the 1920s is best viewed as an attempt to modify and extend rationalism's promise to the realm of employment relations. The upshot was the birth of personnel administration (Jacoby, 1985).

By 1920 not only had the National Personnel Association been formed but the National Civic Federation had begun to speak of "personnel directors" instead of "welfare secretaries" (Baritz, 1960). In 1917 the first general text on applied psychology was published (Hollingworth and Poffenberger, 1917), as was the first issue of the *Journal of Applied Psychology.* The journal's lead article was tellingly entitled "Human Engineering" (Fish, 1917). As the title implies, the two most influential variants of the new

industrial and personnel psychology—testing and ergonomics—remained firmly grounded in a Taylorist ethos. The testing movement, which grew out of the War Department's support for ability assessment, sought procedures for selecting and placing employees, an objective consistent with Taylor's notion of a "first class man" (Taylor, 1903). Ergonomists, who were heavily influenced by Gilbreth's work, attributed differences in performance to environmental and physiological factors, thereby sustaining scientific management's emphasis on individualism, rationalism, and scientific intervention. Thus, although managerial discourse took a normative turn during the 1920s, it did so hesitantly, through a rhetoric crafted out of a modified Taylorism. Yet, by legitimating a concern with human factors in the workplace, the industrial psychologists and personnel workers of the 1920s paved the way for the emergence of a new ideology of normative control: the group-oriented rhetoric of the human relations movement.

Between 1929 and the end of World War II, managerial theorists fashioned a rhetoric of control that turned on the imagery of depth psychology and group behavior. Although Oliver Sheldon (1923) and Mary Parker Follett (1918, 1924) had written of the social-psychological aspects of work during the 1920s, their work was overshadowed by interest in testing and human factors. Follett's work, in particular, remained obscure until long after Elton Mayo was ensconced as the human relations movement's founder. Unlike most managerial theorists of the day, Mayo brought to the problems of industry a multidisciplinary perspective. He began his career with an interest in fatigue, but by the late 1920s his interest had gravitated to clinical psychology, in particular the work of Freud and Janet. Mayo was convinced that psychodynamics drove work behavior and that labor conflict was a form of group psychopathology. Mayo's clinical vision caught the fancy of a number of prominent businessmen and academics, who offered Mayo financial and institutional support. With the help of his patrons, Mayo was appointed to the faculty of the Harvard Business School in 1926, where he soon became involved in the ongoing studies of human factors at Western Electric's Hawthorne plant (Trahair, 1984).

Mayo quickly realized that environmental and physiological factors could not account for the anomalies that the researchers had uncovered. At Mayo's urging, the team abandoned its ergonomic perspective and enlisted the aid of William Lloyd Warner, who had been influenced by Malinowski and Radcliffe-Brown. Warner advocated the observational studies of work groups for which the Hawthorne studies are famous. In making sense of these studies, Mayo subsequently blended ideas from clinical psychology, sociology, and anthropology into a novel explanation for shopfloor dynamics. Crucial to these dynamics, Mayo argued, was the amplification of individual psychopathologies by group processes and the role of the first-line supervisor, whose behavior presumably determined whether a group would advance or hinder a firm's objectives.

As with scientific management, interest in human relations grew slowly over several decades. The principles of human relations were initially formulated during the 1930s. Mayo revealed his interpretation of the Hawthorne studies in 1928 (Trahair, 1984: 237). However, the first published report on Hawthorne did not appear until 1930 (Pennock, 1930) and was followed, over the next decade, by a stream of articles and books written by Mayo and his colleagues (Mayo, 1930, 1931, 1933; Roethlisberger and Dickson, 1934, 1939; Whitehead, 1936, 1938). A number of these publications garnered considerable attention. Mayo's *The Human Problems of Industry* became a best seller and was reviewed favorably in both the popular and academic press (e.g., Park, 1934). Roethlisberger and Dickson's *Management and the Worker* was considered important enough to be abstracted by *Reader's Digest* (Trahair, 1984: 263).

Yet, it was not until the 1940s that the human relations movement garnered substantial institutional support. As with scientific management, educators played a prominent role in spreading the gospel. During the 1940s a number of applied human relations research programs were founded. The University of Chicago established the Committee on Human Relations in Industry in 1943 to promote a multidisciplinary approach to industrial research (Wren, 1972). In 1945, Kurt Lewin formed the Research Center for Group Dynamics at the Massachusetts Institute of Technology, and Rensis Likert founded the Institute for Social Research at the University of Michigan. In 1947, Leland P. Bradford established the National Training Laboratory in Bethel, Maine, an institute dedicated to training managers in human relations techniques. Each of these programs elaborated and disseminated human relations' theory and practice.

After World War II, corporate experimentation with strategies for enhancing loyalty, motivation, and satisfaction blossomed almost overnight. Shopfloor interventions rapidly expanded beyond counseling and supervisory training, modeled on programs Mayo had begun at Western Electric, to include innovative compensation systems (Lesieur, 1958), schemes for participatory decisionmaking and job enrichment (Lewin, 1951; Whyte, 1955; Hertzberg, 1966), attitude surveys, and even such esoteric techniques as psychodrama and sociometry (Moreno, 1946; Van Zelst, 1952). The philosophy of the human relations movement also shaped American labor relations. During the late 1940s a number of industrial relations centers were established, including the New York State School of Industrial and Labor Relations at Cornell, the Yale Labor-Management Center, and the Institute of Labor and Industrial Relations at the University of Illinois. As supposedly neutral bodies, the centers were charged with institutionalizing a system of collective bargaining. A number of prominent spokespersons for the human relations movement joined these centers and subsequently molded visions of collective bargaining in directions compatible with the human relations ideology. As a result, the collective bargaining system's emphasis shifted from solely structuring conflict through due process to include the potential for collaboration (Walton and McKersie, 1965).

By the late 1950s the rhetoric of human relations was well established. Consultants and consulting firms whose business entailed selling organizations expertise in such areas as organizational development, work redesign, and personnel management proliferated (Amon, 1958; Kubr, 1986). Organizational behavior, industrial relations, and personnel administration were emerging in business schools as distinct disciplines specializing in the human side of enterprise. Mid-level managers and corporate executives had even begun to partake of leadership training and management development experiences designed to enhance self-awareness and interpersonal skills.

Rhetoric. Human relations ultimately became a catch phrase for an assortment of philosophies ranging from Mayo's and Lewin's interest in work groups to Maslow's (1954) and Rogers' (1961) theories of self-actualization. Yet, despite such variation, most of the discourse promoted a similar view of workers, managers, and organizations. In direct opposition to scientific management's rationalism and individualism, human relations theorists argued that workers were primarily social beings driven by a need for belonging and acceptance. Social interaction and group affiliation were deemed necessary for human fulfillment and, by implication, harmony in the workplace. Following Mayo (1935), human relations' advocates claimed the locus of commitment in the workplace was the work group, whose norms emerged from ongoing interaction. However, precisely because group norms were emergent, there was no guarantee of their consistency with managerial objectives. Accordingly, human relations theorists claimed that effective management was synonymous with leadership: Only by influencing social dynamics and gaining the consent of the workforce could managers ensure a healthy and productive organization. Leadership entailed leashing the power of normative systems to enhance a firm's integration. Since primary work groups were the ultimate point of integration, managers all the way down to first-line supervisors were said to require communication skills, sensitivity in interpersonal relations, methods for instilling if not inspiring motivation, and knowledge of how to mold the dynamics of a group.

