## **Notes**

#### Preface

1. See Michael Burawoy, *The Politics of Production* (London: New Left Books, forthcoming).

# Chapter One

- 1. Arthur Ross and Paul Hartman, Changing Patterns of Industrial Conflict (New York: John Wiley, 1960); Clark Kerr and Abraham Siegal, "The Interindustry Propensity to Strike—An' International Comparison," in Industrial Conflict, ed. Arthur Kornhauser, Robert Dubin, and Arthur M. Ross (New York: McGraw-Hill, 1954).
- 2. Seymour Martin Lipset, *Political Man* (New York: Doubleday, 1959), chap. 4; Daniel Bell, *The End of Ideology* (New York: Free Press, 1960), chap. 10.
- 3. Interest in the blue-collar worker has been revived to some degree in the seventies. See, for example, Richard Sennett and Jonathan Cobb, *The Hidden Injuries of Class* (New York: Random House, 1972); Harold Sheppard and Neal Herrick, *Where Have All the Robots Gone?* (New York: Free Press, 1972); and William Kornblum, *Blue Collar Community* (Chicago: University of Chicago Press, 1974).

- 4. See, for example, Leon Baritz, The Servants of Power: A History of the Use of Social Science in American Industry (New York: John Wiley, 1965); Alex Carey, "The Hawthorne Studies: A Radical Criticism," American Sociological Review 32 (1967): 403-16; John Goldthorpe et al., The Affluent Worker: Industrial Attitudes and Behaviour (New York: Cambridge University Press, 1968); Clark Kerr and Lloyd Fisher, "Plant Sociology: The Elite and the Aborigines," in Common Frontiers of the Social Sciences, ed. Mirra Komarovsky (Glencoe: Free Press, 1957); Henry Landsberger, Hawthorne Revisited (Ithaca, N.Y.: Cornell University Press, 1958); Donald Roy, "Efficiency and the Fix: Informal Intergroup Relations in a Piecework Machine Shop," American Journal of Sociology 60 (1954): 255-66; Harold Wilensky, "Human Relations in the Work Place: An Appraisal of Some Recent Research," in Research in Industrial Human Relations, ed. Conrad Arensberg (New York: Harper & Row, 1957), pp. 25-59.
- 5. See, for example, Robert Merton, Social Theory and Social Structure (New York: Free Press, 1968), chap. 8; Alvin Gouldner, Patterns of Industrial Bureaucracy (New York: Free Press, 1954); Peter Blau, The Dynamics of Bureaucracy (Chicago: University of Chicago Press, 1955); and, more recently, Michel Crozier, The Bureaucratic Phenomenon (Chicago: University of Chicago Press, 1964).
- 6. James March and Herbert Simon, Organizations (New York: Wiley, 1958), is typical of this approach.
- 7. See, for example, Goldthorpe et al., The Affluent Worker; James Thompson, Organizations in Action (New York: McGraw-Hill, 1967); and Clark Kerr et al., Industrialism and Industrial Man (Cambridge, Mass.: Harvard University Press, 1960). In addition, there is, of course, the classic by Reinhard Bendix, Work and Authority in Industry: Ideologies of Management in the Course of Industrialization (New York: John Wiley, 1956).
- 8. Many of these studies are heavily influenced by Max Weber and Robert Michels. See, for example, Philip Selznick, Law, Society, and Industrial Justice (New York: Russell Sage Foundation, 1969).
- 9. Thus, for example, Morris Janowitz compiles a series of factors contributing to changes in the military over a period of fifty years but never comes to grips with the problem of explaining those changes. He vaciliates between a form of technological determinism and claims of the following nature: "Popular demand for equality of treatment grows with industrialization. As the standard of living rises, tolerance for the discomforts of military life decreases. The skepticism of urban life carries over into the military to a greater degree than in previous generations, so that men will no longer act blindly, but demand some sort of explanation from their commanders" (*The Professional Soldier* [New York: Free Press, 1960], p. 40).

- 10. Arthur Stinchcombe, "Social Structure and Organizations," in *Handbook of Organizations*, ed. James March (Chicago: Rand McNally, 1965); Robert Blauner, *Alienation and Freedom* (Chicago: University of Chicago Press, 1964).
- 11. Arnold Tannenbaum, Control in Organizations (New York: McGraw-Hill, 1967), p. 3.
  - 12. Ibid., p. 46.
- 13. Amital Etzioni, A Comparative Analysis of Complex Organizations (New York: Free Press, 1961).
- 14. Elton Mayo, The Human Problems of an Industrial Civilization (New York: Macmillan, 1933), p. 116.
- 15. Rensis Likert, New Patterns of Management (New York: McGraw-Hill, 1961); Chris Argyris, Integrating the Individual and the Organization (New York: John Wiley, 1964).
- 16. Blauner, Alienation and Freedom. But see also Theo Nichols and Huw Beynon, Living with Capitalism: Class Relations and the Modern Factory (London: Routledge & Kegan Paul, 1977) for a convincing refutation of Blauner's thesis.
- 17. See, for example, E. L. Trist, G. W. Higgin, H. Murray, and A. B. Pollock, *Organizational Choice* (London: Tavistock Institute of Human Relations, 1963).
- 18. Roy, "Efficiency and the Fix." Tom Lupton, On the Shop Floor (Oxford: Pergamon Press, 1963), makes the same point forcefully, although not from the perspective of any harmony theory.
- 19. See, particularly, Crozier, The Bureaucratic Phenomenon.
- 20. See, for example, Alan Fox, Beyond Contract: Work, Power, and Trust Relations (London: Faber & Faber, 1974); but see also Clark Kerr, Labor and Management in Industrial Society (New York: Doubleday, 1964).
- 21. William Baldamus, Efficiency and Effort (London: Tavistock Institute of Human Relations, 1961), p. 1.
  - 22. Ibid., p. 8.
- 23. Ibid., chap. 8. See also, Hilda Behrend, "A Fair Day's Work," Scottish Journal of Political Economy 8 (1961): 102-18.

## Chapter Two

1. The formulations in this chapter are heavily influenced by the writings of a group of French Marxists: Louis Althusser, For Marx (London: Allen Lane, 1969); Nicos Poulantzas, Political Power and Social Classes (London: New Left Books, 1973); and, above all, Etienne Balibar, "The Basic Concepts of Historical Materialism," in Louis Althusser and Etienne Balibar,

Reading Capital (New York: Pantheon, 1970) pp. 201-308. Like many contemporary Marxists, these French theorists try to move away from a teleological view of history, in which the succession of modes of production follow a fixed and inevitable pattern in accordance with the expansion of the "forces of production." The indeterminacy which they introduce is developed in an extreme form by Barry Hindess and Paul Hirst, Pre-Capitalist Modes of Production (London: Routledge & Kegan Paul, 1975).

- 2. Karl Marx, The German Ideology (New York: International Publishers, 1970), p. 48.
- 3. A mode of production is more usually seen as a combination of relations of production and forces of production. I have avoided using the concept of forces of production for two reasons. First, it is often presented as a set of things—raw materials, machinery, technique, etc.—that are themselves neutral with respect to exploitation and domination. Here I want to suggest the way in which the relations of production indelibly imprint themselves on the mode of appropriating nature. Second, the notion of forces of production is usually associated with a teleological view of history, in which the expansion of the productive forces makes necessary the overthrow of capitalism and also lays the basis for socialism. In this study I try to dispel such historically unwarranted optimism. For a more detailed critique of the concept of forces of production see Michael Burawoy, "The Politics of Production and the Production of Politics: A Comparative Analysis of Machine Shops in the United States and Hungary," Political Power and Social Theory 1 (1979).
- 4. The distinction between relations and activities is at the basis of the concept of social structure used here. The social structure is a pattern of relations among "empty places" that individuals occupy as they engage in activities, that is, as they transform something into something else. Social relations are viewed as existing prior to individuals who "support" them and who act within constraints determined by those relations. Just as social relations shape practices, so practices set limits on social relations. Sociology, by contrast, collapses the distinction between relations and activities into such notions as "role expectations." Social structure becomes the relationships among concrete individuals executing values they have internalized. In part 4 I examine the relative merits of these two views of social structure.
- 5. This implies that there are two essential forms of politics: that linked to the relations in production—the politics of production—and that linked to the relations of production—global politics.
- 6. Karl Marx, Capital, 3 vols. (New York: International Publishers, 1967), 3:791.

