TECHNOLOGY AND COMMUNIST CULTURE: THE SOCIO-CULTURAL IMPACT OF TECHNOLOGY UNDER SOCIALISM. Edited by *Frederic J. Fleron, Jr.* New York and London: Praeger Publishers, 1977. xii, 520 pp. Tables.

Frederic Fleron has performed a valuable service in assembling for publication a number of papers from the 1975 Bellagio Conference on Technology and Communist Culture, the major focus of which was "the extent to which particular aspects of imported machine technology and technical rationality have proven to be more or less incompatible with the goal cultures of communist society and the ways in which these societies have attempted to deal with this problem by means of selective adaption of foreign technology and innovative indigenous developments" (p. 19). The articles are grouped into three sections, covering Marxist perspectives on technology, technology transfer and innovation, and the impact of technology and technical rationality in socialist countries. Individual contributions range from broad discussions of the theory of the technology-culture interface to concrete descriptions of specific instances of technology transfer. Fleron's introduction presents a coherent framework which is reflected in the individual chapters with more clarity than is usual in such collections, and his concluding chapter provides a useful summary of the separate theories propounded in the text.

Two principal theoretical foci are present throughout the essays. The first deals with the relationship between the "goal culture" and the "transfer culture" of Communist systems. The former rather loosely encompasses both consciously articulated societal goals and those affective elements of culture which are presumably influenced by imported or indigenous technological development. The latter describes the cultural milieu within which such innovations are accepted outright or molded to socialist ends. As Fleron admits, "the concept of communist goal culture has remained rather elusive" (p. 20), making it difficult to assess the impact of technological innovation outside of the more limited realm of the transfer culture itself.

The second focus is on the question of whether socialist nations have evolved distinct forms of sociotechnological organization and indigenous concepts of technical and scientific rationality. On this point the authors come to mixed conclusions. While some call attention to indigenous forms of socioindustrial organization, particularly those in Yugoslavia and China, or to distinct manifestations of unique forms of technical rationality, others argue (or at least imply) that the inherent logic of advanced industrial technology (the "techno-logic," as some term it) transcends the particularistic focus of the "ideo-logic" in predetermining the emergence of similar sociocultural forms.

Fortunately, Fleron's conclusion sorts out the explicit and implicit positions taken by the authors on this key question, and he offers his own "mediation theory" of technology. He identifies four theories concerning the interaction of technology and culture: (1) the neutrality theory, which holds that technology per se is neutral with regard to the goal culture; (2) technological determinism, which argues for the existence of unalterable technological imperatives and a high level of convergence; (3) the theory of the "scientific and technological revolution" popularized by Soviet theorists and adapted to East European conditions, which draws a sharp distinction between the "objective" and "subjective" dimensions of technology and argues for the creation of socialist forms of technology and science; and (4) the ambivalence theory, which holds that both repressive and liberative aspects are present in all advanced technology, with the social and cultural order dictating the combination.

Fleron's own mediation theory focuses on the reciprocal interplay of technology and culture and argues that technology should be regarded "as one of the artifacts of culture [which] embodies the dominant values contained in that culture" (p. 472). Thus, technology transfer inevitably brings with it a certain cultural content, and Fleron is skeptical that any socialist or Communist adaptions of any but the most

elementary technologies can strip away their "capitalist" (read elements of hierarchical organization, specialization, and technical rationality) overlay. Given this framework, the current scientific and technological revolution becomes, in the hands of Soviet theorists, "a conservative doctrine that describes (and rationalizes) what has in fact been Soviet practice since 1917 . . ." (p. 484).

Taken as a whole, this is an extremely important work for students of comparative communism and modernization. Its principal weaknesses are inherent in its breadth of coverage. The greatest problem has already been noted by many of the authors: the ambiguity of the "goal culture-transfer culture" distinction, and, in particular, the difficulty in demonstrating their relationship. The most enlightening chapters are those which focus explicitly on concrete technologies or transfer situations, the least successful are those which heap theoretical convolutions upon an admittedly shaky foundation. Greater attention should perhaps have been given to the question of the level of technological sophistication as an important factor, although some contributors do suggest that certain primitive technologies have proven more amenable to adaptation to a Communist goal culture. The importance of what has been termed "the second industrial revolution" has all but been ignored, however, except by a few authors who deal with the theory of the scientific and technological revolution.

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ECONOMIE POLITIQUE DE LA PLANIFICATION EN SYSTÈME SOCIALISTE. Edited by *Marie Lavigne*. Recherches Panthéon-Sorbonne Université de Paris, no. 1. Paris: Économica (49, rue Héricart), 1978. 328 pp. Paper.

This volume was written by a group of French political economists engaged in research on the theory of socialist economies. Its primary purpose is to analyze problems of planning in socialist economies of the Soviet type. The study is focused on the following questions: Does socialist planning follow a logic specific to all socialist countries of this type? Can one determine a social optimum and attain it through the efforts of the planners? How did the "law" of priority of heavy industry modify the strategy of socialist growth? What mechanisms of political economy determine prices, revenues, monetary flows, and external exchange in the socialist countries which have abandoned the most imperative and centralized planning system? And what conclusions can be drawn from the debates on self-management in Soviet-type socioeconomic systems?

The book is divided into three parts: (1) optimum growth in a socialist system, (2) regulation in a socialist system—interaction of plan and the political economy, and (3) the socialist economic system. The authors prefer analytical tools of political economy to conventional economic analysis.

In the first part of the book, articles by Seurot and Després deal with different aspects of optimality. Seurot states that the major problem of a socialist economy in attaining optimality lies in reconciling utility functions of individual citizens with the dominant values of the social system. Després stresses "workable" optimality which bypasses the question of social preferences and their reconciliation. Tartarin challenges Stalin's dogma of growth priority of heavy industry as nonscientific and based on an unverified hypothesis supported neither by Marx nor by Lenin. Duchêne examines the most recent contributions of Soviet economists to the intersectoral dynamic equilibrium and the choice of the rate of growth.

In the second part, Richet interprets the historical development of central planning in Hungary and provides a theoretical interpretation of the New Economic Mechanism developed in 1968. In the next two chapters, Asselain and Boncoeur deal