The rhetoric of human relations resembled that of industrial betterment in several key respects. Like proponents of industrial betterment, human relations theorists equated effective organizations with cohesive collectives. Both construed conflict as pathological. And, like the advocates of industrial betterment, spokespersons for the human relations perspective attributed the lack of cohesion in modern organizations to a runaway division of labor and the anomie it spawned. But whereas industrial betterment sought to address industry's problems by socializing employees through the communities in which they lived, the human relations movement sought to transform the firm itself and, more importantly, management into a cohesive collective.

Challenge to the rhetoric. As the rhetoric and practices of human relations became increasingly institutionalized, criticism grew. Observers of corporate life warned that the cost of cohesive organizations was the loss of individualism and a homogenizing mediocrity, especially among white-

collar employees (Mills, 1951; Whyte, 1956). Such claims were popularized by a number of widely read novels, including Wilson's (1955) *The Man in the Grey Flannel Suit* and Marquand's (1961) *The Point of No Return.* Critics pointed to practical problems as well. The unintended consequences of cohesion and loyalty were said to limit the firm's capacity to respond when conditions required creative thought and novel behavior (Janis, 1972). At the same time, organizations were accused of undermining the values of a democratic society and of contributing to the disintegration of families and communities (Whyte, 1956). However, the most important challenge to the human relations movement came from managers themselves. Managerial spokespersons began to claim that human relations practices were costly and delivered few results (Baritz, 1960: 172). As technically trained M.B.A.s swelled the ranks of general management, it became increasingly popular to denigrate the "happiness boys" and "touchy-feely techniques" (see Pettigrew, 1985).

The rising tide of criticism coincided with three developments that catalyzed a new surge of managerial theorizing. First, even though computers were developed in the 1940s, it was not until the late 1950s that corporations bought them in appreciable numbers. The spread of the mainframe computer not only launched a new technical infrastructure, it popularized the language of cybernetics, which would provide a new lexicon for managerial discourse (Beniger, 1986). Second, the launching of *Sputnik* in 1957 raised fears that the Soviets might best the U.S. in the technical competition that underwrote the Cold War. As a result, the federal government intensified its space and weapons programs, which, in turn, subsidized the high-technology industries that were to become the growth sectors of the American economy over the next twenty years. Science and engineering once again became economically and culturally central. Finally, in 1959 the Ford Foundation and the Carnegie Corporation issued influential reports critical of business schools (Gordon and Howell, 1959; Pierson, 1959). Both reports argued that managerial education lacked a coherent core and that managerial training should be as rigorous as other professional training. Both recommended that the M.B.A. degree be made a prerequisite for a managerial career and that business schools stiffen their curricula with courses in statistics and quantitative methods. Together, these developments created a context hospitable to a wave of managerial theorizing in a more rational key. The swell occurred simultaneously on three fronts: the rise of operations research and management science, the search for general managerial principles, and the birth of organizational theory.

Systems Rationalism, 1955–1980

Surge. During World War II, the British and American military employed teams of mathematicians, physicists, and statisticians to devise methods for solving logistical problems (Crowther and Whiddington, 1948; Trefethen, 1954). Working with early computers, these "operations research teams" were so successful that after the war each of the services established its own operations research unit

(Wren, 1972). Operations research (OR) quickly spread from the military to industry. The Arthur D. Little consulting company began applying OR techniques to managerial problems in the early 1950s. The Operations Research Society of America was established in 1952 and, a year later its sister organization, The Institute for Management Science, was formed. Both organizations dedicated themselves to developing and applying quantitative techniques to problems of planning and control (Burack and Batlivala, 1972). Hertz estimated that by 1954 at least 25 firms had established formal OR groups and that as many as 300 analysts worked in industry (cited in Burack and Batlivala, 1972). By the mid-1960s queuing theory, network analysis, simulation techniques, and theories of linear and dynamic programming were sufficiently well developed to be used by large corporations, and a number of universities had already established programs leading to doctoral degrees in operations research (ORSA, 1971). In fact, by the end of the decade the Ford and Carnegie commissions' educational vision was largely realized: Operations research, management science, finance, accounting, and statistics were now the core of the curriculum at elite business schools.

As OR and management science grew more prominent, the general tenor of managerial discourse began to change. Theorists again began to search for an "orderly body of knowledge" to guide the manager (Luthans, 1973: 67). During the 1950s, Newman (1951), Drucker (1954), Koontz and O'Donnell (1955), and others published volumes detailing the "principles" and "functions" of management. Like Taylor, these theorists sought universal dictums that managers could employ in the course of their work. However, unlike their predecessors, the new systematizers wrote of general processes rather than specific practices (Wren, 1972). Process theorists equated management with setting objectives and designing systems for meeting those objectives. Planning, forecasting, and controlling were to be the manager's watchwords. Process theories thereby provided management with a definition of itself consistent with the tools of OR and management science. In fact, the process theorist's recommendations were decidedly calculative even when they were not quantitative. For instance, management by objectives (MBO), originally proposed by Drucker in 1954, did not become popular until Odiorne (1965) published a step-by-step manual for constructing and implementing an MBO system.

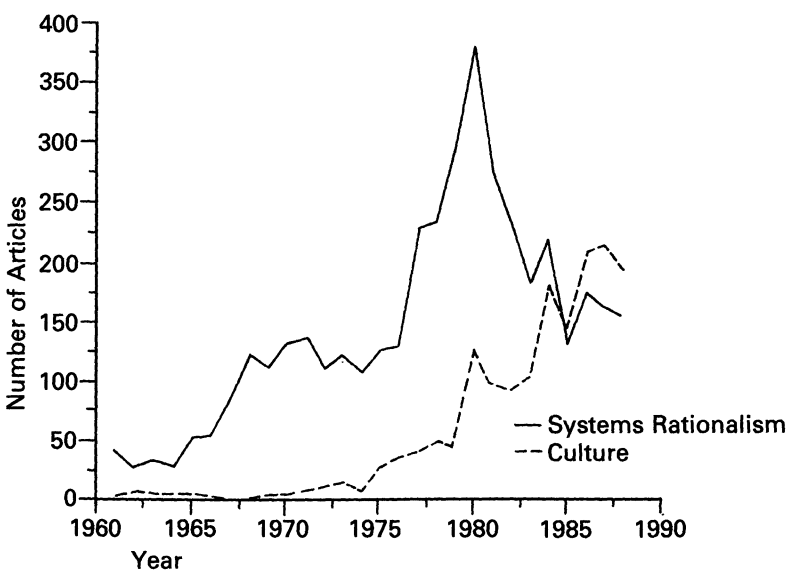
Organizational behavior also began to shed the rhetoric and practices of the human relations movement during the late 1960s. The change was heralded by the advent of contingency theory (Luthans, 1973) and furthered by the subsequent separation of organizational theory from organizational behavior. Thompson (1967), Lawrence and Lorsch (1967), and other contingency theorists proclaimed that the adequacy of an organization's structure depended on the specifics of its environment and technology. Furthermore, with an appropriately analytic orientation and knowledge of contingent relations, managers were led to believe that they could consciously design more effective

firms by manipulating structures and decision processes (Galbraith, 1977). Although most organizational theorists followed March and Simon (1958) in arguing that humans were boundedly rational and, hence, less omniscient than earlier rationalists presumed, the difference was one of degree. There might be no "one best way," as Taylor had proposed, but some ways were clearly better than others. Implicit in such theories was the notion that employees are instrumentally motivated and that efficiency is a matter of means/ends calculations or inducement/contribution ratios (Simon, 1960). Organizational theory's revitalizing of rational action, in turn, influenced micro-organizational behavior, as psychological studies of organizations were now called. During the 1970s previously popular affective theories of motivation (Maslow, 1954; McGregor, 1960) were replaced by motivational schemes grounded in rational calculation and "cognitive decisionmaking."

