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RICHARD F. VIDMER

Soviet Studies of Organization and Management: A “Jungle” of Competing Views

The USSR has entered a new, qualitatively higher stage in constructing a Communist society—“mature” or “developed” socialism.¹ Theorists envision progressively higher developments to occur in this stage and commonly regard the scientific-technological revolution as one of its defining traits. Reflecting objective changes that have occurred in society’s production forces, the scientific-technological revolution poses an unprecedented challenge to political leaders: they must now “integrate complexity and manage change through advances in organization and technology.”² This challenge cannot be successfully met without the support and active participation of specialists in administrative policy. While theorists and politicians alike remain convinced that only socialism provides the optimal framework for organizing societal development, they begrudgingly acknowledge that the reputed advantages of the Socialist economy—national planning, public property, class solidarity—do not manifest themselves automatically, but must be brought to life through the creative application of scientific knowledge and organizational skill.³

This article draws inspiration as well as specific questions from Harold Koontz’s seminal article describing the “jungle” in U.S. management science (see Koontz, “The Management Theory Jungle,” *Journal of the Academy of Management*, 4, no. 3 [December 1961]: 176–88). For a participant-observer’s view of the conceptual diversity, acrimonious disputes, and bureaucratic politics in Soviet economic science, see Aron Katsenelinboigen, *Soviet Economic Thought and Political Power in the USSR* (New York, 1980).

1. G. Popov argues that developed socialism creates the possibility and necessity for elaborating a theory of Socialist management (see G. Popov, *Problemy teorii upravleniia*, 2nd ed., rev. and enl. [Moscow, 1974], p. 206). For Western views on Soviet administrative developments in this era, see Robert F. Miller, “The Scientific-Technical Revolution and the Soviet Administrative Debate,” in Paul Cocks, Robert Daniels, and Nancy W. Heer, eds., *The Dynamics of Soviet Politics* (Cambridge, Mass., 1976), pp. 137–55; Robert F. Miller, “The New Science of Administration in the USSR,” *Administrative Science Quarterly*, 18, no. 3 (September 1971): 247–58; Alfred Zauberman, *The Mathematical Revolution in Soviet Economics* (London, 1975); Michael Ellman, *Planning Problems in the USSR* (Cambridge, 1973); Loren Graham, “Cybernetics,” in George Fisher, ed., *Science and Ideology in Soviet Society* (New York, 1967), pp. 83–106; Donald Schwartz, “Recent Soviet Adaptations of Systems Theory to Administrative Theory,” *Journal of Comparative Administration*, 5, no. 2 (August 1973): 233–63; Erik Hoffmann, “The ‘Scientific Management’ of Soviet Society,” *Problems of Communism*, 26, no. 3 (May–June 1977): 59–67; Richard F. Vidmer, “The Emergence of Administrative Science in the USSR: Toward a Theory of Organizational Emulation,” *Policy Sciences*, 2, no. 1 (August 1979): 93–108; Richard F. Vidmer, “Administrative Science in the USSR: Doctrinal Constraints on Inquiry,” *Administration and Society*, 12, no. 1 (May 1980): 69–80; Richard F. Vidmer, “Management Science in the USSR: The Role of ‘Americanizers,’” *International Studies Quarterly*, 24, no. 3 (September 1980): 392–414; Paul Cocks, “The Rationalization of Party Control,” in Chalmers Johnson, ed., *Change in Communist Systems* (Stanford, 1970), pp. 153–90; Paul Cocks, “Rethinking the Organizational Weapon: The Soviet System in a Systems Age,” *World Politics*, 32, no. 2 (January 1980): 228–57.

2. Paul Cocks, “Retooling the Directed Society: Administrative Modernization and Developed Socialism,” in Jan Triska and Paul Cocks, eds., *Political Development in Eastern Europe* (New York, 1977), p. 84.

3. The voluntaristic element in economic development is stressed by certain theorists, notably administrative lawyers. Nevertheless, others pay more attention to deterministic concepts like *planomernost’* and emphasize that objective laws or *zakonomernosti* play a predominant role in economic affairs.

Consequently, economic cadres are urged to sharpen their skills, planners to learn and apply new procedures, data analysts to adopt the latest Western computing technologies, and theorists to articulate a distinctive theory of management under socialism.

The notion of developed socialism indicates that management (*upravlenie*) is not only an instrument for improving organizational performance, but a general philosophy of social life.⁴ It can be regarded "as the binding, cementing link . . . [which] ensures the effective functioning of production, science, technology, and education."⁵ Depending on context or nuance, however, *upravlenie* can refer to steering, regulation, control, organizational management, governance, administration, or even management of one's own feelings. As a result, theorists routinely talk past one another in their theoretical and applied studies. They often examine dissimilar phenomena and do so from the perspective of competing research traditions. While some have tried to order this confusion, they have so far met with little success.⁶

Since *upravlenie* constitutes such an impenetrable thicket in the Soviet literature, the Western analyst is well advised to restrict his inquiry to manageable dimensions. This article examines *upravlenie* primarily in one applied sphere, that of industrial production, and it draws from recent Soviet works on theoretical as well as practical issues.⁷ To be sure, there is great confusion and diversity even in this relatively narrow domain: theorists do not use key concepts in similar ways, they do not pose similar questions, and they seldom arrive at similar conclusions.⁸ This disarray presents an important, albeit largely neglected scholarly task—to classify the major contrasting approaches to industrial management in the USSR. By ordering the present chaos, we expect not only to gain valuable insights into the complex realm of an emerging social science, but also tentatively to assess the impact of Socialist doctrine and Western concepts on the field. The isolation of parochial views, actors, and communications channels is a modest first step in describing a recurrent pattern of group interactions.

In order to shed light on these issues, I pursue several specific objectives. First, I trace the tension inherent in simultaneously borrowing Western "techniques" and elaborating a distinctive Socialist theory from the advent of Soviet power through the Brezhnev era. This perspective illustrates the doctrinal and political constraints on inquiry and establishes criteria whereby separate approaches to the field can be identified. Second, I examine the major competing schools of thought in the Soviet

4. This resembles Holloway's treatment of cybernetics in the USSR (see David Holloway, *Technology, Management and the Soviet Military Establishment* [London, 1971]). However, I suggest that cybernetics is but one of a multiplicity of competing definitions of *upravlenie*.

5. V. Afanas'ev, "Further Improvement of the Management of Soviet Society," *Social Sciences*, 3, no. 9 (1972): 71.

6. For a treatment that identifies types (*vidy*) of *upravlenie*, see Iu. Tikhomirov, *Vlast' i upravlenie v sotsialisticheskoi obshchestve* (Moscow, 1968).

7. In this article, I deal with Soviet perspectives on management, rather than on specific behaviors associated with administrative reform. Indeed, there are great differences between theory and practice, and even sophisticated developments in management science do not suggest, in themselves, that overall economic performance will improve. Nevertheless, significant organizational changes have already occurred in the USSR due to the political leadership's increasing attention to management science (see Erik Hoffmann, "Soviet Information Processing: Recent Theory and Experience," *Soviet Union*, 2, no. 1 [1975]: 22-49).

8. Erik Hoffmann arrives at similar conclusions with respect to Soviet writings on the scientific-technological revolution (see Hoffmann, "Soviet Views on the 'Scientific-Technological Revolution,'" *World Politics*, 30, no. 4 [July 1978]: 615-44).

Union, including their fundamental concepts and leading institutes, journals, and spokespeople, with special attention to the clash of political interests among the schools. Finally, I draw some tentative conclusions regarding future developments in the field.

