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Title: Nigerian Tin Mining and Imperialism: From the Niger Company to
 Atmn.

by: Bill Freund

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NIGERIAN TIN MINING AND IMPERIALISM: FROM THE NIGER
COMPANY TO ATMN

Bill Freund

As a number of writers have pointed out in recent years, (Kiernan, Warren), there are considerable problems in assessing the relationship between the rise of finance capital and imperial rivalry and conquest so narrowly juxtaposed by Lenin. In particular, evidence suggests that changes in the structure of capital in late nineteenth century Europe can only be correlated indirectly with the imperial forward movement in Africa. The two principal imperial powers involved in West Africa, Britain and France, were among the last capitalist states to witness the development of monopolies on the German model and there was much continuity with earlier patterns in the history of their advance into the interior of the continent. Even if we assume that narrowly economic motives were primary in motivating the Scramble for Africa, they cannot be understood purely in terms of *finance* capital nor can they be divorced from the fundamental capitalist labour and production process. Colonial expansion did correspond more precisely to significant technological changes in European industry, notably the rise of precision engineering (which formed the basis for great advances in weaponry) and the invention of a great range of cheap consumer products with new raw material requirements. Closely allied to these developments in turn was the so-called transport revolution.

The fundamental feature governing the conquest of West Africa by Europeans was the need for capital to overcome the barriers to its advance posed by pre-capitalist ruling strata that were unable either technologically or socially to accommodate such an advance. These barriers affected the possibility of realising expanded profits for capitalist production in Europe through commerce but they were even more consequential from the point of view of the development of capitalist production in Africa itself. This interpretation flows from a Marxist reading of A.G. Hopkins' *Economic History of West Africa*, in particular his discussion of commercial crisis on the West African coast from the 1870s. It also bears comparison with the recent assessment

by Marks and Trapido of the Boer War and Milnerite reconstruction in the Transvaal.¹

Before the dominant forms of late nineteenth/early twentieth century capitalism could establish any real purchase on tropical Africa, a transitional process needed to take place. This process bore some of the hallmarks of the long phase Marx had described for the West as primitive accumulation. In Africa, the beginnings of an equivalent historical development took place under the aegis of conquest and through interconnection with an already highly articulated capitalist system in Europe, giving it a somewhat different character. This process was dramatised through its rapidity and extreme brutality in the history of Leopold II's Congo Free State; elsewhere it took place more gradually. The deep involvement of finance capital impinged with particular intensity and success in the Congo because of the early exploitation of important mineral resources, well under way on the eve of World War I. Mining attracted much the lion's share of capital investment in colonial Africa as a whole and therefore deserves particularly careful attention in the history of capital penetration in Africa.

Economic necessity did not exactly determine the timing and organisation of the Scramble for Africa, however. From the point of view of capital penetration, much of the partition was premature and perhaps overly hasty. Political developments followed the specific course of crises in Africa and the rivalries of European states. Yet fierce as those inter-state rivalries were, it should not be forgotten that the conquest of Africa had as well a cooperative aspect. French and German investors and merchants profited after all from the British conquest of Nigeria or the Transvaal which placed capitalist enterprise on a sound basis, even though British capital might thereby derive particular advantages.

Northern Nigeria was rather typically an area conquered presumably from a strictly economic point of view. Its occupation from 1900 served above all to forestall French or German advances on the Niger and Benue. From the point of view of division of labour, of the commoditisation of a substantial surplus or the well-articulated social forms of a class society, the territories under the hegemony of the Sokoto Caliphate were among the most highly developed in all of Africa. However, they did not yield in 1900 an obvious surplus of desirable goods for Western industry, nor did they provide a ready market for imported articles of any great substance. The West African savanna was a difficult and unattractive prospect for coastal merchant firms to penetrate. Not for nearly a decade after its surrender to British arms in 1903 did Kano, the "Manchester of West Africa", receive the first canteens of the Niger Company and other big firms outside its walls; this required the construction of a railway from the port of Lagos.

