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- 81. István Gábor, 'The Second Economy', Acto Oeconomica, vol. 22, nos. 3-4, 1979, p. 291.
  - 82. Gábor, 'The Second Economy and Its "Fringes" '; Marrese, op. cit.

83. Gábor, 'The Second Economy and Its "Fringes".'

84. Gálasi and Sziráczki, p. 3.

85. Haraszti, p. 119; Szelényi, Urban Social Inequalities, p. 121.

86. G. Konrád and I. Szelényi, 'Social Conflicts of Under-Urbanization', in M. Harloe, ed., Captive Cities, New York 1979, pp. 157-74.

87. C. Hann, Tázlár: A Village in Hungary, Cambridge 1980.

88. G. Kertesi and György Sziráczki, 'The Structuring of the Labour Market in Hungary', unpublished paper presented at the Oslo Conference of the International Working Party on Labour Market Segmentation, 1982.

89. J. Montias, 'Observations on Strikes, Riots and Other Disturbances', in J. Triska and C. Gati, eds., Blue-Collar Workers in Eastern Europe, London 1981, p. 181.

90. Szelényi, Urban Social Inequalities.

91. Konrad and Szelényi, Intellectuals on the Road to Class Power, p. 224.

92. Eros and Civilization, p. 178.

93. Zaslavsky, p. 198.

- 94. H.H. Ticktin, 'Towards a Political Economy of the USSR', Critique, vol. 1, no. 1, Spring 1973, pp. 20-41.
- 95. M. Holubenko, 'The Soviet Working Class Opposition', Critique, no. 4, 1975, p. 22.
- 96. P. Lewis, 'The Peasantry', in D. Lane and G. Kolankiewicz, eds., Social Groups in Polish Society, London 1973, pp. 29-87; G. Kolankiewicz, 'The New "Awkward Class": The Peasant-Worker in Poland', Sociologia Ruralis, vol. 20, nos. 1-2, 1980, pp. 28-43.
- 97. R. Turski, 'Changes in the Rural Social Structure', in J. Turowski and L. Szwengrub, eds., Rural Social Change in Poland, Warsaw 1976, p. 53.

98. Kolankiewicz, p. 34.

99. Bill Lomax, Hungary 1956, London 1976.

100. Jadwiga Staniszkis, Poland's Self-Limiting Revolution, Princeton 1984.

101. Alain Touraine, et al., Solidarity, Cambridge 1983; Henry Norr, "Quitea Frog to Eat": Self-Management and the Politics of Solidarity', unpublished manuscript, 1983; Staniszkis op. cit.; and Chapter Two of this book.

# Our analysis of production politics under early and advanced capitalism concentrated on factors internal to those societies. Only when explaining differences among them did we turn to international factors, in particular the timing of industrialization relative to the development of capitalism on a world scale. In the last chapter, we saw how global political forces circumscribed changes in the form and inter-relationship of production politics and state politics in Eastern Europe. We now continue our analysis of the limits set by international factors in a study of the transition from colonialism to post-colonialism in Zambia. We will not examine those international constraints in their own right — that task will be left to the conclusion — but rather their 'internalization' as expressed through the Zambian class structure. We will see how the transformation of the class

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structure accounts for the changing relationship between production politics and state politics.

In January of 1981, the government of Zambia faced two weeks of industrial unrest and strikes following the expulsion of seventeen labour leaders from the ruling United National Independence Party (UNIP) — the only party in Zambia's one-party state. These leaders came from the executives of the country's major unions, including the Zambia Congress of Trade Unions and the powerful Mineworkers' Union of Zambia. The occasion for the expulsion was union opposition to the new decentralization plan of the Zambian government, which would have given more power to the party in the provincial areas. Although it was presented as the extension of democratic control to the people, union leaders saw it as an attempt to subordinate them to the party and thus to the state. Rank-and-file unionists, already facing increasing hardship due to inflation, wage restraint and scarcity, stood by their leadership and staged walk-outs and strikes.

The most significant feature of these strikes was their explicitly political character, at least in their immediate goal. Directed at the

state in defence of trade union independence — and not in pursuit of short-run economic demands — they were very different from the organized and sometimes lengthy strikes waged by mineworkers during the colonial era. Even at the height of the independence struggles, these had been dominated by economic or Africanization demands upon the mining companies, and the colonial administration had tried to stay out of industrial disputes.

In the post-colonial era the state has increasingly intervened to regulate relations between capital and labour: to enforce compulsory arbitration, outlaw strikes, detain leaders, monitor union organization, impose wage freezes. The state circumscribes the terrain of class struggle within industry by shaping the institutions that regulate that struggle, the political apparatuses of production. The post-colonial state has sacrificed its independence, becoming ever more closely allied to capital. This was reflected and consolidated in the nationalization of the mines six years after independence. Strikes are directed against the state rather than simply against the companies, and the state has become increasingly concerned with issues of labour discipline, absenteeism and productivity. Once the concern of the companies alone, the labour process itself has become the target of state intervention.

### 1. Production and Politics in Theories of Underdevelopment

Although there is nothing unusual in the transition to postcolonialism described above, theories of underdevelopment have failed to examine the labour process or its relationship to the state as mediated by the political apparatuses of production. Even when presented in the guise of returning to production, the causes of underdevelopment often remain located in the 'noisy sphere' of the market place, 'where everything takes place on the surface and in full view of everyone'. Theories never accompany the colonial producer into the 'hidden abode of production'. Conventional notions of modernization attribute the failure to recapitulate the trajectory of already advanced capitalist nations to factors indigenous to peripheral societies, such as inappropriate values, the force of tradition or the scarcity of capital. Reacting against this view, Paul Baran and, following him, André Gunder Frank have focused on the plundering of colonies as causing both development in the metropolis and underdevelopment in the satellite. Hence Frank coined the expression 'the

development of underdevelopment'. In stressing the size and use of surplus generated in the periphery, its wasteful consumption and its transmission to the metropolises, however, the mode of production of surplus is left out of account.

In explaining the transfer of surplus from periphery to centre, Arghiri Emmanuel claims to throw us back from the sphere of exchange to the sphere of production.3 In a far-reaching critique of the theory of comparative advantage, Emmanuel tries to show that under conditions of international specialization of products, mobility of capital and immobility of labour, unequal wages lead to unequal exchange between countries. Commodities produced in the periphery, where rates of exploitation are higher (or, which amounts to the same thing for Emmanuel, wages are lower), exchange at prices below their value, while commodities produced in high-wage countries exchange in the international market at prices higher than their value. Even though he appropriates Marx's schemes for the transformation of values into prices, Emmanuel never actually enters the hidden abode of production, for he treats wages as an independent variable determined outside production. Samir Amin's elaboration of Emmanuel's model loosens some of its assumptions, in particular those of international trade in specific commodities and the exogenous determination of wages. Amin claims that unequal exchange occurs 'when the differential between rewards to labour is greater than between productivities'. 4 Growth of wages in the centre is determined by the conditions of 'autocentric accumulation' — that is, by the productivities in the production of the means of production and of the means of consumption — whereas wages are held down in the periphery through processes of marginalization, including rising levels of unemployment, subsidies provided by pre-capitalist modes of production, and repression.5 For all the talk of productivity, there is still no attempt to come to terms with the labour process in peripheral societies.

The same can be said of Amin and Emmanuel's critics, such as Charles Bettelheim and Geoffrey Kay, who return us to the law of value and wages as the value of labour power. We now discover that rates of exploitation are lower in the periphery than in the centre. 'A lowly paid worker barely able to make ends meet, illiterate, poorly housed, unhealthy, and poorly equipped, is much less productive than a highly paid worker who is educated, well fed and well equipped. It takes him much longer to produce the equivalent of his wage, and therefore the proportion of the working day he is able to give away free is much lower. The more productive highly paid

worker, on the other hand, produces his wage in a much shorter time and is therefore able to perform much more surplus labour. By implication, therefore, affluent workers of the developed countries are much more exploited than the badly paid workers of the underdeveloped world."

A great deal separates the perspectives of Kay and Bettelheim from those of Emmanuel and Amin, particularly in their opposing conceptions of the labour process. However, in neither case do they attempt

to support their assertions with any empirical analysis.

A break with 'underdevelopment theory' comes more forcibly from those who throw us back to 'production' and to Marx's original conception of capitalist development as spreading evenly through the world. In a powerful polemic with stagnationist conceptions which root backwardness in the transfer of surplus between countries, Bill Warren insists on very real capitalist developments taking place in peripheral countries. Particularly since World War II, they have achieved a measure of autonomy sufficient to attract capitalist investment. Warren's return to production and his debunking of the conventional wisdom of underdevelopment theory are refreshing, but he never reaches into the specificity of 'the forces of production' — that is, into the production processes that are advancing in different parts of the world. Instead, these processes are reduced to levels of industrial or manufacturing output and to their contributions to gross national product.

Warren does, however, recognize the heterogeneity of the so-called periphery. Here we also find the fashionable interest in 'modes of production' and their 'articulation'. 10 Underdevelopment is no longer attributed exclusively to integration into a world capitalist system. Instead the point of departure becomes the reproduction of precapitalist modes of production, which, rather than being destroyed, are reshaped and subordinated to capitalist modes of production that are often transnational. On closer examination many of these formulations tend to reduce the mode of production to relations of exploitation — that is, the mode of appropriating surplus — without considering relations in production, that is, the relations of the labour process. For example, in his important critique of the so-called modes-of-production analysis, Jairus Banaji distinguishes between relations of exploitation and the broader relations of production, which concern the relations among enterprises. 11 The latter ultimately determine the rhythm of underdevelopment, and the enterprise is of only secondary interest. And where the distinction between capitalist firms and enterprises such as haciendas, planta-

tions, and independent peasant production becomes central to the analysis, the varieties of capitalist firms and in particular of the capitalist labour process are never examined. 12 It is presumed that the capitalist enterprise is much the same in the periphery as in the centre, and that only the relative preponderance of non-capitalist enterprises is significant.

As the labour process is left out of these studies of modes of production, it is not surprising that the struggles over its relations the politics of production — are ignored as well. Indeed, some even claim that there are no such struggles. 'The absence of this struggle in underdeveloped capitalism is also the absence of a tendency internal to it that leads to the constant revolutionizing of the forces of production." And when a politics of production is recognized, it is dissociated from struggles over state power. 'A study of working-class politics ... would have to go beyond the unions to the shop floor and examine the various forms that the struggle of labour against capital took. Such detailed research is not within the scope of this book. Also, inasmuch as this struggle was not about the question of state power. we feel justified in leaving it out of our analysis of the principal contradictions that informed the politics of Uganda up to 1972."

In a celebrated article on the post-colonial state in Tanzania, John Saul examines the indeterminacy of state intervention springing from struggles within the state between different fractions of the yet unformed class of the petty bourgeoisie. 15 As Leys points out, Saul's account does not consider the external limits on state intervention posed by class struggles outside the state. But Leys himself does not tell us how to conceptualize those struggles or their relationship to struggles fought within the state. 16 Above all, he does not specify those day-to-day struggles over relations in production and relations of exploitation, whether in the villages or the factories. As Poulantzas has suggested, once we recognize state apparatuses as a terrain of class struggle, we must also recognize that not all power is congealed there. It also materializes in institutions outside the state, such as factory apparatuses. 17 The relationship between struggles within the state and those outside it must be understood as shaped by the relations between the corresponding apparatuses.