Leonid Brezhnev's call to fuse organically the achievements of the world-wide revolution in science and technology with the distinctive traits (and reputed advantages) of socialism has struck a responsive chord among Soviet administrative specialists as well as Marxist-Leninist philosophers and political economists.⁹ Virtually every interest in Soviet society has been able to find what it seeks in the General Secretary's vague phraseology. Thus, orthodox forces stress the incompatibility of socialism and capitalism, especially regarding fundamental socioeconomic principles and institutions. But what they ignore, namely, the organizational forms, industrial technology, and administrative techniques that exist irrespective of social system, are precisely the phenomena most relevant to management specialists. This fascination with Capitalist "techniques" has strong roots in Soviet history and even sanction in Marxist-Leninist doctrine. Good Socialists never doubted the ability of the Capitalist system to organize and manage large-scale production.¹⁰ And by the Soviets' own admission, it was in the realm of industrial techniques that Soviet administrators and scientists had much to learn from their bourgeois predecessors. Those techniques would fit into an organizational framework not radically different from that which existed under capitalism, despite the greater centralization and more comprehensive planning implied by proletarian rule.¹¹ But even Engels's prediction that the "governance of men" would become the "administration of things" did not mean that management would disappear as a separate command function. Consequently, Lenin was acting in consistent Marxist fashion in the twenties when he insisted that specialists adopt "all that is progressive" in F. W. Taylor's scientific management, but at the same time reject the universal nature and Capitalist application of Taylorism.¹²

Neither Lenin nor his followers have adequately shown where administrative "techniques" leave off and the Capitalist "system" begins, making it difficult to separate acceptable from unacceptable Western ideas or allegedly positive bourgeois attitudes (the work ethic) from negative ones (acquisitiveness). Marxist-Leninist doctrine has given managers, not to mention organization theorists, little policy guidance. As a result, the precise manner in which Socialist administrative science should take shape—particularly in light of the massive and largely haphazard diffusion of Western management concepts into the USSR—has remained unclear. The ambiguity has allowed party officials, economic cadres, ideologues, and political economists to adopt dissimilar stances on pressing theoretical and practical

9. This task was initially set forth by Brezhnev at the Twenty-fourth Communist Party Congress (1971) and then strongly reiterated at the twenty-fifth congress in 1976.

10. Of course, it was not productivity, but rather the distributive inequities of capitalism and its systematic exploitation of the working class that would ultimately destroy bourgeois rule.

11. Marxists envisioned bureaucracy as largely a technical problem. Once stripped of its bourgeois character, the conditions would exist for the eventual "withering away" of state agencies. But production organizations would undergo quantitative, not qualitative, changes under proletarian rule, despite the expectation that workers would occupy key managerial roles in the new order. See Jeremy Azrael, *Managerial Power and Soviet Politics* (Cambridge, Mass., 1966), pp. 12–27.

12. O. Pozdniakov, *O problemakh nauchnoi organizatsii truda i upravleniia* (Moscow, 1969), p. 19.

questions. Justifiable doctrinal grounds have always been found to prop up the various positions. Nevertheless, one can observe certain political constraints on the content as well as conduct of Soviet administrative theorizing. Specialists have not been permitted to follow Western experience blindly, or to focus exclusively on the practice of management under socialism. They have not been allowed to isolate themselves or their studies from the politics of class struggle, dictatorship of the proletariat, and the USSR's relationship to the outside world. Theoretical works have been expected to account for the distinctive features of the Socialist system and, consequently, could not focus on industrial technology or administrative "techniques" at the expense of broader socioeconomic phenomena. Administrative theorists have had to identify criteria whereby Socialist management could be differentiated from Capitalist. And only people—not things—could meet such a requirement for conceptual analysis.

Even within these limits, the Soviet response to Western concepts and methods has varied and has sometimes resulted in disastrous consequences for specialists, the heads of their institutions, and their political patrons. In the 1920s, for example, Bolshevik theorists did not shirk from canvassing the West for ideas on how to order the growing administrative malaise they themselves had helped to create. Attempts to gather and disseminate information about Western techniques were not only officially sanctioned, but vigorously promoted and enthusiastically received by the community of specialists. While the emulative posture was strong medicine for doctrinal purists, it apparently evoked little soul-searching among professional specialists dedicated to building a more efficient state machine in the USSR.

But the flourishing of scientific studies was accompanied, according to V. Pozdniakov, by "erroneous views on the substance, methods, and possibilities of NOT [*Nauchnaia Organizatsiia Truda*, or the scientific organization of labor] under conditions of the dictatorship of the proletariat."¹³ Self-serving statements about NOT's focus on the worker, his health, and working conditions could not hide the basic similarities of approach and subject matter to those used by Taylor.¹⁴ This conclusion was sufficiently compromising on strict doctrinal grounds to give political leaders cause for alarm, but it could be tolerated begrudgingly as long as the New Economic Policy (NEP) remained the official line. If NEP should "wither away," however (it was always seen as a temporary measure), certain views and their political expression could drastically part company with Socialist orthodoxy. And by 1928, a consensus had emerged that NEP should be terminated, agriculture collectivized, class enemies routed, and maximum effort placed on rapid industrial growth. Not only did the First Five-Year Plan concentrate on gross output targets, but it did so by ignoring—and actually overturning—many of the goals and methods of economic rationalization.¹⁵ Nothing would be permitted to stand in the

13. M. Babin, "Problema nauchnoi organizatsii truda v sovetskoi ekonomicheskoi literature dvadtsatykh godov," (Doctoral diss., Moscow, 1966), p. 5.

14. For obvious doctrinal reasons, there would be little talk in the Soviet administrative literature about "intelligent gorillas"—the Taylorist conception of the worker. And to their credit, many Soviet theorists felt more comfortable dealing with technical rationalization than raising labor intensification.

15. For an excellent review of the rationalization movement, see Cocks, "Rationalization of Party Control."

way of Stalin's frantic drive to catch up and surpass the advanced states, least of all research centers "mechanically" copying bourgeois "techniques."¹⁶

Consequently, Bolshevik élan almost completely displaced scientific management and technical rationality as leadership values in the 1930s. For Stalin and his entourage, there could be no technical expertise apart from the "correct" political line. Except for a badly truncated branch of technical-engineering knowledge, administrative science died out. By pursuing short-range policy benefits, scholars gingerly avoided theoretical analysis and, instead, concentrated on microlevel questions of intrafirm planning, control, accounting, and bookkeeping.¹⁷ Their neglect of theory was, in the Soviet lexicon, "not accidental." Stalin had consciously divorced theory from practice and pronounced the latter sole criterion of theoretical truth.¹⁸ From this doctrinal standpoint, to "foist upon political economy problems of economic policy is to kill it as a science."¹⁹ What survived of theoretical inquiry remained safely tucked away in administrative law (for analysis of the state apparatus) and did no more than provide *ex post facto* justification for policy choices made on other grounds.²⁰ Thereafter, until the mid-1950s, administrative specialists engaged in *agitprop* and were completely replaced by economic practitioners (mainly engineers) who made decisions by trial and error. The relevance of Western "techniques"—a central issue in the previous decade—was carefully avoided by specialists concerned with their own personal safety and, hence, content to restate eternal truths. They could no longer apply the rhetorical device of separating "techniques" from the Capitalist "system" since the whole package was out of step with political and psychological needs of the Stalinist system. Only the rich, albeit poorly mastered experience of constructing socialism in the USSR could provide the theoretical basis of Soviet management science.