The contrast is especially striking with Southern Nigeria. Whereas, in the south, the British administration could live

off customs revenue, primarily liquor imports, and even maintain at times a handsome surplus, its northern equivalent, even while forcing the peasantry to pay taxes at the onerous rates exacted by emirs in the past on a more systematic cash basis, ran a large deficit until the end of World War I. This was, of course the reason why North and South were amalgamated into one central financial unit in 1914.

The difficulties involved in converting the West African surplus into one that could feed the circuit of capital can be exemplified in the pre-colonial tin mining industry of Northern Nigeria.² As early as the *jihad* period, Muhammad Bello mentioned tin as a product of Ririwai in the *Infag al Maisuri* and it was no doubt mined for centuries before that. Tin mining was a specialty of the town of Ririwain Kano, in the extreme south of Kano emirate. In the mid-nineteenth century, a second Ririwai was settled further south under the jurisdiction of the emirate of Bauchi at the foot of the Jos Plateau escarpment. Other mining sites (and perhaps smelting sites) existed but it appears that little mining was done above Ririwain Bauchi (also called Ririwain Dalma) on the Plateau itself which lay outside the hegemony of Sokoto and had only marginal commercial links to the plains below.

Most tin was gathered in streams and washed but in Ririwain Kano, at least, there were underground galleries and systematic mining operations. Tin was smelted in the Ririwais and brought by merchants to craft centres, notably Kano, Bauchi and Bida, where smiths worked it into various objects largely for luxury consumption (horsegear, jewelry, ornamental plates). Smelter-owners (who also constituted the political office-holders of the smelting towns), merchants and the state, which taxed mining operations, shared the surplus. The social forms of labour working tin varied. Dependent household labour, wage labour and slave labour were all used. The two Ririwais were characterised by a high degree of specialised production but it seems likely that they were largely self-sufficient in food and even some handicraft needs. Tin mining was in good part a seasonal activity and it was largely incorporated into the household economy as a whole.

From the early 1880s, the Royal Niger Company agents on the Benue identified tin purchased from House merchants as a local product. This precipitated a substantial increase in mining and smelting in Ririwain Bauchi and sales expanded. Nonetheless, before imperial conquest, the tin resources of Northern Nigeria only moderately interested Western capital. The price on the Benue was too elevated to compete with supplies from elsewhere in the world, given the cost of transport, and surplus absorbed locally. In fact, following the conquest, local tin production was quickly undercut by cheap imported scrap from the West. Urban smiths came to depend on the like of cigar boxes for supplies. It was

moreover, impossible for human portorage (donkeys could also be used in the dry season) to bear a very substantial quantity of ore down to the Benue. The labour demands of large-scale tin workings required a huge workforce that pre-capitalist social structures in the savanna did not have available for the taking. The British did not conquer Northern Nigeria for its tin but it was only the conquest which made its exploitation, on a suitable basis for capital, possible.

Tin metal has a considerable range of uses in alloy and most of them hinge on the production of consumer durable goods characteristic of the "Second Industrial Revolution" of the late nineteenth century. This era saw a great extension in the use of the tin can, a somewhat earlier invention which proved fundamental in the modern use of the metal. Its relative scarcity precipitated a great expansion of world tin mining and made tin the most expensive of the commoner industrial metals. By 1870, Britain, principal tin mining and consuming country in Europe, was beginning to require extensive imports. As British tin consumption levelled off towards the turn of the century, US consumption continued to grow rapidly. Thus the financial prospects for new tin mines were excellent in the early years of the twentieth century. When in 1910 mining leases became available commercially on the Jos Plateau, dozens of syndicates were floated in London, behind which often sat cross-cutting directorates, which sought to share the risks involved in speculative mining ventures. By July, 1911, some £3m. had been placed in Nigerian tin mining shares on the London Stock Exchange and for much of that year they were the most actively traded shares.³ A second boom in 1913-14 brought the paper investment to some £10m. with some 200 companies involved. This investment, much of it strictly nominal, amounted to almost 100 times the actual profit earned from the mines in 1914.⁴