Because systems rationalism became popular in an age when the indexing of publications became systematized, it is possible to chart the ideology's trajectory using bibliometric techniques. One such measure, constructed from the *Business Periodicals Index* (*BPI*), is displayed in Figure 1. The solid line plots the annual frequency of articles pertaining to general and specific techniques advocated by systems rationalists. The measure was constructed by counting the number of articles listed in the *BPI* from 1960 to 1989 under the following subject headings: cost benefit analysis, financial analysis, job analysis, management by objectives, management information systems, operations research, work design, job descriptions, and job evaluation. The index shows slow growth through the 1960s, explosive growth during the 1970s, a peak in 1979–80, and subsequent decline.

Rhetoric. Management science, operations research, process theory, and contingency theory were each instances

Figure 1. Annual frequency of articles associated with systems rationalism and culture indexed in the *BPI*.



of a broader trend that we dub "systems rationalism." Unlike earlier managerial rhetorics, systems rationalism had no titular spokesperson and lacked the character of an integrated movement. Instead, rhetorics of systems rationalism were articulated simultaneously by several camps that sometimes drew sharp distinctions between themselves. Nevertheless, the camps explicitly or implicitly subscribed to a set of precepts that transcended their differences.

As a group, systems rationalists expressed antipathy toward human relations. Odiorne (1965: 8), for example, referred to the "human relations era" as the "age of the goof-off" and promised to move beyond fuzzy visions of a "sunny atmosphere" to practical action. In a similar vein, Vroom (1973: 66–67) wrote:

> We began with the normative question. What would be a rational way of deciding on the form and amount of participation in decision making that should be used in different situations? We were tired of debates over the relative merits of Theory X and Theory Y and of the truism that leadership depends on the situation. We felt that it was time for the behavioral sciences to move beyond such generalities. . . . Our aim was to develop a set of ground rules for matching a manager's leadership behavior to the demands of the situation. It was critical that these ground rules be operational, so that any manager could determine how he should act in any decision-making situation.

Analogous passages that prescribe rational and calculative activities as antidotes for human relations' excesses litter the management literature of the late 1960s and early 1970s.

All systems rationalists regardless of discipline peddled programmatic techniques or universal principles that would enable managers to plan, forecast, and act more effectively. Accordingly, each camp drew moral, if not technical inspiration from scientific management. Throughout the period, noted systems rationalists attempted to exonerate Taylor's reputation (Fry, 1976; Locke, 1982). Drucker (1954: 280), for example, proclaimed scientific management "the most powerful contribution America has made to Western thought since the Federalist Papers." Other theorists simply appropriated the Taylorites' achievements. For example, the Critical Path Method (CPM) and the Program Evaluation and Review Technique (PERT), popularized by operations researchers in the 1960s, were direct extensions of the Gantt Chart developed by Henry Gantt in the early 1900s (Archibald and Villoria, 1967).

Like the Taylorites, the systems rationalists turned to science and engineering for ideas. But whereas scientific management drew on mechanical engineering, systems rationalism appropriated concepts from electrical engineering and computer science. Computer metaphors and "systems thinking" became the lingua franca of endeavors as disparate as linear programming and organizational design. During the 1960s, general systems theory became increasingly prominent in managerial discourse. Proponents argued that, like computer programs, organizations could be controlled by managing boundaries between "subunits" and

by regulating the "input/output interfaces" between the organization and its environment (Boulding, 1956; Miller and Rice, 1967; Buckley, 1967). By the 1970s, "box and line" diagrams depicting organizations as programs had become common in texts and journals. The rhetoric intimated that management was simply a form of systems analysis, albeit one with a broader perview.

Accordingly, to be successful, managers once again needed to be experts. However, because systems analysis was so abstract, the new vision of expertise differed from the "functional" expertise that Taylor had advocated. Systems analysis was depicted as a general skill. Managers who understood an organizational system could presumably control a firm's performance without knowing details. Moreover, because details were irrelevant, trained managers could presumably apply their skills to almost any organization or problem they encountered.

Finally, systems rationalism lacked an explicit model of the workforce. Aside from top management and the occasional staff expert, employees were largely absent in texts written by systems rationalists. In some areas of organizational theory, it even became popular to write as if the actions of employees and the decisions of managers were irrelevant to an organization's fate (e.g., Aldrich, 1979). As in economics, when the workforce was considered, employees were portrayed either as automatons who responded mechanically to structural changes or as rational actors whose involvement in work was instrumental.

Challenge to the rhetoric. By 1980 systems rationalism was not only well institutionalized but its promise had tarnished. For the first time since World War II, American industry faced significant foreign competition, especially from Japan and West Germany, whose products had gained an international reputation for quality. Asymmetric trade policies and the advantage of lower labor costs in Southeast Asia allowed the Japanese, in particular, to market their goods at prices lower than those produced in the U.S. At the same time, the U.S. had encountered a period of relatively high inflation coupled with periods of recession linked, in part, to worldwide shocks in the oil market. With the decline of traditional industries and the rise of the service economy (Bluestone and Harrison, 1985) came an increasing number of professional and semiprofessional workers whose identities were tied to occupations that extended beyond the organization. The expertise of such occupations was said to be more specialized, more obscure, and less amenable to control than that of the traditional labor force (Von Glinow, 1988). Moreover, having matured during the 1960s, many professional workers and their blue-collar contemporaries seemed less willing to accept authority or view work as a central life interest (Bellah et al., 1985). It appeared as if loyalty to the firm could no longer be taken for granted, even among the professional labor force. Thus, in the guise of social and economic change, managers found themselves confronting problems for which systems rationalism seemed ill-suited. A variety of commentators began to argue that curing industry's ills would demand a rededicated workforce as well as greater flexibility and creativity (Peters and

Waterman, 1982; Piore and Sabel, 1984). It was in this context that discourse on organizational culture and employee commitment began to attract attention.

Organizational Culture and Quality, 1980–Present

Surge. Theorists associated with the human relations movement spoke of organizational climates and occasionally noted that organizations had cultures (Jacques, 1951; Schein, 1969). However, the idea that organizations might profitably be viewed as cultures did not attract sustained attention until the late 1970s, when the notion entered managerial discourse via two paths. The first was through the work of theorists who argued that organizations should be viewed as socially constructed systems of meaning (Wilkins, 1979; Pettigrew, 1979; Van Maanen, 1979; Dandridge, Mitroff, and Joyce, 1980; Louis, 1981; Martin, 1982; Pondy et al., 1983). Influenced by anthropology and symbolic interactionism, these scholars sought to counterbalance systems rationalism by promoting an alternate paradigm for organizational analysis. The second and more influential path was through the work of consultants and applied researchers who wrote primarily for practitioners (Silverzweig and Allen, 1976; Peters, 1978; Ouchi and Price, 1978; O'Toole, 1979; Baker, 1980; Schwartz and Davis, 1981). Although the second group used images similar to the first, their claim was more pragmatic: By heeding the symbolics of leadership and by attending to employees' values, managers could enhance their firm's competitiveness. The practitioner literature explicitly linked organizational culture to Japanese competition. Japan's industrial ascent was popularly attributed to the Japanese corporation's ability to inspire commitment without sacrificing flexibility and performance. Commentators suggested that American firms would do well to emulate the Japanese by developing "strong" cultures that fostered concern for quality, flexibility, and service (Pascale and Athos, 1981; Ouchi, 1981).