By the time of Stalin's death, this situation had become intolerable for those specialists dealing with organization, management, and planning in the national economy. But economists themselves were in no position to suggest pertinent changes. Indeed, no individual or group dared to press the political leadership to adopt new policies or even to agitate for innovative research and theorizing without clear signals that the changes were, in fact, desired by at least some faction in high political circles. Those purposive signals were forthcoming at the July 1955 plenum, and again at the Twentieth Communist Party Congress, when leading political and scientific officials began seriously to criticize the moribund condition of Soviet economic science.²¹ Prodding from the top produced a response. Scholars again concentrated on studies that could improve the practice of management and economic planning under socialism. The props supporting Stalinist political economy started to crumble. Soon, mathematical economists vigorously promoted

16. Management theorists in the 1930s, especially those with bourgeois credentials, would find themselves linked to the "right deviation" in politics and, hence, were subject to severe repression and even liquidation.

17. For a good review of administrative science in this period, see D. Kruk, *Razvitie teorii i praktiki upravleniia proizvodstvom v SSSR* (Moscow, 1974).

18. Virtually all Soviet management specialists today recognize the disastrous consequences that such a separation had on the field.

19. J. Stalin, *Economic Problems of Socialism in the USSR* (New York, 1952), p. 72.

20. Robert Miller has noted the administrative law sanctuary for the scattered remnants of theoretical inquiry (see Miller, "New Science of Administration," pp. 248–50).

21. See Richard Judy, "The Economists," in H. Gordon Skilling and Franklyn Griffiths, eds., *Interest Groups in Soviet Politics* (Princeton, 1971), p. 225.

input-output analysis and linear programming. The NOT movement reemerged in 1957, and, thereafter, specialists tried to streamline operations in the workplace. In 1962, D. M. Gvishiani's seminal *Sotsiologiia biznesa* strongly advanced the selective adoption of American administrative techniques.²²

These changes represented a fundamental shift away from Stalinist orthodoxy and toward various modern approaches to management science, which have taken place in spite of bureaucratic lethargy and even fierce resistance from conservative forces in the Soviet establishment.²³ Although conservative leaders have tried on numerous occasions—with some success—to reverse the balance, their efforts have had only tactical significance. The revolution has continued and actually sped up under Brezhnev and Kosygin as the USSR has moved rapidly into the mainstream of international developments.²⁴ Not only have political leaders defended leading theorists, especially mathematical economists,²⁵ but they have made firm institutional commitments to advance innovative research and theorizing.²⁶

Doctrinal and political constraints on outright Westernization in Soviet management science nevertheless remain. The internal debate continues to reveal distinctive features which have not withered away in the post-Stalin era. Soviet analysts now believe that it is both possible and necessary to elaborate a distinctive science (and theory) of management under socialism.²⁷ The good standing of cybernetics, mathematical methods, and systems analysis notwithstanding, orthodox specialists insist that such approaches are incapable of meeting the conceptual needs of Socialist theory because they fail to provide either a sound basis or analytical language for differentiation between social systems. From this doctrinal perspective, political economists can always deal their foes a stern rebuff—"the specifics of Socialist production disappear in their analysis."²⁸

In order to make the emulation of Capitalist techniques more palatable to ideologues, specialists often resort to dichotomies that detach (1) Socialist from general theory and (2) socioeconomic from organizational-technical aspects of management.²⁹ General theory includes any framework that ignores the specific features of a given social system, but nonetheless provides insights as well as useful ideas with which to improve Socialist management. Cybernetics would be an example of such a theory. Socialist theory, on the other hand, must take into

22. During a series of interviews conducted at the Tallinn Polytechnical Institute, Estonian management theorists stressed the influential political nature of this work (see D. Gvishiani, *Sotsiologiia biznesa* [Moscow, 1962]).

23. Despite the devastating impact of cybernetics and the *Ekonomiko-Matematicheskie Metody* (EMM) on political economy, that field continues to exert substantial political as well as institutional muscle in the field.

24. This movement is perhaps best symbolized by Soviet participation in the International Institute of Applied Systems Analysis in Vienna. Along with the United States, the USSR bears the greatest financial burden in this multinational venture.

25. For a good illustration of such a defense, see I. Solov'ev's article in *Pravda*, June 4, 1973, p. 2.

26. See Vidmer, "Management Science in the USSR."

27. The possibility and necessity of developing Socialist theory can be attributed to changes occurring after the 1964 (October) plenum, that is, after the political demise of Khrushchev (see Popov, *Problemy teorii upravleniia*, p. 206).

28. A. Eremin, *Otnosheniia sotsialisticheskoi sobstvennosti i ekonomicheskoe upravlenie* (Moscow, 1973), p. 51.

29. Erik Hoffmann correctly points out that such dichotomies serve an important ideological function, namely, to deny undue Western influence in Soviet society (see Hoffmann, "Soviet Views," p. 626).

account or generalize about the defining traits of socialism—national planning, public property, class solidarity—and then demonstrate their objective connection to the managerial structure in the USSR. Such a theory remains an aspiration, rather than a concrete achievement, but political economy lays strong claim to being its methodological base. The socioeconomic aspects of a society define that society and cannot be transferred between systems. However, organizational-technical aspects of management (for example, industrial technology) represent uniformities that exist irrespective of social system and can be consciously exchanged with a minimum of hazard.

These dichotomies permit Westernizers to defend studies that—although not designed to meet the needs of Socialist theory—can provide techniques to improve the practice of management under socialism. The same dichotomies also suggest criteria whereby the observer can identify as well as differentiate among various schools of thought in Soviet administrative science.³⁰ These relationships are illustrated in figure 1. The horizontal axis separates Socialist from general views; the vertical axis separates organizational-technical and socioeconomic aspects of management. An identifiable school can be found within each quadrant. For example, cybernetics and the empirical approach are both general analytical frameworks. Each can make important contributions to Socialist and Capitalist management science, but they differ in that cybernetics deals with things (for example, technical control processes), while management empiricists concentrate on leadership in human collectives. The quadrants on the left side of figure 1 focus on Socialist management. Political economy traditionally has examined socioeconomic principles and tried to demonstrate an “objective” linkage between economic laws (*zakonomernosti*) and the purposive nature of economic development in the Soviet Union. Planning (*planirovanie*) on the scale of the entire national economy represents not only a distinctive feature of the Socialist economy, but its major reputed advantage over market systems. In comparison with political economy, however, planning contends with narrower, more technical issues.

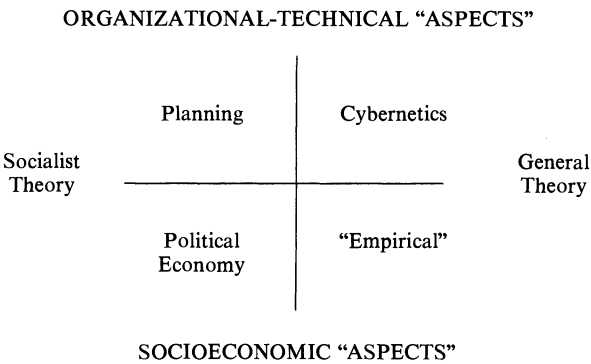


Figure 1.

Despite the prominence of these schools, it would be highly misleading to speak of a dominant theme, an officially sanctioned theory, or a general line in the

30. Ivan Syroezhin, a prominent Leningrad game theorist, outlined these four schools to me during an interview held at the Voznesenskii Finance-Economics Institute, March 1976.