- 7. Althusser, For Marx, p. 233.
- 8. Karl Marx, Capital, 1:72.
- 9. Ibid., p. 74. "For Marx, a determined mode of appearance corresponds to each determined structure of the real, and this mode of appearance is the starting-point for a kind of spontaneous consciousness of the structure for which neither consciousness nor the individual is responsible. It follows that the scientific understanding of a structure does not abolish the spontaneous consciousness of that structure. It modifies its role and its effects, but it does not suppress it" (Maurice Godelier, "Structure and Contradiction in Capital," in Ideology in Social Science, ed. Robin Blackburn [New York: Vintage Books, 1973], p. 338).
- 10. On the one hand, Marx's analysis of commodity fetishism sees ideology as inscribed in the very production of commodities. On the other hand, Marx accords the dominant class the capacity to manipulate and impress ideas on the dominated classes through its monopoly of the means of disseminating ideas. See Karl Marx, The German Ideology, p. 64. At the same time, he insists on the limits of such manipulations and in his discussion of bourgeois political economy shows how it corresponds to the perspectives of the capitalist. Naturally, the range of ideologies that mesh with a given lived experience will vary according to the context. In his stimulating discussion of ideology, Alvin Gouldner formulates the problem in similar terms by drawing on Basil Bernstein's concepts of restricted and elaborated linguistic codes (The Dialectic of Ideology and Technology [New York: Seabury Press, 1976]).
  - 11. Nicos Poulantzas expresses this position well:

In referring to ideological apparatuses, we must recognize that these apparatuses neither create ideology, nor are they even the sole or primary factors in reproducing relations of ideological domination and subordination. Ideological apparatuses only serve to fashion and inculcate (materialize) the dominant ideology. Thus Max Weber was wrong in claiming that the Church creates and perpetuates religion: rather it is religion which creates and perpetuates the Church. In the case of capitalist ideological relations, when Marx analyses the fetishism of commodities as relating directly to the process of valorization of capital, he offers us an excellent example of the reproduction of a dominant ideology which goes beyond the apparatuses; this was noted by Marx himself in his frequent references to a "correspondence" between "institutions" and "forms of social consciousness," in which he implied the distinction. [Classes in Contemporary Capitalism (London: New Left Books, 1975), p. 31]

12. Louis Althusser, Lenin and Philosophy and Other Essays (London: New Left Books, 1971), p. 168.

- 13. Karl Marx, Early Writings (New York: Vintage Books, 1975), p. 251.
- 14. Antonio Gramsci, Selections from Prison Notebooks (New York: International Publishers, 1971), p. 126.
- 15. Karl Marx, "Preface to A Contribution to the Critique of Political Economy," in The Marx-Engels Reader, ed. Robert Tucker (New York: W. W. Norton, 1972), p. 5.
- 16. Eugene Genovese, Roll, Jordan, Roll (New York: Vintage Books, 1976).
- 17. For an exposition of these two views, see Clifford Geertz, *The Interpretation of Cultures* (New York: Basic Books, 1973), chap. 8.
- 18. Maurice Godelier, Rationality and Irrationality in Economics (New York: Monthly Review Press, 1972), p. 45.
- 19. Agnes Heller, The Theory of Need in Marx (London: Allison & Busby, 1976), p. 60.
- 20. See, for example, Rodney Hilton, ed., The Transition from Feudalism to Capitalism (London: New Left Books, 1976); Perry Anderson, Lineages of the Absolutist State (London: New Left Books, 1974); Hindess and Hirst, Pre-Capitalist Modes of Production; Robert Brenner, "The Origins of Capitalist Development: A Critique of Neo-Smithian Marxism," New Left Review no. 104 (July-August, 1977): 25-92.
- 21. "Modes of Production in a Materialist Conception of History," Capital and Class no. 3 (Autumn 1977): 19.
- 22. Hindess and Hirst add the following important qualifying remarks to this conventional interpretation:

Although he [the tenant/laborer] may own the instruments of production, have tenant-right to the land, and be able to organise the production of his subsistence, he does not control the reproduction of means and conditions of production. It is primarily through the control of the reproduction of the means of production that the landlord/exploiter separates the tenant/laborer from the means of production. It should be noted, nevertheless, that the control of the production of the surplus-product under demesne production, and the ownership and operation of certain important means of production (mills, dykes, etc.), are important means of control of the conditions of reproduction for the feudal lord. [Pre-Capitalist Modes of Production, p. 238]

23. George Homans, in his analysis of thirteenth-century England, writes:

Anyone who has studied manorial custumals must have been struck by the extreme detail into which they go. For instance, they often do not say simply that a man must plow, sow, and harrow one acre of the lord's land. They say that he must plow it with as many oxen as he has in his plow, harrow with his own horse and harrow, and sow it with seed he must fetch from the lord's granary with his own horse and sack. Services were

remembered in a minute detail, and when further details, even the most obvious and the most necessary, were not nominated in the custumal or attested by a long history of past performances, they were not custom and were not done. [English Villagers of the Thirteenth Century (New York: W. W. Norton, 1975), p. 272]

The very static imagery that Homans adopts is partly a reflection of his own bias but also a reflection of the particular period he chose to study, which was one of the most settled in the history of feudal England. For more variegated and dynamic pictures involving struggles over the commutation of labor rent, see Rodney Hilton, A Medieval Society (London: Weidenfeld & Nicolson, 1966), chap. 5; E. A. Kosminsky, Studies in the Agrarian History of England in the Thirteenth Century (Oxford: Basil Blackwell, 1956), chap. 3; and M. M. Postan, The Medieval Economy and Society (Harmondsworth, Eng.: Penguin Books, 1975), chap. 9.

24. The fusion of control and coordination allows sociologists to ignore the specifically capitalist nature of industrial work. Thus, Marx wrote of the political economist: "When considering the capitalist mode of production, he, on the contrary, treats the work of control made necessary by the cooperative character of the labour-process as identical with the different work of control, necessitated by the capitalist character of that process and the antagonism of interests between capitalist and labourer" (Capital, 1:332).

25. See, for example, Rodney Hilton, "Freedom and Villeinage in England," Past and Present no. 31 (July 1965): 3-19.

26. Or, as Louis Althusser puts it, "The individual is interpellated as a (free) subject in order that he shall (freely) accept his subjection, i.e., in order that he shall make the gestures and actions of his subjection 'all by himself.' There are no subjects except by and for their subjection. That is why 'they work all by themselves.'" (Lenin and Philosophy and Other Essays, p. 182). The creation of an apparent freedom—freedom within limits—and the expression of consent on the shop floor is illustrated by the responses I received from fellow workers when I asked them why they worked so hard. A common reaction was a look of bewilderment and a statement like "You think I work hard?" They would walk off chuckling to themselves. In other words, many workers not only did not think they were working hard but even thought they were getting back at management by goofing off as much as they did. Others would respond, "You've got to make a living." Such an answer denied the distinction between coming to work and the application of effort once at work—a distinction suggested by the comment, "The hardest part of working is coming to work." Alternatively, operators might say, "What else am I going to do here?" or "It makes the time pass more quickly. You'd get bored if you didn't work."

Hard work was an adaptation to the deprivation inherent in routine, monotonous tasks. Some would claim, "If we don't work so hard, then the company will go broke and we'll be out of a job"—a recognition of a common interest between worker and management. Yet others, like my day man, Bill, clearly enjoyed working hard more than "goofing off." I suspect this was true of a number of people, but few would ever admit it. What is interesting about all these responses is the absence of fear or coercion as a motivating factor and the assumption that there is a real choice open to workers as to how hard they are going to work. Moreover, in evaluating the choice and in deciding whether they were working hard or not, they unquestioningly measured their behavior against managerial norms. Thus they recognized that it was possible to be dismissed for consistently "goofing off," but such disciplinary action was viewed as legitimate, natural, and inevitable.

- 27. Marx discusses the mystifying effects of competition and capital on the source of profit in volume 3 of *Capital*, particularly chapters 2, 10, 48, and 50.
- 28. Even in France and Italy, where many workers do believe that their labor is the source of profit and Marxist theories are widely accepted, there is no evidence to suggest that these beliefs directly determine how hard a French or Italian laborer works; for Marxist theories like these cannot become a material force—an ideology—until they are embodied in the lived experience of the shop floor.
  - 29. Marx also recognized this possibility:

The actual difference of magnitude between profit and surplus value—not merely between the rate of profit and rate of surplus value—in the various spheres of production now completely conceals the true nature and origin of profit not only from the capitalist, who has a special interest in deceiving himself on this score, but also from the labourer. The transformation of values into prices of production serves to obscure the basis for determining value itself. [Capital 3:168]

30. See, for example, Harry Braverman, Labor and Monopoly Capital (New York: Monthly Review Press, 1974); André Gorz, ed., The Division of Labor (Atlantic Highlands, N.J.: Humanities Press, 1976); Richard Edwards, "The Social Relations of Production in the Firm and Labor Market Structure," Politics and Society 5 (1): 83-108.

#### Chapter Three

1. Donald Roy, "Restriction of Output in a Piecework Machine Shop" (Ph.D. diss., University of Chicago, 1952); "Quota Restriction and Gold-

bricking in a Machine Shop," American Journal of Sociology 57 (1952): 427-42; "Work Satisfaction and Social Reward in Quota Achievement," American Sociological Review 18 (1953): 507-14; "Efficiency and the Fix," American Journal of Sociology 60 (1954): 255-66.

- 2. Roy, "Restriction of Output," chap. 9.
- 3. Ibid., p. 543.
- 4. There have since been a number of reinterpretations of the Western Electric studies. See, for example, Alex Carey, "The Hawthorne Studies: A Radical Criticism," American Sociological Review 32 (1967): 403-16; Henry Landsberger, Hawthorne Revisited (Ithaca, N.Y.: Cornell University Press, 1958); Richard Franke and James Kaul, "The Hawthorne Experiments: First Statistical Interpretation," American Sociological Review 43 (1978): 623-43.
- 5. A notable exception is, of course, William Lloyd Warner and J. Low, *The Social System of a Modern Factory* (New Haven: Yale University Press, 1947).
- 6. Roy, "Restriction of Output," p. 51. According to Roy, this extract was the major portion of volume 1, no. 3, of *Geer News*, the only issue he ever received. Roy makes no other reference to the nature of the company.
- 7. Joel Seidman, American Labor from Defense to Reconversion (Chicago: University of Chicago Press, 1953), p. 129.
  - 8. Roy, "Restriction of Output," chap. 16.
- 9. Roy does note that, toward the end of his employment at Geer, the union did begin to show some militancy (ibid., p. 440).
  - 10. Seidman, American Labor, p. 130.
- 11. Ibid., chap. 7.
- 12. Ibid., chap. 9.
- 13. Roy, "Restriction of Output," p. 311.
- 14. Ibid., p. 339.
- 15. See Seidman, American Labor, chaps. 5 and 8; Nelson Lichtenstein, "Defending the No-Strike Pledge: CIO Politics during World War II," Radical America 9, nos. 4-5 (1975): 49-76.
- 16. James Green, "Fighting on Two Fronts: Working Class Militancy in the 1940's," *Radical America* 9, nos. 4-5 (1975): 7-48; Lichtenstein, "Defending the No-Strike Pledge."
  - 17. Seidman, American Labor, pp. 123, 129.
  - 18. Lichtenstein, "Defending the No-Strike Pledge," p. 56.
- 19. Seidman, American Labor, chap. 8; Green, "Fighting on Two Fronts"; Edward Jennings, "Wildcat! The Wartime Strike Wave in Auto," Radical America 9, nos. 4-5 (1975): 77-105.
  - 20. Roy, "Restriction of Output," pp. 208, 224-27.
  - 21. This widespread change is documented by Alfred Chandler in

Strategy and Structure: Chapters in the History of the American Industrial Enterprise (Cambridge: M.I.T. Press, 1962).