Both camps gathered momentum slowly until 1982, when interest in organizational culture suddenly exploded. The groundswell of interest was sparked by cover stories in *Business Week* (1980), *Fortune* (Uttal, 1983), and other popular magazines, as well as by the back-to-back commercial success of three books that spoke of culture under various guises: Ouchi's *Theory Z* (1981), Peters and Waterman's *In Search of Excellence* (1982), and Deal and Kennedy's *Corporate Cultures* (1982). By the mid-1980s the practitioner-oriented view had become dominant, even in academic circles (Barley, Meyer, and Gash, 1988). By the end of the decade, notions of culture and commitment had become entwined with a variety of efforts to revitalize American industry, such as the "Total Quality Movement" and the movement for "World Class Manufacturing." Quality was seen as the product of a state of mind that required a revolution in the way both managers and workers viewed their jobs. Commitment was to quality as calculation was to efficiency.

Evidence that cultural rhetorics have begun to compete with systems rationalism can be garnered from observations of

managerial practice. Not only have numerous managers recently written about cultural change in their own organizations (e.g., Cunningham, 1981; Brown, 1982; Boyle, 1983; Shapiro, 1983; Bice, 1984; Kanarick and Dotlich, 1984; Koerner, 1984; Malinconico, 1984) but studies indicate that self-conscious attempts to formulate corporate cultures have become part of organizational life (Schein, 1985; Van Maanen and Kunda, 1989). In his ethnography of a firm widely celebrated as the possessor of a strong culture, Kunda (1992) noted that employees not only talked about culture but the firm also sent its employees to culture seminars. The organization even employed a corporate ethnographer charged with documenting and disseminating a managerially sanctioned interpretation of life in the firm.

More systematic evidence can be gleaned from an analysis of articles published in the business press. Figure 1 also plots the frequency of articles indexed annually by the *Business Periodicals Index* under subject headings associated with the rhetoric of corporate culture: commitment, employee motivation, organizational loyalty, teamwork, culture, and morale. As the graph indicates, the frequency of such articles began to grow in the late 1970s and had not plateaued by 1989. In fact, the graph suggests that by the late 1980s discourse on corporate culture may have become as common as discussions of systems rationalist techniques.

Rhetoric. Culture's popularizers openly attacked systems rationalism. In the rush to adopt rational systems of control, firms were said to have sacrificed moral authority, social integration, quality, and flexibility. Although rationalization may have streamlined production, it was criticized for rewarding specialization, parochialism, and calculative involvement at the expense of loyalty and commitment. Culture's proponents claimed that rampant systematization posed few problems in a period of surplus and stability but that the costs of relying on systemic controls materialized when environments became turbulent. Critics argued that under such conditions exclusive reliance on rational controls might even exacerbate anomie to the point where further rationalization would actually occasion declines in productivity (Masuch, 1985). The point was succinctly articulated by Baker (1980: 53) in his thumbnail diagnosis of a typical firm's ills:

> Despite continuing profitability costs were higher. . . . Management tried to take corrective action, but the new marketing programs were not properly implemented. They reorganized only to find that the new structure had little impact. . . . They increased their spending on research and development, but nothing substantial developed. The culture thwarted most of their actions. . . . Frustrated by their inability to get employees to take needed actions, top managers tightened their employees further, increasing management's frustration and provoking still tighter controls. In one organization, the vicious cycle ended only with bankruptcy.

The postulate of rationality's declining returns underwrote culture theory's first tenet: Economic performance in turbulent environments requires the commitment of employees who make no distinction between their own welfare and the welfare of the firm. Texts on culture argued

that "unity" and "loyalty," the primary attributes of "strong" cultures, could counteract the unintended consequences of rational design. Although shared beliefs and values might blur the boundaries between self and organization, such commitment was said to imply no loss of individualism or autonomy. In fact, strong cultures were said to actually enhance autonomy, since well-socialized employees could be trusted to act in the organization's best interest. The image of autonomy within the confines of value conformity was central to Peters and Waterman's (1982: 15–16) image of an "excellent company":

> Excellent companies are both centralized and decentralized. For the most part . . . they have pushed autonomy down to the shopfloor. . . . On the other hand, they are fanatic centralists around the few core values they hold dear. 3M is marked by barely organized chaos . . . . Yet one analyst argues: "The brainwashed members of an extremist political sect are no more conformist in their central beliefs."

Ultimately, advocates promised, strong cultures would transform organizations into full-fledged collectives. As Kanter (1983: 119) proclaimed of employees in strong-culture companies:

> They gain an experience of . . . communitas . . . which lifts them out of the humdrum . . . of their place . . . [it] may be the closest to an experience of community [that many workers may have]. . . . What imbues this with meaning . . . is not just the sense of being part of a group, but . . . the feeling of pride and accomplishment at building . . . something relevant to the larger organization.

The rhetoric's second tenet was that strong cultures can be consciously designed and manipulated. Enlightened managers were said to be capable not only of formulating value systems but of instilling those values in their employees. Management was advised to exorcise unwanted thoughts and feelings from the workforce and to replace them with beliefs and emotions that benefited the organization. To make the point, proponents employed an imagery of cults, clans, and religious conversions (see Ouchi and Price, 1978; Deal and Kennedy, 1982; Donnelly, 1984; Pascale, 1984). Authors exhorted managers to become the "high priests" of their organization's values, to appoint "mythical heroes," and to fabricate "sagas" (Deal and Kennedy, 1982). The following passage is typical:

> The manager who attempts to change the organizational culture must assume . . . the role of a missionary. If the manager is successful in converting key personnel to the new set of values, then appropriate symbolic change should follow. . . . As with any new proselyte, organizations which are converting their cultures can be helped in this process by institutionalizing new rituals, symbols, languages, and heroes. . . . This will take the form of memos and directives from top management . . . and reward systems which praise those who serve the new values. (Ulrich, 1984: 126)

Of course, culture's champions did not advocate controlling values simply for its own sake. The third tenet was that value conformity and emotional commitment would foster financial gain. Most spokespersons vaguely promised that strong cultures would result in some form of economic advantage. However, those more familiar with their audience's hard-nosed pragmatism attempted to quantify the gain. Deal and Kennedy (1982: 15), wrote in no uncertain

terms: "The impact of a strong culture on productivity is amazing . . . we estimate that a company can gain as much as one or two hours of productive work per employee per day."

EXPLAINING ALTERNATIONS IN THE TENOR OF MANAGERIAL THOUGHT

Cultural Antinomies

The historical record thus seems to suggest that since 1870 five reasonably distinct rhetorical waves successively embellished American managerial discourse. Moreover, these five waves appear to cluster coherently into two thematically contrasting sets. The rhetorics of industrial betterment, human relations, and organizational culture emphasized normative control. Proponents of each claimed that organizations are, or should be, collectives. Whether the dominant image was of community, group, or culture, each depicted the organization as a locus of shared values and moral involvement. Accordingly, all three blurred the boundaries between work and nonwork and between managers and workers. Because advocates of each envisioned cohesion and loyalty as the ultimate source of productivity, they exhorted managers to be leaders: to set an example, to inspire, to motivate, and to provide for the employees' welfare. As sentient, social beings, employees were said to perform more diligently when they were committed to a collective whose ideals they valued. Control therefore rested on shaping workers' identities, emotions, attitudes, and beliefs.