One reason for the neglect of struggles outside the state lies in the prevailing conception that the post-colonial state plays a central role in development and possesses a certain 'autonomy'. 18 First, it inherits an overdeveloped structure from its colonial predecessor, which had to subordinate all indigenous classes and corresponding modes of production. Second, the post-colonial state plays a prominent economic

role, appropriating a large proportion of the economic surplus. Third, the post-colonial state plays a critical ideological role in establishing 'hegemony', binding the subordinate classes to the nation-state. Under attack from Leys and others, Saul's attempt to substantiate the centrality and autonomy of the post-colonial state falls apart at the seams. 19 But we are left with little sense of the post-colonial state vis-à-vis metropolitan or colonial states.

In all these treatments of underdevelopment, the lack of any notion of production politics has political and theoretical consequences. The reduction of politics to state politics — to struggles over or within the state — and of the labour process to a technique of production easily slips into a distinctive conception of socialism as a strategy of development orchestrated by benign technocrats operating within the state.<sup>20</sup> Socialism is no longer a form of society in which unavoidable conflict is institutionalized through organs of popular control that guide public policy, a society in which local (production) politics takes on a form of collective self-management that is not subordinate to state politics.

Our alternative approach focuses on the relationship between production politics and state politics, so that neither 'overdevelopment' nor 'relative autonomy' occupies such a central place. Instead, we examine the functions of the colonial and post-colonial states as they are reflected in the relations between apparatuses of the state and those of the economy - industry or agriculture. My argument is simple. The colonial state was indeed an interventionist, although not necessarily a strong, state whose 'function' was to establish the supremacy of the capitalist mode of production. It was concerned with primitive accumulation in two senses: the separation of direct producers from the means of production in generating labour supplies for industrial capital, and the extraction of surplus from pre-capitalist modes of production by merchant capital. The relative importance and precise articulation of these two forms of primitive accumulation varied from colony to colony and, over time, within each colony.<sup>21</sup> Thus, the colonial state was concerned not with production per se but with the orchestration of relations among modes of production in such a way as to secure the ascendancy of the capitalist mode. Once the dominance of the capitalist mode of production has been established and other modes subordinated to its requirements, the raison d'être of the colonial state disappears. A new form of state emerges, concerned with the expanded rather than the primitive accumulation of capital, with the extraction of relative surplus value from production rather than of specific surplus labour through exchange, and with the production of specific types of labour power rather than the generation of labour supplies. The granting of formal political independence is but a symbol of the transition from the colonial to the post-colonial state. 22

In the next section it will be shown that although studies of Southern African labour history have examined the processes of primitive accumulation, they have neglected the way these have been shaped by the specific economic and political requirements of expanded accumulation in the mining industries. Subsequent sections will turn to the hidden abode of production itself, examining the nature of the labour process under colonialism and the political conditions for its regulation. We will then see that with the eclipse of colonialism, in some instances the labour process itself has changed, while in others, where technological constraints inhibit such changes, the conflict continues between production apparatuses and the labour process. In the final sections of this chapter we shall analyse how the relationship between production politics and state politics is limited by the labour process on one side and international forces on the other.

### 2. From Primitive Accumulation to Expanded Reproduction

Capitalism's genesis must be distinguished from its reproduction. In the first stage, primitive accumulation, capital is initially accumulated and brought together with labour, which is dispossessed of the means of production and turned into a commodity: labour power. In the second stage, expanded reproduction, capitalism has already been established, and the focus of analytic attention becomes the capitallabour relation itself and the accumulation of capital based on the search for higher rates of profit. In Capital, Marx takes the historically specific form of primitive accumulation as it occurred in England through the ravages of merchant capital and the enclosure movement and juxtaposes it to a general theory of the reproduction and dynamics of capitalism. Primitive accumulation is thus dissociated from expanded reproduction. Marx does not theorize how the form of primitive accumulation may shape the extraction of absolute and relative surplus value — that is, the capitalist labour process.

Trotsky, however, appreciated the connection between the origins and the expansion of capitalism by underlining its combined and uneven development: 'The laws of history have nothing in common with a pedantic schematism. Unevenness, the most general law of the

historic process, reveals itself most sharply and complexly in the destiny of the backward countries. Under the whip of external necessity their backward culture is compelled to make leaps. From the universal law of unevenness thus derives another law of combined development - by which we mean a drawing together of the different stages of the journey, a combining of separate steps, an amalgam of archaic with more contemporary forms. Without this law, to be taken of course in its whole material content, it is impossible to understand the history of Russia, and indeed of any country of the second, third or tenth cultural class'.23

In Russia, primitive accumulation skipped the early phases of handicraft production and small industry and thrust a 'backward' proletariat, recently torn from feudal estates, into the crucible of the modern factory based on advanced technology imported from the West. Sponsored by the state and dependent on foreign capital, the Russian bourgeoisie was too weak to contain the volatile proletariat it had created. And the absolutist state, compelled to compete economically and militarily with modern European nations but lacking a modern economic base, could only limp from crisis to crisis. Thus, Trotsky drew out the implications of different forms of primitive accumulation for the relationship between the proletariat and the state.

Marx insisted on not only a theoretical but also a historical rupture between primitive and expanded accumulation: the former was the prehistory of the latter. Rosa Luxemburg fundamentally challenged this formulation in The Accumulation of Capital, 24 arguing that capitalism's continued expansion rested on the incorporation of noncapitalist modes of production. Yet she retained the orthodox view that this necessarily led to the dissolution of non-capitalist modes of production. Hence capitalism destroyed the very conditions upon which its continued expansion depended. As history has shown, however, pre-capitalist modes of production are by no means automatically dissolved by the advance of capitalism. More often they are recreated and restructured in accordance with the needs of the dominant capitalist mode of production. The history of Southern and Central Africa demonstrates particularly well the conservation/ dissolution tendencies among the pre-capitalist modes of production, as orchestrated by the state.

Although there are now many excellent accounts of primitive accumulation in Southern Africa, Giovanni Arrighi's study of labour supplies in Southern Rhodesia (Zimbabwe) continues to be the most theoretically important. 25 Arrighi distinguishes four periods. In the

first, 1890-1904, African peasants responded to a growing demand for food from the emerging towns and industries by voluntarily entering into production for the market; no extra-economic force was necessary to stimulate agricultural production. Even though there was increasing demand for wage labour. Africans were able to increase their incomes without entering the labour market. In the second period, 1904-23, a combination of economic and political forces compelled Africans to sell their labour power. As they became increasingly dependent on the exchange economy for basic requirements, the colonial administration inaugurated forced labour, taxation and land expropriation. Africans were pushed into 'Native Reserves', where declining productivity and increasing transportation costs combined with falling prices to reduce their earnings from agriculture. White settler farmers, given preferential treatment by the colonial government, increasingly gained a monopoly on food production for the market. This was a period of genuine primitive accumulation, in which political mechanisms were used to subordinate the African peasantry to the requirements of capital accumulation.

In the third period, 1923 to the 1940s, market mechanisms accelerated the peasantry's demise. Overcrowding and soil erosion in the reserves made it increasingly difficult to produce a surplus, let alone compete with white farmers. The Land Apportionment Act of 1931 and the institutionalization of separate African and white price systems for maize only consolidated these trends. Africans were compelled to enter the labour market in increasing numbers, selling their labour power for a wage calculated on the basis of maintaining a single worker in town. Children, the old, the sick and the unemployed were cared for in the rural reserves. The connection between the maintenance of direct producers and the renewal of the labour forces was guaranteed through a system of migrant labour based on limited residence rights in the town and remittances to the rural areas to

supplement the bare subsistence obtained there.

A similar story can be told for Zambia (Northern Rhodesia). When the British South Africa (BSA) Company took over the administration of the territory in 1889, it was empowered by the British government to exploit all available resources. Although little was found in the way of minerals, the BSA Company did open the territory to international market forces and develop a basic infrastructure to facilitate trade. Copper was mined only intermittently until the second quarter of the twentieth century, when the discovery of rich underground sulphide ores and new processing techniques made commercial exploitation feasible. Until then Northern Rhodesia had been a labour reserve for

the mines and industries of Southern Rhodesia, South Africa and, after 1910, Katanga. In order to facilitate labour recruiting and to boost its own revenue, the BSA Company imposed taxes on the African population as early as 1900. In 1902, 69 per cent of its administrative revenue came from that source.26 As in many other parts of Southern Africa, Africans responded to taxation by producing food for the market. They began supplying maize for a growing urban population in Northern Rhodesia as well as for the Katanga mines. Fearing a loss of labour to the south, the BSA Company began alienating the most fertile land along the line of rail for white settlers. This and other preferential policies combined to undercut African peasant agriculture's competitiveness with European agriculture. forcing greater numbers of Africans into the labour market. By 1921 an estimated 41 per cent of able-bodied males were working for wages, almost all outside the territory.<sup>27</sup> Of course, these were migrant labourers who would periodically return to their villages and eventually resettle there.

As the BSA Company drew substantial capital into Northern Rhodesia, it created new classes — the white settler population of farmers, traders and skilled workers — whose interests were opposed to the strict profit criterion of the BSA Company. Moreover, the rise of indigenous classes of migrant workers and peasant producers required a state administrative apparatus. Yet as an instrument of metropolitan capital, responsible to its shareholders, the BSA Company could not be responsive to these interests, so essential to the development of its territory. Thus, in furthering the development of capitalism, the BSA Company guaranteed its own demise. In 1924 it was replaced with a more stable form of colonial administration that was subordinate to the Colonial Office and, to a certain degree, responsive to indigenous and settler classes.28

The colonial administration pursued a cautious policy toward the Northern Rhodesian copper mines when they began to be developed commercially in the late 1920s. The administration was reluctant to cut off or control the flow of labour to other territories, for state revenue depended on the migration of African labour to other employment centres in Southern and Central Africa.29 It would not extend priority to the copper mines until they had proven themselves viable. However, under pressure from the mines and the white settler population, the administration did establish a system of reserves in 1929 that both enhanced the protection of white farmers and generated labour supplies for the Copperbelt. When the Depression hit in 1931, copper prices tumbled from 24 cents per pound in 1929 to 61/4

cents at the end of 1931, and cutbacks in production reduced the African mine labour force from a peak of nearly thirty-two thousand in September 1930 to less than seven thousand at the end of 1932. During the succeeding years African peasants faced even greater obstacles to food production, as pricing policies gave a virtual monopoly to white farmers. So Africans became increasingly dependent on wage labour, and many found it in the Copperbelt, where industry expanded rapidly before and during the Second World War.

Let us now turn to Arrighi's fourth period of labour supply, characterized by the rise of multinational corporations with their capitalintensive investments. Arrighi describes the result in terms of the replacement of unskilled migrants by semi-skilled 'stabilized' workers. Multinationals, with higher wages, encouraged migration of families, and an 'aristocracy' of labour began to form. Here Arrighi makes his closest approach to the hidden abode of production. He accounts for the capital-intensive techniques of large corporations by reference to the 'logic of capital'. Although his main arguments involve technological considerations, managerial expertise and the financial resources of international capital, he does suggest that the skill requirements of a mechanized production process — 'semiskilled and high-level manpower' - are more suited to colonial labour supplies. Such a 'capital logic' argument, however, pays little attention to the different ways in which the colonial context might shape that logic. Thus, Arrighi dismisses Baldwin's claim that since the Second World War the wages of Africans and Europeans working on the Copperbelt 'have been raised by monopolistic actions to levels considerably above the rates necessary to attract the numbers actually employed. The consequences of this wage policy have been the creation of unemployment conditions in the Copperbelt towns, especially among Africans, and widespread substitution of machines for men in the industry.'30 Instead, Arrighi accepts the conventional wisdom that migrant workers have limited capacity to engage in effective industrial struggles, and argues that African trade unions, formed since the Second World War, have 'played a dependent role in the spiral process of rising wages and mechanization."31

This fourth phase represents a curious shift in the focus of Arrighi's analysis, from a concern with the political mechanisms that generated labour supplies to the economic forces behind the demand for labour. In the first three periods the state stimulates and compels primitive accumulation, but in the last period it drops out of the picture. In omitting from his analysis the changing forms of state intervention, Arrighi fails to note that the colonial state, which organized primitive

accumulation, has given way to a 'post-colonial' state, whose concern is the regulation of the expanded reproduction of capitalism. The formal declaration of political independence may either precede or follow this transition. If the colonial state is not primarily concerned with the expanded reproduction of capital, the consequence is not that expanded reproduction does not take place but that alternative institutions take over its regulation. As we shall see, these are the apparatuses of the company state — the compound system of the mines of Southern Africa, which closely monitors the day-to-day life of African workers.

