

**MINERAL
EXPLOITATION:
AN HISTORIAN'S VIEW**



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By
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*Professor of History
University of Ghana, Legon*

*An Inaugural Lecture delivered at the University of
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GHANA is an important producer of minerals, and has been so for at least 500 years. The history of both the indigenous politics of the country, and the nature of early European involvement with those politics, is inextricably bound up with the history of Ghanaian (that is Gold Coast not ancient Ghana) gold production. In 1919, by which time the Gold Coast had dropped to a fairly low position in the hierarchy of world gold producers, diamonds were discovered; and there have been periods when Ghana was actually as large a producer by weight, though never alas in terms of value, as South Africa. Ghana also produces today bauxite and manganese in quite significant quantities. There can be no doubt, therefore, that mineral exploitation has been of great importance to Ghana in the past and will continue to be so in the future, especially if that dream of a major oil find, be it offshore or onshore, is ever realised. In other words, it is not hard to argue that the subject of the history of mining and mineral exploitation is a proper object for the attention of a scholar working in Legon.

The importance of the role of mining and metallurgy in history is freely admitted by every historian who has heard even the faintest whisper of the name of the dismal science of economics. Historians of the subject, however, are fairly far and few between. The reason, of course, is not hard to find. We have here a field which involves a certain grasp of technological factors for its proper appreciation. On the whole, and particularly in the British educational scheme of things, technologists have not written very good history—though more than one has tried—; and historians, lacking even ‘O’ Level physics and chemistry, have not showed the enthusiasm for technical matters in the 20th Century that was so characteristic of the first gentleman members of the Royal Society in the 17th century when Robert Boyle could be both, and at the same time, the uncle of the Earl of Cork and the Father of Chemistry.

My own interest in specifically African aspects of the mining industry was much stimulated by two events which took place subsequent to my arrival at Legon.

The first was the discovery that though the Ghanaian diamond industry is one of the world’s major sources of industrial stones, yet no full history of its origins and evolution has ever been attempted: the best account available, and one to which I would like here to acknowledge my debt, is by a geographer, Professor K. B. Dickson who has an excellent chapter on diamonds in his historical geography

of Ghana. The Ghanaian diamond industry is interesting for a number of reasons, not least because of the role that it played in the career of one of the greatest Ghanaians of modern times, the late Nana Sir Ofori Atta the First. Nana Sir Ofori Atta, among his many achievements, was one of the first, perhaps the very first, of traditional African leaders to win for himself a seat on the board of a major city of London mining finance house. In 1927, I think it was, he took it upon himself to visit his London office; and it was indeed an event which the City has never forgotten. From the Bank of England to half way up Coleman Street all traffic was sealed off so that Nana Sir Ofori Atta, duly escorted by horn blowers, linguists, drummers and umbrella bearers, could be carried in state to attend a special board meeting of his Company. The occasion, alas, was never repeated; a fact regretted by many who felt that Nana Sir Ofori Atta's performance was quite equal in its splendour to the annual Lord Mayor's show.

My second factor derives from a fascinating paper which Mr. L. A. K. Quashie of the Department of Geology of the University of Ghana delivered to the 1969 meeting of the Ghana Historical Society in which he introduced us to some of the technical background to the history of Gold Coast gold. Here again, and with rather less obvious justification than in the case of diamonds, the historian has perhaps not devoted the attention the subject deserves to a major aspect of Ghanaian economic history. Much, of course, has been written about Gold Coast gold; but we still lack a good technical study of the industry both in the early days when it was dominated by African miners and, for that matter, in the more recent period when the injection of European capital and technology made both large scale mechanical dredging and deep underground working possible. Mr. Quashie's paper was particularly intriguing to me as much for the questions it raised as for the facts it presented. It was clear that the African miners working the ores of the Birimain series had progressed from alluvial or placer mining to underground lode mining. Mr. Quashie even produced evidence to suggest that they were employing quite sophisticated methods for crushing and milling the gold-bearing rock. When did the great step forward from placer mining to lode mining take place? How much gold was actually produced by these methods? Who worked the mines and how many people were involved in the industry? And finally, why, having shown real technical ingenuity, were African miners appa-

rently unable to take the next step ahead and move on to modern machinery using local capital resources in the way that some of the Chinese tin miners of Malaya and Thailand had managed to do? This last point is particularly interesting because we know that in the second half of the 19th century a number of Ghanaians did in fact give serious thought to the matter and produced a number of projects of, on the face of it, great promise. It is worth noting in this particular context that more than a decade ago John Scarrisbrick, now Professor of History in the University of Warwick and the leading authority on the life of Henry VIII, while visiting Legon was so impressed with the implications of the kind of questions subsequently raised by Mr. Quashie that, with P. L. Carter, also from Legon, he undertook what he described as "An expedition to Wangara" to investigate at first hand African miners working alluvial deposits by techniques which must have been also characteristic of the age of ancient Ghana.