In contrast, the second set of rhetorics emphasized rational control. Proponents of scientific management and systems rationalism argued that productivity stemmed from carefully articulated methods and systems. Each portrayed the firm as a machine, either mechanical or computational, that could be analyzed into its component parts, modified, and reassembled into a more effective whole. Both rhetorics exhorted managers to be experts: to bring rational analysis and a body of empirical knowledge to bear on the firm's problems. Furthermore, both assumed that employees were calculative actors with instrumental orientations to work. Employees were said either to understand the economic advantages of an efficient system or to be powerless to resist a well-designed structure. Since compliance was therefore unproblematic, control could be readily exercised by manipulating systems.

The five rhetorics' sequence suggests an alternation between normative and rational ideologies of control. Although it is impossible to date ideological surges precisely, it seems safe to say that the normative rhetoric of industrial betterment captured the attention of prominent industrialists after 1870, when spokespersons first began to articulate the philosophy, and before 1900, when betterment practices had become sufficiently institutionalized to be showcased at an international exposition. Similarly, the rational rhetoric epitomized by scientific management moved beyond engineering circles to the larger managerial community between 1900 and the early 1920s. The resurgence of

welfare capitalism and the rise of industrial psychology during the 1920s marked a return to normative theorizing that gathered full force in the human relations movement, whose ideas were well institutionalized by the late 1950s. The rhetoric of systems rationalism, inspired by the rise of general systems theory in the mid- to late-1950s, came to dominate managerial discourse, if not practice, by the late 1970s. Finally, during the early 1980s the rhetorics of organizational culture, commitment, and quality gathered force as American managers once again evoked a normative ideology in the face of foreign competition and global dependency. The alternating pattern of elaboration (normative, rational, normative, rational, normative) strongly suggests that American managerial ideology has evolved within the confines of a bipolar ideational structure.

Structural anthropologists (Levi-Strauss, 1963, 1967; Needham, 1973; Maybury-Lewis and Almagor, 1989) have long maintained that cultures revolve around core ideas that are oppositional or dualistic in structure. These dualisms are said to define the ontological dilemmas that undergird everyday life. They suffuse the culture's dominant symbols, validate cleavages in social structure, and fuel the semantics of everyday speech (Eisenstadt, 1989). In preindustrial societies, pivotal dualisms often encode naturalistic and religious enigmas: life versus death, good versus evil, and so on. Most anthropologists agree that although industrial cultures are less dualistic than preindustrial cultures, oppositions still continue to play a crucial role (Maybury-Lewis, 1989). For instance, with respect to images of the social order, no antinomy has been more salient in Western culture than the contrast between communalism and individualism or mechanistic and organic solidarity.

Writing in the period 1876 to 1922, which spanned the eras of industrial betterment and scientific management, Marx (1906), Tonnies (1957), Durkheim (1933), and Weber (1968) each sensed that industrialization was problematic because it juxtaposed two contrasting paradigms for social order. These two forms of social organization were given different names by different scholars. Weber wrote of the "communal" and the "associative," Durkheim contrasted "mechanistic" with "organic" solidarity, and Tonnies used "Gemeinschaft" and "Gesellschaft." However, the essence of their vision was the same. In a Gemeinschaft, people share a common identity, are bound by common values and traditions, and partake of a way of life that contrasts sharply with the competition, individualism, and calculative self-interest associated with Gesellschaft. The central dilemma identified by the early social theorists concerned the integrity of the social fabric. How could relations based on utilitarianism and rational calculation remain integrated and socially fulfilling? It seemed that increasing differentiation would beget crises of integration and that increasing integration would beget crises of differentiation.

The question of how to balance these opposing processes not only continues to motivate much sociological research, it appears to have become a central motif in Western culture. Several anthropologists and sociologists have recently argued that all Western societies treat

traditionalism/rationalism and communalism/individualism dualistically (Eisenstadt, 1989; Abbott, 1990). Associated with the antinomies' poles are opposing solutions to the problem of control: normative control and regimes of trust versus rational control and regimes of self-interest. For those who run corporations, this dualism often evinces itself in the practical issue of how to prevent anomie, construed as lack of commitment, while reaping the benefits of the very rationalization that exacerbates anomie. It should therefore come as no surprise that managerial ideologies traffic in notions of both normative and rational control. However, as structural anthropologists note, because cultural dualisms are ontologically incompatible, they can never be resolved even by the most cunning theory. All one can expect is to cope with the incommensurates.

After examining the anthropological literature on cultural dualism, Maybury-Lewis (1989) concluded that "alternation" or "temporal segregation" is one of a small set of strategies by which societies have sought to manage incommensurates.[3] Temporal segregation entails emphasizing alternate poles of an antinomy during successive time periods. Maybury-Lewis observed that alternation has been particularly prominent in Anglo-American cultures where, among other things, it underwrites the institution of two-party politics.

The trajectory of American managerial thought seems consistent with the Anglo-American pattern. One might therefore explain the alternation between rhetorics of normative and rational control as follows. Like most other people, managerial theorists are constrained by their culture's repertoire of images and ideas. As in most Western cultures, Anglo-American visions of social order rest on an opposition between mechanistic and organic solidarity, associated, respectively, with normative and rational ideologies of control. Thus, when constructing theories of how best to manage firms, theorists are more or less obliged to work within a broadly bipolar framework. Perhaps also for cultural reasons, American theorists have broached the duality of mechanical and organic solidarity by emphasizing either one or the other. But because the two visions form a duality, any ideology that emphasizes normative action is vulnerable to charges of ignoring rational action, and vice versa. Hence, temporal segregation offers an inherently unstable resolution. The instability may remain latent so long as the current ideology provides a plausible interpretation for events and so long as the managerial community appears to be coping reasonably well with socioeconomic conditions. However, when conditions change and the practices associated with the prevailing ideology seem to become inadequate, the cultural repertoire constrains theorists to search for alternatives nearer the pole of the antinomy least recently emphasized. Accordingly, managerial discourse evolves in alternating waves.

Although a theory of cultural constraint may be able to explain why the innovative edge of managerial discourse alternates between ideologies of normative and rational control, it cannot account for the timing of each new wave. Theories of cultural dualism imply that pressures for change

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Maybury-Lewis (1989) identified two other general strategies: (1) integration and (2) social or spatial segregation. Cultures pursue the former by devising ideologies that embrace both poles of an opposition simultaneously, as in the Taoist notion of yin and yang. Cultures that pursue the latter allocate each pole of an antinomy to separate realms of social life or to different groups (moieties) and then periodically perform rituals of integration.

flow from within the system of ideas. Tensions internal to the system may well offer proponents of change a blueprint for criticism, but because conceptual tensions are theoretically omnipresent, the mere fact of their existence cannot trigger a surge. To account for the timing of alternations one must therefore invoke forces exogenous to the culture's conceptual repertoire.

Timing

Because most scholars of managerial discourse have focused on one or two particular rhetorics, they have tended to offer historically contextualized accounts of each ideology's ascent. Without doubt, each wave of discourse reflected and perhaps even shaped the events and practices of an era. For instance, industrial betterment's emergence cannot be fully understood apart from the socioeconomic conditions of the late nineteenth century. Similarly, one can hardly imagine how the imagery and techniques of systems rationalism could have developed without the computer. Yet, however bound a particular rhetoric's content might be to the specifics of an era, to account for surges solely in terms of contextual factors would be to imply that normative and rational theorizing have alternated more or less by coincidence. Although serendipity and historical confluence have surely played a role in the evolution of managerial discourse, the strong pattern of alternation begs for the consideration of more systematic explanations.