A further weakness in Arrighi's analysis is that he introduces the demand for labour only in the final period of the ascendancy of the multinational corporation. In the first three periods he pays little attention to the labour needs of the industries and mines to which African peasants migrate, and thus misses the way in which proletarianization is itself shaped by the requirements of capital accumulation. It is to this that we turn next.

### 3. The Labour Process and the Colonial Legacy

Charles Perrings's excellent study of mineworkers in Northern Rhodesia and Katanga moves beyond Arrighi, consistently interpreting the supply of labour in terms of the conditions of capital accumulation. Perrings shows how geological constraints, the state of technology and the price of copper determined the range of production techniques open to any given mine. Thus, the labour strategies of the various mines were shaped primarily by the specific technical conditions of production, not by managerial style, nationality of directors or corporate policies, as had previously been argued.

The very different ore bodies in Katanga and Northern Rhodesia led to distinctive types of mines: those in Katanga were usually open-cast, while those in Northern Rhodesia were underground. This had immediate implications for labour requirements, underground mining being more arduous and dangerous and requiring more skills. In Katanga desertion was therefore less of a problem, and it was more feasible for the Union Minière du Haut Katanga to pursue a policy that settled miners and their families in the mine compounds for longer periods of employment. The conditions underground in Northern Rhodesia, on the other hand, were such that Africans would undertake only relatively short stints of work. This restricted any policy of stabilization, although there was variation from mine to mine. The higher level of skills required in underground mining drew a larger contingent of white workers to the Copperbelt than to Katanga, and the devaluation of the franc made it very expensive to attract white miners from sterling areas to the Congo. The advancement of Africans into skilled or even semi-skilled jobs was powerfully blocked on the Copperbelt by the presence of white workers; while in Katanga African Advancement required substantial investment in training which further predisposed management to a policy of labour stabilization. Also crucial to the different labour strategies in the two regions were the options available to potential African mineworkers. Whereas in Northern Rhodesia settler farmers had taken over food production, forcing Africans into the labour market, the absence of settler farmers in Katanga allowed Aftricans to produce cash crops for the mines. This led to a recurrent shortage of labour, which encouraged the mines to improve working conditions and monetary compensation and to introduce stabilization policies to promote a deeper commitment to wage labour.

For Perrings, then, geology and technical knowledge impose limits on the techniques of production, levels of mechanization, and so forth. The characteristics of the labour supplies and the form of proletarianization not only are determined by but also select the prevailing production techniques. Unlike Arrighi, Perrings consistently takes the issue of capital accumulation as a point of departure in understanding the process of proletarianization. Like Arrighi, however, he reduces the labour process to a production technique that gives rise to a corresponding skill requirement. In so doing he confuses labour power with the labour process. It is one thing to produce or recruit a particular type of labour power, but quite another to turn labour power into labour. The labour process involves relations and practices that must be regulated and therefore require certain political apparatuses of control. These in turn depend on the existence of certain state apparatuses. Perrings reduces capital accumulation to production techniques of economic efficiency and ignores production apparatuses of political regulation. He reduces capital requirements to the reproduction of labour power and excludes the reproduction of the relations of the labour process, relations in production.

Having said all this we immediately come up against a methodological problem: how do we examine these relations in production and their mode of regulation? Unfortunately we do not have the rich case studies of the labour process that have defined the heritage of industrial sociology in Europe and the United States. Indeed, data on the organization of work during the colonial period are virtually nonexistent. We must rely on hearsay, on occasional comments in evidence before commissions of inquiry, or on the recollections of participants. What follows, then, is but a first landing on new terrain.

The reconstruction of the colonial labour process is based on participant observation and interviews conducted by myself and three Zambian students at a single Zambian mine in 1971, seven years after political independence. The mine at which we worked was one of six concentrated in the Copperbelt, which lies in the northwest of the country, near the Zaire border. In 1971 approximately fifty thousand people were employed by the six mines. Of these, twenty per cent were expatriates who continued to control the mines through the operation of the colour bar principle: no black should exercise authority over any white. Expatriates earned six times as much as Zambian mineworkers, who earned twice as much as other Zambian industrial workers.

In terms of the overall production of copper we can delineate three types of operation: the actual removal of ore, the processing of the ore into a refined product, and the performance of various services and infrastructural work necessary for the functioning of the mine as a whole. In order to provide a firmer basis for generalization, we shall first take a labour process that belongs to the processing of copper ore, then move on to one from the service division, and finally examine a work situation in the mine itself.

### Copper Anodes

The more relations among workers are limited by technology, the less likely they are to be affected by changes in political regime — or so it might seem. The first work situation to be examined, casting copper anodes, is organized on the principle of the assembly line, while the second, tracklaying, involves gang labour under personal supervision, with few technological constraints on relations and activities.

The casting section of the smelter converts molten copper matte into anodes ready for transportation to the refinery. The matte is poured from the furnace onto a huge 'spoon', which is operated by a caster seated in a cage on an elevated platform. Copper is ladled from the spoon into the moulds of a casting wheel. The wheel, with its twenty-two moulds, continuously rotates at a speed controlled by the caster. After the copper has been poured into a mould, it passes under a water cooler. The lug man then removes the 'stoppers' holding the copper anodes in place. A little further on, the take-off attendant removes the anode with a mechanical contraption that grips the corners of the anode and lifts it out of the mould. Additional operators

then clean and dress the mould before copper matte is again poured into it.

The anode wheel differs from an assembly line in that its speed is controlled by the operators themselves. Although the caster actually operates the wheel, the take-off attendant dictates the speed; when he becomes weary, he conveys this to the caster, who then either slows down the wheel or takes a break. If the caster decides not to go along with the take-off attendant's demands, the latter can simply allow an anode to pass him by, and the wheel must then be stopped and reversed.

All the workers in 1971 were Zambians. Their relations at work were largely governed by their position in the production process. Steam and noise made communication difficult, and the operators had developed an elaborate sign language in which they conveyed the condition of the moulds, the impending appearance of the foreman, their previous night's activities, and anything else they chose. The dominant conflict was between the take-off attendant and the caster, over the speed of the wheel. The most senior operator was the caster, a position which had previously been held by a European. Presumably before the Zambianization of the position, the caster would almost unilaterally dictate the speed of the wheel, and the other operators the take-off attendant, mould cleaner, mould dresser, lug man and spoon attendant — would have to try to keep up. In 1971 the caster could no longer draw on any colonial status to impose his will on the rest of the gang. Indeed, he was now subject to their control. The transition from colonial to post-colonial production relations (relations in production) led to the reversal of power relations between the positions in the labour process.

Although the technology of casting anodes was well suited to colonial production relations, in a post-colonial society it led to friction among operators, which impeded its functioning. Workers, rather than management, now controlled the speed of the machine. Technology is not neutral: it is a product of the political relations extant at and outside the work point. One might say that there are colonial and post-colonial technologies, and that the persistence of the former into the period of the latter undermines managerial control. As the example of casting anodes reveals, Zambianization facilitated the transition to post-colonial production relations. The Zambian caster could no longer command the support of management to maintain the authoritarian hierarchy of the colonial context. Even when the supervisory positions are not Zambianized a similar situation develops, as our next example shows.

### Tracklaving

Tracklaying is part of the engineering department of the mine. The transportation section, which includes tracklaying, keeps the various shafts and plants supplied with the materials they require. There are approximately forty miles of track and six gangs to service it. Each gang includes six men and a ganger, who is responsible to a Zambian assistant foreman. The assistant foreman is supervised by an expatriate plate-laying foreman, who in turn reports to a sectional engineer. Each gang is responsible for maintaining a certain stretch of track, although the gangs come together in the event of an emergency or a particularly big job.

The gangs must maintain old track and build new, Maintenance involves searching for broken rails, cleaning up, oiling points, and replacing worn rails. In replacing or laying new track the most important tasks revolve around lifting and packing the rails so that their elevation and gradient are correct, particularly the relative height of parallel rails. Tracks are raised or lowered by 'packing' more or less ballast — small stones — under the sleepers. This is a strenuous job. and workers are expected to lift and pack about eight sleepers on one shift. Building new track involves cutting and bending track to size and shape, bolting rails to sleepers and, most difficult, getting the track into the correct position. At ninety-one pounds a yard, this may involve all the concerted effort of thirty men. In short, all the tasks of tracklaying are labour-intensive, and most are extremely arduous. Cooperation among the gang members is essential.

In 1971 the gangs were largely self-regulating groups of workers who established and enforced norms of effort. Using a wide range of mechanisms, day-shift workers made continual and successful attempts to limit output in order to obtain overtime and sometimes Sunday work; responding to management efforts to cut back on overtime, they restricted their output until it had to be restored. When younger workers began working too hard, older ones instructed them to slow down; if conflict broke out, the older workers would draw on their greater powers of witchcraft to instill fear into the rate busters. Tribal slurs were often used to bring workers back into conformity with the norms laid down by the experienced workers, so that the group presented a united front to the ganger.

The gang mobilized resources against the ganger more often than against one another. When the supervisor began pushing his subordinates too hard, the younger workers started arguing in English. which the ganger had difficulty understanding. They also used

English, when necessary, to persuade the foreman James, who spoke only English, that they were not at fault. When gangers tried to press charges for lack of discipline, they were in a weaker position than the educated younger workers. The older, experienced workers, for their part, would threaten the gangers with witchcraft. Frequently the shop steward would enter the fray and threaten to bring in the union. Workers would also play off one ganger against another, casting aspersions on those who tried to imitate colonial bosses and praising those who were more relaxed in their supervision.

The organization of the labour process made the gangers' position untenable. Tracklaying depends on the cooperation of several unskilled workers. Management can regulate the group either through a militaristic and punitive system or through a wage system based on some form of bonus. In Zambia the coercive system of the colonial era gave way to post-colonial production relations without an incentive scheme. Under colonial production relations, white foremen and assistant foremen were in a position to impose stringent controls through the use of coercive sanctions, and even black gangers had more power to regulate their gang's output than they did in 1971.

In the transition from colonial to post-colonial production relations, the foreman remained an expatriate but his powers were considerably diminished. The transition was brought to a head in one of many incidents that occurred for a number of years after independence. In 1969 the expatriate foreman Marshall, nicknamed Kafumo because of his potbelly, came under attack from the tracklayers for his racist and insulting behaviour. He was still trying to uphold colonial production relations. All the tracklaying gangs struck, brought in both the United National Independence Party and trade-union officials, and refused to return to work until Marshall Kafumo had been replaced. The assistant foreman James, also an expatriate, took over from Marshall, Learning from the incident, James's leniency earned him the nickname Polepole, 'easy'. But his leniency in the face of recalcitrant gangs of workers made the position of his Zambian assistant and, in turn, of the gangers very weak. They had recourse to few sanctions with which to combat group regulation of output and distribution of overtime. If workers sat around, took a rest in the bushes or engaged in heated political discussion, gangers could either stand and watch or give vent to their wrath by working by themselves.