Needless to say, most of the money made in this era found its way to the pockets of stock-jobbers and financial swindlers. Without underestimating the importance of this stratum of capitalist activity, it is also necessary to recognise that nonetheless the speculation ultimately gambled on the real possibilities of Nigerian mining -- the extent of the tinfield, the technical quality of the deposits and the effect on the world market of Nigerian tin export. A newly-discovered minesfield in colonial Africa was especially susceptible to wild, uncertain speculation precisely because of the absence of "normal" conditions of capitalist reproduction and production. Indeed similar booms and speculative investment cycles had already taken place with regard to gold mining in the Gold Coast, Rhodesia and, above all, South Africa.

In the slip between investment and production, two historical actors were of central importance in colonial Northern Nigeria before World War I: the British colonial state and the Niger Company, the dominant trading firm in the region. The role of the state was absolutely vital in the creation of the tin mines or, to put it more accurately, the capitalist take-over of the mines. In my recent book, I explore that role in terms of the most salient concrete imperatives:

"1) the violent conquest of the Jos Plateau to prevent the indigenous population from interfering with the recovery and transport of tin, 2) the complete dismantling of the native Nigerian tin industry, 3) the creation of a large force of labour prepared to sell their labour power for at least a portion of the year to mining capital, 4) the provision of an extensive market in foodstuffs to feed this new work-force on the Plateau, 5) collusion to keep labour cheap, both from the point of view of world competition in the production and the establishment of a low common wage rate in the protectorate of Northern Nigeria, 6) construction of a railway, both to increase the speed at which tin could be transported from Nigeria and to enable a far larger amount of tin to be transported than the supply of human (and animal) labour in the country permitted and 7) the establishment of legislation dispossessing the local population of land and water rights in particular and creating the possibility of capitalist enterprise in general."

I do not wish to repeat the development of this argument in any detail here except to state certain points that may be derived from it. The first is the centrality of prizing loose labour on a massive scale from a pre-capitalist social formation where wage labour existed only marginally. Labour needs (and the cost of labour power) lay at the centre of most of the problems encountered in establishing the mining industry. This required the coercive power of a determined state initially and the setting forth of fiscal policies that would ultimately create a large labour market, free in the capitalist sense in that it was forced to procure cash for survival.

The labour needs of the tin mines were immense; before the railway arrived, more than 12,000 porters were required to bring tin to the railhead.⁵ A porter could bear a head-load of approximately sixty pounds but he could not be expected to carry metal every day of the year and the chairman of the Niger Company, Lord Scarbrough, estimated that the maximum tin that could be exported purely by head-load was 500 tons p.a.⁶ Yet despite the urgent necessity

for a railroad, no private company was seriously interested in building one. It was the state alone which could appropriate the necessary land rights and coerce the so-called "political labour" to construct it.

A second point which deserves stress because it is often neglected in studies of colonial rule in Africa was the importance of establishing a legal framework in which enterprise could operate. The British state in Northern Nigeria vested in itself the right to all land, justifying its actions through a strange mixture of *force majeure*, the claim that this represented the correct interpretation of Northern Nigerian Islamic custom and an acceptance of the dubious treaties purportedly signed by the emirs and representatives of the Royal Niger Company. This gave the state the right to authorise the expropriation of land and water for mining purposes, subject to compensation payments which were very nominal before World War II and handed, in any case, to chiefs dependent on the colonial regime for their jobs.