Levels of labor activity. Derber (1970), Edwards (1979), and other scholars have linked changes in managerial ideology to the shifting quality of labor relations in the United States. Although some commentators claim that all managerial ideologies are a means of repressing labor, a few have offered interpretations cued to the substantive differences between rhetorics (Salvati, 1984). Sanford Jacoby reasoned that because normative rhetorics have emphasized employment relations, they should have become attractive when labor relations seemed especially troublesome.[4] Conversely, because rational rhetorics have ignored employee relations, they should have gained popularity during periods of relative calm. By this logic, the three normative rhetorics should have surged during periods of relatively high labor activity, while the two rational rhetorics should have grown prominent during lulls.

Labor activity can be measured in a variety of ways (Stern, 1978). Figures 2 and 3 display time series for two such indices: the number of unions founded annually between 1870 and 1976 (Figure 2) and the frequency of strikes between 1880 and 1988 (Figure 3). Data on union births were drawn from Hannan and Freeman's (1987: 925) study of the foundings of U.S. labor unions. Data on the frequency of strikes were compiled from the *Handbook of Labor Statistics* (U.S. Department of Labor, 1942, 1980, 1989).[5] The figures also indicate the periods (given in Table 1) during which each managerial rhetoric is thought to have surged.[6]

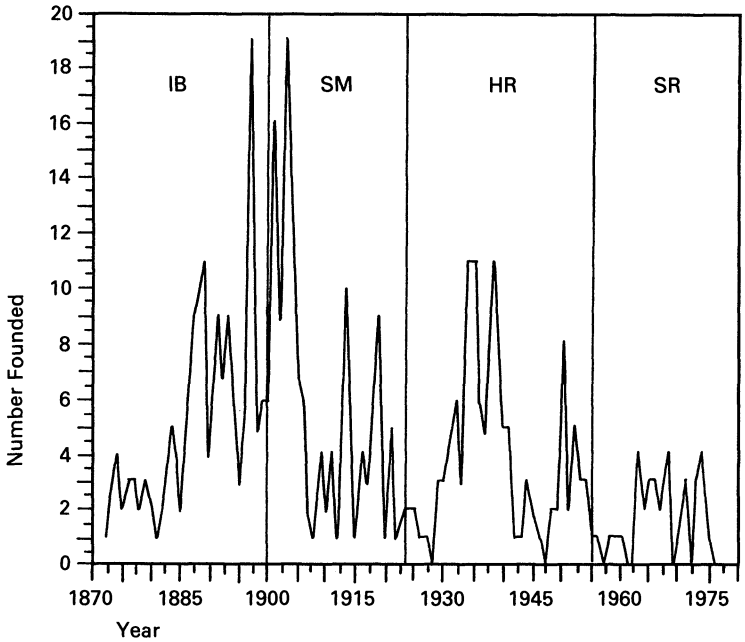
Figures 2 and 3 challenge the thesis that normative rhetorics prospered during periods of labor turmoil and that rational rhetorics flourished in eras of labor peace. Of the three normative rhetorics, only industrial betterment clearly

4
Personal communication.

5
In 1980 the Reagan administration ordered the Department of Labor to compile data only on strikes involving 1,000 or more workers. Figure 3 therefore plots data on all strikes as well as on strikes of over 1,000 workers, so that the two curves can be compared and general trends can be examined over the entire 118-year period. The Department of Labor also collected no data on strikes between 1906 and 1914 and incomplete data for 1915 and 1916. Using data from five states, Griffin (1939) developed a procedure for estimating the missing data. Edwards (1981) has shown that, if anything, Griffin's procedures underestimate the number of strikes that actually occurred during those years. We have used Griffin's estimates to calculate the number of strikes between 1906 and 1916.

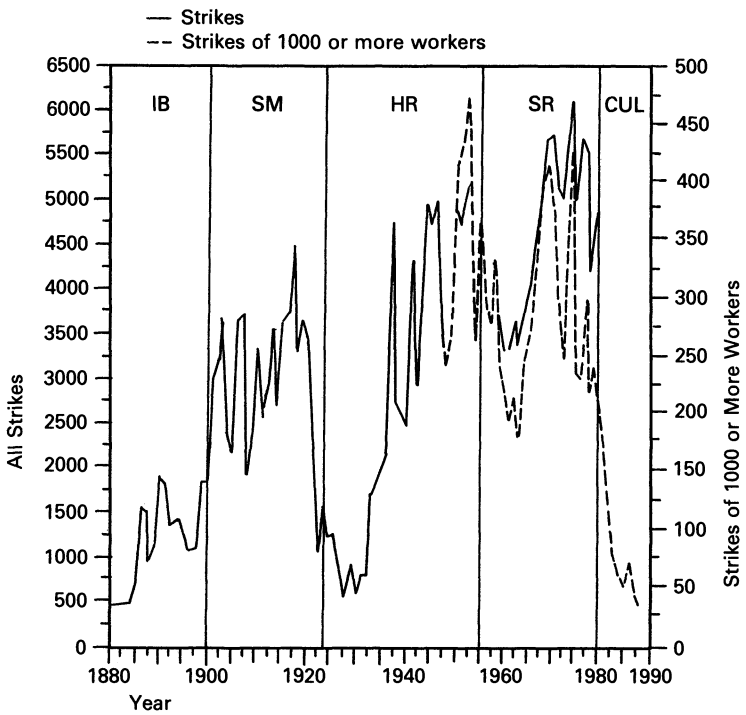
6
Data on the percentage of the workforce that struck between 1880 and 1988 replicate the patterns discussed below and are available from the first author upon request.

Figure 2. Unions founded annually, 1870–1976.



Note: IB = Industrial betterment; SM = Scientific management; HR = Human relations; SR = Systems rationalism.

Figure 3. Annual frequency of strikes, 1880–1988.



Note: IB = Industrial betterment; SM = Scientific management; HR = Human relations; SR = Systems rationalism; CUL = Organizational culture.

coincided with a period of increasing unionization and strike activity. Heightened labor activity may also have fanned interest in human relations during the 1940s. However, rhetorics of organizational culture and commitment unambiguously arose in an era of declining labor militancy. Moreover, of the two rational rhetorics, only systems rationalism surged during a period of labor calm. Scientific management moved beyond engineering circles as union foundings were reaching an all-time high and flowered when strikes were more common than at any previous time. Nevertheless, the labor-activity hypothesis remains elegant precisely because it relates the pattern of alternation to trends relevant to the substantive themes that distinguish between normative and rational ideologies of control. In fact, no contrast could be more prominent: Normative rhetorics stress the employee's relation to the firm, while rational rhetorics do not. The labor-activity hypothesis may therefore fail not because it emphasizes the wrong distinction but because it neglects to specify the distinction fully.

The hypothesis frames the issue solely in terms of the tenor of the normative rhetorics. This one-sidedness directs attention to trends that may warrant an interest in normative control but not to trends that may warrant an interest in rational control. In effect, the labor-activity hypothesis assigns rational rhetorics to a residual category by claiming that they should surge whenever conditions do not merit normative appeals. The timing of normative and rational surges may be better explained by a process that would explicitly elicit normative rhetorics during certain times and rational rhetorics during others. Expansions and contractions of the economy may be such a process.