Colonial production relations could not be reproduced by the postcolonial system of managerial authority, and in this instance were overturned through struggle. A new set of relations was introduced, although the foreman was still white. Just as the Zambian caster could

no longer draw on managerial support to enforce the compliance of the take-off attendant, so Polepole could not dictate work norms to the tracklaying gangs. Irrespective of the colour of the supervisor, the old forms of regulation based on racial domination were no longer tenable. Thus, as in the case of anode casting, workers in the tracklaying gangs enhanced their control of the labour process as a result of the way it had been organized under the regime of 'colonial despotism'.

### 4. The Rise and Fall of Colonial Despotism

What distinguishes industrial production under colonialism is not the labour process, for the same relations in production could as easily develop under other political and economic conditions.<sup>32</sup> Rather, the particular mechanisms through which production relations are regulated — the particular political apparatuses of the mine — are the distinctive factor. I call this form of production regime colonial despotism: despotic, because force prevails over consent; colonial. because one racial group dominates through political, legal and economic rights denied to the other. It is very different from the despotisms of nineteenth-century Britain, where coercion stemmed from the economic whip of the market. Although a colonial labour market obviously existed, Africans' survival did not depend on the sale of their labour power, for they always had access to some kind of subsistence existence in the rural areas. The arbitrary power exercised by the dictatorial 'Bwana' (white boss) was based on the control of life outside work. An overt and explicit racism was the organizing principle behind these production apparatuses.33

### Colonial Despotism

What was the nature of the power exercised by white bosses over African mine labourers? Physical violence was the rule rather than the exception, especially in the early years. It was even noted by the Russell Commission, which otherwise tried to whitewash the conditions that precipitated the Copperbelt strikes of 1935. Working from the disciplinary records of one mine, George Chauncey concludes:

'Though there were frequent instances of physical brutality in the compounds during the early years of the industry, its use in the enforcement of workplace discipline underground was pervasive. Any sign of disrespect, slowness in obeying orders, or improper work was liable to be punished on the spot. A lashing worker reported in 1934 that "fumes were coming from

the stuff we were lashing so I went close by to wash my face, but as I moved off my Bwana hit me twice on the face and kicked me three times, and I fell down . . . The Bwana then handed aa length of belting to No. 8590 and told him to beat me." Another worker in 1935 reported that his supervisor beat him after accusing him of being too slow; two years later a common labourer complained, "I took one of the machines back to the Bwana but he said that I had brought him the wrong one, and he did not want it. The Bwana was angry and he kicked me with his boots and hurt me." A file at the Roan Antelope archives contains literally hundreds of such examples. 34

Although violence in the compounds, where it was particularly visible, may have soon diminished, it continued to be normal in the mine, despite the introduction of 'native supervisors' who were to look into grievances. Africans were more likely to desert mine employment altogether than to risk lodging a grievance against their Bwana. Moreover, despite a few notable exceptions, management was reluctant to discipline those European bosses who were reported for brutality.

White bosses also controlled a system of bonuses and fines, which further enhanced their power. They distributed so-called efficiency bonuses to obedient and cooperative workers and levied fines on others, charging them with insubordination, coming to work drunk. sleeping on the job, laziness or absenteeism. The 'ticket' system of payment opened further channels of abuse. Africans were paid only on completion of a 'ticket', which required thirty shifts of work to be performed within forty days, usually in five six-day working weeks. Leaving the mines before completion of one's ticket meant forfeiting one's pay. The system also encouraged workers to bring forward their pay day by working every possible shift, even on weekends. 35 Until the mid-1930s, if the European supervisor refused to sign the ticket, a worker would lose both a day's pay and the day's food rations. 36 White bosses could also manipulate the dangers of underground work in order to secure active acquiescence from their African workers. 'In this context, the various "Safety First" programmes launched by the companies can be seen as serving the dual purpose of encouraging safe work habits and emphasizing the importance of obeying orders. The company emphasized the dangers of the work environment and of straying from the supervisor's area on the first day a man went underground by giving him a tour of the most dangerous areas. And once underground the supervisor had enormous power over his workers. In the many dark tunnels of the mines where no electric lights had been installed, supervisors took on enormous power simply because they were the only ones with lanterns.'37 Moreover, the

European supervisor had complete discretion over the distribution of safe and dangerous work among the members of his gang.

## The Rise of the Company State

In the late 1920s, when construction work on the mines was at its height, much of the labour was recruited and controlled by contractors. The despotism of the Bwana emerged in the early thirties. Thereafter, however, some of the white bosses' power was withdrawn and centralized in the compound offices. Domination at the point of production was linked to the mining company's control of the compounds where miners lived. Increasingly, survival outside work became tied to subordination at work through means other than the cash nexus, arbitrary firing and the system of bonuses and fines. In the thirties and forties the regulation of all facets of African life came to be vested in the 'company state', personified by the compound manager, who reigned as supreme dictator over 'the natives' in compound and in mine.

The compound system was adapted from South Africa, where it was first developed at the Kimberley Diamond Mines in the 1880s. In Southern Rhodesia and then on the Northern Rhodesian Copperbelt, a more open version of the South African system, with more relaxed surveillance, was adopted.38 Whereas in South Africa single black mineworkers were kept prisoner in a barrack-like system, on the Copperbelt they had greater freedom of movement, and between 30 and 60 per cent shared their cramped quarters with their immediate dependants.<sup>39</sup> One of the mining companies, Roan Selection Trust, encouraged workers to live with their wives, arguing that 'in general, women give a fair amount of trouble but this is offset by the care they take of their husbands, and we have found that the presence of the woman gives the man a sense of responsibility so that he hesitates to jeopardize his billet by some senseless trouble-making." Since rations were distributed according to the number of certified dependants living with the miner, and huts for married workers were bigger than those for single ones, the advantages to be gained from such stabilization entailed higher economic costs - costs that could be borne by the Northern Rhodesian copper companies but not by the South African gold mines, where profit margins were usually much lower. Because workers automatically lost their compound accommodation when they were fired, this system enhanced their subordination at work.

The compound system facilitated almost totalitarian surveillance of

the workforce. The compound offices kept close watch on activities through the mine police. When a miner was reported absent, the mine police were sent out to find him. 41 Visitors were expected to register with the company, a regulation enforced by midnight house-to-house searches and the eviction of anyone not holding a pass. After several unsuccessful experiments, the companies devised an invidious system of identification. '[T]hey fastened metal wristlets bearing the appropriate mine number to the wrist of every worker and dependant in the compound, "Tickets and Identification Certificates can be stolen and given to a friend," a compound manager pointed out, "but wristlets with Mine Numbers stamped on are all fastened with ACME fasteners." By means of the wristlet, police could distinguish visitors from workers at a glance, and could immediately identify and ascertain the mine number of anyone caught breaking company rules. Workers despised the system, and their attempts to tear off the wristlets were the single most frequent cause for their being fired. "We couldn't take it off ourselves," remembered one worker. "We would sleep with it, work with it, die with it," '42

The compound manager also used a system of tribal elders to keep him informed of the happenings in the compound and possible disturbances or even strikes. The tribal elders, who were respected representatives of the various tribes living in the compound, adjudicated disputes among Africans in the urban context and were regularly consulted by management. 43 The strikes of 1935 and 1940, however. dramatically demonstrated that the tribal elders were ineffective for industrial conciliation and unreliable for social control. Both strikes took the companies unaware, for they were organized by associations that Africans had built independently of compound management and its network of informants. In the 1940 strike, in particular, the tribal elders were pushed aside as representatives of the workforce, and at Mufulira the miners elected a negotiating committee composed largely of 'boss boys', the immediate supervisory assistants of European workers.

True to the paternalistic impetus behind the compound system, the companies extended their control into recreational activities. In an attempt to regulate beer drinking, they constructed beer halls and outlawed home brewing. They encouraged dancing societies and supervised religious groups. But the very form of the compound and the 'corporate' labour strategies of the companies consolidated the unitary structure of the mining community and encouraged the development of class consciousness.44 The more stabilized and skilled workers could pursue their interests within the industrial context only

by mobilizing the unskilled and temporary migrants. Furthermore, the compound provided powerful encouragement to working-class solidarity across ethnic, language, skill, and sometimes even racial boundaries. Africans turned out to be adept at shaping their own cultural institutions to their class purposes. Thus, the Mbeni Dancing Society and the Watchtower Movement became the political bases from which struggles against the companies, particularly strikes, were launched. In the absence of legitimate channels of protest and organs of industrial struggle, such as trade unions, these clandestine and subversive institutions were much more difficult for the companies to control.

The mineworkers' capacity to create a world of their own limited direct supervision by the company state. So too did the duration of employment. Although the mines encouraged stabilization by allowing longer periods of service and building married quarters, they did not encourage proletarianization — that is, the severing of all ties to the rural areas. Although the day-to-day maintenance of the black mineworkers was to take place under the direction of the company state, the renewal of the labour force — the creation and recruitment of new miners and the care of the old — was to take place in the villages. Neither the mines nor the colonial administration was prepared to countenance the political and economic costs of proletarianization. Accordingly, there was no provision for education, health services or retirement once workers left the mines. 45 Most workers. for reasons of economic security, had to maintain contact with their home villages through frequent visits and the remittance of savings.

### The Decline of the Company State

The supremacy of the company state began to be questioned after the strikes of 1935 and 1940. The Colonial Office investigated the shootings of Africans and pushed for the establishment of a labour department within the colonial government.<sup>46</sup> The colonial administration of Northern Rhodesia opposed such an apparatus, fearing that it might undermine the concordat between government and mines over their respective spheres of influence. The Forster Commission, which reported on the 1940 strike, also highlighted grievances of black mineworkers, which included not only wages and working conditions but also the explosive issue of African Advancement.

In 1936, the white miners had formed a union to defend their monopoly of certain jobs. During the war, the Northern Rhodesian Mineworkers' Union was able to blackmail the companies into procrastination. In 1947, however, the Colonial Office sent out trade unionist Bill Comrie to set up African trade unions, and in 1948 the mining companies were forced to cooperate in establishing the first African Mineworkers' Trade Union, As it developed strength, the union adopted increasingly militant tactics, striking in 1952 and again in 1955 and 1956 over increased wages and the companies' willingness to recognize a rival union, the Mines African Staff Association. Any such recognition would have divided the black miners along class lines, depriving the union of many of its leaders.

All these developments eroded the supremacy of the company state. White bosses could no longer arbitrarily determine earnings or fire workers. Survival in the compound was less directly linked to productivity in the mines, and regulations on the flow of labour were relaxed. It was now a matter not of stabilization but of full-fledged proletarianization. And as opportunities in the towns expanded, workers became less subservient to the whims of their white bosses.

Under these conditions it was no longer possible for compound officials to act as a unitary authority in both compound and mine. Compound life was being absorbed into a wider urban environment, and a breach was being forged between work and leisure. The company state had to break down, and in 1955 the compound offices split into two sections. Industrial relations controlled hiring and firing, acted as judge and jury in all disciplinary cases, and dispensed loans; community affairs organized housing, welfare, recreation and other aspects of compound life. Both sections were run by white officers. In the townships Africans were represented by tribal representatives until 1953, when these were abolished. At the mine they were represented by trade union officials, although it would be some time before an active shop organization developed.47

### Bureaucratization of Industrial Relations

The split in the company state and the rise of the mineworkers' trade union reshaped the mechanisms through which production relations were reproduced and struggles were regulated. 48 The worst abuses inflicted by white bosses on black labour were eliminated, and the white departmental African personnel officers, who were stationed at the work sites, became more active in the control of black labour. However, discriminatory treatment of employees and colonial production relations were still evident in the existence of a separate departmental European personnel officer to handle the problems of European labour. Only in 1962 did both positions amalgamate into

the single departmental personnel officer.