Mining companies were not, however, permitted to own land in freehold; they could only obtain ninety-nine year leases through the offices of the inspectorate of mines. The government was eager to minimise the amount of land alienated and imposed limits on the size of the leases. It was also keen to prevent land from being held for speculative purposes only or worked inefficiently. As a result, a company had first to acquire a mining lease and show that it had satisfactorily proved the ground before an EPL (exclusive prospecting licence) was granted. Even then, a company was required to demonstrate that a minimum of labour had been exerted on the EPL property to hold onto it. This "labour obligation" in fact proved extremely difficult to enforce. The minerals ordinance also discriminated racially, in insisting that the manager on the spot of a mining operation be a European. This bit of overt racism was eliminated from the statutes in 1926 but it was only after World War II that Nigerian petty bourgeois began to acquire EPLs. It was only on possession of an EPL that an individual or firm held the right to export tin ore to Europe, Nigerian smelters having been forcibly shut down by 1918.⁷

In this context, the social character of production needs at least some reference. Before World War I, the technical conditions of mining, despite the great extension of activity, were relatively unchanged. Operations were alluvial with traditional prospecting, carrying and washing techniques dominant. New discoveries depended very largely on skilled African prospectors. Apart from the railway, capitalist control of tin mining largely meant coercive control over land and export rights with little direct intervention in the production process. Indeed one can legitimately argue that with the divorce from local smithing and the ban on local smelting, production became more technically backward than before from a territorial perspective.

If capital was eminently successful in procuring labour, it had little effective control over that labour. Collusive efforts to push down wages before World War I failed. The hiring of gangs was in the hands of African contractors who alone knew the strength and numbers of the workforce. European supervision was immensely expensive and kept necessarily to a minimum.

These circumstances were ideal for an apparently paradoxical situation: the dominance of an old West African trading firm, the Niger Company, on the minesfield despite the fact that the company did not divert itself wholeheartedly into a mining operation. Until 1899, the company had a royal charter possessing governmental authority. Through some hard and rather questionable bargaining, the British state bought out the sovereignty rights of the company, which ceased being "royal". It was thereby able to reduce its share capital from £1.1m. to £319,000, which brought up profits as a percentage of capital invested from 2.8% in 1897 to 13.4% in 1899 and 19.4% in 1900 (over 20% in 1904 and 1906).⁸

Perhaps the most notorious aspect of Sir George Goldie's 1890 deal with the state concerned the company's supposed rights in Northern Nigeria. These were part of dubious treaties whose legitimacy was in turn used to justify the legitimacy of British rule. As a result, the state was therefore to pay the Niger Company half of all royalties, licence fees, rentals, etc. derived from mines in Northern Nigeria for 99 years. The company (and the successor United Africa Company collected royalties until bought out by the Nigerian government at the beginning of 1950. The total sum including the final sum paid out, amounted to over £3m.

Without minimising the significance of the royalty arrangement, it should not be allowed to obscure the importance of the Niger Company in other aspects of tin mining. Much of the impetus for this came from the Agent-General Walter Watts, who interested himself early in mining possibilities and secured a personal 15% commission on development of the tinfield. Watts then went to Sir Frederick Lugard, the man the government had entrusted with the conquest of the North and secured the private promise of a large concession of land for the company after the conquest.⁹ Lugard acted on this promise in 1902 following the Morland expedition which subjugated Bauchi.¹⁰ In fact, rival claims by then existed but, through its close links to Lugard, the Niger Company was able to prevail or buy them out. Its greatest rival was Sir William Wallace, formerly a company employee and now Acting Commissioner of Northern Nigeria. Wallace knew the area well and may have been the first Briton to discern the importance of the Benue tin trade in the 1880s. At first, he came to terms with the company, probably to his advantage. When he pressed a valuable claim in 1905 in the name of his brother-in-law,

the company cried scandal and had both the claim excised and Wallace ultimately removed from office.