Economic expansions and contractions. Rational and normative rhetorics both promise managers greater productivity and profitability but advocate radically different means for obtaining these ends. Rational rhetorics stress the efficient use of structures and technologies, while normative rhetorics stress employee relations. Therefore one might argue that rational rhetorics should surge when profitability seems most tightly linked to the management of capital. Conversely, normative rhetorics should surge when profitability seems to depend more on the management of labor. The literature on "Kondratieff cycles" or "economic longwaves" provides support for this line of reasoning.

Students of longwaves contend that over the last 200 years Western economies have experienced four broad cycles of expansion and contraction, each with a period of approximately 50 years (Schumpeter, 1934; Kondratieff, 1935; Rostow, 1978; Mandel, 1980; van Duijn, 1983; Sterman, 1990). Table 2 displays estimates of the timing of each wave as well as an average calculated from the estimates.[7] Of particular interest are the second, third, and fourth waves, which span the eras under discussion. The second expansion is said to have begun in the late 1840s and continued until the early 1870s, when the economy entered a slow decline that ended with the depression of 1896. During the late 1890s Western economies once again began a boom that lasted until the early 1920s. The subsequent contraction ceased with the end of the Great

7
Longwave theorists have measured cycles of expansion and contraction using aggregate indices of price and production. Until the 1950s the two types of indices tracked each other. Since then, prices have steadily risen while output has followed the expected pattern. Most analysts concur that the change in the price data reflects the growth of Keynesian economic policies. Consequently, most recent longwave analysts, with the exception of Rostow (1980), consider price data to be a muddy measure of economic performance and rely almost exclusively on output data. For this reason, Rostow's estimates of the number and the timing of longwaves depart radically from all others'.

Depression, which some scholars locate before and others after World War II. In either case, by the end of the war the West had entered a fourth expansion, which lasted through the 1960s. By the early 1970s Western economies had again embarked on a downturn, which has yet to end. Although evidence of longwaves can be found in economic data from most Western nations, the evidence is particularly strong for the United States (van Duijn, 1983).

Table 2

The Timing of Longwaves, According to Different Analysts

	Kondratieff (1935)	Schumpeter (1934)	Rostow (1978)	Mandel (1980)	van Duijn (1983)	Sterman (1990)	Average
First wave							
Expansion	1790–1817	1787–1814	1790–1815	–	–	–	1789–1818
Contraction	1817–1851	1814–1843	1815–1848	1826–1847	–	–	1818–1847
Second wave							
Expansion	1851–1875	1843–1870	1848–1873	1847–1873	1845–1872	–	1847–1872
Contraction	1875–1896	1870–1898	1873–1896	1873–1893	1872–1892	1870–1894	1872–1894
Third wave							
Expansion	1896–1920	1898–1925	1896–1920	1893–1913	1892–1929	1894–1923	1894–1921
Contraction	–	–	1920–1935	1913–1948	1929–1948	1923–1938	1921–1944
Fourth wave							
Expansion	–	–	*	–	1948–1973	1938–1973	1944–1971
Contraction	–	–	*	–	1973–present	1973–present	1971–present

* As explained in footnote 7, because Rostow's estimates for later periods are based on a method that departs radically from that used by other theorists, we exclude his estimates from the table.

Longwave theorists concur that escalating levels of capital investment (Forrester, 1973, 1977; Rostow, 1978; Mandel, 1980) spurred by fundamental shifts in the technical infrastructure (Schumpeter, 1934; Kuznets, 1953; Mensch, 1979; Kleinknecht, 1987) have driven each expansion. Contractions occurred when the supply of capital outstripped its demand, which typically coincided with the saturation of markets stimulated by the technologies that underwrote the expansion. Scholars have shown that the second wave swelled with the rise of the railroads, steam-powered machinery, and replaceable parts; that the third wave coincided with the spread of electricity and the internal combustion engine; and that the fourth wave paralleled the diffusion of electronics, air transportation, and synthetic materials (Mensch, 1979; Rostow, 1980; van Duijn, 1983). These technologies became infrastructural, in part, because they allowed industries to automate different aspects of the production process (Coombs, 1984a, 1984b). Steam-powered machinery and replaceable parts enabled automated fabrication, which became common during the course of the second wave. Transfer processes remained largely manual until the spread of electric motors, internal combustion engines, and conveyor belts during the third wave. Finally, during the fourth wave, electromechanical technologies were widely used to automate control systems.

Each wave and its associated technology thus engendered a "paradigm of automation" (Coombs, 1984a) that triggered a

quantum leap in the rationalization of production. The techniques and technologies associated with each paradigm spread rapidly during upswings and were partially responsible for the expansions' escalation (Mensch, 1979; Coombs, 1984a; Kleinknecht, 1987). However, as the downturns set in, further automation began to yield declining returns and the paradigms stagnated. It stands to reason that managers should be attracted to rhetorics that emphasize rational procedures and structures when profits hinge easily on capital investment and automation. But when returns on capital begin to decline, managers should show greater interest in rhetorics that focus on the utilization of labor, industry's second factor of production. One might therefore expect rational rhetorics to have surged during the upswings of longwaves and normative rhetorics to have surged during downswings. The evidence in Figure 4 broadly supports this hypothesis.

Figure 4. Correspondence between ideological surges and longwave expansions and contractions.

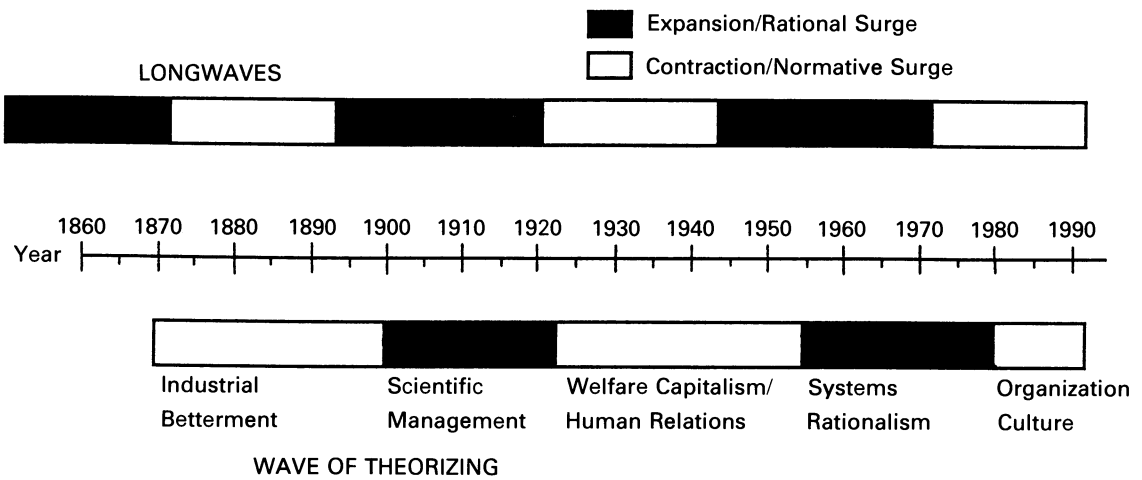


Figure 4 displays, as parallel timelines, an averaged estimate of the eras of expansion and contraction (given in Table 2), as well as our estimate of the eras during which each rhetoric surged (given in Table 1). Shaded portions of the two timelines signify periods of expansion and rational surges. Unshaded portions represent contractions and normative surges. If the allure of rational and normative ideologies mapped precisely onto expansions and contractions, then the shaded and unshaded portions of the two timelines would coincide. Visual inspection of Figure 4 reveals a reasonable approximation of coincidence. Surges of normative and rational theorizing occurred, respectively, in conjunction with periods of contraction or expansion. Although more difficult to pinpoint with the available data, the estimated timelines also seem to indicate that changes in the tenor of managerial discourse generally lagged the beginning of an upturn or a downturn, thereby raising the possibility that the latter may have cued the former.