With independence around the corner, the mining companies began planning for an accelerated 'Africanization' or Zambianization programme, and the personnel department had top priority. Accordingly, a number of younger Zambian school leavers were recruited and, together with the more 'promising' African members of the personnel department, were trained for new positions. Not until 1966, two years after independence, however, did the head offices in Lusaka dictate the speed at which Zambianization should take place. In 1967 the community affairs and industrial relations departments were brought together, again under a single white personnel manager. The department was then reorganized so that the personnel manager became the 'staff development adviser', a new position created to look after expatriates, Zambianization, training and manpower services. A Zambian became personnel manager and took responsibility for industrial relations as they affected Zambian employees and for community affairs in the townships.

This reorganization considerably reduced the personnel manager's authority. His dealings were now confined to African workers, and he lost control over manpower services, training, work study, and odd attachments such as parks and gardens. The decline in status was reflected in the personnel manager's subordination to the mining manager, and his loss of direct access to the mine's general manager. The staff development adviser was a surrogate personnel manager with direct access to the general manager, and he was frequently consulted over issues that were rightly in the personnel manager's domain. At the level of the corporation, the new personnel manager also lost status. Previously the personnel managers of the different mines belonging to the two mining corporations would work out common policy and participate in industry-wide negotiations with the various unions. Now a new position, the group industrial relations manager, was created to perform this function, and it was filled by an expatriate who in most cases had previously been a personnel manager.

According to the plan, the staff development adviser would be phased out as the Zambian personnel manager reabsorbed some of the old personnel functions. Although the adviser was eliminated in 1971, the personnel department remained weak, for most of the adviser's functions were farmed out to other departments.

The lack of trust in the personnel manager and his diminished power weakened the personnel officers' ability to resolve conflicts, to influence line management, and to deal with the union and settle workers' grievances. Personnel officers are now clerks who process disciplinary cases, leave requests and clothing requirements, and participate in union works committee and safety meetings. The power to enforce sanctions against employees, impose fines, grant loans and dispose of other resources has been withdrawn.

There are a number of explanations for this devaluation of the personnel department, Throughout the mining industry, Zambianization took place without upsetting the colour bar principle that whites should not be subordinated to blacks. What changed was the colour bar's position — and even then the change was often only formal. Not only were new jobs usually created for the displaced expatriates, but the Zambian successors to the old jobs were not granted the support from their expatriate supervisors that their white predecessors had had, and were therefore unable to command the same authority over their subordinates. In many cases resources were formally withdrawn from the Zambian successor. In short, the devaluation of supervisory authority lay in the very process of Zambianization.

In the case of the personnel department, Zambianization was particularly rapid, and those who were responsible for training the new incumbents were the very people losing their jobs. They had no incentive to work themselves out of lucrative employment, and often promoted their own interpreter-clerks into positions for which they were obviously not equipped. The rapid succession to personnel manager provided expatriate management with a justification for appropriating many of the essential functions of the personnel department. This further weakened the Zambian personnel manager, who became even more dependent on expatriate management. At the same time, hostility between the successor and his white supervisor drove a wedge between them, which forced the personnel manager into passivity and isolation. This confirmed the prejudice of management that Zambians were not to be trusted.

The personnel manager's apparent spinelessness made life difficult for the personnel officers — which in turn created rifts in the department, often cast in the idiom of tribalism. Personnel officers were only too conscious of their diminished role and of the contempt with which line management regarded them. Zambian workers were also quick to point this out and had little faith in the personnel and industrial relations officers. In short, the very mechanisms of Zambianization, the retention of the colour bar, the rapidity of the process, the Zambian personnel, the threat these posed to expatriates, and the opportunity for expatriates to reallocate managerial authority in an upward direction - all these combined to reduce the power of that department in comparison with that of its colonial predecessor.

The diminished capacity of the mine's political apparatuses and the development of administration through rules also weakened the position of trade-union officials. While colonial despotism had fallen away, the bureaucratic apparatuses that the union dealt with from day to day protected centres of power that had shifted to the higher reaches of mine organization, such as the group industrial relations manager in Kitwe or even the head of industrial relations in Lusaka. To confront those powers, more drastic actions, such as strikes or walk-outs, were necessary. But this was to court the direct and sometimes repressive intervention of the state, as we shall see in the next section. No union official would openly advocate such a tactic.

Not surprisingly, trade union leaders directed much of their resentment over their loss of power toward Zambian representatives in the industrial relations apparatuses. The personnel officers were branded as 'stooges' who were selling out their fellow Zambians to white management. Workers shared this opinion. Zambians had not yet accustomed themselves to a post-colonial production politics that divided racial groups along class lines. Although personnel officers, including the personnel manager himself, were hostile to expatriate management, the function they performed placed them in clear opposition to workers and, to a lesser extent, to trade union leaders. As if to emphasize their new position, personnel officers began to adopt a patronizing attitude toward union officials, regarding them as 'uneducated' people who failed to appreciate the new common interest between workers and employers.

At the same time, the weakness of the mine apparatuses was an opportunity for the union to impose constraints on managerial discretion. In the early years of independence, the union officials, aided by the party, were often able to change colonial production relations. They intervened to remove racist supervisors and to eliminate the abuse of workers. Even though their activities were severely curtailed by the government, their potential power was feared by both expatriate and Zambian management. Trade union and personnel officers intervened less and less in the direct regulation of the labour process, but their very presence acted as a deterrent to the restoration of colonial production relations.

I have described some of the changes in the political apparatuses of the mines. In the first phase, power was concentrated in the hands of the company state, and the offices of the compound manager were mobilized as a despotic power over workers. In the second phase,

Africans became effectively organized, and the links binding compound life to work activities were severed. The company state fragmented and lost its monopoly of power. In the final phase, it was replaced by the weaker and less extensive personnel department. While Zambianization was the occasion and the excuse for the deflation of the mine apparatuses, this transformation dovetailed with the growing intervention of the state apparatuses in the regulation of industrial relations.

### 5. The Disjuncture between Labour Process and Production Apparatuses

As colonial despotism gave way to a weaker and more bureaucratic administrative apparatus, adjustments were made in the labour process, often in the direction of greater worker control. Coercion became less dominant in day-to-day work activities, and consent more important. In other work situations, however, the labour process could not be so easily reshaped, either because of technological constraints inherited from the colonial period or because of managerial attempts to regulate work in the old ways. These factors operated among the hand lashers, our next case study, where the struggles engendered by the organization of work were in continuous tension with the regulative capacity of the mine apparatuses.

# Continuity in the Organization of Work: The Case of Lashing

In mining an ore body, sections of rock ('stopes') are excavated. Main-level development provides the tunnels that carry the trains transporting the ore blasted out of the stopes, and sub-end development enables drills to gain access to the stopes so that blasting charges can be placed. Blasting on sub-end development takes place by day, and the ore is removed ('lashed') at night. The sub-ends are so small that lashing must be done by hand.

Just as the compound is the distinctive institution in the regulation of the colonial labour force, hand lashing is the prototypical colonial labour process. It gained currency in the South African gold mines and then spread to all the mines of Southern Africa. It is distinguished by its simplicity and arduousness. Underground lashing involves shovelling broken rock in a cramped space into a wheelbarrow and carrying it to a tip. In other countries this is done by mechanical loaders. According to Baldwin, 'one mechanical loader in Northern Rhodesia handling 250 tons per day and working six days a week

would cost (in 1959) \$54 per day including spares, maintenance, and amortization. This is equivalent to the cost of 39 labourers. In the United States the daily cost for the equipment would be \$60, or an amount equivalent to the cost of less than four labourers. The loader can do the work of about ten workers, so that it is highly profitable in the United States but a dead loss on the Copperbelt. 149

However, Baldwin captures only one aspect of the colonial legacy: supplies of cheap labour power. He misses technological constraints that prevent mechanization; and, even more important, his narrow 'efficiency' criteria ignore the political requirements of lashing. We can appreciate the importance of these requirements by looking at the experiences of the British coal mines, where the labour process is generally organized around self-regulating and relatively autonomous work groups. These enforce their own output norms and develop their own informal leadership, while management provides services and equipment, ensures safety, allocates work, and administers the system of remuneration. Attempts to mechanize British coal mining after the Second World War led to a fall in productivity and resistance from the miners, since the new methods broke down the self-regulating groups and introduced a hierarchical division of labour based on the fragmentation of tasks. Trist, Higgin, Murray and Pollock concluded that, owing to the uncertainty and danger inherent in mining, production could be organized either through the self-regulating group, paid according to some bonus scheme, or through a system of coercion, which they claimed was 'impractical and unacceptable' to British miners. 50 But what was 'impractical and unacceptable' to British miners has been the basis of mining in the colonial context of Southern Africa. Lashing is just a small part of the coercive system there, which depended not only on the availability of cheap labour power but also on a system of managerial control capable of enforcing colonial production relations. What happens to lashing when the external political regime is transformed, with 'independence'?

In some ways the problems of lashing are similar to those involved in tracklaying. Both draw on unskilled labour to perform heavy manual work. Yet where tracklaying approached self-regulation, lashing continued to be organized on a strictly coercive and bureaucratic pattern. In the present study there were approximately fifteen workers in a lashing gang, supervised by a Zambian section boss (ganger) with the assistance of a crew boss. The next two layers of management, the shift boss and the mine captain, were also Zambians by 1971. At the beginning of the shift, workers were allocated to particular ends in groups of two, three, four or more, depending on the size of the end,

the footage to be advanced, and the distance to the tip. When the section boss or crew boss had come to 'water down' the end and make sure it was safe, the lashers could begin work. They were usually expected to complete the assigned end by 2:00 a.m., in which case they would share a bonus calculated on the basis of the amount of ore removed, usually amounting to about a fifth of their earnings. If they had not finished by 2:00 a.m., they were normally expected to work into overtime until they did finish.

Confronted with their end at the beginning of the shift, a group of lashers would estimate their chances of cleaning it up before 2 o'clock. If they thought they could do this without becoming totally exhausted, they would try. If it looked too big or the tip was too far away, they would take it as easy as possible and hope they would not be forced to finish in overtime. In short, the lashers tried to minimize the time they spent underground, and when this was not possible they minimized the expenditure of energy. Why were they so different from the tracklayers, who tried to maximize overtime by restricting output during the normal shift? First, the tracklayers were generally older and more experienced workers who had family responsibilities and therefore needed more earnings, while the lashers tended to be young, single workers, who treasured their time more than their money. Second, tracklayers were more able to take it easy during the day in order to conserve energy for overtime, whereas lashers were invariably worn out by 2:00 a.m. They could not relax during the shift, for they were subjected to much more stringent supervision than were the tracklayers.<sup>51</sup> In general, the underground night shift was an altogether more unpleasant experience than daytime surface work.

The third difference between the two systems of regulating the labour process - namely, the use of bonuses - was also the least important. Indeed, it was so ineffective in regulating lashing output that it might as well not have existed. A bonus system is effective only if workers have some measure of control over the labour process. Management's failure to provide the necessary conditions and its arbitrary punitive interventions systematically thwarted such control. The allocation of workers to ends was usually dictated by the shortage of labour rather than the amount of work involved. Workers often had no chance of completing the assigned task by the end of the shift. There were frequent shortages of equipment, such as wheelbarrows. Lashers might have to wait up to four hours before their ends were checked and they could begin work. From time to time a breakdown in the air-cooling system would bring all work to a halt.