Soviet Union today. In stark contrast to that of Stalin, the Brezhnev regime has promoted an unusual measure of conceptual reorientation and international contact in administrative science. Thus, management specialists generally have been free to pursue divergent lines of inquiry. And they have not been reticent to attack what others in the field have said, thought, or done. If they so choose, specialists can safely ignore the entire domain of Socialist theory and instead concentrate on improving managerial practice. The current "jungle" in studies of organization and management reflects more than simply leadership preferences. Although one can uncover basic agreement that management should play a key role in the 1980s, there is disagreement—and even outright conflict—on the most fruitful lines of advance.

The "jungle" in Soviet studies of organization and management can be untangled by examining each major approach to administrative science.³¹ While any attempt to classify this complex and confusing topic is bound to overlook certain views, misclassify others, or ignore subtle nuances within each, the "four schools" interpretation has been restated, albeit using different categories, by Soviet theorists themselves.³² Table 1 summarizes my arrangement of these schools while listing important concepts, institutes, scholarly journals, and prominent theorists representing each view. Efforts to sharpen these distinctions are seriously hampered by the virtual absence of germane studies which review the state of the art and classify divergent perspectives.³³ Despite discontent and exasperation resulting from ambiguous terminology, bitter jurisdictional disputes, and viciously argumentative theses, the Soviets have made few efforts to order the turmoil.³⁴ Instead, rival "groupings" scramble to find support from political leaders who might enhance their clout in the field.

Political economy is an official part of the ruling orthodoxy in the USSR and provides the basic texts and common reference points taught to all Soviet administrative theorists. By formulating "correct" analytical tools, political economy uncovers "the laws which govern production, distribution, exchange, and the consumption of material wealth in Socialist society."³⁵ It constitutes the "methodological" core of the economic sciences, including those fields which examine Socialist management. The language of political economy—*nauchnost'*, democratic centralism, *planomernost'*—creates an imagery (and expectation) of optimal organizational performance and makes no conceptual allowance for various administrative dysfunctions. Its normative bent has made an enduring impression on the field. Subsequent approaches like cybernetics, operations research, and systems analysis can be seen as instruments designed to achieve the aspirations of political economy.

31. This classification scheme avoids various microanalytical approaches like NOT, the sociology of labor, and social planning in the collective. While these fields can provide important data for managers and consultants, administrative theorists (mainly economists) regard them as excessively narrow, capable of dealing only with certain "aspects" of management. Of course, sociologists disagree with such views.

32. This conclusion came to light after I had conducted numerous interviews with Soviet administrative specialists in Moscow, Leningrad, and Tallinn.

33. Ironically, there has been no review of Soviet approaches to match Gvishiani's trenchant analysis of management science in the United States. See D. Gvishiani, *Organisation and Management: A Sociological Analysis of Western Theories* (Moscow, 1972).

34. For an attempt to order the field's terminological chaos, see I. Mangutov and L. Umanskii, *Organizator i organizatorskaia deiatel'nost'* (Leningrad, 1975).

35. G. Anisimov, "O predmete politicheskoi ekonomii," *Kommunist*, no. 18 (December 1966): 90.

Table 1. *Soviet Schools of Management Science*

	Concepts-Ideas	Institutes	Journals	Theorists	Locations
Political Economy	<i>planomernost'</i> "principles" democratic-centralism	Leningrad State University Leningrad Engineering Economics Institute	<i>Kommunist</i> <i>Organizatsiia Upravleniia</i>	A. Godunov I. Sigov A. Eremin D. Kruk Iu. Lavrikov A. Rumiantsev N. Moiseenko V. Cherkovets	centered in Leningrad
	<i>nauchnost'</i> optimization objectivity <i>proportional'nost'</i>				
Empirical	case methods business games <i>rukovodstvo</i> consulting management education organizational design rationalization functions	Moscow State University Tallinn Polytechnical Institute Moscow Institute of the National Economy Moscow Institute of Management	<i>Vestnik Moskovskogo Universiteta</i> <i>Organizatsiia Upravleniia</i> <i>Ekonomika i Organizatsiia</i> <i>Promyshlennogo Proizvodstva</i>	O. Deineko G. Popov R. Iuksviarav M. Khabakuk S. Kamenitser B. Mil'ner V. Ozira G. Dzavadov	centered in Moscow and Tallinn
Cybernetics	automated systems system feedback regulation control information environment programming	Institute of Cybernetics Institute of Systems Research Institute of Management Problems	<i>Kibernetika</i> <i>Aviomatica i Telemekhanika</i> <i>Mekhanizatsiia i Aviomaticizatsiia</i> <i>Upravleniia</i>	A. Berg V. Shorin V. Glushkov V. Trapeznikov I. Syroezhin V. Marshev S. Dumler I. Novik	widely dispersed
Planning	input-output linear programming modeling <i>planirovanie</i> optimal planning mathematical economics	TsEMI Institute of Economics and Organization of Industrial Production	<i>Ekonomika i Matematicheskie</i> <i>Metody</i> <i>Planovoe Khoziaistvo</i>	N. Drogichinskii N. Fedorenko V. Dadaian L. Kantorovich R. Raiatskas A. Modin A. Aganbegian V. Kossov	Moscow Novosibirsk

Thus, I. M. Syroezhin—a powerful voice in Soviet management science—regards his own work as largely a concretization of political economic categories.³⁶

While *partiinosť* has been a defining trait of political economy, its relation to applied fields and the practice of management has been a dependent, rather than independent, variable. Its role under Stalin—to justify “theoretically” the dictator’s policy choices—has evoked harsh, albeit retrospective, criticism: “political economy could not serve as the methodological basis of management science . . . and the leadership of the national economy was deprived of a scientific foundation.”³⁷ Since the reemergence of scientific analysis in the mid-1950s, political economists have tried to carve out a policy-relevant niche for their field, while reconfirming political economy’s leading role in theoretical studies. And they have undertaken a strictly ideological task—to give management an acceptable Marxist-Leninist interpretation.³⁸ This has assumed two specific directions, although consensual positions on each have yet to be achieved. First, orthodox theorists have tried to show that managerial relations (*upravlencheskie otnosheniia*) under socialism are distinctly different from those existing in Capitalist systems. Thus, conservative theorists have been preoccupied with uncovering the objectivity (*ob’ektivnost’*) of management and its organic connection to the economic laws of socialism. From this standpoint, David Kruk regards *upravlenie* as a basic social relationship between owner and means of production: “the goals of production management, its content, form and methods depend on the form of property.”³⁹ Some see *upravlenie* as a complex intermingling of base and superstructural elements.⁴⁰ Still others regard it as “secondary production relations” under socialism.⁴¹ Second, political economists have tried to dominate—if not monopolize—the major theoretical departures in administrative science. Most continue to argue dogmatically that their field defines the theoretical core, basic principles, and analytical categories of management science. But Al’bert Eremin and other moderates separate political economy from the science of management.⁴² To be sure, the latter “concretizes” the theoretical concepts of a more general and abstract field. Finally, certain theorists (for example, I. Sigov, A. Godunov) in the political economy school regard *upravlenie* as a distinctive phenomenon, complete with its own economic laws. Thus, it represents an autonomous science, even though political economy remains its “methodological” base.

One can identify orthodox political forces which stand behind the political economy interpretation of management. They can be found in certain research institutes as well as in the conservative wing of the party apparatus. The geographi-

36. I. Syroezhin, ed., *Ekonomicheskai kibernetika: Osnovy teorii khoziaistvennykh sistem* (Leningrad, 1974), p. 30. Syroezhin also believes that economic phenomena cannot be examined in a special theory apart from the analytical categories of political economy.