By this time, the Niger Company had done much to investigate the prospects of Nigerian tin deposits and systematically established its right to extensive sections of land. The British government was flooded with conflicting and unsurveyed claims and was obliged to reorganise the minesfield and establish a land system from 1909. The pre-eminent role of the company, represented from 1903 by H W Laws, a mining engineer whom Europeans liked to call the "uncrowned king of the Plateau" was recognised and it received much the best of the early mining licences and then EPLs. The company had no right directly to sell this access to land; however it was able to use its blocking power to transfer the best pieces to producing mining companies for handsome considerations. As a result, the Niger Company earned large profits and special dividends following 1910. By the end of 1911, mining profits had reached £189,881 in cash, double the total outlay spent to that time.¹¹ Moreover, the company had extensive shares in the most successful firms and the director, Lord Scarbrough, had a seat on the board of many of them.

The Niger Company had, moreover, used to its advantage the commanding situation it held in internal transport. It served as the miners' transporter and purveyor of all supplies, organising the portage before the coming of the railway. It offered transport rates only over the entire distance from Jos, the centre of the Plateau minesfield companies, to Liverpool. At least one plan to form a rival transport system by producers failed as the Niger Company raised and lowered prices to fit the need of stifling competition.¹² It also provided the tools and other stores required on the Plateau and often established monopoly rights to canteens in the camps.¹³ The Plateau became a major sales outlet for it. One has as well to consider the profits that accrued to the company from the dependence of many miners on its engineering department's services. These were organised as Laws, Rumbold & Co. in 1914.¹⁴

Most importantly, the Niger Company provided for the basic financial needs of the cash economy of the minesfield. In this period, there was only one bank in Nigeria, the Bank of British West Africa, controlled by the company's great antagonist, Elder Dempster, the shipping firm. The Niger Company moved by 1910 into the business of discounting for the Plateau firms at the rate of 2½%, a particularly profitable business for them.¹⁵ The sum of cash advances provided mainly for wages rose from £93,031 in 1911 to £308,672 in 1913. It was entirely appropriate that the Niger Company was the main force behind the creation of a Chamber of Mines in Jos in 1910 and its reorganisation as a branch

of the Nigerian Chamber of Mines in London in 1912, the London chamber having at its head through these years none other than Lord Scarbrough.¹⁶

What we can gather from the situation of the Niger Company in the early phase of capitalist tin mining in Nigeria is a picture of the transitional character of capital penetration in West Africa even under the aegis of colonial conquest. The transformation of social and economic conditions that was required was enormous and, to the extent that it could be minimised for the time being, the older merchant firm was able to achieve a striking, if temporary domination. This in turn reflected the continued domination of pre-capitalist social relationships in the production process, not yet subordinated more closely to the needs of capitalist circulation.

On the eve of World War I, the Niger Company greatly extended its capitalisation. The war, after great initial strains, brought substantial profits as commodities became scarcer in Europe. The price of tin rose to unprecedented heights and tin assumed a larger and larger share in company profits and company financial commitments. These favourable conditions prevailed as well immediately after the war, when the price of tin reached unprecedented heights. The more spectacular then was the fall. By the time the bottom fell out of the tin market in the middle of 1920, the Niger Company was no more, forced to sell out as agricultural produce prices collapsed, to the firm of Lever Brothers, which had built an empire around the sale of soap.¹⁷ Lord Leverhulme had a passionate interest in Africa based on his conviction that Lever had to move into the field of direct production of the tropical oils on which its products were based. He had no interest, however, in the Niger Company's mining interests.

The Niger Company section of Lever Brothers (Unilever after merger with the Dutch margarine trusts) was renamed the United Africa Company. Absorbing several rival trading firms, it came to occupy as dominant a role in the Nigerian economy as ever the Niger Company had. From the Niger Company, the UAC inherited the royalty share benefits from mining. It sought to divest these in vain. It was the state which was unprepared to pay the price the company asked.¹⁸ The UAC also continued to retain an important position on the Plateau as general wholesaler and retailer. However, as prosperity returned to the tin mining industry in the mid-1920s, it was determined to sell all remaining mining property.