22. According to Wilson, whom I had the opportunity to interview, pricing policies have become increasingly liberal over the years because of changes in the organization of the corporation, in particular the distribution of divisions to vice-presidents.

#### **Chapter Four**

- 1. David Noble, "Before the Fact: Social Choice in Machine Design," paper presented at the National Convention of the Organization of American Historians, April 1978. For a more general history of the role of science in the development of capitalism, see his America by Design: Science, Technology, and the Rise of Corporate Capitalism (New York: Alfred A. Knopf, 1977).
- 2. William Friedland, Amy Barton, and Robert Thomas, "Manufacturing Green Gold: The Conditions and Social Consequences of Lettuce Harvest Mechanization" (unpublished ms., University of California, Santa Cruz, 1978), and William Friedland and Amy Barton, Destalking the Wily Tomato (Davis, Calif.: Department of Applied Behavioral Sciences, College of Agriculture and Environmental Sciences, University of California, 1975).
- 3. See, for example, Taylor's Shop Management (New York: American Society of Mechanical Engineers, 1903).
- 4. Donald Roy, "Restriction of Output in a Piecework Machine Shop," (Ph.D. diss., University of Chicago, 1952), p. 76.
  - 5. Ibid., pp. 419-23.
  - 6. Roy refers to hot jobs on two occasions (ibid., pp. 405, 504).
- 7. When a job was really "hot," the scheduling man might appeal to the foreman or even to the superintendent for support if the operator appeared recalcitrant.
- 8. I have not been able to discover the nature or existence of equivalent penalties during the war.
  - 9. Roy, "Restriction of Output," p. 307.
- 10. The change is one of degree, since Roy was also expected to check his pieces from time to time (ibid., pp. 267, 338).
- 11. Indeed, the general manager expected managers of quality control to make consistent efforts to cut the numbers of inspectors.
  - 12. Roy, "Restriction of Output," p. 388.
- 13. From conversations with various management officials and reading between the lines of Roy's dissertation, I am left with the impression that

Geer Company tended to be more concerned with shipping the goods out than with quality control, particularly in view of the demand. (Managers of Geer have, of course, tended to deny this.) The problem of quality control has been endemic in the engine division since Allied took over. As long as quality control is subordinated to production, it is impossible to find good quality-control managers. What conscientious quality-control manager could possibly countenance subjugation to the imperatives of shipping? It is not surprising, therefore, to learn that there is a considerable turnover of quality-control managers.

- 14. My day man, Bill, never penciled in the time but always got his cards punched in on the clock at the time office. This restricted his room for manipulation; but since he was very experienced on the miscellaneous job, this did not reduce his earnings by very much. When I filled in for him on first shift, I did in fact pencil in the times, and no one complained. This may have been a reflection of my power, since, with Bill away, hardly anyone knew how to do the various jobs or where the fixtures were. By penciling in the times, I reckoned I could earn the same amount of money as Bill but with less effort.
  - 15. Roy, "Restriction of Output," p. 240.
  - 16. Ibid., table 4, p. 94.
- 17. During the week 17 November 1975 to 23 November 1975, there were sixteen radial-drill operators in the small-parts department. Their average "measured performances" for the entire year (or for the period of the year since they had begun to operate a radial drill) were as follows (all figures are percentages): 92, 108, 109, 110, 110, 111, 112, 115, 116, 119, 125, 133, 137, 139, 141, 142. The average was 120 percent, which turns out to be precisely Roy's average in his second period. Moreover, the average period spent on a radial drill in the *first eleven months of 1975* among these sixteen operators was of the order of six months, though a number of these operators had probably been operating radial drills for years. The data do not suggest significant differences between the rates on radial drills in Geer's Jack Shop and on radial drills in Allied's small-parts department.
  - 18. Roy, "Restriction of Output," p. 102.
  - 19. Ibid., p. 290.
- 20. Reinhard Bendix, Work and Authority in Industry: Ideologies of Management in the Course of Industrialization (New York: John Wiley, 1956); Frederick Taylor, Shop Management; Richard Edwards, "The Social Relations of Production in the Firm and Labor Market Structure," Politics and Society 5 (1975): 83-108.
- 21. Donald Roy, "Work Satisfaction and Social Reward in Quota Achievement," American Journal of Sociology 57 (1953): 509-10.

- 22. Karl Marx, Capital, 1:555.
- 23. I vividly recall being bawled out by a manager who came into the time office long after he should have gone home. He found me going through the books to see how many pieces had been handed in on a particular operation. Second-shift shop-floor management allowed and even encouraged operators to look these sorts of things up for themselves rather than bother the time clerks, but senior management regarded this as a criminal act.
- 24. Stuart Klein, Workers under Stress: The Impact of Work Pressure on Group Cohesion (Lexington, Ky.: University of Kentucky Press, 1971), p. 100.
- 25. This enhanced power was one of the attractions of the miscellaneous job, which no one wanted because it was rough, dirty, and dangerous as well as low-paying. Since the other operators on second shift knew virtually nothing about the jobs I did, I was able to develop a certain bargaining power, although by no means as great as Bill's.
  - 26. Personal communication, July 1975.
  - 27. Roy, "Restriction of Output," chap. 11.
  - 28. A similar argument, made by Lupton, is worth citing in full:

In Jav's. I would also say that the "fiddle" [chiseling] was an effective form of worker control over the job environment. The strength and solidarity of the workers, and the flexibility of the management system of control, made a form of adjustment possible in which different values about fair day's work, and about "proper" worker behaviour, could exist side by side. I have no doubt that, if management controls had been made less flexible, and management planning more effective, the "fiddle" would have been made more difficult to operate and probably output could have been slightly increased. But this might have destroyed the balance of social adjustment between management and the workers, and the outcome might have been loss in work satisfaction. The shop would no longer have been a "comfortable," may be not even a "happy," shop. And, in turn, this might have produced higher labor turnover, absenteeism and the like. One can only guess about these things, since there are so many other considerations involved: the existence of alternative employment, the ability of existing management-worker relationships to withstand the impact of radical change, for example, but it seems to be that when relationships are adjusted in a way similar to that I have described, which resembles the indulgency pattern noted by Gouldner, then any attempt to "tighten up" might lead to resentment and resistance. In the circumstances, management might prefer to live with the "fiddle" at the cost of what they believe to be some slight loss of output, and regard this as the price they pay for a good relationship. [Tom Lupton, On the Shop Floor (Oxford: Pergamon Press, 1963), pp. 182-83]

Though Lupton fails to see the organization of work as the consequence and

object of struggles between workers and managers, among workers and among managers, his characterization of the *functions* of the "fiddle" are illuminating.

- 29. In interpreting these changes we will repeatedly come up against a difficult problem, namely, the degree to which Roy's observations reflect the exigencies of wartime conditions. For example, during the war, government contracts encouraged the overmanning of industry, since profits were fixed as a percentage of costs. Boosting costs did not change the rate of profit. As a consequence, we should not be surprised to discover cutbacks in personnel after the war. Thus, Roy informs us that after V-J Day, just before he left Geer, there was a reorganization in which foremen were demoted and the setup function was eliminated (Roy, "Restriction of Output," pp. 60, 219). Hostility of workers to the company must have been, at least in part, engendered by wartime restraints on union militancy and by the choking-off of the grievance machinery.
- 30. Paul Cardan (alias Cornelius Castoriadis), Redefining Revolution (London: Solidarity Pamphlet 44, n.d.), p. 11.
- 31. Cornelius Castoriadis, "On the History of the Workers' Movement," Telos no. 30 (Winter 1976-77): 35.
- 32. See, for example, Herbert Marcuse, One Dimensional Man (Boston: Beacon Press, 1964), chap. 1; An Essay on Liberation (Boston: Beacon Press, 1969); Eros and Civilization (Boston: Beacon Press, 1955), chap. 10.

## Chapter Five

- 1. This is as true of "scientific Marxism" and of French structuralists such as Louis Althusser, Etienne Balibar, and Maurice Godelier as it is of so-called "Western Marxism," exemplified in the work of Georg Lukács, Max Horkheimer, and Theodor Adorno. However, Marxism has more recently rediscovered "spontaneous subjectivity" in the writings of Henri Lefebvre, Cornelius Castoriadis, Jürgen Habermas, Maurice Merleau-Ponty, and others, although Herbert Marcuse has long since recognized this as "false subjectivity," or what Paul Piccone recently referred to as "artificial negativity."
- 2. Michael Mann, "The Social Cohesion of Liberal Democracy," American Sociological Review 35 (1970): 423-39.
- 3. Henri De Man, *The Psychology of Socialism* (New York: Henry Holt, 1927), pp. 80-81, cited in Donald Roy, "Banana Time': Job Satisfaction and Informal Interaction," *Human Organization* 18 (1958): 160.
- 4. William Baldamus, Efficiency and Effort (London: Tavistock Publications, 1961), p. 53.
  - 5. Ibid., chaps. 5-7.