The historian of the mining industry, as I have already indicated, must somehow bridge the gulf between Lord Snow's "Two Cultures", the sciences and the humanities. In the process he may find himself wandering far in both space and time from his original starting place. Legon, indeed, provides already one good example of such a migration. Oliver Davies, who in 1935, as Lecturer in Ancient History at Queen's University, Belfast, published his classic *Roman Mines in Europe*, ended his career in Ghana where he had evolved into a cross between a geologist and an archaeologist, a two culture man if there ever was one.

The mining industry in the past as today can perhaps be divided into six major aspects. First, there is the question of prospecting, of the process of the discovery of minerals. Second, there is the actual technology of mining, or extracting the minerals from the ground. Third, there is the technology of concentrating, smelting, refining and so on, in other words, the conversion of the ore, the actual substance mined, into a usable product. Fourth, there is the whole question of transport, the moving of material, be it ore, concentrates, crudely smelted or refined material to the areas where it is to be worked into products. Fifth there is the whole question of marketing, of distributing the refined material to its consumers. Finally, there is the question of finance, of the provision of the necessary capital and fiscal incentives which make all the other aspects of the industry possible. Bear these six factors in mind when considering the extant

literature on what Bovill so charmingly described as “The Golden Trade of the Moors” and ask yourself how many of them have been covered in anything like a satisfactory manner.

This is not to say that scholars have failed to appreciate the interest of this particular kind of problem. A great deal of pioneering work has indeed been done. Bovill and Mauny are two names that immediately leap to mind; and it should also never be overlooked that historians in Legon have long been active in their interest in various aspects of this field for many years. I need not expand upon the inspiration which Professor John Fage has provided to his colleagues. Perhaps less well known is that my predecessor, Graham Irwin, himself an orientalist who turned to Africa, was a prime mover in having archaeology included in the Volta Basin Research Scheme which has provided so much data on northern trade. Professor Adu Boahen has written much on the problems of Saharan Trade; and in Professor Hunwick we have here an arabist and historian uniquely qualified to make proper use of the Arabic texts upon which we depend for so much of our understanding of early West African history before the coming of the Europeans. On the 17th and 18th century economic implications of Gold Coast mining we have the researches of Dr. Kwame Daaku and Dr. Albert van Dantzig. Groundwork is not lacking. What has not been done is to produce a history devoted specifically to the mining industry in all its manifold aspects.

Let us return again to the Golden Trade of the Moors—it is, after all, as good an example of the history of the mining and metallurgical industry as any other, and, moreover, one which should be familiar, if not to every schoolboy, at least to every First Year History student in the University of Ghana. Let us look at that trade from two quite different angles.

First, let us put ourselves in the position of the actual miners working the deposits of West Africa. Such evidence as we have indicates that the techniques used by the miners, whose precise identity is shrouded in mystery in the literary sources, was until fairly late in the story the simple applications of panning, that is to say washing gravel from gold bearing alluvial, or placer, deposits, using vessels of brass or iron or, more probably in the early days, calabashes. This technique is simple and requires the minimum of capital; but it is by no means ineffective and is still used for the extraction of heavy minerals from alluvial deposits in many parts

of the world. The gold bearing gravels, of course, might lie quite deep underground; and we have evidence of shafts descending sixty feet or more to reach the auriferous beds: but the methods of working were still, even in this kind of situation, essentially the same. Now it would seem, from a study of the working in more recent times of alluvial gold deposits by simple washing techniques, as in the 19th century California gold rush and later along the Klondyke and the beach at Nome in Alaska, yield tended to drop off quite rapidly with time. Gold was found. Miners rushed to the new deposit. There followed a few years of high yield when the richest deposits, the results of millennia of geological concentration were creamed off; and then the miners pushed on elsewhere leaving the field, if there remained any profit in it, to be worked by capital intensive enterprises employing sophisticated machinery like mechanical dredges.