Because the bonus system was less than effective in eliciting what section and shift bosses considered an adequate amount of work, the bosses intervened with threats of disciplinary charges, overtime and an even worse allocation of ends the following night. By using its power to intensify effort controls, management made the lasher's life even more unpredictable and the bonus system even more ineffective. Yet the coercive system was not particularly successful, and section and shift bosses no longer had the support of colonial sanctions and apparatuses. To be sure, they had the power to allocate work and enforce overtime, but lashers were able to resist by manipulating the work situation, feigning illness, and so forth. A situation of continuous struggle ensued, leading to spontaneous walk-outs and sometimes wildcat strikes.

Why did lashing, unlike tracklaying, continue to be organized on the basis of colonial production relations? And what happened when shift bosses and mine captains were Zambianized? As in other situations, the Zambian successor did not inherit all the power of his predecessor. The jobs were fragmented, and a new layer of supervision was created for the displaced expatriate. The number of shift bosses and mine captains increased while their span of control diminished. From the labourer's point of view this meant closer supervision and even fewer opportunities to control conditions and earn bonuses. In short, Zambianization advanced the division of labour and bureaucratization while withdrawing the supervisors' power to enforce the division of labour. Moreover, these changes coincided with mounting worker resistance to that mode of organizing the labour process. The result could only be intensified struggle at the point of production.

There were other reasons why hand lashing persisted into the post-colonial era. Management often defended its continuation on technical grounds, arguing that the small sub-ends on which excavation was based made machine lashing unfeasible. Hand lashing was thus the legacy of a time when cheap labour power was in easy supply and coercive production relations could be enforced. To redesign the mine in accordance with the transformed production apparatuses would be unprofitable.52 However, this cannot have been the whole story, because one mine did manage to eliminate hand lashing.

Equally significant is lashing's relative unimportance in the overall mining process. It rarely created a production bottleneck, so that only strikes could draw management's attention to the problem. Furthermore, management was able to exploit the supposed necessity of hand lashing. All employees entering the mine, whether on the surface or underground, had to engage in a spell of lashing. Even Zambian shift bosses and mine captains (although not their expatriate counterparts) had to do their stint. Lashing thus served two functions for management: it provided a labour reservoir for the rest of the mine, and disciplined workers for the arduous work on the mines. Those who could not make it through their stint of lashing were rejected as mineworkers. In Erving Goffman's terms, new recruits were stripped and mortified in preparation for their service to the mining industry. According to expatriate management, this was particularly important in light of the increasing recruitment of school leavers, who 'thought tough and dirty jobs were beneath them'. Since compulsory lashing was introduced only after independence, it must be seen as a managerial attempt to uphold or restore the colonial regime of labour in a post-colonial period. Thus, rather than change the technology, which would have been costly, management attempted to impose coercive relations in production with a view to intensifying labour discipline. Class struggle ensued. Its outcome was shaped not only by political apparatuses that regulate relations at the point of production, but also by the apparatuses of the post-colonial state.

### The Lashers' Wildcat Strike

A year before our study, there had been a mine-wide strike of lashers. 53 The events began when four lashers who went underground at 6:00 p.m. only reappeared on the surface at 11:00 the next morning. Despite their seventeen hours underground, they were charged for failing to complete their ends. The next day all the lashers at this shaft refused to go down the mine, complaining about the nonpayment of bonuses and overtime and the excessive charges for uncompleted ends. After a three-day strike these lashers returned to work, whereupon lashers at a second shaft came out on strike for a week. The reasons given were the transfer of seven lashers from day to night shift, the fact that the periods on lashing were longer than at the other two shafts, and the non-payment of overtime. The day after lashers at the second shaft struck, those at the third shaft came out in sympathy for the duration of the week. During the strike, management dismissed nine lashers.

In its public statements and its negotiations with management, the national leadership of the Mineworkers' Union of Zambia sympathized with the lashers' grievances but condemned them for striking, and exhorted them to return to work. The union maintained that the bonus for completing an end was an insufficient incentive to work

hard, that section bosses were being allocated fewer men than the tasks warranted, and that section bosses, for fear of being disciplined themselves, were forcing lashers into unpaid overtime. The union claimed that the four men who had spent seventeen hours underground 'had completed their initial end and were charged for not completing an additional end. They had started late, not because of loafing, but because they had no tools.' The union also suggested that part of the problem lay with the mine's policy of employing only Zambians with four or more years of schooling.

In its response, management denied any responsibility for defective equipment or inadequate staffing levels, maintaining that the lashers' failure to clean the ends was caused by their working slowly. It referred to work-study investigations that had established what an average man could accomplish in eight hours, but naturally the union insisted that the conditions prevailing underground were very different from those that provided the basis for work-study investigations. Management specifically laid the blame for the strike on irresponsible troublemakers who 'thought they were highly educated and expected to rise to a high position overnight. They were not prepared to work under less educated supervisors who had many years of mining experience which these youngsters lacked.' Management lambasted the new type of worker that was appearing in the mines: 'The quality of the lasher had to be considered too. What was considered a fair amount of work as done by lashers some time back was suddenly too much for lashers today. It was quite obvious that their attitudes toward work must change.' In short, it was not that previous management was excessively coercive but that previous lashers were well disciplined. By holding up the 'colonial' lashers as the paragon of virtue and castigating the new lashers as 'undisciplined' and 'without respect', management was denying the political gains of the postcolonial order and trying to reassert a colonial regime of production.

Although the union recognized the legitimacy of the lashers' grievances, it concurred with management that there was a general problem of discipline in the mines and that 'the problem of educating today's youth in the facts of life was real, and they would continue their struggle to make them realize that paper qualifications alone did not make them useful citizens.' Thus, the union also failed to recognize the significance of the transition from colonial to post-colonial production politics. It merely reiterated the government view that striking workers were undisciplined and irresponsible. The cabinet minister for the Copperbelt Province reportedly said 'that the government fully supported management's action in dealing with strikers.' The secretary general of the Zambian Congress of Trade Unions attacked the striking lashers in parliament: 'In the first place both the Mineworkers' Union of Zambia and the Zambian Congress of Trade Unions do not support the strike of young people on the mines. It is unconstitutional, it is irresponsible.' After the strike, he stated publicly that 'disciplined members are an asset to the union, just as disciplined soldiers are an asset to the commander. . . . But undisciplined members cannot expect protection.' The government not only identified its interests with those of the mining companies but also upheld a despotic regulation of production akin to the colonial pattern. And it was precisely this endeavour that was at the root of the strike.

### 6. From Production Politics to State Politics

The repercussions of strike activity may serve to illuminate the relationship between production politics and state politics. From the lashers' standpoint, the strike was a struggle over the organization of production relations. The government, however, defined the strike as a concern of the state. The union was caught straddling state and production politics, upholding the legitimacy of the lashers' grievances while condemning the use of a strike as a bargaining weapon. Although on this occasion the government did not directly participate in the repression of the strike, its support was essential in management's moves against the strike leaders. By mobilizing public opinion against the lashers and ignoring their actual grievances, the Zambian state became a more direct instrument of the 'exploitation of wage labour by (mining) capital' than its colonial predecessor had been.

Similar observations were made by Bruce Kapferer in his 1966 study of a garment factory in Kabwe.<sup>54</sup> In waging struggles with management, workers tried to prevent the intervention of the union and party while the manager sought to call them in. So long as struggle was confined to the factory, workers were in a strong position to extract concessions; but as soon as their actions attracted the attention of the party or the union, let alone the government, their chances of victory were slim. In the colonial period, by contrast, although an enlargement of the field of struggle was difficult to achieve, it stood a good chance of strengthening the workers' position. Why should this be?

### The Separation of Production Politics and State Politics

The raison d'être of colonial rule, established in 1924, was to replace the administration of the British South Africa Company with a state that would possess sufficient autonomy from the dominant economic interests to secure capital accumulation. The company state arose alongside the colonial state. It provided the conditions for the immediate production of surplus value, for the regulation of the labour process through colonial despotism, and for the maintenance of migrant workers through the compound system. The colonial state sought to generate labour supplies for various industries in Southern Africa through rural taxation. Because the mining companies required a stable labour force in order to remain profitable, and the provincial administration was dependent on revenues from a migrant labour force, the two clashed over labour policy. 'The Government's policy on migrant labour was formed by the economic pressures of the depression and from consideration of native policy in a rural rather than an industrial context. Lack of faith in the future of the copper industry, fear of the expenses of large-scale urban administration, devotion to Indirect Rule, and a wish to circulate money in the remote and poor country districts away from the line of rail led the Government to discourage the creation of a large class of settled workers.'55

The colonial administration sought the mines' assistance in the regular repatriation of workers to the rural areas. It tried unsuccessfully to persuade the companies to reintroduce labour recruitment from the hinterland, a system that had been discontinued in 1931, and, through deferred payments, to compel workers to return home periodically.<sup>56</sup> So long as the mines did not have to bear the costs of urban administration outside the compounds, their interests were best served by the development of a reserve army of labour on the Copperbelt.

However, for the most part the mining compounds and the colonial administration recognized the legitimacy of their separate jurisdictions. The government maintained a non-interventionist role in the copper mines' industrial relations, and the companies did not directly shape colonial policy. To be sure, there were occasions when the colonial state intervened in rash and reactive fashion, as when defenceless blacks were shot in the mine strikes of 1935 and 1940, or when union leaders were arrested following the rolling strikes of 1956. But these were tantamount to declarations of weakness and inexperience in the handling of industrial struggles, and were the exception rather than the norm. Generally, the government restricted itself to setting up commissions of inquiry or appointing arbitrators. The industrial relations legislation itself allowed little scope for government intervention. When the Colonial Office began pushing for the creation of a labour department, the colonial administration dragged its feet, claiming that district officers could perform the job equally well. In practice the district officers rarely entered the mines, and were regarded with much suspicion when they did. The mines themselves were equally opposed to the appointment of labour officers, who might deem it their duty to interfere with the operation of the company state.57

Even when the mines sought the colonial administration's intervention, they often failed to secure it. In the post-war period the mining companies pushed unsuccessfully for more repressive labour legislation. Similarly, the administration remained silent when the mines asked it to take a stance on African Advancement. This issue, touchy even before the war, became much more sensitive as African labour militancy increased and the political power of the white settler population became more entrenched. Rather than legislating against the colour bar, the government insisted that, as Africans had their own trade union, African Advancement was an industrial, not a political, issue. It maintained this position in the face of successive commissions that recommended that the European union transfer jobs to the African one. Only a risky initiative by Roan Selection Trust in 1954. threatening to withdraw recognition of the European union, broke the deadlock.

Orthodox Marxism has regarded colonialism as a means of generating super-profits (Lenin) or of resolving crises of accumulation (Luxemburg). Such theories portray the colonial state as an instrument of transnational capital. As we have seen, however, the colonial state possesses a distinct autonomy from international capital, so much so that the latter has to create its own 'company state' to guarantee the extraction of surplus value. How can we explain this anomaly? The distinctive function of the colonial state is to organize primitive accumulation so as to maximize the transfer of surplus to the metropolis. Merchant capital requires the colonized populations to produce for the market (for example, cocoa farmers in Ghana). whereas industrial capital requires proletarianization (for example, Southern Africa). The revenues of the colonial state emerge from and thereby reproduce the forms of primitive accumulation. The economic base of the colonial state is as weak as the surpluses it helps to generate are inaccessible to it. It is a limited state that cannot afford the costs of extensive infrastructure and urbanization. And so there is a separation of powers between the company state and the colonial state.