229

- 6. William Foot Whyte, Money and Motivation (New York: Harper, 1955), p. 37.
  - 7. Ibid., p. 38.
- 8. F. J. Roethlisberger and William Dickson, Management and the Worker (Cambridge: Harvard University Press, 1939), p. 457.
  - 9. Ibid., p. 445.
- 10. George Homans, The Human Group (New York: Harcourt, Brace, 1955), p. 155.
- 11. Elton Mayo, The Human Problems of an Industrial Civilization (New York: Macmillan, 1933), pp. 119-20.
- 12. Michel Crozier, "Comparing Structures and Comparing Games," in European Contributions to Organization Theory, ed. G. Hofstede and M. Kassem (Amsterdam: Van Gorcum, 1976), pp. 193-207. See also Michel Crozier's The Bureaucratic Phenomenon (Chicago: University of Chicago Press, 1964).
  - 13. Roethlisberger and Dickson, Management and the Worker, chap. 19.
- 14. Jason Ditton, "Perks, Pilferage, and the Fiddle," *Theory and Society* 4 (1977): 39-71, and "Moral Horror versus Folk Terror: Output Restriction, Class, and the Social Organization of Exploitation," *Sociological Review* 24 (1976): 519-44.
- 15. Stanley Mathewson, Restriction of Output among Unorganized Workers (New York: Viking Press, 1931), chap. 2.
- 16. Stanley Aronowitz, False Promises: The Shaping of American Working Class Consciousness (New York: McGraw-Hill, 1973), p. 38; Emma Rothschild, Paradise Lost: The Decline of the Auto-Industrial Age (New York: Vintage Books, 1974), chap. 4.
  - 17. Crozier, The Bureaucratic Phenomenon, p. 163.
- 18. Ronald Dore notes a similar conflict between foreman and time-study men in the English factory. See his *British Factory—Japanese Factory* (Berkeley and Los Angeles: University of California Press, 1973), p. 93. In a personal communication, Bill Friedland indicates that the opposition between foremen and methods departments assumed a similar form in the United States auto industry.
- 19. Herbert Marcuse, One Dimensional Man (Boston: Beacon Press, 1964), p. 5.
- 20. Donald Roy, "Restriction of Output in a Piecework Machine Shop," (Ph.D. diss., University of Chicago, 1952), pp. 499-500.
  - 21. Ibid., p. 511.
- 22. Further insight into the dominance of the values inherent in making out is to be found in the infrequency with which operators complained about the level of maximum pay or the 140 percent ceiling as compared with

the persistent grudge that some rates were impossible or difficult to make. As Roy puts it: "No dissatisfaction was expressed concerning quota levels; there was apparent acceptance of earning limits. No one ever complained to the writer that \$1.25 an hour wasn't enough; the complaint was that such an earning rate could be achieved only intermittently, with quota earning days few and far between" (ibid., p. 136). In this way, constituting work as a game of making out had the effect of drawing attention to variations within specified limits and deflecting attention away from the limits themselves.

- 23. Karl Marx, Capital, vol. 1, chap. xxi.
- 24. Peter Blau, *The Dynamics of Bureaucracy* (Chicago: University of Chicago Press, 1963), p. 81.
- 25. See, for example, James March and Herbert Simon, Organizations (New York: John Wiley, 1958), chap. 6; Michel Crozier, The Bureaucratic Phenomenon, chap. 6; James Thompson, Organizations in Action (New York: McGraw-Hill, 1967), chap. 1; Harry Braverman, Labor and Monopoly Capital (New York: Monthly Review Press, 1974).
  - 26. Roy, "Restriction of Output," pp. 511-12.
- 27. One might conclude that the greater the variation among jobs, as regards the ease with which one makes out, the more divisions, that is, the stronger the hierarchy, established on the shop floor. In 1945 the variation among machines as regards easy rates was not widely known, but it appears to have been less than in 1975, which would be a further factor contributing to the greater solidarity among workers thirty years ago.
  - 28. Roy, "Restriction of Output," pp. 517-18.
- 29. For the origin of these terms see Jürgen Habermas, Legitimation Crisis (Boston: Beacon Press, 1975), pt. II, chap. 3.
- 30. Clustering around these points could also indicate effective cross-booking (chiseling).
- 31. Baldamus, Efficiency and Effort; Donald Roy, "Banana Time"; Harvey Swados, On the Line (Boston: Little, Brown, 1957).
- 32. My use of the notion of game here is the *opposite* of "play" as commonly used in critical theory, where it refers to "a set of principles for organizing experience, constituted by an activity that is voluntary and open-ended (i.e., free from both external and internal compulsions), non-instrumental (in the sense that it is pursued for its sake and has at its center of interest process rather than goal), and transcendent of ordinary states of being and consciousness" (Francis Hearn, "Toward a Critical Theory of Play," *Telos* no. 30 [Winter 1976-77]: 145). For Herbert Marcuse, play is counterposed to work: "play expresses objectless autoeroticism and gratifies those component instincts which are already directed toward the objective world. Work, on the other hand, serves ends outside itself—namely the ends

of self-preservation" (Eros and Civilization [Boston: Beacon Press, 1955], p. 196). In my usage of the word, game is assimilated to work rather than play.

- 33. I am referring here to Habermas's notions of the political formation of consensus, the public sphere, and undistorted communication. See, for example, his *Theory and Practice* (Boston: Beacon Press, 1973).
- 34. Many Marxists, following Marx, have tended to assume that in a postrevolutionary society or in an emancipated society there would be no politics. This is emminently false. See Karl Korsch, "What Is Socialization?" New German Critique no. 6 (Fall 1975): 60-81; Cornelius Castoriadis, "The Hungarian Source," Telos no. 29 (Fall 1976): 4-22; Claude Lefort, "The Age of Novelty," Telos no. 29 (Fall 1976): 23-38.

#### **Chapter Six**

- 1. Peter Doeringer and Michael Piore, Internal Labor Markets and Manpower Analysis (Lexington, Mass.: D. C. Heath, 1971); Bennett Harrison, "Public Employment and the Theory of the Dual Economy," in The Political Economy of Public Service Employment, ed. H. L. Sheppard, B. Harrison, and W. J. Spring (Lexington, Mass.: Heath-Lexington, 1972), pp. 41-76; Richard Edwards, "The Social Relations of Production in the Firm and Labor Market Structure," Politics and Society 5 (1975): 83-108.
- 2. Doeringer and Piore, Internal Labor Markets, pp. 1-2.
- 3. Edwards, "The Social Relations of Production," p. 86.
- 4. See, for example, Doeringer and Piore, *Internal Labor Markets*, chaps. 2-4; Koji Taira, "Internal Labor Markets, Human Resource Utilization, and Economic Growth," paper presented at the Urban Labor Market Research Conference, 1974.
- 5. Karl Polanyi, *The Great Transformation* (New York: Rinehart, 1944), p. 134.
- 6. This may not be true for all "internal labor markets." It is possible—for example, in Japan—for internal labor markets to operate through a managerial distribution of employees to jobs on the basis of seniority, that is, without the organization of a full-fledged bidding system. This would explain part of the variation among enterprises in the degree of individuality expressed on the shop floor.
- 7. Ronald Dore, British Factory—Japanese Factory (Berkeley and Los Angeles: University of California Press, 1973); Koji Taira, Economic Development and the Labor Market in Japan (New York: Columbia University Press, 1970).
  - 8. A cautionary note: the low levels of mobility within the firm in 1944-45

can in part be explained by the wartime freeze on labor mobility between firms.

- 9. Donald Roy, "Restriction of Output in a Piecework Machine Shop," (Ph.D. diss., University of Chicago, 1952), p. 104.
  - 10. Ibid., pp. 134-35.
  - 11. Ibid., p. 134.
  - 12. Ibid., p. 416, pp. 134-35.
- 13. Ibid., pp. 211, 311, 312, 488, 489.
- 14. Ibid., p. 101.
- 15. In an interview, Wilson (the general manager, who took over the engine division in 1957) told me that expanded application of plant-wide seniority could work against the interests of labor. He maintained that after the introduction of plant-wide bumping for all those with more than one year's service, management tended to lay off employees in much larger batches so as to avoid some of the complicated reshuffling processes that would take place if layoffs took place gradually.
- 16. The effective operation of an internal labor market therefore depends on the existence of strong union protection for the labor force and on nonarbitrary firing.
  - 17. Edwards, "The Social Relations of Production," pp. 96-97.

#### Chapter Seven

- 1. James Weinstein, The Corporate Ideal in the Liberal State: 1900-1918 (Boston: Beacon Press, 1968).
- 2. Jürgen Habermas, Legitimation Crisis (Boston: Beacon Press, 1975), pt. II.
- 3. Philip Selznick, Law, Society, and Industrial Justice (New York: Russell Sage Foundation, 1969), p. 154.
- 4. Donald Roy, "Restriction of Output in a Piecework Machine Shop (Ph.D. diss., University of Chicago, 1952), p. 434.
  - 5. Roy, "Restriction of Output," pp. 438-39.
- 6. Walter Reuther, "Individualism vs. Unionism," in Source Book on Labor, ed. Neil Chamberlain (New York: McGraw-Hill, 1958), p. 144.
- 7. Unfortunately, Roy never attended any union meetings in 1944-45. It is therefore difficult to assess whether the union leadership has assumed a more or less aggressive role in its relationship with management. Certainly, one finds it difficult to imagine a president in the early days of the union presenting absenteeism as a "union" problem.
- 8. Adam Przeworski has conceptualized this situation as "capitalist profit equals worker savings," by which he means that workers ensure their

employment in future months or years by "consenting" to a restricted growth in wages. That is to say, wage restraint today allows accumulation of profit and therefore increased wages tomorrow. In this way the interests of capitalists and workers are concretely coordinated (Przeworski, "Capitalist Democracy and the Transition to Socialism," unpublished ms., University of Chicago, 1978).