At this time, the Nigerian tinfield was divided into many small operations. In 1920, the last overall profitable year before the slump, declared profits had been £472,000 but this was divided between 105 operators, averaging a mere £4495.¹⁹ It was now realised clearly that Nigeria was no rival to Malaya as the world's premier source of tin. Nonetheless, prospecting had revealed the presence of important deposits in fossil riverbeds that contained substantial

amounts of tin ore but required the removal of an overburden of at least thirty to seventy feet. This in turn created the problem of intensified mechanical application and the introduction of electric power to mining.

Even before World War I, hydro-electric power appeared to hold some of the answers to the technical problems of the minesfield, as opposed to expensive imported oil and inefficient Nigerian coal. Plans to harness the fall of water from the Plateau escarpment proceeded slowly. The most ambitious firm was the Northern Nigeria (Bauchi) Company which obtained an option from Lord Lugard in 1917 for the construction of a hydro-electric plant at Kwall Falls, the rapids of the Ngell river.²⁰ These plans were put into abeyance during the 1920-22 slump but afterwards resumed on the basis of new negotiations with the government. The Kwall plant was finally opened in July, 1925. Despite its cost of some £250,000 it represented a profitable and important advance. Now imported machinery could be harnessed to producing tin ore at costs, on favourable ground, as low as in virtually any tin mines in the world. The water supply trapped by the plant allowed mine operations to continue throughout the year and the mid-1920s witnessed a spate of machine imports that brought total application to 6,300 horsepower in 1926 and 12,000 in 1928. In its wake, the machinery was accompanied by a large number of skilled workmen and entrepreneurs who established workshops in Jos, Bukuru and other major Plateau settlements. Conditions now had been created through which an interested capitalist bloc could take over the lion's share of tin production in Nigeria on the basis of controlling the production process itself.

The successful candidate for this position was a trust formed in Britain in 1926 under the direction of John Howeson called Anglo-Oriental. Anglo-Oriental had its central sphere of operations in Malayan tin mining. At the beginning of the 1920s, some two-thirds of Malayan production still remained in the hands of Chinese capital, although British capital dominated both smelting and financing. This picture changed dramatically while total production and productivity mounted through the introduction of expensive dredges, giant earth-moving machinery that created artificial pools allowing the electrically-operated shovels to work in slush, rather than hard ground. The dredge transformed tin mining in Malaya, the world's number one producer, but at the cost of making mining a substantially more capital-intensive industry and, as a consequence, especially sensitive to the trade cycle. Howeson's Anglo-Oriental companies came to control some one-third of Malayan production in the last years of the decade.

His position became even more formidable when he established an alliance with Antonia Patino, the dour Bolivian clerk who became the wealthiest Third World entrepreneur of his day. Patino's Bolivian mines were at that time

the principal tin mining operation in the world based on underground techniques. The seams were at first very rich but production costs in the Bolivian Andes were also high and, as Bolivian production expanded in the 1920s, the quality of the rock declined and dependence on high prices for tin grew. By this time, Patino had diversified his interests from Bolivian mining to British smelting. The expansion of tin smelting during and after World War I created excessive capacity that pointed as well in the direction of extensive production and high prices.

The shadow that loomed over Howeson and Patino was that of the 1920-22 slump, when tin prices had fallen drastically. At the time, the biggest British producers in Malaya had secured the consent of the colonial regime there to work for production cuts. This expanded into an agreement with the government of the Netherlands East Indies to create what was known as the Bandung Pool. For Anglo-Oriental, this had been a highly promising initiative which needed reconsideration when prices fell again. The Bandung Pool had embraced only the Netherlands East Indies and Malaya. Nigeria had stood outside it, as had Bolivia. The 1920s witnessed a dramatic extension of world tin production (including a 70% increase in Nigeria) and any fields were being brought into operation in Siam and the Belgian Congo, both with richer reserves than those known for Nigeria.