## The Convergence of Production Politics and State Politics

The very success of the colonial state in generating labour supplies leads to its demise, as capitalist relations of production become selfreproducing. With the stabilization of the towns and the degeneration of the rural areas, the colonial state can maintain its reason for existence only through the coercive reproduction of a system of migrant labour. A new form of state necessarily arises, responsive to the needs of expanded capital accumulation in a social formation dominated by a capitalist mode of production. It retains an increasing proportion of the surplus in order to build an infrastructure, to reproduce specific forms of labour power, and to foster indigenous capital accumulation. The new form of state, which in the post-war period was a settler-dominated administration, stands in opposition to the metropolitan state. 58 As the colonial state becomes less effective as a political mechanism for securing the transfer of surplus back to the metropolis, the latter relinquishes its control.

From where do the pressures for a settler state come? Baylies has analysed in great detail how primitive accumulation led to the formation of new classes, in particular settler farmers, settler entrepreneurs and white workers. 59 In alliance these classes managed substantially to increase their political power in the Legislative Council after the Second World War. They pushed through increased taxation of the mining companies and of the BSA Company's royalties, thus redirecting surplus toward the construction of a more self-sustaining economy. 60 The Federation of Rhodesia and Nyasaland, which lasted from 1953 to 1963, was designed to further independence from the Colonial Office and to establish a more integrated economy. For Northern Rhodesia the federation proved to be an economic disaster, because huge copper revenues flowed to Southern Rhodesia, and a political disaster, because it galvanized the opposition of African nationalism. During this period, the mining companies exercised little direct influence over the state except through the dwindling powers of the Colonial Office. Although the federal and territorial governments were subject to immediate pressures from the settler classes, they were at the same time becoming increasingly dependent on revenues from the copper mines. Accordingly, the Northern Rhodesian government was prepared to intervene in the industrial

relations of the mining companies in exceptional circumstances. In 1956, for example, it arrested strike leaders and proceeded to neutralize the African Mineworkers' Union as a political force.

Just as the settler state reflected an expanding accumulation of capital, with surplus being reinvested within the territory, political independence and majority rule formalized reintegration into a world capitalist economy. Surplus was now transferred back to the metropolis via economic mechanisms, while external political constraints became internalized as class forces. International capital developed ties to local capital through either joint or para-statal enterprises." The post-colonial state concerned itself with making the ex-colony attractive to foreign investment. Expenditure on infrastructure, such as roads, railroads and energy, rapidly increased along with the education and welfare budget. Nationalization of the mines in 1969 merely cemented the growing coincidence of interests between international mining companies and the Zambian state. It was announced along with a wage freeze, an official ban on strikes and an appeal from President Kaunda to Zambian miners to work harder and give up their colonial habits now that the mines were 'theirs'.

New relations developed between state politics and production politics. Because the company state was fragmented and the new production apparatuses were weaker, less extensive, and more autonomous from management, the state itself intervened to narrow the scope of purely industrial struggle. It introduced industrial legislation that protected the rights of workers, but within ever narrower limits. The Industrial Relations Act of 1971, for example, established works councils whose scope and power were so limited as to render them largely ineffectual as a means of collective self-management. They were a mechanism for the regulation and absorption of class struggle at the level of the firm. The new legislation also aimed to stamp out strike activity by making collective bargains legally binding and subject to ratification by a newly created Industrial Court. The implications for class struggle are clear. Under the colonial order the development of primitive accumulation led to the insulation of production apparatuses from state apparatuses and, as a consequence, the separation of production politics from state politics. Under the constraints of late development, expanded accumulation of capital led to the interpenetration of production apparatuses and state apparatuses and the rapid transformation of industrial struggles into struggles against the state.62

Earlier I drew attention to the failure of development literature to analyse the labour process and therefore to consider its relationship to politics and the state. But one exception stands out. Immanuel Wallerstein attempts to link what he calls modes of labour control and forms of state as they appear in different zones of the world capitalist system. He summarizes his argument thus:

Why different modes of organizing labour — slavery, 'feudalism', wage labour, self-employment — at the same point in time within the world economy? Because each mode of labour control is best suited for particular types of production. And why were these modes concentrated in different zones of the world-economy — slavery and 'feudalism' in the periphery, wage labour and self-employment in the core, and as we shall see share-cropping in the semiperiphery? Because the modes of labour control greatly affect the political system (in particular the strength of the state apparatus) and the possibilities for an indigenous bourgeoisie to thrive. The world economy was based precisely on the assumption that there were in fact three zones and that they did in fact have different modes of labour control. Were this not so, it would not have been possible to assure the kind of flow of surplus which enabled the capitalist system to come into existence.<sup>63</sup>

As both Skocpol and Brenner have stressed, Wallerstein's 'model' of the world system rests on a mechanical reduction of state apparatus to class structure, of class structure to mode of labour control, and of mode of labour control to technical possibilities and opportunities afforded by position in the world market. <sup>64</sup> Underdevelopment is the product of primitive accumulation, understood as the transfer of surplus from the periphery to the core made possible by the relative strength of states. These relative strengths in turn are dependent on the international distribution of modes of labour control.

Yet there is a certain plausibility to Wallerstein's logic, a logic we have in broad outline followed. We have argued that location in the periphery of the world capitalist economy generated cheap labour supplies based on a system of migrant labour and led to specific forms of the capitalist labour process whose reproduction required a particular set of production apparatuses. These in turn presupposed a particular form of state, to facilitate the transfer of surplus back to the core. Indeed, this was our mode of exposition, which started from the labour process and moved to the level of the state via the political apparatuses of production.

But such a functionalist logic does not explain how the various structures (labour process, production apparatuses and state apparatuses) come into being and change over time. Synchronic functionalist teleology is no substitute for diachronic causal analysis. Thus, the world market and technical possibilities cannot explain the change in production politics (mode of labour control?) from colonial despotism to bureaucratic rule, nor the transition from a colonial to a post-colonial state. Rather, these can be understood only as a result of class struggles, which were internal to the social formation and which led to the completion of primitive accumulation and the consolidation of self-reproducing capitalist relations of production as the dominant mode of production. Furthermore, such internal struggles reshaped, within limits, the form of the capitalist labour process (leading, for example, to the diminution of coercion and a corresponding increase in consent) and the form of international relations (away from direct political control and the repatriation of profits to direct economic subordination through forms of unequal exchange). Wallerstein's combination of teleological determinism and economic reductionism must be supplemented with causal-historical analysis. The relationship between production politics and state politics and the form assumed by each selects, at the same time that it is limited by, the labour process on one side and international forces on the other.

We saw how the attempts in January 1981 to subordinate production politics to state politics beyond the existing 'corporatist' arrangement foundered on the powerful collective resistance of labour, resistance nurtured by a production politics that stemmed from the labour processes of the copper mines. In neighbouring Tanzania, by contrast, state politics could impress itself on production politics more easily. There factories were smaller and labour less well organized during the colonial era, so that the Tanganyika African National Union (TANU), the single party of the one-party state, and the National Union of Tanganyika Workers, the governmentcontrolled trade union, could forge a direct link between apparatuses of production and those of the state. As a result, workers were even more sensitive to state policy than in Zambia, and the socialist ideals of the Arusha declaration provided ideological weapons for workers to extend class struggle. In particular, Mwongozo (the TANU guidelines for 1971) was the occasion if not the cause of a rash of strikes, leading in some instances to workers taking over and running factories.65 These were either directly suppressed by the state or allowed to dissipate of their own accord.

Tanzania represents a top-down control of production politics by

the state through the party and trade union — that is, a movement toward bureaucratic despotism. By contrast, the unusual situation in Algeria between 1962 and 1964, after the evacuation of the settler population, represented a movement toward collective self-management or autogestion. However, within five years autogestion had become a dead letter. In hindsight the outcome might appear as a foregone conclusion.66 First, autogestion affected only those marginal sectors of the economy that had been run by the colons. Worker control never touched the nationalized industries, such as the oil fields, nor many of the larger estates. Second, the success of worker control depended on protection and guidance by the state. Facing competition from large-scale private, often international capital and a legacy of debt left behind by the colons, worker committees became increasingly dependent on the government for finance and marketing as well as raw materials. This necessary centralization of resources provided the state bureaucracy with the opportunity to appropriate and distribute surplus in its own interests and thus to undercut worker control. The preservation of a colonial administrative structure, often staffed with colonial personnel, only accelerated the demise of autogestion. Finally, the workers and peasants themselves were economically, politically and ideologically unequipped to withstand the state's encroachments. Inasmuch as worker control brought few if any material

The destiny of autogestion was sealed by the workers' and peasants' failure to extend their control beyond the small businesses and farms they had inherited from the colons. In certain sectors the comités de gestion successfully controlled relations in production, but this was rendered meaningless by their inability to control the relations of production, at the level of relations among enterprises and between enterprises and consumers as well as of surplus distribution between the enterprise and the state. The conquest of the apparatuses of production becomes meaningful only in conjunction with the conquest of the apparatuses of the state. But when moves are made in that direction, as happened in Chile, for example, Third World governments always have the invited or uninvited support of international capitalism's political and economic sanctions.

benefits, it lost its initial appeal.

Thus, we see that the labour process and the international economic and political orders are the inner and outer limits on transitions between systems of production politics and state politics. Hitherto, attention has focused almost entirely on international constraints and modes of production. This chapter has suggested the importance of penetrating the mode of production to the hidden abodes of production, the organization of enterprises, the relations in production, and the constraints these pose for production politics and their relationship to state politics.

### **Notes**

1. Karl Marx, Capital Volume 1, Harmondsworth 1976, p. 279.

2. Baran, The Political Economy of Growth, New York 1957; Frank, Latin America: Underdevelopment or Revolution, New York 1969, chapters 1, 2.

3. Unequal Exchange, New York 1972.

4. 'The End of a Debate', in Imperialism and Unequal Development, New York 1977, p. 217. For a critique of Emmanuel and Amin, see Alain de Janvry and Frank Kramer, 'The Limits of Unequal Exchange', The Review of Radical Political Economics, no. 11, Winter 1979, pp. 3-15.

5. See Amin, Unequal Development, New York 1976.

6. Bettelheim, 'Theoretical Comments', in Emmanuel, Unequal Exchange, pp. 271-322; Kay, Development and Underdevelopment, New York 1975.

7. Kay, p. 54; see also Bettelheim, p. 302.

8. There is now an extensive literature critiquing 'underdevelopment theory' for inverting 'modernization theory' and thereby retaining many of the latter's assumptions, See, e.g., John Taylor, From Modernization to Modes of Production, London 1979; Lorraine Culley, 'Economic Development in Neo-Marxist Theory', in Barry Hindess, ed., Sociological Theories of the Economy, London 1977, pp. 92-117; Henry Bernstein, 'Sociology of Underdevelopment versus Sociology of Development', in David Lehmann, ed., Development Theory, London 1979, pp. 77-106; and Robert Brenner, 'Origins of Capitalist Development', New Left Review, no. 104, London 1977.

9. Warren, Imperialism: Pioneer of Capitalism, London 1980. For a critique of Warren's controversial work, see Emmanuel, 'Myths of Development versus Myths of Underdevelopment'. New Left Review, no. 85, May-June 1974; and Philip McMichael, James Petras and Robert Rhodes, 'Imperialism and the Contradictions of

Development', New Left Review, no. 85, May-June 1974.

10. See, e.g., Mahmood Mamdani, Politics and Class Formation in Uganda, New York 1976; Colin Leys, Underdevelopment in Kenya, Berkeley and Los Angeles 1975; Leys, 'Captial Accumulation, Class Formation and Dependency: The Significance of the Kenyan Case', Socialist Register, 1978, pp. 241-66; Ernesto Laclau, Politics and Ideology in Marxist Theory, London 1977, chapter 1; and Harold Wolpe, ed., The Articulation of Modes of Production, London 1980.

11. See Banaji, 'Modes of Production in a Materialist Conception'; and Banaji, 'For a Theory of Colonial Modes of Production', Economic and Political Weekly, no. 7, 23

December 1972, pp. 2498-502.