- 9. See ibid. for further details on the material basis of consent and the conditions under which it will break down.
  - 10. Selznick, Law, Society, and Industrial Justice, chap. 4.
  - 11. Ibid., p. 215.
- 12. Ibid., p. 229. This is naturally an outgrowth of laissez faire, in which the strong unions manage to protect their membership, while the weak unions and unorganized workers can achieve little.
- 13. Thus, the two-party system described by Seymour Martin Lipset, Martin Trow, and James Coleman in their study of the International Typographical Union is the counterpart of the two-party system in the organization of politics in the wider society. In some respects it fosters consent in the same way that party systems foster consent in global politics. At the same time, studies of miners, longshoremen, and also the ITU indicate the importance of local autonomy in the emergence and maintenance of "democratic" practices in the government of industry. The two-party trade-union system, instead of being the cause of such forms of democracy at the point of production, tends, on the contrary, to be a consequence (Seymour Martin Lipset et al., *Union Democracy* [Glencoe: Free Press, 1956]).
- 14. It may be objected that these views of industrial government are tainted with euphoria. I have repeatedly pointed out, however, that my conclusions apply to only certain sectors of the economy, namely, those where strong unions prevail and where the product market is dominated by a few large firms. In other sectors, such as agribusiness and the public sector, the internal state and the internal labor market may be rudimentary or nonexistent. Moreover, even in the so-called monopoly sector, it may be argued that the internal state and the internal labor market do not operate in the frictionless, formally neutral fashion suggested here. But, as I indicated earlier, the existence of bias (as long as it is not too substantial or too persistent) in the administration of "justice" and in the allocation of personnel has the paradoxical effect of increasing rather than decreasing the effectiveness of the internal labor market and the internal state in the production of consent. In normal times, bias directs attention to the imperfections of the system rather than to the underlying relations upon which the system rests.
- 15. The emphasis in this chapter has been on the implications of bureaucracy as a form of domination. Traditionally, industrial sociology has

tended to take off from the view, perhaps more prevalent in Weber's work, of bureaucracy as "technically superior to any other form of organization" (Max Weber, Economy and Society, 3 vols. [New York: Bedminster Press, 1968], 3:973). Thus, industrial bureaucracies have been regarded as more or less efficient ways of organizing production. (See, for example, Robert Merton. Social Theory and Social Structure [New York: Free Press, 1968], chap. 8: Peter Blau. The Dynamics of Bureaucracy [Chicago: University of Chicago Press, 1955]; Philip Selznick, TVA and the Grass Roots [Berkelev: University of California Press, 1949].) By contrast, Alvin Gouldner and Michel Crozier have recognized the other strand in Weber's view of bureaucracy, showing how rules diffuse tensions between worker and management (Alvin Gouldner, Patterns of Industrial Bureaucracy [New York: Free Press. 1954]: Michel Crozier, The Bureaucratic Phenomenon [Chicago: University of Chicago Press, 1964]). Crozier regards domination as an inevitable feature of industrial work, and Gouldner argues against such inevitability; both views differ from the formulation implicit in the internal state, that domination is a product of capitalist relations of production.

16. The dual perspective of force and consent runs throughout Antonio Gramsci's work in such forms as domination vs. hegemony; violence vs. civilization; political society vs. civil society. His view of the relationship between the two perspectives is suggestive if underdeveloped: "In actual fact, it often happens that the more the first 'perspective' is 'immediate' and elementary, the more the second has to be 'distant' (not in time, but as a dialectical relation), complex and ambitious." In another passage he writes:

The "normal" exercise of hegemony on the now classical terrain of the parliamentary regime is characterized by the combination of force and consent, which balance each other reciprocally, without force predominating excessively over consent. Indeed, the attempt is always made to ensure that force will appear to be based on the consent of the majority, expressed by the so-called organs of public opinion—newspapers and associations—which, therefore, in certain situations, are artificially multiplied. [Selections from Prison Notebooks (New York: International Publishers, 1971), pp. 170, 80]

## Chapter Eight

- 1. R. H. Franke and J. D. Kaul, "The Hawthorne Experiments: First Statistical Interpretation," American Sociological Review 43 (1978): 623-43.
- 2. James Thompson, Organizations in Action (New York: McGraw-Hill, 1967), chap. 2.
- 3. See, for example, Paul Lawrence and Jay Lorsch, Organizations and Environment (Boston: Harvard University Press for the Graduate School of

Business Administration, 1967); F. E. Emery and E. L. Trist, "The Causal Texture of Organizational Environments," *Human Relations* 18 (1963): 20-26. Thompson himself writes: "My focus is on the behavior of organizations; behavior within organizations is considered only to the extent that it helps us understand organization in the round" (*Organizations in Action*, p. ix).

4. So far in this study. I have tried to explain the organization of consent, the obscuring and securing of surplus value, without recourse to an explicit psychology. Such an omission is justified to the extent that the translation of relations into activities is invariant or, as in Marx, rests on survival. If capitalists are to survive as capitalists, they must compete and accumulate: if workers are to survive as workers, they must sell their labor power to a capitalist. Presenting individuals as carriers or agents of social relations and activities as the effects (within limits) of those social relations captures the essential quality of existence under capitalism. Within such a context, psychology can be reduced to a theory of needs: how capitalism generates needs, what these needs are in the different phases of capitalist development, and whether capitalism can satisfy the needs it produces. The Budapest School, and, in particular, Agnes Heller's The Theory of Need in Marx (London: Allison & Busby, 1976), has probably moved the farthest in developing such a theory. The Budapest School, however, ignores unconscious feelings and drives, while one of the most notable contributions of the Frankfurt School has been the critical appropriation of Freudian psychology (see, for example, Herbert Marcuse, Eros and Civilization [Boston: Beacon Press, 1955]; Wilhelm Reich, Sex-Pol [New York: Vintage Books, 1972]; Max Horkheimer, "Authority and the Family," in Critical Theory: Selected Essays [New York: Seabury Press, 1972], pp. 47-128; Theodor Adorno. "Sociology and Psychology," New Left Review no. 46 [November-December 1967]: 67-80, and no. 47 [January-February 1968]: 79-99; for two recent but divergent formulations in the critical-theory tradition see Russell Jacoby, Social Amnesia [Boston: Beacon Press, 1975], and Jessica Benjamin, "The End of Internalization: Adorno's Social Psychology," Telos no. 32 [Summer 1977]: 42-64). The unmediated way in which individuals under capitalism carry out the dictates embodied in social relations becomes a problem and a point of critique. For Adorno, therefore, monopoly capitalism so strips the individual of defenses that psychoanalysis, conceived of in terms of a dynamic tension among ego, id, and superego, becomes irrelevant. Russell Jacoby, following in Adorno's shadow, calls for a "negative psychoanalysis"—a theory of the subjectless subject. Thus the central figures of the Frankfurt School maintain that the institutions of advanced capitalism penetrate and shape individual instincts and drives in accordance with the reproduction of capitalist rationality. Wilhelm Reich, however,

insists on the impermeability and emancipatory potential of individual instincts; capitalism represses but does not destroy the instinctual impetus to liberation. From all these writings it becomes clear that no Marxism can be complete as long as it does not clarify its assumptions about human nature, whether in terms of needs or psychoanalytic categories.

In looking upon the labor process as a game, I am not only showing how capitalism mobilizes adaptation to alienation for its own ends but am pointing to the empirical existence of a human potential for emancipation, to an instinctive compulsion of workers to collectively control the labor process—a compulsion that under capitalism expresses itself in the distorted form of a game.

5. It is relatively easy to increase the strength of direct labor but very difficult to get additional auxiliary workers, or indirect labor. Every addition to indirect costs is carefully scrutinized by all levels of management, up to and including the general manager. It is much more difficult to recruit a chip-handler than a drill-press operator. This is because management regards the ratio of indirect to direct labor costs as a measure of efficiency.

6. Difficult as it is to believe, until January 1975 no records were kept of the production performance of individual departments. No one appeared to know how well each department was doing from week to week. Of course, each department had its own budget, but this did not pinpoint the source of changes.

7. Personnel management attributed the decline in absenteeism to a publicity campaign and a new human-relations program, which sought to help the absentee "rectify his behavior." Absenteeism was not recorded systematically by the company until January 1975.

8. Maurice Zeitlin has suggested to me that the nature of the interdependence among operators and auxiliary workers provides the basis for regarding absenteeism as illegitimate. This is certainly an interesting idea, but it could be assessed only through comparisons among labor processes.

## Chapter Nine

- 1. John Goldthorpe, David Lockwood, Frank Bechhofer, and Jennifer Platt, The Affluent Worker: Industrial Attitudes and Behaviour (New York: Cambridge University Press, 1968). An important earlier paper, which, on the basis of an attitude survey, claims that work is a means to fulfilling central life-interests outside the factory, is Robert Dubin's "Industrial Workers' Worlds: A Study of the Central Life Interests of Industrial Workers," Social Problems 3 (1956): 131-42. Dubin's conclusions can be subjected to the same criticism as the work of Goldthorpe et al.
  - 2. Goldthorpe et al., p. 185.