Thus the interest of Anglo-Oriental in Nigeria was essentially twofold. Primarily, its concern was control over world production with a view to influencing the price of tin. Throughout the 1920s, its trade journal, *Tin*, began each issue with the exhortation that the trend in base metals prices must always be upwards. As one enemy of this empire wrote "... the financial stability of the tin trusts was dependent on the realisation of the expectations of the boom years, and this involved a price above £200 per ton."²¹ The essence of the Patino-Anglo-Oriental alliance lay in the effort to preserve the value of money capital which stood as their financial scaffolding.²² Secondly there was Anglo-Oriental's interest in heavy machine production and the consequent technical potential for this in Nigeria, although it proved to be far less than in the case of Malaya, was unfolding in the middle 1920s.

Anglo-Oriental's principal rival was Herbert George Latilla, an Englishman who had emigrated to Rhodesia in the 1890s, gone into gold mining speculation and eventually established ties with Rhodes' old company, Consolidated Gold Mines of South Africa, and in particular with Sir Abe Bailey. Unlike other Rand ventures of its day, Consolidated was not sanguine about long-term prospects on its properties and tried from an early date to develop mining interests in other parts of the world and notably in Africa. It had interests in the Nigerian tinfield from at least 1910 and the possibilities for expansion in the

1920s seemed attractive. It was Latilla who bought out the last remaining Niger Company properties in 1925. Two years later, he successfully negotiated with the state for new hydro-electric works at Kurra Falls, which could make his Ropp Company the base for a strong position on the south - western Plateau.

By this time, Anglo-Oriental had entered the Nigerian lists, establishing Associated Tin Mines of Nigeria to acquire its first local companies in 1926. The following year it bought out Northern Nigeria (Bauchi) with effective control over Kwall Falls. By the time a new set of companies were consolidated into the London Tin Corporation in 1929, its position was commanding. Kurra Falls dam was completed the next year but by then Latilla had been brought to terms. He received a seat on the new Nigerian Electric Supply Company board, while Howeson became a director of Consolidated Gold and Consolidated bought Anglo-Oriental shares.²³ Anglo-Oriental then controlled some 40% of Nigerian production and 90% of hydroelectric power based production but it was only after the Depression, the consequently successful tin withholding practices put into action and the unprecedented boom of the middle 1930s that these operations were all consolidated into the Amalgamated Tin Mines of Nigeria, for some twenty years the largest single tin mining company in the world. At this stage, expansion ceased and the ATMN share of Nigerian tin production remained the same from the initial formation of the company to the 1970s. Middle producers, such as Latilla's Gold and Base Metal Mining Corporation, accounted between them for a similar proportion of total mining while "private miners", petty capitalists, dominated speculative and marginal holdings.

It is not proposed in this paper to consider later developments. Unquestionably the emergence of ATMN marked the achievement of a certain level of maturity in capitalist mining in Nigeria. Production was far more directly penetrated by capitalist methods. Ironically this presented serious difficulties for the future of the industry. When wages were driven down to the remarkable lows of the Depression, machine application diminished and expensive equipment was left to rust, unable to compete with miserably paid Nigerian labour. Tin production control tilted the balance in the commerce of Northern Nigeria towards peasant crop production more heavily than before.

This highlights the still tentative character of capitalist production in the country and the subordination of that production to pre-capitalist forms and conditions on Nigerian terrain. By the 1920s, after a generation of British domination, conditions for capitalist production and the direct intervention of finance capital were ripe on the Nigerian minesfield. The rise of Anglo-Oriental marked this intervention in the form of subordination

to the financial needs of a transnational corporation for which Nigerian mining operations were only a branch in an overall system that dictated local development in tin mining until the coming of national independence in 1960 and, to a large extent, afterwards. The strong extra-verted orientation and enclave character of mining development has to be related to the overall social conditions for production in Nigeria and their gradual transformation. This in turn provides the concrete context that needs to be studied in developing a theoretical approach to the history of capitalist development and imperialism in West Africa.