One wonders whether the basic mechanisms of the gold rush as we have seen them in 17th century Brazil and 19th century America, Canada and Australia, were also at work in the alluvial goldfields of West Africa at an earlier age. If so, then as a working hypothesis to be tested by field research, one might suggest that with time there was a progressive shift eastwards and southwards of the centres of alluvial working from the headwaters of the Senegal to, ultimately, the Birimian and its associated alluvial deposits of the Gold Coast, the last stage of this evolution having been reached at a point in time not too far removed from that date in the mid 15th century when the Portuguese arrived on the Guinea coast. This last event, indeed, might not be unconnected with the beginnings of lode working. Such a hypothesis does not of necessity imply that the earlier workings were abandoned. Indeed, there is excellent evidence in many instances that they were not. It merely suggests that we would expect, on the basis of our experience of alluvial mining elsewhere, a progression of the centre of the richest production with the passage of time.

Second, let us for a moment consider what happened to the gold when it reached Sijilmasa and other caravan cities on the northern edge of the Sahara. Mauny estimated that in good years in the period between say 900 A.D. and 1400 A.D. or so this gold in quantity amounted to as much as 9 metric tons. I am by no means convinced by the reasoning on which he based his often quoted figure; but the plain fact of the matter is that this is about the only statistic we have.

So let us stay with it for a while. Did this gold, when it had passed into the general economic system of the Islamic Mediterranean world, all become jewelry? Are we to suppose that every year the weight borne by the ears, necks and ankles of Moroccan ladies increased by nine metric tons? Clearly such an idea is absurd. Some Sudanic gold was consumed in this cosmetic manner; but much probably the bulk, went into circulation as money in one form or another. The basic demand for Sudanic gold, from which one could argue the rest of the industry sprang, ought to be closely related to the monetary demand for bullion in the world of Islamic trade which, in fact, extended already in the 8th century A.D. from the North West corner of Africa all the way eastwards to Canton and other ports on the South China Sea. The eastern trade, which from at least the 13th century onwards underwent an accelerating boom, as recent archaeological research in sites as widely separated as the Persian Gulf, the East African coast and the Malay Peninsula makes clear enough, was basically a deficit trade from the point of view of the Islamic world of the Eastern Mediterranean and the Near East. In other words, merchants sailing from Red Sea and Persian Gulf ports purchased more from the East in the way of silks and spices and porcelains than they could sell in the East wares originating from or through their own home ports.

There was nothing new about this situation. The Elder Pliny, writing in the first century A.D., complained bitterly about the way in which the wealth of the Roman Empire was being drained off to the East, to India and China. Indeed, Pliny actually gives us some statistics to illustrate the magnitude of this particular balance of payments problem. India, Arabia and China between them, he tells us, were taking out of Roman circulation the equivalent of 25,000,000 denarii each year. The conversion of such a figure into meaningful modern term does present some problems; but a bit of rough pencil work on the back of an envelope caused me to believe that 25 million denarii worked out as the equivalent, the denarius of course being a silver coin, to about seven and a half metric tons of gold. If Pliny is to be believed, then this amount of bullion was leaving the Mediterranean for the east each year in the period 60 to 80 A.D. What would the figure have been for the Islamic half of the Mediterranean in 900 A.D.? And what for 1300 A.D. when the northern and Christian littoral of the Mediterranean, severed to a great extent from commercial contact with its southern and eastern parts by the

politics of the Islamic world since the 7th century, once more began to be an active participant in the trade of the Indian Ocean, even if indirectly? We have no reason to suppose that the deficit of Pliny's day had suddenly disappeared in the Middle Ages. The great developed economics of India and China continued to sell more than they bought; indeed, they went on doing so up to the end of the 18th century. A petition of Dutch merchants to the States General in 1611 puts the matter in a nutshell. "In many places goods must be sought for, not with other goods but with money, as is evident from the whole Eastern trade, which can only be driven from this side with money."

In Medieval times, at any rate, there can be no reasonable doubt that the Islamic traders of the Mediterranean and the Near East were running a deficit in their balance of payments with the further east, and one of considerable magnitude. Yet, as many a Minister of Finance in other times and other places has realised, somehow the books of the overall trade had to be balanced; as, indeed, it seems that they were. In part this was done by a complex pattern of local trade. In part it was certainly achieved through the export of bullion. There were, of course, a number of sources of gold and silver in Africa and elsewhere from which specie could be derived; but there are good grounds for assuming that the biggest single source was by way of the states of the Western Sudan, which may even have borne a similar relationship to the other gold sources of the Islamic world that the mines of South Africa bear to other gold producers today. If so, then the books of Islamic eastern trade in the year 1300 A.D. needed badly Mauny's 9 metric tons, a figure which one is now tempted to argue is a serious underestimate. At all events, with this general economic picture in mind it is not difficult to see why a banking house of the age of Ibn Batuta, with its headquarters in Tangiers, should have had the equivalent of branch offices in both Timbuctu and Canton.