12. See, e.g., Norman Long, 'Structural Dependency, Modes of Production and Economic Brokerage in Peru', in Ivar Oxaal, Tony Barnett and David Booth, eds., Beyond the Sociology of Development, London 1975; and Harriet Friedmann, World Market, State and Family Farm: Social Bases of Household Production in the Era of Wage Labour', Comparative Studies in Society and History, no. 20, October 1978, pp. 545-86.

13. Mamdani, p. 145.

14. Ibid., p. 282.

16. Leys 'The "Overdeveloped" Post-Colonial State: A Re-evaluation', Review of African Political Economy, no. 5, January-April 1976, pp. 39-48.

17. Poulantzas, State, Power, Socialism, NLB, London 1978.

18. Hamza Alavi, 'The State in Post-Colonial Societies: Pakistan and Bangladesh', New Left Review, no. 74, July-August 1972, pp. 59-81; and Saul, 'The State in Post-Colonial Societies'.

19. Leys, 'The "Overdeveloped" Post-Colonial State'; W. Ziemann and M. Lanzendorfer, 'The State in Peripheral Societies', Socialist Register, 1977, pp. 143-77.

20. Such an emphasis underlies Amin's conception of socialism as 'self-reliance' and Clive Thomas's Dependence and Transformation, New York 1974.

21. Thus, Kay's emphasis on the role of merchant capital reflects his experience in Ghana, while those who write on Southern Africa, such as Arrighi, emphasize the importance of industrial capital. Reflecting the history of Kenya, John Lonsdale and Bruce Berman examine the changing relationship between the two forms of primitive accumulation ('Coping with the Contradictions: The Development of the Colonial State in Kenya, 1895-1914', Journal of African History, no. 20, 1979, pp. 487-505; and Berman and Lonsdale, 'Crises of Accumulation, Coercion and the Colonial State: The Development of the Labour Control System in Kenya, 1919-1929', Canadian Journal of

African Studies, no. 14, 1980, pp. 37-54).

22. The position adopted here is similar to Leys's view of 'neo-colonialism' as 'a system of domination of the mass of the population of a country by foreign capital, by means other than direct colonial rule' (Underdevelopment in Kenya, p. 27). The transition to post-colonialism corresponds to the reproduction of capitalism as the dominant mode of production without direct political subordination to a metropolitan country. A similar set of conceptions is implicit in the work of Emmanuel, Amin and Mandel, and in Fernando Cardoso and Enzo Faletto's Dependency and Development in Latin America. Berkeley and Los Angeles 1979. This is not to say that political relations among states are not important, but that they assume less significance with the consolidation of the capitalist mode of production in peripheral social formations. Apart from the work on Africa cited in this chapter, see, e.g., Peter Evans, Dependent Development: The Alliance of Multinational, State and Local Capital in Brazil, Princeton 1979; and David Collier, ed., The New Authoritarianism in Latin America, Princeton 1979.

23. Leon Trotsky, The History of the Russian Revolution, London 1977, p. 27; see also Trotsky, The Permanent Revolution and Results and Prospects, New York 1969, pp.

29-68.

24. See also Rosa Luxemburg and Nikolai Bukharin, The Accumulation of Capital -An Anti-Critique: Imperialism and the Accumulation of Capital, New York 1972.

25. 'Labour Supplies in Historical Perspective: A Study of the Proletarianization of the African Peasantry in Rhodesia', in Arrighi and Saul, eds., Essays on the Political Economy of Africa, New York 1973, pp. 180-234. Other studies of primitive accumulation in Southern Africa include Charles van Onselen, Chibaro, London 1976; Colin Bundy, The Rise and Fall of the South African Peasantry, Berkeley and Los Angeles 1979; Maud Muntemba, Rural Underdevelopment in Zambia: Kabwe Rural District, 1850-1970, Ph.D. dissertation, University of California, Los Angeles 1977; and Charles Perrings, Black Mineworkers in Central Africa, New York 1979.

26. Carolyn Baylies, The State and Class Formation in Zambia, Ph.D. dissertation,

University of Wisconsin, Madison 1978, p. 148.

27. Ibid., p. 123.

28. I am here following Baylies's important argument, ibid., chapter 2.

29. Elena Berger, Labour, Race and Colonial Rule, London 1974, chapter 3.

30. Robert Baldwin, Economic Development and Export Growth, Berkeley and Los Angeles 1966, p. 105.

31. 'International Corporations, Labour Aristocracies, and Economic Development

in Tropical Africa', in Arrighi and Saul, p. 124.

32. It would be interesting to compare, for example, the labour process under colonial despotism with the one in the Scottish coal mines under conditions of slavery.

33. This is recognizable even in the account of the compound system by one of its practitioners: F. Spearpoint, 'The African Native and the Rhodesian Copper Mines',

supplement to the Journal of the Royal African Society, vol. 36, July 1937.

- 34. George Chauncey, Ir., 'African Work Culture, Resistance, and the Evolution of Management Strategy for Labour Control in the Zambian Copperbelt, 1925-1945', paper presented to the Southern African Research Program, Yale University, 29 November 1979, pp. 12-13. See also Jane Parpart, Labour and Capital on the Copperbelt: African Labour Strategy and Corporate Labour Strategy in the Northern Rhodesian Copper Mines 1924-1964. Ph.D. dissertation. Boston University Graduate School. Boston 1981, pp. 98-99.
  - 35. Chauncey, p. 16.

36. Ibid., p. 16. See also Parpart, p. 67.

37. Chauncey, p. 17. See also Perrings, pp. 202-3.

38. Van Onselen, op.cit.

39. Parpart, chapter 2; Perrings, chapter 7.

- 40. Spearpoint, p. 38. As both Parpart and Perrings make clear, the different levels of stabilization reflect the different ore bodies and therefore techniques of production; see, e.g., Parpart, pp. 48-51.
  - 41. On the role of the police in labour control, see Parpart, pp. 64-70.

42. Chauncey, p. 26.

43. See A.L. Epstein, Politics in an Urban African Community, Manchester 1958.

- 44. I am here following Parpart's convincing analysis, which opposes both the official views attributing the early African strikes to outside agitators and subversive millennarian movements, and the more scholarly views that give prominence to Bemba tribal leadership or the effects of dual dependence on two modes of production.
- 45. The mines adopted a variety of strategies to encourage stabilization without proletarianization. Workers were permitted to take long leaves without losing their jobs and even to take leaves without pay. The pension scheme paid retired miners enough to live comfortably in a rural economy, but discouraged them from remaining in the towns, where living costs were much higher. See Baldwin, pp. 138-9.

46. See Berger, chapter 5.

47. The African Mineworkers Union was constructed from the top down. It was highly centralized, with initiatives coming from the leaders, reflecting the centralization of mining operations. Attempts to introduce grievance machinery and a system of shop stewards came to nought until 1963.

48. This section is based on a detailed study of the personnel department at one mine over a period of two years. It involved participant and non-participant observation as

well as extensive interviewing of personnel officers and line management.

49. Baldwin, p. 92.

50. Trist, et al., pp. 66-7.

51. This is the reverse of what Alvin Gouldner reported in Patterns of Industrial Bureaucracy. There Gouldner shows how the self-regulating groups appeared underground while on the surface bureaucratic patterns prevailed. This only highlights the importance of examining the political context of the development of the labour process.

52. Perrings, pp. 234-5.

53. The information on the strike comes from newspaper accounts and the minutes of the four meetings held between management and the union.

54. Strategy and Transaction in an African Factory, Manchester 1972.

55. Berger, pp. 40-1. See also Helmuth Heisler, Urbanization and the Government of Migration, London 1974, chapter 4.

56. Perrings, pp. 113-4.57. See Parpart, pp. 182-90.

58. Behind the claims that the colonial state is an instrument of international capital lies the assumption that the colonial state is an instrument of the metropolitan state. We have already questioned orthodox Marxism's first assumption; we are now questioning the second. For an elaboration of this argument, see Emmanuel, 'White-Settler Colonialism and the Myth of Investment Imperialism', New Left Review, no. 73, May-June 1972, pp. 35-57.

59. Bayliess, part 2.

60. Until 1935 the Northern Rhodesian government's income from 'Native Taxes' was greater than its income from the mines (ibid., p. 250). In 1947 taxes paid by the mining companies made up only 27.7 per cent of total government revenues, but by 1952 this had already risen to 57.5 per cent (Berger, p. 8).

61. Baylies (chapters 7-9) explores in great detail the changing relationship between

international, national and state capital.

62. For an account of the relationship between trade-union and nationalist struggles in Northern Rhodesia, see Ian Henderson, 'Early African Leadership: The Copperbelt Disturbances of 1935 and 1940, Journal of Southern African Studies, no. 2, October 1975, pp. 83-97; and Henderson, 'Wage Earners and Political Protests in Colonial Africa: The Case of the Copperbelt', African Affairs, no. 72, July 1973, pp. 288-99. The divergence between union and nationalist struggles has been explained in a number of ways. Thus, Epstein refers to the 'unitary' structure of the mine compounds and the 'atomistic' structure of the locations where the African National Congress was strong (pp. 188-93). But such an argument does not explain the convergence of industrial and political struggles after independence. Parpart argues that the 'decision to keep the union outside politics emerges as a pragmatic solution in an oppressive colonial context, rather than proof of the absence of political consciousness' (p. 256). There is little evidence to suggest that the colonial state was any more oppressive than the postcolonial regime. It was more the insulation of the company state from the colonial state than actual colonial oppression that structured the separation of struggles irrespective of political consciousness.

63. Wallerstein, The Modern World System, p. 87.

64. Theda Skocpol, 'Wallerstein's World Capitalist System: A Theoretical and Historical Critique', American Journal of Sociology, no. 82, March 1977, pp. 1075-89; R. Brenner, 'Origins of Capitalist Development', New Left Review, no. 104, London 1977, pp. 25-92.

65. For accounts of the relationship between production politics and state politics in Tanzania, see Henry Mapolu, ed., Workers and Management, Dar-es-Salaam 1976; Paschal Mihyo, 'Industrial Relations in Tanzania', in Ukandi Damachi, Dieter Seibel and Lester Trachtman, eds., Industrial Relations in Africa, London 1979, pp. 240-72.

66. I am here relying on Ian Clegg, Workers' Self-Management in Algeria, New York 1971.

# Conclusion: Toward a Global Perspective

We began with production; we must end with politics. What should we mean by politics? This is itself a political question. Definitions are not innocent.

Throughout this book I have distinguished between the labour process, as the economic moment of production, and the apparatuses of production, as crystallizing the political moment of production. By politics I understand struggles over or within relations of structured domination, struggles that take as their objective the quantitative or qualitative change of those relations. What then is the relationship between politics and apparatuses? Originally I wanted to claim a one-to-one correspondence between apparatuses and politics, such that apparatuses guarantee the production of a distinctive set of relations. In particular, the apparatuses of the state should guarantee the relations of production, while the apparatuses of the workplace should guarantee the relations in production. This, however, is patently not the case, as the apparatuses of the workplace are involved in struggles over wages and benefits - that is, relations of exploitation which are part of the relations of production. A better approximation might be that production apparatuses regulate struggles over the labour process and the valorization process — relations in production and relations of exploitation — while state apparatuses regulate struggles over relations of reproduction. Yet this departs from reality, as the state can be actively involved in the regulation of wages, benefits, working conditions, and even technology, and production apparatuses may regulate struggles designed to transform relations of reproduction, as when wage negotiations are tied to public control of investment.

Considering that there is at best\a weak correlation between apparatuses and the relations they regulate — that is, there is not a one-to-one mapping between the two — we must choose between politics defined as struggles regulated by specific apparatuses, politics defined