37. F. Binshtok, *Nauka upravliat’* (Moscow, 1967), p. 20.

38. But this has proved no mean task. In fact, it is no exaggeration to state that no definitive treatment has yet appeared in the Soviet literature.

39. D. Kruk, *Nekotorye problemy teorii upravleniia sotsialisticheskimi proizvodstvom* (Alma-Ata, 1970), p. 13.

40. Political economists have been challenged by theorists, mainly administrative lawyers, who regard *upravlenie* as primarily a voluntaristic phenomenon, that is, purposive human leadership. And while many acknowledge a complex intermingling of elements, they nonetheless emphasize the economic core of management.

41. V. Volovich, *Mesto i rol’ upravlencheskikh otnoshenii proizvodstva v ekonomicheskoi strukture sotsialisticheskogo obshchestva* (Leningrad, 1975), p. 5.

42. A. Eremin, *O sisteme ekonomicheskikh nauk* (Moscow, 1968).

cal center of this school remains Leningrad, where leading theorists publish vigorously and play important roles in organizing conferences, seminars, and other relevant forums. And some, including Iu. Lavrikov, have successfully frustrated efforts by empiricists to publish a separate management science journal.⁴³ While prepared to accept disciplines that can improve managerial practice, political economists nonetheless insist that only their field can elaborate the theoretical basis of the regime's economic policy. From this vantage point, they envision scientific management (*nauchnoe upravlenie*) under socialism, but not an autonomous, interdisciplinary social science of management (*nauka upravleniia*), perhaps because they fear "what would [then] be the role of political economy . . . in mastering the economic laws of socialism."⁴⁴ Of course, political economists can be counted on to back up conservative politicians who oppose even moderate reforms in the central planning institutions. For example, N. A. Moiseenko considers socialism and centralism indivisible—the very soul of the Soviet economy.⁴⁵ Similar views have been insistently maintained since the ill-fated Sik economic reforms in Czechoslovakia in 1968. Political economists are also becoming increasingly apprehensive over the "mechanical" imitation of bourgeois techniques by less vigilant specialists. They see a dangerous trend toward the professionalization of management in the USSR. Together with their allies in high political circles, orthodox theorists uncover the "groundless thesis about separating management activities into some kind of . . . privileged sphere of a certain social stratum [which] is erroneous . . . and in contradiction with the entire way of life in our society."⁴⁶

Unlike the political economy school, the empirical school⁴⁷ is a general, rather than Socialist, approach to *upravlenie*, that is, it can improve managerial practice in both Socialist as well as Capitalist systems. Instead of examining the "objective" features of management, however, Soviet empiricists concentrate on various subjective elements of creative human leadership at all levels in the national economy. They also seek to generalize and systematize inductive principles drawn from analysis of real administrative experience. This view is based on the premise that if the experiences of managers and consultants are thoroughly examined, the analyst will somehow learn to apply the most effective techniques in a given situation. This approach is closely related to that popularized in *The Great Organizers*.⁴⁸ During the 1960s, however, Soviet theorists somberly noted the lack of studies which review the industrial experience of outstanding managers like I. A. Likhachev and A. I.

43. I reached this conclusion after a series of interviews with Soviet theorists in Leningrad, March 1976.

44. V. Oligin-Nesterov, *Ispol'zovanie ekonomicheskikh zakonov sotsializma i upravlenie proizvodstvom* (Moscow, 1973), p. 48.

45. N. Moiseenko and M. Popov, *Demokraticeskii tseñtralizm—osnovnoi printsip upravleniia sotsialisticheskoi ekonomikoi* (Moscow, 1975), p. 144.

46. V. Shcherbitskii, "Partiinnye organizatsii i sovershenstvovanie upravleniia ekonomikoi," *Kommunist*, no. 6 (April 1973): 19–33. (An English excerpt is found in *Current Digest of the Soviet Press*, 25, no. 36 [October 3, 1973]: 6.)

47. This terminology was suggested to me by Ivan Syroezhin in Leningrad in 1976. To be sure, the word "empirical" does not refer to the microaccumulation of data with the explicit purpose of describing or explaining organizational behavior. On the contrary, Soviet theorists focus on prescriptive recipes to improve managerial performance. And the approach that concentrates on training managerial cadres constitutes an "empirical" view to them.

48. See Ernest Dale, *The Great Organizers* (New York, 1960).

Efremov.⁴⁹ Of course, the aim of this approach is to train managers so that they can make better decisions and apply useful principles. Most empiricists attempt to transfer—in vicarious fashion—the experience and know-how of real managers to the practitioner and student. To be sure, they are less concerned with describing how large organizations actually function than with prescribing how to improve their effectiveness by raising the qualifications of high-level managers.⁵⁰ Consequently, great attention is paid to the training and retraining of administrative personnel, which has been accomplished, in part, by borrowing and adapting techniques (for example, case methods, business games, sensitivity training) from the repertoire of U.S. businesses.

The empirical school is centered in Moscow and has an important branch in Tallinn. While there is broad agreement among empiricists that the leadership role constitutes its major analytical focus, certain specialists concentrate their efforts elsewhere. For instance, B. Z. Mil'ner and his colleagues at the Institute of the U.S.A. and Canada are organization design theorists. They have championed notions like project management and program-goal planning in the USSR by reviewing American corporate experience.⁵¹ Madis Khabakuk, R. Iuksviarav, and others at the Tallinn Polytechnical Institute have experimented modestly with descriptive theory and have examined decision making in the organizational context.⁵² Moreover, various centers (for example, the Ordzhonikidze Management Institute) focus primarily on narrow, enterprise-level phenomena and problems occurring within separate industrial sectors—machine building, steel, chemicals, petroleum, and so forth. By contrast, some deal with interbranch (*mezhotraslevye*) problems and issues bearing on the national economy as a whole. And still others (for example, Plekhanov Institute of the National Economy) train students (actually successful managers who have qualified for retraining) in various skills prior to reassignment to a variety of industrial or nonindustrial areas.

These differences have not stopped empiricists from demarcating the boundaries of an autonomous management science which borrows and then synthesizes the contributions of numerous sciences, including biology, economics, cybernetics, sociology, administrative law, and mathematics.⁵³ To be sure, the issue of disciplinary independence has been a crucial one. Empiricists have consistently argued that *upravlenie* cannot be simplistically reduced to data processing or even the application of computers to administrative problems. And they have made great efforts to detach *upravlenie* from *planirovanie*—the reputed heart (*serdtse*) of the Soviet economy.⁵⁴ Concluding that *upravlenie* is the broader, more inclusive concept, empiricists contend that it involves different goals as well as problems and, as a separate field, has distinctive theoretical needs. From this perspective, research and

49. For a good illustration, see N. Adfel'dt, "Khoziaistvennye kadry i nauka upravleniia proizvodstvom," *Ekonomicheskaiia gazeta*, September 29, 1962, no. 40, p. 7. (An English translation is found in *Current Digest of the Soviet Press*, 14, no. 40 [October 31, 1962]: 3.)

50. For a detailed examination of this bias in Soviet administrative theorizing, see Vidmer, "Administrative Science in the USSR."

51. For example, see B. Mil'ner, ed., *Organizatsionnye formy i metody upravleniia promyshlennymi korporatsiiami* (Moscow, 1972).

52. M. Khabakuk, "Professional Loyalty and Its Influence on Managerial Decision-Making," *International Studies of Management and Organization*, 2, no. 2 (Summer 1972): 197–212.