By 1300 A.D., of course, we have evidence to suggest that it was not only eastwards into the Indian Ocean that Sudanic gold was being drained off, but also into Western Europe. If so, then we must think yet again about the validity of Mauny's estimate of 9 metric tons, and wonder once more whether this figure is far too low for at least some of the period between, say 900 A.D. and 1450 A.D.

The whole question of the history of medieval European coinage is clouded in darkness. As the editors of the 3rd volume of the

Cambridge Economic History of Europe put it, "unfortunately the field of monetary history is thinly held"; but from an appendix to that volume some interesting facts can be derived which have some bearing on our consideration of the destination of Sudanic gold. In Roman times gold was mined in a number of places but two sources would seem to predominated by the 3rd century A.D. One was to the East of Europe from the Danube onwards into the Ukraine and perhaps even the rivers of Siberia and the valleys of the Caucasus. Gold from these sources continued to reach Byzantium long after the Western Roman Empire had fallen. The Eastern Roman Empire was able, right up to the end in 1453, to mint gold coins. The other source was Spain which was a prolific producer not only of gold but of useful metals such as copper and mercury. By the 8th century A.D. the Spanish mining region in the general neighbourhood of Rio Tinto and Tharsis had fallen into the Islamic sphere of influence; but by this date the easily worked Spanish gold deposits would seem to have in any case to have reached the point of exhaustion. Moslem Spain, at all events, we are told, minted no gold coins in the 9th century; and from the 10th century onwards minted a gold dinar of the North African type which was surely made from Sudanic gold. The gold dinar of Moslem Spain had by the 11th century begun to be copied in Christian Spain; and in the 12th and early 13th centuries we have dinars and double dinars—the term alone is suggestive—being minted in Castille, Leon and Portugal. By this time, also, there had been a history of more than a century of gold minting of dinars in Moslem Sicily which was continued under the Normans and was used as a basis for the first specifically European gold coin of modern times—if we ignore Byzantine types—, the *augustale* of Emperor Frederick II of 1231 soon to be followed by gold coins issued by Genoa and Florence.

The increase in European gold coinage is generally taken to be an indication of what Friedmanite economists would call an increase in money supply in Western Christendom; and as such it certainly bears a close relationship to the origins of the Renaissance. Here, however, one must be rather cautious in drawing too general conclusions. By 1300 A.D. Western Europe was deriving gold and, which was probably rather more important to its economy, silver, from a wide range of sources. It is said that in late medieval times people were actually panning for gold along the banks of the lower Rhine. Central European silver output was on the increase. Italian

bankers had access to the gold reserves of the Byzantine world and the alluvial deposits around the shores of the Black Sea. One cannot try too seriously to attribute the economic revolution which lay behind the Renaissance to Sudanic gold alone. But it played its part. Above all, perhaps, it performed a crucial role in stimulating the Portuguese in their quest for access to the Guinea Coast.

May I now endeavour to draw some general conclusions?

If some of my assumptions are correct, it was demand in economically developed regions which, in the last analysis, stimulated supply. The great desire, still all too evident today, of Indians to hoard bullion, and the reluctance of the Chinese to buy foreign consumer goods, imposed upon the trade of at least the western half of the Islamic world those same deficit conditions which had earlier been noted by the Elder Pliny and which were to be the basis of many a political attack in the English Parliament in the 17th and 18th centuries on the activities of the East India Company. It is highly unlikely that the gold miners of Wangara, washing their gravel in calabashes, were aware that they were tied, so to speak, to a long economic chain which stretched all the way to Canton, and that their hard won gold dust would, perhaps, end up in helping to pay for the extravagances of the Yuan rulers of China and the Sultans of Delhi. Even if they had been so aware, they would not have been in a particularly strong position to dominate the trade in their product beyond the immediate territorial limits of their own producing areas. In other words, as has so often been the case in the history of mineral exploitation the producers have tended to be very much at the mercy of other people down the line leading to the consumer.

To illustrate this point further an example from oil industry would be useful, not least because the matter is one of the greatest interest to the developing nations of the world. In the last decades of the 19th century the Standard Oil Company, that extraordinary creation of John D. Rockefeller, came to dominate the oil production of the United States not because it controlled exploration and production—Rockefeller left these highly speculative operations to other more venturesome entrepreneurs—but because it had a virtual monopoly position in the transport and marketing of oil. If you did not sell your crude petroleum to Standard you were in trouble. The railways and pipe lines charged you a higher price than they charged to good Standard suppliers; and if you did not buy your refined kerosene from the Standard salesman you faced the risk of a price war with