NOTES

1. Shula Marks and Stanley Trapido, "Lord Milner and the South African State", *History Workshop Journal*, 8 (Autumn 1970).
2. For this and other themes below treated in greater depth and detail, see Bill Freund, *Capital and Labour in the Nigerian Tin Mines* (Longman 1981).
3. Trigge to Scarbrough, 10 July, 1911, MS. Afr.s.85, Niger Company papers (henceforce NC), Rhodes House, Oxford (henceforth RH); A.F. Calvert, *Nigerian Mining Manual*, (London 1913).
4. *African Mail*, 8 December, 1916.
5. *Mining Journal*, IC, 2 December, 1912.
6. *African Mail*, 24 January 1913, Scarbrough to Secretary of State, Colonies, 17 May 1910, CO 446/94, Public Record Office, London.
7. The Minerals Proclamation of 1910 is discussed and reproduced in A.F. Calvert, *Nigeria and its Tinfields*, (London 1912).
8. MS. Afr. s.85, NC papers, RH.
9. Watts to Scarbrough, 8 August, 1910, MS. Afr.s.98, NC papers, RH.
10. *Ibid.*; Memorandum on Niger Company's Badiko Prospecting and Mining Areas, MS. Afr.s.89; Both NC papers, RH.
11. There are a variety of calculations in Scarbrough's handwriting in MS. Afr.s.89, NC papers, RH.
12. Trigge to Scarbrough, 6 January 1911, MS.Afr.s.89; Wallace to Scarbrough, 8 February 1911, MS.Afr.s.90; both NC papers, RH.
13. Trigge to Scarbrough, 16 July, 1914, MS.Afr.s.85; Alex. Cowan of Miller Bros., to Niger Company, 5 May 1913, MS. Afr.s.87; both NC papers, RH; Minute in Lugard to Secretary of State, Colonies, telegram, 4 July, 1918, CO 583/67, Public Record Office, London.
14. Trigge to Scarbrough, 16 July 1914, MS. Afr.s.85, NC papers, RH.
15. Trigge to Scarbrough, 17 December 1910, MS. Afr.s.89, NC papers, RH.

16. Jos Association meeting, 20 June 1912, MS. Afr.s.90, NC papers, RH.
17. Memorandum, 26 January, 1921, MS. Afr.s.101, NC papers, RH; *Mining Magazine*, XXII (6), June, 1920; Colin Newbury, "Trade and Technology: the Case of the Niger Company 1900-20", *Journal of African History*, XIX, 1978.
18. Thomson to Avery, 13 January 1927, CO 583/147, Public Record Office, London.
19. Nigeria. Mines Department. Annual Report, 1921.
20. Precis of Agreement, 19 September, 1916, Kwall Falls Power Scheme, 885/1916, SNP 9, National Archives, Kaduna; A.R. Cannin, "Alluvian Tin Properties Belonging to the Northern Nigeria (Bauchi) Tin Mines Ltd.", *Mining Magazine*, XVIII, April 1918, 180-82.
21. J.K. Eastham, "Rationalisation in the Tin Industry", *Review of Economic Studies*, IV, (1936-37), 30.
22. *Ibid.*, *passim*.
23. Consolidated Gold Fields of South Africa, "The Gold Fields 1887-1937" (house publication, n.d.), 125; *Mining Magazine*, XLI (5), November, 1929; XL(3) March, 1929; *Mining World*, January 4, 1930; Kurra Falls Power Scheme, 554/1926, JOSPROF 1/1; Press Criticism of Control of Tin, 18460; Control of Tin Cutout by Government, 14034 v.2, last two SNP 17/2; all Nigerian Archives, Kaduna.