- 3. Ibid., p. 179.
- 4. See tables 73 and 74, ibid., pp. 164-65.
- 5. Workers' Attitudes and Technology (Cambridge, Eng.: At the University Press, 1972).
- 6. For a discussion of the existence of the traditional worker see David Lockwood, "In Search of the Traditional Worker," in Working Class Images of Society, ed. Martin Bulmer (London: Routledge & Kegan Paul, 1976), pp. 239-51.
  - 7. See Edward H. Carr, The New Society (London: Macmillan, 1951).
- 8. "The Social Cohesion of Liberal Democracy," American Sociological Review 35 (1970): 423-39.
- 9. John Westergaard, "The Rediscovery of the Cash Nexus," in *The Socialist Register 1970*, ed. Ralph Miliband and John Saville (London: Merlin Press, 1970), pp. 111-38.
  - 10. Ibid., p. 120.
  - 11. Ibid.
- 12. Everett Hughes, "The Knitting of Racial Groups in Industry," American Sociological Review 11 (1946): 512-19.
- 13. William Kornblum, Blue Collar Community (Chicago: University of Chicago Press, 1974), p. 36.
- 14. A. R. Radcliffe-Brown, Structure and Function in Primitive Society (London: Cohen & West, 1952), p. 92.
- 15. There was one young white worker who spent most of his time with the younger Blacks, both on the shop floor and in outside work. He was the only White on second shift to sit with the group of Blacks at lunch. He would also invite them to his house for parties and so forth. His black friends held him up as an exemplary case of the unprejudiced White.
- 16. Although it is difficult to prove that racial discrimination took place, it was widely assumed (both by management and by the rank and file) that the union leadership was discriminatory in the way it pursued grievances. Blacks were certainly convinced of this and responded by attending union meetings in disproportionate numbers. Frequently these meetings would erupt into a heated exchange between the black membership and the white president of the local.
- 17. Donald Roy did not collect any data on the relationship of output to social background because he did not have access to output data for any worker but himself.
- 18. Melville Dalton, "The Industrial Rate Buster," Applied Anthropology 7 (1948): 5-18.
- 19. Dalton does not give the average age of his sample. It is possible that the average age was boosted during the war.
  - 20. Hughes, "The Knitting of Racial Groups," p. 517.

- 21. In using the notions of "intervention" and "mediation," I am following the meaning given to them by Erik Olin Wright in his Class, Crisis, and the State (London: New Left Books, 1978), chap. 1.
- 22. It might be argued that seniority, therefore, largely measures a characteristic of piece rates; that senior operators will manage to place themselves on the jobs with the easiest rates that also happen to be the highest in prestige. Two comments are relevant. First, just because a rate is easy does not mean that operators will attempt to maximize output. It could be argued, for example, that external factors would determine whether operators would try to make out on gravy jobs. Second, piece rates are themselves nothing but an expression of social relations between time-study men, operators, and foremen. That piece rates are associated with seniority therefore only strengthens seniority as a measure of relations in production.
- 23. The 185 machine operators in the small-parts department at Allied's engine division constitute a discrete and distinctive population. I am not suggesting that the results of my statistical analysis are generalizable to workers in all industries, although, as in any case study, the conclusions are suggestive as well as illustrative. Since I am not dealing with a true sample but with a population, the statistical significance of the results has little meaning. However, I have decided to include the results of significance tests as a polemical device: if this were a sample, we could have a certain confidence in generalizing to the population as a whole. Thus, in this first regression, the coefficients for seniority and experience are significant at the 0.001 level, while coefficients for the other variables are not significant even at the 0.05 level.
- 24. When average output for the first eleven months of 1975 is regressed on the external variables alone, 21.5 percent of the variance is explained as compared with the 37.5 percent explained by the work variables. Most of the variance explained by the external variables is due to age (20 percent), and this is due to the high correlation between age and log seniority (0.69). Since these are the only two independent variables that have a correlation coefficient greater than 0.5, multicolinearity does not pose a problem. It is worth noting that these results also cast serious doubt on the view that behavior on the shop floor can be understood in terms of the "cash nexus." Had money been an important influence, one would have expected operators with large families to work harder. The regression shows no significant independent effect of marital status or age on output.
- 25. Of the regression coefficients, only one, log seniority, was significant at the 0.01 level; the rest, including experience, were not significant at the 0.05 level.
- 26. Although some of the discrepancies between the coefficients appear to be quite considerable, none of them is statistically significant even at

the 0.1 level, which suggests that they cannot be taken too seriously.

27. Again, relatively little variance in output is explained by the external variables; in the one case, it is 7.1 percent, and in the other it is 6.1 percent. The only external variable to have a statistically significant effect on output is marital status, and then only for the subpopulation with three years or less of seniority. One might note that, although its impact is slight, race has opposite effects for the two subpopulations: for the more-senior group, being black rather than white enhances output; for the less-senior group, being black rather than white reduces output.

28. Indeed, many theorists do claim that such a common experience of domination and discipline is produced in all areas of society. See, for example, Max Horkheimer and Theodor Adorno, The Dialectic of Enlightenment (New York: Seabury Press, 1972) and Michel Foucault, Discipline and Punish (New York: Pantheon, 1977). Of particular relevance is the work of Samuel Bowles and Herbert Gintis, Schooling in Capitalist America (New York: Basic Books, 1976). They argue that there is a correspondence between the social relations of the classroom and those of the workplace and that this is no accident but the result of the deliberate attempts by the dominant class to use schools as an instrument to

depoliticize the potentially explosive class relations, . . . perpetuate the social relationships of economic life through which these patterns are set, by facilitating a smooth integration of youth into the labor force, . . . legitimate inequality through the ostensibly meritocratic manner by which they reward and promote students, . . . create and reinforce patterns of social class, racial and sexual identification among students, [and] foster types of personal development compatible with the relationships of dominance and subordinacy in the economic sphere. [P. 11]

All this—in addition to imparting technical and social skills and appropriate motivations for participation in the labor force. They conclude:

The economic system is stable only if the consciousness of the strata and classes which compose it remains compatible with the social relations which characterize it as a mode of production. The perpetuation of the class structure requires that the hierarchical division of labor be reproduced in the consciousness of its participants. The educational system is one of several reproduction mechanisms through which dominant elites seek to achieve this objective.... The educational system reproduces the capitalist social division of labor, in part, through a correspondence between its own internal social relationships and those of the workplace. [P. 147]

At the same time, Bowles and Gintis do recognize that "work must be organized so as to make authority relationships in the firm appear at best

just, or at least inevitable. That is, relationships among superiors, subordinates and peers must not violate the norms of society" (p. 82). The inversion of race, age, or gender relations at the workplace can lead only to conflict and instability. They come to this conclusion because they have little sense of the relative autonomy of the labor process and its capacity to reproduce and "legitimate" its own relations. The totality seen by Bowles and Gintis is one in which each part is an expression of, and therefore has to be compatible with, capitalist relations. For them the important point is not merely that a different system of schooling or a different family life would produce a consciousness incompatible with relations at work and thereby promote instability but that such schools and families could never realistically appear without first transforming the labor process. "Patterns of inequality, repression, and forms of class domination cannot be restricted to a single sphere of life, but reappear in substantially altered, yet structurally comparable, form in all spheres" (p. 148). Although Bowles' and Gintis' view of the correspondence between work relations and schooling would anticipate the results of this chapter, they would probably attach greater importance to the contribution of schooling to the production of able and willing workers and would more narrowly restrict the range of educational systems compatible with capitalist relations. At the same time, I am obviously not denying the importance of education and the family in the allocation of people to places in the class structure and in the learning of such basic skills as literacy and numeracy. Yet, even at this level, as my studies of the Zambian copper industry indicate, a distinctive work language is created at the point of production when workers and supervisors come from a variety of linguistic backgrounds. Finally, as I shall argue in chapter 12, labor processes do vary in their independence of imported consciousness and external changes. These factors may be more important in the competitive sector of the economy, where the labor process is less protected by the elaborate buffering of internal labor markets and the internal state.

#### Chapter Ten

- 1. Donald Roy, "Restriction of Output in a Piecework Machine Shop," (Ph.D. diss., University of Chicago, 1952), p. 238.
  - 2. Ibid., pp. 252-53.
  - 3. Ibid., pp. 239-40.
- 4. The time-study men worked only between 8 A.M. and 5 P.M. Since Roy was on second shift, he overlapped with them for only about an hour and a half.
  - 5. Roy, "Restriction of Output," p. 113.

- 6. Geer Company Contract 1945, Article IX, section 4.
- 7. Roy, "Restriction of Output," p. 111.
- 8. Ibid., p. 242.
- 9. Ibid., p. 245.
- 10. Ibid., pp. 322-23.
- 11. Frederick Winslow Taylor, Scientific Management (New York: Harper & Bros., 1947), pp. 79-85.
- 12. Donald Roy, "Efficiency and the Fix: Informal Intergroup Relations in a Piecework Machine Shop," *American Journal of Sociology* 60 (1954): 255-66.
- 13. Roy offers no explanation for the introduction of the new rules. The nearest he comes to an explanation is the comment of the setup man: "The next day Johnny 'interpreted' the new ruling as an attempt by management to find out 'what is holding up production,' following a complaint that the former 'help yourself' policy slowed production rather than expediting it" (Roy, "Restriction of Output," p. 416). Why the new rules were introduced at that particular time is not discussed.
  - 14. Roy, "Restriction of Output," p. 415.
  - 15. Ibid.
  - 16. Ibid., pp. 373-75.
  - 17. Ibid., p. 374.
  - 18. Ibid., p. 432.
- 19. On one occasion I was searching through the methods books for a rate on a particular operation when a senior manager walked into the office and bawled me out. He lectured me on why operators should never come into the office, yet the practice was customary for second-shift operators and was endorsed by shop-floor management. In view of the confrontation, the scheduling man suggested that in future I wait until seven o'clock before looking through the books. By that time all senior management would have gone home.
- 20. See, for example, Alvin Gouldner, *Patterns of Industrial Bureaucracy* (New York: Free Press, 1954).