DISCUSSION AND CONCLUSIONS

The data suggest that organizational scholars ought at least to consider the possibility that American managerial ideology

has evolved rather differently than commonly hypothesized. Rather than having progressed steadily from coercive to rational and then to normative conceptions of control, managerial ideology may have been elaborated in surges of rhetoric that alternately celebrated normative and rational forms of control. Moreover, an interplay between broad cultural and economic forces may have underwritten these alternations. Specifically, deeply rooted but opposing images of Gemeinschaft and Gesellschaft appear to have constrained the collective imagination of the managerial community by dichotomizing the range of acceptable images of organizing. New waves of rational and normative theorizing have, in turn, been associated with long-term expansions and contractions in the economy. Rational rhetorics prospered when the economy expanded; normative rhetorics surged when the economy contracted. Thus, one might postulate that culture has set the substantive and structural boundaries within which managerial discourse has developed but that economic forces have determined when new surges of theorizing occurred.

Such a claim at once violates and bridges traditional accounts of ideological change on two fronts. First, most scholars have advocated either an idealist or a materialist explanation of ideological change. Idealists have argued that new ideologies arise out of tensions endogenous to the system of ideas itself (Sutton et al., 1956; Gramsci, 1957; Douglas, 1966). In contrast, materialists claim that ideological change is triggered by exogenous events such as wars, immigration, changing economic conditions, climatic shifts, and so on (Marx, 1906; Harris, 1979). Not only have idealists and materialists generally portrayed their perspectives as mutually exclusive but the purist tendency has solidified in recent years with the rise of postmodernism and the realist backlash it has occasioned.

Social theorists have long counseled that ontological purism is too rigid to account adequately for social change (Bendix, 1956; Weber, 1968; Giddens, 1984). However, most attempts at synthesis have been cast at the level of abstract social theory. What we have attempted to show, in however a rudimentary manner, is that by pragmatically combining idealist and materialist explanations, one can account more fully for the dynamics of ideological change in at least one domain, American managerial thought. In this arena, cultural arguments are necessary for explaining conceptual constraints, while material arguments are crucial for explaining the timing of trends. Either explanation without the other would leave an incomplete account of the pattern's unfolding.

Second, our analysis of American managerial discourse blurs the longstanding distinction between strain and interest theories of ideological change. Strain theories assert that ideologies enable collectives to cope with contradictory social forces (Parsons, 1951; Sutton et al., 1956; Johnson, 1968). But since all ideologies contain inconsistencies, they eventually prove inadequate either because social conditions change or because the ideology sows the seeds of its own destruction. For whatever reasons, once contradictions have

become apparent, a new ideology arises to redress the previous ideology's inadequacies. In contrast, interest theorists (Mannheim, 1936; Marx, 1976) have argued that because all ideologies champion the concerns of their purveyors, ideological change signals either a change in the dominant group or a change in the dominant group's interests. Our reading of the elaboration of managerial ideology suggests that any sharp distinction between these two perspectives is unwarranted, since both may be necessary to explain the dynamics of ideological change.

Specifically, the role of cultural antinomies and economic change in the evolution of managerial discourse is broadly consistent with the teachings of strain theory. Cultural antinomies generate inherently unstable interpretations of social life, and economic cycles occasion social tensions that highlight the antinomies' contradictions. However, the existence of contradictions and strains does not lead automatically to a new ideological surge. Instead, the contradictions provide ammunition for the formulation of an ideological alternative by members of an insurgent interest group. With the exception of the most recent ideological turn, each surge of managerial theorizing was championed by members of a specific subgroup: industrial betterment by owners, scientific management by mechanical and industrial engineers, human relations by personnel administrators, and systems rationalism by financiers, accountants, and mid-level managers with management-science-oriented M.B.A.s. Portions of various ideologies and certain of their associated practices ultimately became institutionalized because of the actions of these groups.

Several concluding clarifications and caveats are in order. First, to say that rational and normative ideologies of control have swept over managerial thought in alternating sequence is not to say that adherents of rational ideologies "outnumbered" adherents of normative ideologies in some eras but not others. Nor is it to say that rational and normative ideologies have alternately become "dominant," at least in the traditional sense of the term. In fact, there is considerable evidence that rational ideologies have always "dominated" the managerial community, in the sense that they are more prevalent and more tightly linked to managerial practice. For this reason we have been careful to avoid a language that might suggest the cyclical rise and fall of hegemonic regimes. Instead, in our view, the ideas, beliefs, and practices that inform the managerial community cluster around two broad themes: organic solidarity and rational control versus mechanical solidarity and normative control. The first cluster may be the larger (and perhaps more influential), but for both socioeconomic and cultural reasons, the second cluster periodically attracts considerable attention in the managerial community. This is not to say that rational theories disappear, nor even that rational thrusts do not also occur during normative eras, but only that rationalism will be tempered by and perhaps will even justify surges in normative theorizing. For instance, in the 1980s as the rhetoric of culture and commitment surged, the economy was overhauled by a wave of mergers and acquisitions justified in some managerial quarters by a

hyperrational ideology of financial ruthlessness. Rather than cast doubt on our claim that this period was characterized by a surge of normative theorizing, the presence of this hyperrational ideology could be variously interpreted as the culmination, the continuation, or even the institutionalization of the previously surging rhetoric of systems rationalism. From this point of view, the rhetoric and practice of mergers and acquisitions may actually have fuelled interest in the rhetoric of corporate culture. It is certainly the case that even as they implemented their hyperrational vision of industry, proponents of this point of view also sought justification and legitimation in the rhetoric of values, motivation, and morality characteristic of the concurrently surging normative ideology. Interestingly enough, industrial betterment's popularity also mushroomed in conjunction with the first wave of acquisitions and mergers to shake the American economy (Brandes, 1970; Chandler, 1977; Edwards, 1979).

Second, our analysis has focused on ideational phenomena. We have not sought to address the relation between ideology and practice. Conceivably, the two might covary, or they might be completely unrelated. The alternatives have very different implications for a theory of ideology. Covariance would indicate that ideology has an impact and that ideas may even play a causal role in the development of practice. Independence would be consistent with the claim that ideology is largely window dressing. While management theorists typically assume the former and labor historians the latter, the issue remains an empirical question that begs for further analysis.

Ultimately, the power of any social-scientific theory lies not only in its capacity to explain the past but in its ability to predict the future. Ignoring social science's less than illustrious record of accurate predictions, if our analysis has merit, one would expect the current emphasis on normative control to be followed by a resurgence of rationalism. Moreover, this surge should occur in conjunction with a long-term expansion in the economy and the rise of a new paradigm of automation. The implications of such a suggestion for organization theory are sobering. Some believe that organizational theory develops progressively, while others believe that shifts in the tenor of our theorizing offer an opportunity for greater understanding. But to the degree that trends in organizational theory mirror trends in managerial discourse at large, our efforts may be neither cumulative nor pathbreaking. Instead, in the long run, the tenor of our theorizing may amount to little more than the turning of a small cog within a larger socioeconomic clock over which no one has control.

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