53. O. Deineko finds twenty-one disciplines relevant for management (see Deineko, *Metodologicheskie problemy nauki upravleniia proizvodstvom* [Moscow, 1970]).

54. Gavriil Popov told me that "if *planirovanie* constitutes the heart of the Soviet economy, then *upravlenie* makes up its body" (personal interview in Moscow, June 1976).

theoretical analysis in each field can proceed with minimal conceptual overlap and institutional conflict.

Although empiricists have had their jurisdictional disputes with cybernetics and the planning school, they reserve special scorn for political economists, whom they regard as incapable of improving the practice of management. Led by G. Kh. Popov, they have even assaulted political economy's theoretical primacy in the field. By relating his version of Socialist theory to *rukovodstvo* and the art (*iskusstvo*) of management,⁵⁵ Popov arrives at a devastating conclusion for orthodox theorists: "theoretical generalization is the result of practical experience. The work on planning and implementing the rationalization of management is the basis for further development of a management theory."⁵⁶ This establishes the unity of theory and practice of management under socialism, but certainly not on the basis of conventional wisdom. Empiricists have exerted considerable political muscle in the field, particularly regarding resource allocation—the funding of new research institutes, joint ventures, and international contacts with Western specialists. They actively seek economic contracts (*khoziaistvennye dogovory*) and want to play a leading role in rationalizing the gigantic Soviet economy.⁵⁷

The planning school equates *planirovanie* with *upravlenie* or, at a minimum, regards the former as the major element in Socialist management. Although certain bourgeois techniques can upgrade planning practices in the USSR, Soviet theorists insist that only socialism permits their full, creative application on a country-wide scale. *Planirovanie* is considered a defining trait of socialism and a prerequisite for purposive, systematic economic development. According to N. Drogichinskii, "*planirovanie* fulfills every function in the production-administrative complex . . . [and] coordinates all technical, organizational, and material aspects of production."⁵⁸ It is the basis not only of a broad system of knowledge, but also of practical activities which regulate virtually every element of social life.⁵⁹ It finds its highest conceptual expression in the application of mathematical methods and data processing to economic planning. Building on ideas pioneered by L. V. Kantorovich and other mathematical economists (for example, linear programming, input-output analysis, systems engineering) as well as on the historical experience of the Soviet Union, specialists at the Central Mathematical Economics Institute (TsEMI) have advanced a "theory of the optimally functioning socialist economy."⁶⁰ Such a

55. In Popov's theory, *rukovodstvo* involves deductive principles generated at various levels of abstraction. By contrast, *iskusstvo* deals with inductive principles based on generalizing managerial experience. They combine, in synthesis, to adumbrate the subject matter of Socialist management (see Popov, *Problemy teorii upravleniia*).

56. *Ibid.*, p. 174.

57. Popov told me in 1976 that Moscow State University's Management Center had over one hundred fifty thousand rubles in consulting contracts with various agencies, including Gosplan RSFSR.

58. N. Drogichinskii, ed., *Sovershenstvovanie mekhanizma khoziaistvovaniia v usloviakh razvitiia sotsializma* (Moscow, 1975), p. 24.

59. A. Malkov, *Ekonomika, upravlenie i planirovanie promyshlennogo proizvodstva* (Kazan', 1974), p. 196.

60. Ellman, *Planning Problems in the USSR*, especially chapter 3. Moreover, a great deal of TsEMI's success can be attributed to the political skill and "empire building" of its director, Nikolai Fedorenko. By consciously pursuing a policy of diversity at the institute, Fedorenko has been able to shift gears and emphasize new trends whenever political alignments so demanded. His adaptability and tolerant attitude have allowed many leading specialists to remain at TsEMI, although they no longer count among the "favorites" (Katsenelinboigen, *Soviet Economic Thought*, pp. 107–31).

view and the panoply of mathematical techniques which buttresses it have rapidly moved into the forefront of economic-managerial thinking in the USSR. This can be attributed to several interrelated factors, including the traditional strength of mathematics in Russian scholarship, the political acumen of economists like V. S. Nemchinov, and the growing availability of high-speed computers.⁶¹ Moreover, *planirovanie* finds its greatest practical (and political) expression in Gosplan—an institution representing over sixty years of Soviet planning experience. Defining *planirovanie* broadly and being organizationally committed to enhancing its own power and prerogatives in the economic system, Gosplan has largely discarded the antiquated trial-and-error methods that typified its earlier operations.

The application of mathematical techniques promises to improve the hierarchical planning apparatus in the Soviet Union without risking the adverse political consequences of economic decentralization. But while champions of this school envision optimal planning, substantial differences exist among those who approach optimality from the perspective of linear programming, general equilibrium theory, technical systems, or the problems of an administrative economy.⁶² Sharp disagreements have also surfaced between mathematical economists in TsEMI and practitioners in Gosplan, especially regarding what the latter consider TsEMI's periodic lapses into abstract theorizing far removed from real economic problems. Political leaders have echoed similar complaints which, on occasion, have resulted in significant changes in the editorial board of *Ekonomika i Matematicheskie Metody*.⁶³ Consequently, theorists who can shed light on pressing economic problems have gained considerable prestige and clout in the field.⁶⁴ Recently, a certain disenchantment with the notion of optimality surfaced within the planning school. Led by V. S. Dadaian and R. L. Raiatskas, theorists are now attempting to cope with uncertainties in human behavior as well as rigidities in the bureaucratic environment.⁶⁵ In response, various novel institutional arrangements have emerged which portend greater cooperation between research and line agencies.⁶⁶

The planning school is entangled in severe jurisdictional battles as well as seemingly endless, semantic disputes with rival views. Indeed, it is extremely difficult to ascertain precisely where *planirovanie* leaves off and *upravlenie* begins.⁶⁷ Both political economists and empiricists, however, define *planirovanie* narrowly; it is

61. Another factor might be added to this check list, namely, the apparently successful work done in the United States by specialists like T. Koopmans, George Dantzig, and others. Certain analysts, particularly Michael Ellman, suggest that American experience had significant impact on the Soviet decision to proceed with mathematical economics.

62. Ellman, *Planning Problems in the USSR*, p. 57.

63. The gap between theory and practical applications was strongly criticized in the editorial commentary found on the tenth anniversary of *Ekonomika i matematicheskie metody* (12, no. 2 [1976]). And in the very next issue, a major shakeup of the editorial board was announced (ibid., no. 3 [1976]).

64. Abel' Abanbegian is one such theorist. He heads the prestigious Institute of Economics and Organization of Industrial Production in Novosibirsk. The institute was originally staffed largely with former specialists from TsEMI, but has lost some theorists in a recent migration back to Moscow.

65. For a good illustration of this trend, see V. Dadaian and R. Raiatskas, "Integrirovannye makromodel'nye komplekсы," *Ekonomika i matematicheskie metody*, 12, no. 2 (1976): 256–67.

66. For example, Dan Bond—an American mathematical economist well versed in Soviet developments—told me in 1976 that a research group had been integrated into Gosplan, Lithuania. While it then had no operational responsibilities, researchers shared the same building and facilities with Gosplan's line personnel.

67. Some of the greatest semantic entanglements in Soviet management science involve which concept has a more general theoretical purview—*upravlenie*, *planirovanie*, or *rukovodstvo*.

either an applied discipline taught to future planners (for political economists) or the most important function in the broader managerial system (for empiricists).⁶⁸ While there is great overlap between *planirovanie* and cybernetics, particularly in terms of mathematical modeling and data processing, substantial differences nonetheless remain. As Michael Ellman points out, these two schools differ in organization, personnel, and intellectual approach.⁶⁹ Those dealing with cybernetics are often computer specialists and operations researchers. Their major task—the development of automated systems—is a state matter. By contrast, optimal planning is a field of academic research, in which most specialists are mathematical economists, and TsEMI is the leading institute.