#### Chapter Eleven

- 1. I am making the assumption that the changes described in part 3 evolved gradually in a unilinear fashion. All the evidence from the content of management-union contracts points in that direction, although, as we shall see, changes under Geer were of a different kind from those under Allied.
- 2. There are, in fact, two types of political class struggles, namely, those whose object is the relations in production and those whose object is the

relations of production. At the level of the enterprise, the latter tend to merge with ideological struggles, whereas, at the level of the economy as a whole, they concern the various forms of state intervention.

- 3. Such activities were associated with the National Civic Federation during the Progressive Era and supposedly provided the basis of "welfare capitalism" in the twenties. See William Appleman Williams, The Contours of American History (Cleveland: World Publishing Co., 1961); James Weinstein, The Corporate Ideal in the Liberal State, 1900-1918 (Boston: Beacon Press, 1968); Gabriel Kolko, The Triumph of Conservatism (New York: Free Press, 1963); Stephen Scheinberg, "The Development of Corporation Labor Policy, 1900-1940" (Ph.D. diss., University of Wisconsin, 1966).
- 4. In a personal communication to me (16 August 1976), Mitchell Fein, an eminent professional engineer, wrote:

In general, I'd guess there are not fewer time study men on the floor today than there were in 1944; rather it depends on company policies, the type of production, the operations performed, whether incentives are used or not, and other such questions. Also, by the use of standard data which is developed through detailed time studies, engineers can, after awhile, set standards from a desk without venturing out on the floor, if they have sufficient details on how the operation will be performed. Most companies have gone this route and, by now, have sufficient data available so that less time is needed on the floor to set standards.... The tough manager has not deliberately withdrawn the time study man as a way of reducing industrial conflict. On the contrary, he doesn't give a damn and if injecting more time study men would attain his objective of raising productivity, he wouldn't care whether conflict was lowered or raised.

- 5. "Changing Patterns of Organizational Authority: The Military Establishment," Administrative Science Quarterly 3 (1959): 473-93.
- 6. Although I did get some insight into the various struggles and alliances among the departments from different managers and from what I saw from the shop floor, it is too fragmentary to warrant analysis. Unfortunately, there have been all too few studies of politics within management. See, however, Melville Dalton, Men Who Manage (New York: John Wiley, 1966), and Tom Burns and G. M. Stalker, The Management of Innovation (London: Tavistock Publications, 1961).
- 7. The new general manager arrived in January 1975 and immediately set about reorganizing the division, with some of the effects I described in chapter 8. During the following two years the division consistently made profits every quarter—an almost unprecedented achievement. However, toward the end of 1976, problems of quality control were becoming an

increasing headache, and, as a result, the division was being threatened with the loss of a large customer from within the corporation. Even though it has been transformed since 1953, the engine division is still faced with many of the problems that plagued Geer Company. The plant is too small, and the engines too diversified, for it to be able to sell its product competitively. These are structural problems that no manager can solve except through expansion or through reduction in the number of different engines being manufactured.

- 8. For one interesting view of bargaining between the largest corporations and the largest unions, see William Serrin, *The Company and the Union* (New York: Vintage Books, 1974).
- 9. From the various accounts I have heard, the organization of the steel workers local at Geer followed the pattern described by Peter Friedlander in his *The Emergence of a UAW Local, 1936-1939* (Pittsburgh: University of Pittsburgh Press, 1975).
- 10. Obviously, other factors cannot be ignored. The arrival of a generation of workers who had not experienced the great depression and who had no sense of the preunion days and the recruitment of black workers coming out of a more politically militant background necessarily affected the conduct of union leadership.
- 11. See, for example, Huw Beynon's description of a Ford assembly plant at Liverpool (Working for Ford [London: Allen Lane, 1973]) and the description of machine shops to be found in Ronald Dore, British Factory—Japanese Factory (Berkeley and Los Angeles: University of California Press, 1973), chaps. 5 and 6; and in Tom Lupton, On the Shop Floor (Oxford: Pergamon Press, 1963).
- 12. See Theo Nichols and Huw Beynon, Living with Capitalism (London: Routledge & Kegan Paul, 1977).
- 13. David Noble, "Before the Fact: Social Choice in Machine Design," paper presented at the National Convention of the Organization of American Historians, April 1978.
- 14. Growing recognition of the importance of the concrete experience of the working class is also to be found in recent contributions to United States labor history, influenced by the work of two British historians: Eric Hobsbawm, Labouring Men (London: Weidenfeld & Nicolson, 1964), and Edward Thompson, The Making of the English Working Class (London: Victor Gollancz, 1963). See, for example, David Montgomery, "Workers' Control of Machine Production in the Nineteenth Century," Labor History 17 (Fall 1976): 485-509; idem, "The 'New Unionism' and the Transformation in Workers' Consciousness," Journal of Social History 7 (Summer 1974): 509-29; Herbert Gutman, Work, Culture, and Society in Industrializing America (New York: Vintage Books, 1977).

#### Chapter Twelve

- 1. Cornelius Castoriadis, "On the History of the Workers' Movement," Telos no. 30 (Winter 1976-77): 35-36.
  - 2. Thus, in 1880, Engels writes:

In the trusts, freedom of competition changes into its very opposite—into monopoly; and the production without any definite plan of capitalistic society capitulates to the production upon a definite plan of the invading socialistic society. Certainly this is so far still to the benefit and advantage of the capitalists. But in this case the exploitation is so palpable that it must break down. No nation will put up with production conducted by trusts, with so barefaced an exploitation of the community by a small band of dividend-mongers...the transformation of the great establishments for production and distribution into joint-stock companies, trusts and state property shows how unnecessary the bourgeoisie are for that purpose.... The more it [the state] proceeds by taking over productive forces, the more does it actually become the national capitalist, the more citizens does it exploit. The workers remain wage-workers—proletarians. The capitalist relation is not done away with. It is rather brought to a head. But, brought to a head, it topples over. State ownership of the productive forces is not the solution of the conflict, but concealed within it are the technical conditions that form the elements of that solution. ["Socialism: Utopian and Scientific," in The Marx-Engels Reader, ed. Robert Tucker (New York: W. W. Norton, 1972), pp. 632-341

- 3. There are, of course, numerous accounts of this period, but see, particularly, Charles Maier, Recasting Bourgeois Europe (Princeton: Princeton University Press, 1975); Nicos Poulantzas, Fascism and Dictatorship (London: New Left Books, 1974). For the United States, see James Weinstein, The Corporate Ideal in the Liberal State, 1900-1918 (Boston: Beacon Press, 1968); Gabriel Kolko, The Triumph of Conservatism (New York: Free Press, 1963); and William Appleman Williams, The Contours of American History (Cleveland: World Publishing Co., 1961).
- 4. It cannot be repeated too often that twentieth-century Marxism is not a simple regurgitation of Marx's writings but a response to the inadequacy of those writings for understanding the historical trajectory of capitalism and the transition to socialism. That Marxists are like other people and can learn from history is still not widely recognized by American sociologists, who continue to ignore Marxism because Marx's "predictions about the course of the socioeconomic system have been deeply invalidated by the course of events in the most advanced industrial societies," and his "doctrines, however important in their time, have been rendered obsolete by technical developments in theoretical economics." Accordingly, Marxism is reduced to a dogma of "certain categories of intellectuals, who have

247

professed to speak for the masses of the underprivileged in their respective societies and, in their latest phase, for the underprivileged society as a whole" (Talcott Parsons, "Some Comments on the Sociology of Karl Marx," in Sociological Theory and Modern Society [New York: Free Press, 1967], pp. 127, 109-10, 128). These comments, coming as they do from the high priest of American sociological theory, are remarkable for their ignorance of what either unites or divides Marx from Marxism. It was Lukács who wrote that, if research showed all Marx's "predictions" to be false, "every serious 'orthodox' Marxist would still be able to accept all such modern findings without reservation and hence dismiss all of Marx's theses in toto—without having to renounce his orthodoxy for a single moment" (History and Class Consciousness [Cambridge, Mass.: M.I.T. Press, 1968], p. 1).

Notes to Pages 196-98

- 5. For contemporary theories of the interventionist state see James O'Connor, The Fiscal Crisis of the State (New York: St. Martin's Press, 1973); Jürgen Habermas, Legitimation Crisis (Boston: Beacon Press, 1975); and Claus Offe, "The Theory of the Capitalist State and the Problem of Policy Formation," in Stress and Contradiction in Modern Capitalism, ed. Leon Lidberg, Robert Alford, Colin Crouch, and Claus Offe (Lexington, Mass.: Lexington Books, D. C. Heath, 1975), pp. 125-44.
- 6. For Marxist theories of the state that emphasize the repression or organization of class struggles, see Antonio Gramsci, Selections from Prison Notebooks (New York: International Publishers, 1971); Ralph Miliband, The State in Capitalist Society (New York: Basic Books, 1969); and Nicos Poulantzas, Political Power and Social Classes (London: New Left Books, 1973). All these works are inspired by Marx's political works, in particular The Eighteenth Brumaire of Louis Bonaparte and Class Struggles in France.
- 7. There are, of course, notable exceptions, such as Paul Baran and Paul Sweezy, *Monopoly Capital* (New York: Monthly Review, 1966).
- 8. For early attempts to regulate relations between labor and capital in the United States, see James Weinstein, The Corporate Ideal in the Liberal State, and Stuart Brandes, American Welfare Capitalism, 1880-1940 (Chicago: University of Chicago Press, 1976). David Brody makes the interesting argument that welfare capitalism, which reached its height in the 1920s, would have survived and American industrial relations would have continued on its paternalistic course had it not been for the depression ("The Rise and Decline of Welfare Capitalism" in Change and Continuity in Twentieth Century America: The 1920's, ed. John Braeman, Robert Brenner, and David Brody [Columbus, Ohio: Ohio State University Press, 1968], pp. 147-78). It was only after World War II that the internal labor

market and the internal state resumed their ascendancy, this time aided and abetted by organized labor.

- 9. It is difficult to determine the extent to which relations in production are shaped by the technical imperatives of machines and how much by relations of production, that is, by the need to obscure and secure surplus labor. It does appear that these technical aspects of the relations in production will vary with the machine; they are different for the automated (numerically controlled) machine tool and the assembly line. Nor is it easy to draw any firm conclusions about the nature of the change in technical relations in production as one moves from competitive to monopoly capitalism unless one confuses competitive capitalism with the era of the craft worker.
- 10. As usual, Alvin Gouldner puts his finger on the trigger when he writes:

For Weber, therefore, authority was given consent because it was legitimate, rather than being legitimate because it evoked consent. For Weber, therefore, consent is always a datum to be taken for granted, rather than being a problem whose sources had to be traced. In consequence, he never systematically analyzed the actual social processes which either generated or thwarted the emergence of consent. [Patterns of Industrial Bureaucracy (New York: Free Press, 1954), p. 223]

Unfortunately, Gouldner gets cold feet and does not pull the trigger.

- 11. See Ronald Dore, *British Factory—Japanese Factory* (Berkeley and Los Angeles: University of California Press, 1973).
  - 12. See note 4, chapter 8.
- 13. This is not to suggest that capitalism has in any way solved all of its major problems—as was presumed by the emminent political sociologists of the fifties—but only that theorists such as O'Connor and Habermas fail to demonstrate that the problems they highlight necessarily become worse and crises deepen as advanced capitalism develops. In addition, while they do recognize the distinctions between economic and political crises, between system and social crises, they do not show how the one leads to the other—how people become conscious of the postulated crises as crises of capitalism.
- 14. Antonio Gramsci was probably the first major Marxist to recognize the significance of the absence of precapitalist modes of production for the relatively smooth reproduction of capitalism in the United States. (He seems to have ignored slavery as a distinct precapitalist mode of production.) Capitalism, he argued, could develop only unevenly in a country such as Italy, handicapped by the parasitic residues of feudalism. In a similar line of argument, Michael Mann has recently tried to link the appearance of more

revolutionary working classes to the continued existence or recent destruction of precapitalist modes of production. Samir Amin's theories of accumulation on a world scale and unequal development are probably the most comprehensive to incorporate as their central tenet the inception of socialism as occurring in the underdeveloped world. See Antonio Gramsci, Selections from Prison Notebooks; Michael Mann, Consciousness and Action among the Western Working Class (Cambridge, Eng.: At the University Press, 1973); Samir Amin, Unequal Development (New York: Monthly Review Press, 1976).

#### Appendix

- 1. By far the most outstanding comparative study is Ronald Dore's British Factory—Japanese Factory (Berkeley and Los Angeles: University of California Press, 1973). The weight of his argument seems to favor understanding variations in industrial behavior in terms of the historical emergence of different patterns of industrial relations. His perspective is therefore very similar to my own. By contrast, Michel Crozier (The Bureaucratic Phenomenon [Chicago: University of Chicago Press, 1964]) argues that culture directly affects both the organization of work and patterns of work behavior. He does not disentangle the two forms of cultural determination, and his conclusions are less than convincing, since he has no comparative data from other countries.
- 2. Michael Burawoy, "The Politics of Production and the Production of Politics: A Comparative Analysis of Machine Shops in the United States and Hungary," Political Power and Social Theory 1 (1979).
- 3. See, for example, Alvin Gouldner, Patterns of Industrial Bureaucracy (New York: Free Press, 1954), and Norman Dennis, F. Henriques, and C. Slaughter, Coal is Our Life (London: Eyre & Spottiswoode, 1956), chap. 2.
- 4. The problem of uncertainty that confronts the organization of work in mining and the two modal types of adaptation have their parallel in the organization of a combat unit. See Morris Janowitz, "Changing Patterns of Organizational Authority: The Military Establishment," Administrative Science Quarterly 3 (1959): 473-93,
- 5. Eric Trist, G. W. Higgin, H. Murray, and A. B. Pollock, *Organizational Choice* (London: Tavistock Publications, 1963), pp. 66-67.
- 6. For further details, see Frederick Johnstone, Class, Race and Gold (London: Routledge & Kegan Paul, 1976); H. J. Simons and R. E. Simons, Class and Colour in South Africa, 1850-1950 (Harmondsworth, Eng.: Penguin Books, 1969), particularly chaps. 2 and 3; Charles van Onselen.

Chibaro (London: Pluto Press, 1976); and Harold Wolpe, "Capitalism and Cheap Labor Power in South Africa: From Segregation to Apartheid," Economy and Society 1 (1972): 425-56.

- 7. This, of course, is not peculiar to southern Africa. See André Gorz, ed., The Division of Labor (Atlantic Highlands, N.J.: Humanities Press, 1976); Katherine Stone, "The Origins of Job Structures in the Steel Industry," Review of Radical Political Economics 6 (1974): 113-73; and Harry Braverman, Labor and Monopoly Capital (New York: Monthly Review Press, 1974).
- 8. Michael Burawoy, Constraint and Manipulation in Industrial Conflict (Lusaka: Institute for African Studies, Communication no. 10, 1974), chaps. 2 and 3. The lashing job seems to have originated in the South African gold mines and was later adopted in the Zambian copper mines.
- 9. Arthur Stinchcombe, "Social Structure and Organizations," in Handbook of Organizations, ed. James March (Chicago: Rand McNally, 1965), pp. 142-69. Interestingly, Stinchcombe does write that "the main exceptions to the generalizations are in 'machine building' industries. These industries, whether building ships, locomotives and railroad cars, machine tools, automobiles, aircraft, electrical machinery, all have modern forms of organization, whatever their age" (p. 159)—as opposed to the more normal correlation between age and organizational form of industry. Paradoxically, however, the technology and work organization of machine shops have remained essentially the same since the Industrial Revolution. Yet, according to Stinchcombe, the "structural characteristics" of these industries have always been modern. Clearly, Stinchcombe is measuring something very different from the structure of work. (In fact, he measures "structure" by the proportion of unpaid family members, proportion of self-employed and family workers, clerical workers as a proportion of administrative workers, and professionals as a proportion of people occupying positions of authority.) It appears that he is is measuring the size of certain "buffering" elements of an organization that insulate the productive process from the environment. Accordingly, when the buffering elements are weak, as in agriculture, the production process is most vulnerable to influence from external factors and is therefore also subject to transformation. On the other hand, where the buffering elements are relatively strong, as in the machine industry, the structure of work is protected from environmental contingencies and will therefore tend to persist. External change is absorbed by a bureaucratic apparatus. Only in this way can we explain the growth of bureaucratic elements, on the one hand, and the persistence of the structure of work, on the other. In other words, the positive correlation between Stinchcombe's organizational characteristics and age of the industry tends

to obscure the absence of a correlation between the structure of work and the age of the industry. The alternative hypothesis I am suggesting is that certain organizations develop auxiliary institutions (possibly measured by Stinchcombe's organizational characteristics) that obstruct the transformation of the work process. Moreover, the older the industry, the less well developed are these institutions (according to Stinchcombe's data) and the more likely it is that the work process will undergo transformation. Further, the more modern the organization—that is, the more developed the buffer institutions—the more difficult it is to transform the technology and the work process.

- 10. Michael Burawoy, The Colour of Class on the Copper Mines: From African Advancement to Zambianization (Manchester: Manchester University Press for the Institute of African Studies, Zambian Papers no. 7, 1972).
- 11. See, for example, Reinhard Bendix, Work and Authority in Industry (New York: Wiley, 1956), pp. 34-73.
- 12. Morris Janowitz adequately describes the endeavors of such development scholars:

In particular, in Old Societies and New States, edited by Clifford Geertz, they have sought to identify those patterns of social and cultural stratification that offer the strongest barrier to "modernization." They have probed the consequences of different types of primordial sentiments—ethnic, descent group, language, race, and religion—on the development of "civil" or secular politics. [Political Conflict (Chicago: Quadrangle Books, 1970), p. 24]

This approach to development has deservedly come under attack from writers like Gundar Frank (*Latin America: Underdevelopment or Revolution* [New York: Monthly Review Press, 1969], chap. 2).

- 13. "Anthropological Problems Arising from the African Industrial Revolution," in *Social Change in Modern Africa*, ed. Aidan Southall (London: Oxford University Press for Internal African Institute, 1961), pp. 69-70.
- 14. A. L. Epstein, *Politics in an Urban African Community* (Manchester: Manchester University Press, 1958).
- 15. Clyde Mitchell, *The Kalela Dance* (Manchester: Manchester University Press for the Rhodes-Livingstone Institute, Rhodes-Livingstone Paper no. 27, 1956).
  - 16. Southall, Social Change in Modern Africa, p. 19.
  - 17. Burawoy, The Colour of Class, chap. 9.
- 18. Robert Bates, Unions, Parties, and Political Development (New Haven: Yale University Press, 1971).

- 19. Burawoy, "Another Look at the Mineworker," African Social Research no. 14 (1972); 239-87.
- 20. Burawoy, Constraint and Manipulation in Industrial Conflict; idem, The Colour of Class; and Bruce Kapferer, Strategy and Transaction in an African Factory (Manchester: Manchester University Press, 1972).