Optimal planners skilled in quantitative methods have not only modernized *planirovanie*, but they have functioned as a powerful reform movement in Soviet economic science. To be sure, the challenge mounted by leading mathematical economists to orthodox views during 1960–68 has represented

an attempt to replace one doctrine, political economy, which provides the ideological legitimization for rule by the bosses, by another doctrine, optimal planning, which legitimizes the rule of the white-collar intelligentsia (which both calculates the optimal plans and manages the optimally functioning socialist economy), as the theoretical basis of the economic policy of the Soviet state.⁷⁰

Their success had ostensible limits, however. Although bureaucratic lethargy and orthodox protests could not stop the legitimization of mathematical techniques *per se*, conservative theorists and their political patrons have successfully thwarted attempts to displace political economy as the “methodological” core of the regime’s economic policy. The challenge presented by optimal planners began to decline rapidly after the Soviet-led invasion of Czechoslovakia in 1968. Since then, specialists at TsEMI have withdrawn their extreme claims and initiated few attacks against the theoretical primacy of political economy. For their part, orthodox theorists have accepted the utility of linking quantitative methods to planning problems, but they interpret this connection as an analytical tool or applied sphere, rather than an independent school of thought. They do not hesitate to criticize less vigilant planners for their excessive fascination and even “mechanical” borrowing of Capitalist techniques. By finally accepting an instrumental role, that of rationalizer, the planning school has made its views an important component of today’s conventional wisdom in the USSR.

The observer can find no more popular treatment of administrative phenomena in the USSR than that of cybernetics. This comes as no surprise. As the science of communication and control, cybernetics deals with major problems facing Soviet planners and administrators, for example, the control of dynamic processes and the prevention of increasing disorder within them.⁷¹ It reinforces the Marxist vision of a society amenable to rational direction as well as the Leninist preoccupation with purposive human activity. Cybernetics not only props up doctrinal imagery; it

68. Such definitions, it should be noted, permit these specialists to carve out a meaty subject for themselves.

69. Ellman, *Planning Problems in the USSR*, p. 65.

70. *Ibid.*, p. 141.

71. Graham, “Cybernetics,” p. 86.

rekindles hope that the Soviet economy can, in fact, be managed from a single administrative center.⁷² Despite initial misgivings among Socialist ideologues, cybernetics now has greater prestige in the Soviet Union than perhaps anywhere else in the world. Indeed, if specialists regard political economy as the theoretical core of Socialist management science, they are also likely to conclude that cybernetics represents the field's practical orientation.⁷³

Most typically, the cybernetic school views *upravlenie* as "the processing of information into signals which correct the activities of machines and organisms"⁷⁴ or, according to A. I. Berg, as the "transfer of a complex dynamic system from one state to a new [higher] one by influencing its variables."⁷⁵ These definitions not only stress certain organizing concepts—system, information, regulation, feedback—but set forth a distinctive interpretation of administrative processes. To be sure, the cybernetic systems approach faces no serious rival in the Soviet literature, not even among those theorists who emphasize its limitations, but who nonetheless often resort to cybernetic ideas to describe the process of management.⁷⁶ Cybernetic theorists look at the administrative mechanism at all hierarchical levels—the shop, production section, enterprise, industrial branch—as a system of interconnected elements. A change in one element naturally affects all others. In each system the observer can identify a subject and object of management. And there is a purposive relationship between them: the subject (usually a state or party organ) leads and manages the object in a certain direction for specified purposes. By continuously processing information about the system's performance over time and then feeding it back into the system, the subject can transform a given state of affairs into a higher level of organizational development. Since the system monitors and adjusts its own behavior to take feedback into account, it is self-managing and can maintain equilibrium in the face of internal and external disturbances.

Cybernetic concepts have not been confined to narrow technical-engineering problems or even to the nonhuman milieu. On the contrary, they have been given broad application to societal as well as economic questions. For example, V. G. Shorin uncovers important analogies between cybernetic and administrative systems.⁷⁷ A. S. Petrov finds that basic managerial functions like planning, organizing, and regulating correspond to cybernetic laws which embrace virtually all aspects of social production.⁷⁸ Although the descriptive power of cybernetics when applied to social phenomena has been severely criticized,⁷⁹ I. M. Syroezhin has used it to elaborate a theory of the firm under socialism.⁸⁰ His conception of "economic cybernetics" not only takes into account human activities, but advances a noteworthy reinterpretation of traditional economic categories.⁸¹

72. For an insightful view on how Soviet theorists have adapted cybernetic to administrative theory, see Schwartz, "Recent Soviet Adaptations of Systems Theory."

73. V. Ikonnikov, *Osnovnye aspekty formirovaniia nauki upravleniia obshchestvennym proizvodstvom* (Moscow, 1969), p. 3.

74. A. Kolmogorov, *Kibernetika* (Moscow, 1958), p. 149.

75. A. Berg, *Kibernetika na sluzhbu kommunizmu* (Moscow, 1961), p. 29.

76. For a good illustration, see A. Godunov, *Sotsial'no-ekonomicheskie problemy upravleniia sotsialisticheskim proizvodstvom* (Moscow, 1975).

77. V. Shorin, ed., *Aktual'nye problemy upravleniia* (Moscow, 1972).

78. A. Petrov, *Chto takoe organizatsiia upravleniia* (Moscow, 1967), p. 40.

79. For a good review of these arguments, see Hoffmann, "Soviet Information Processing."

80. Syroezhin, ed., *Ekonomicheskaia kibernetika*.

81. I. Syroezhin, Iu. Kurochkin, and S. Gidrovich, *Simulated Game Models as a Means of Management Training and a Form of Collective Decision-Making* (Leningrad, 1976). This monograph was presented as part of the U.S.-USSR cultural exchange in management science.

The most significant practical thrust of the cybernetic school has been the development and application of automated management systems (*avtomaticheskie sistemy upravleniia* or ASU).⁸² This is intended to upgrade administrative efficiency and has led to the establishment of a large number of research institutes dealing with problems of ASU. In contrast to the empirical school or even to optimal planning, relevant cybernetic institutes are not only widely dispersed throughout the country, but are attached to either the Academy of Sciences or to state committees. For instance, the All-Union Scientific Research Institute for Problems of Organization and Management—the agency responsible for implementing a nationwide computer network—reports directly to the State Committee on Science and Technology.⁸³ Officially sanctioned by party directives in 1971, the institute is empowered to conduct research, plan and design new projects, and coordinate the entire system. But there are other agencies in the Soviet Union which stand behind parochial, and competing, views of ASU. For example, the Institute of Cybernetics (Ukrainian Academy of Sciences) regards ASU as little more than the processing of primary economic data by means of modern computing techniques.⁸⁴ Its most prominent spokesman, V. M. Glushkov, argues that by automating routine accounting operations, managerial personnel are relieved of mundane tasks and thus can focus their attention on decision-making problems. In this view, ASU fosters basic changes in neither organizational structure nor interpersonal relations. Consequently, planners and administrators do not have to contend with qualitative changes in the practice of management due to ASU. This conclusion is challenged, however, by V. A. Trapeznikov and others at the Institute of Management Problems. They base their ideas on cybernetic control and view *upravlenie* as a process of incessant struggle against a system's natural tendency toward entropy. Nevertheless, by processing information and learning through feedback, a control center can maintain the system's viability, but not without potentially significant changes in structure and process.⁸⁵

The cybernetic school is not without vocal opponents in the Soviet management science community. These opponents are motivated by practical as well as parochial interests. Thus, political economists and doctrinaire specialists insistently warn against displacing Marxist-Leninist ideology with that of systems theory. They emphasize that dialectical materialism and the concepts of traditional economic analysis represent a more general—and distinctly Socialist—approach to organization and management.⁸⁶ Administrative lawyers and others attack the vague, abstract nature of cybernetic categories; they find ideas like “system,” “information,” and “feedback” ill suited to the social aspects of management.⁸⁷ Finally,

82. For a summary of where ASU has been most effectively utilized, see V. Afanas'ev et al., *Upravlenie sotsialisticheskim proizvodstvom: voprosy teorii i praktiki* (Moscow, 1975), pp. 510–16.

83. For an examination of this institute as well as the role of D. Zhimerin in its formation, see Wade Holland, “A Tsar for Soviet Computing,” *Soviet Cybernetic Review*, 2, no. 6 (November 1972): 7–11.

84. Ivan Syroezhin has described the major elements of this approach to U.S. readers (see Syroezhin, “Man-Machine Systems in the USSR,” *Management Science*, 15, no. 2 [October 1968]: B–6).

85. Trapeznikov is often identified with a distinctive trend in Soviet cybernetics which, *inter alia*, is considerably more complex than the views promoted by the Institute of Cybernetics. Moreover, Glushkov's views have been sharply contrasted to those of Fedorenko (see William J. Conyngham, “Technology and Decision Making: Some Aspects of the Development of OGAS,” *Slavic Review*, 39, no. 3 [September 1980]: 426–45).

86. Moreover, some have argued that systems theory is a concretization of dialectical materialism (see A. Petrov, *Ekonomicheskie osnovy upravleniia proizvodstvom* [Moscow, 1966], p. 4).

87. Iu. Kozlov, *Upravlenie narodnym khoziaistvom SSSR* (Moscow, 1969), p. 4.

empiricists take the cybernetic school to task for its inattention to leadership in the production collective. Coupled with major hardware and software developmental problems, these criticisms have done much to discredit the naïve faith of the 1960s in a cybernetic utopia. The successful introduction of modern computing techniques lags far behind that already accomplished in the West and remains the greatest challenge today for Soviet cyberneticists.

The diversity, ambiguity, and competition in Soviet studies of organization and management reflect more than the typical disagreements found among rival specialists. The relatively free inquiry tolerated under Brezhnev is only a partial explanation. Basically, the “jungle” in Soviet management science has resulted from the gradual diffusion of authority throughout the administrative hierarchy since the decompression of high Stalinism. Theorists can now openly disagree on matters of organizational technique without provoking official displeasure or political reprisals. Encouraged by leading politicians to develop a Socialist science of management, analysts have been willing and able to find what they seek. Behavioral treatments aside, they have advanced competing ideas on where and how to improve managerial practice. And those same specialists claim a piece of the political action, something unheard of since the 1920s!⁸⁸ Their competition for scarce resources constitutes a regulative policy process—tangible goods have been distributed in asymmetrical fashion.⁸⁹ Ostensible winners and losers can be found in this process. Political economists have been largely kicked upstairs while economic rationalizers—D. M. Gvishiani, G. Kh. Popov, B. Z. Mil’ner, and many others—have made dramatic advancements. Understandably, the situation remains sufficiently vague and contentious so that it is difficult to identify who does *not* speak for the regime on questions of management.

The disputes in Soviet management science are unlikely to abate, much less disappear, in the near future. But while certain approaches and analytical tools have shown great sophistication and theoretical promise, their contribution toward streamlining the economic system has been marginal at best. This gap between theory and practice comes as no surprise. Most theorists simply ignore questions that point to fundamental reform and, instead, concentrate on practical issues that have no bearing on the party’s ascendancy in the Soviet establishment. Similarly, theoretical models typically neglect to take into account limitations on rational adaptation posed by the bureaucratic planning apparatus in the USSR. Concepts which do focus on administrative dysfunctions or organizational constraints on purposive choice making—information distortion, limited learning, conflict, satisfying—have so far failed to gain popularity in the community of specialists. To be sure, these restrictions, as well as the leadership’s unwillingness to risk the unanticipated political consequences of major administrative changes, will sharply delimit the effectiveness in applied situations of the theoretical models and conceptual tools in Soviet management science.

88. For example, G. Popov recommends that a “special mechanism” be formed, perhaps modeled on Rabkrin, to help rationalize the economic mechanism. This would unite the knowledge and experience of scholars with that of managers in order to help formulate and then evaluate relevant policies (see Popov, *Problemy teorii upravleniia*, p. 150).

89. William Zimmerman would characterize the interplay of conflicting forces in administrative science as a “regulative” policy process (see Zimmerman, “Issue Area and Foreign-Policy Process: A Research Note in Search of a General Theory,” *American Political Science Review*, 67, no. 4 [December 1973]: 1204–12).

If nothing else, the current fascination with and disputes over *upravlenie* in the Soviet literature point to the political leadership's increasing awareness of the complexity and the administrative constraints on optimal behavioral change. Taking such lessons to heart, politicians have consciously renounced the "harebrained scheming" and "unscientific" approaches reminiscent of their predecessors. Thus, the Soviet Union has moved forward cautiously and incrementally, more in line with the "politics of marginal adjustments" than with epoch-making changes.⁹⁰ This has meant charting a moderate political path. By trying to modernize administrative methods, the regime has fostered the rise of competing managerial expertise.⁹¹ Since current models and techniques have proved only partial remedies to the USSR's pressing economic difficulties, specialists and their political patrons have come to recognize that total solutions simply do not exist. Nevertheless, if techniques prove unsatisfactory and greater demands eventually "overload" the system, stronger medicine might be required. This could promote a new *krepkii khoziain* and a concomitant return to the "political ideology of administration."⁹² While this scenario remains unlikely, it must not be discounted as the USSR moves into the uncertainties of the 1980s.

90. This is Paul Cocks's terminology. For a trenchant analysis of contemporary Soviet politics, see Cocks, "Rethinking the Organizational Weapon."

91. Of course, only the Communist Party has the strategic position in the Soviet establishment and the political authority to process demands, that is, to pick and choose among competing claims. And the party has shown purposiveness in pressing for innovative techniques (often imported from the West), much to the chagrin of many political economists as well as conservative party hacks. To be sure, the current situation represents a major departure from the traditional Stalinist system: "The diversity of trends in economics has developed a firm political basis. The competition among these institutes is no longer organized by just one person; it is based on oligarchical or so-called collective leadership. Each Politburo group supports the institutes which develop proposals for it, and the balance of power between powerful opposing groups in the Politburo guarantees the existence of these organizations" (Katsenelinboigen, *Soviet Economic Thought*, p. 156).

92. For an interpretation of Soviet administrative theory as a repressive political ideology, see Michael E. Urban, "Bureaucracy, Contradiction and Ideology in Two Societies," *Administration and Society*, 10, no. 1 (May 1978): 49–85. However, Katsenelinboigen notes another possibility, namely, the emergence of a new "strong boss" who promotes economic-mathematical methods in a manner reminiscent of Khrushchev's reckless advancement of corn in Soviet agriculture (Katsenelinboigen, *Soviet Economic Thought*, p. 166).