some other dealer who did. The Standard monopoly in the United States was finally broken by government anti-trust legal action in 1909. The international oil industry, however, has continued to be run by what many would argue is a concealed monopoly of what are essentially refining and marketing organisations, the seven or eight major international oil companies allied with a few of the larger so called independents who, while competing fiercely between themselves, yet present a united front when dealing with the rulers of the oil producing countries outside the United States and the Soviet Union. Only last week this fact produced an interesting confrontation in Teheran where a group of the major oil producers of the Middle East, and North Africa, acting through their own attempt at a monopolistic union, the Organisation of Petroleum Exporting Countries, met a concerted delegation of the major oil companies across the conference table and demanded a bigger slice of the financial cake. We have yet to see what the final outcome of this will be—the interim result is so far a draw. Whoever wins, we can be sure that in the end it will be the poor consumer, you and I, who will pay through higher prices for our petrol.

Sometimes, today, the producers do have their little victories. There was recently an acute shortage of nickel and the free market price of this metal, so essential for nearly every aspect of modern industry, shot up from below £1,000 per ton to around £7,000 per ton. Even here, however, the big marketing resources of the giant of the industry, the International Nickel Company of Canada, soon managed to bring about a stabilisation of the situation which undoubtedly benefited it far more than the smaller independent nickel producers.

It has been argued that one answer to this situation would be the nationalisation, by the producing countries, of their basic resources. This, it is said, would help them control the price structure to the benefit of the producer; and we have seen this endeavour being executed in Zambia and no doubt about to be executed in Chile. Here, however, we meet a contradiction. The producing countries today are very often poor nations in desperate need of additional revenue for their own development. To them nationalisation means increased production; and the very threat of uncontrolled over-production can have a catastrophic effect on world commodity prices. Events in Zambia and Chile have certainly contributed to the recent plunge of world copper prices from over £700 per ton to

just above the £400 mark. Moreover, increased production raises another problem which was already implicit in the old alluvial mines of West Africa in the days of Ibn Batuta.

We have already noted the probable gold rush aspects of the early Sudanic alluvial mines. These rushes are really a reflection of one of the fundamental processes of modern civilization, the exhaustion of the most easily worked mineral deposits. The world output of minerals is rising at a phenomenal rate. It would seem that far more copper was mined between 1850 and 1900 than was mined from the beginning of the bronze age, over four thousand years ago and 1850; and five times more copper was mined between 1900 and 1950 than was mined between 1850 and 1900. The same applies to many other minerals crucial to that standard of living of the developed world which is slowly spreading into the developing world. Three consequences, interrelated, follow from this fact.

First, the grade of ore worked is in many cases becoming leaner and leaner. Miners fifty years ago would regard a copper ore with a 10 per cent metal content as pretty poor stuff. Today there are at least three major copper projects in train which propose the exploitation of ores containing less than one half of one per cent of copper metal content. These projects can only work on the basis of the most sophisticated technology which is so far concentrated in the research institutes of the most developed nations. The role of froth flotation in making it possible to raise world copper production from 13,000,000 tons in the period 1850–1907 to more than 80,000,000 tons in the half century 1907 to 1957, involves a technological revolution perhaps as important in the long term view of world history as, say, the discovery that coke could substitute for charcoal in iron production which was one of the pillars of the much studied industrial revolution of the 18th century.

Second, with leaner ores comes an increase in the scale of projects and the consequent rise in initial capital outlay. The Bougainville copper project now under way in Papua/New Guinea will involve, before a single penny is returned to the till, an investment of over £100,000,000 sterling. Developed and semi-developed nations like Canada and Australia find it impossible to raise this kind of money out of their own capital resources. How much more so does this consideration apply to the poorer nations of the developing world. Finance, as in the case of our ancient Wangara alluvial mines, must come from outside; and this fact has political and diplomatic

consequences which the statesmen of the developing world cannot afford to ignore.

Finally, mining is essentially the exploitation of a wasting asset; and it is on this consideration that I will conclude my lecture. Sooner or later, as again my hypotheses about the old Sudanic gold trader would indicate, any mine will become, if not totally exhausted, at least so uneconomic as to be barely worth the trouble of working. To the people further up the line, once more—though for many minerals even for these men the day of reckoning is not far off—the drying up of one source merely stimulates the search for alternatives. Indian diamonds were worked out by the end of the 17th or early 18th century. They were replaced by diamonds from Brazil which, in turn, gave way to the diamond fields of Africa; and looming over the horizon are the great diamond deposits of Yakutia in the Soviet Union. Meanwhile, all the time the laboratories are at work seeking better ways to make synthetic diamonds. The diamond consumers are in no immediate danger of a stoppage of supply. But in the rich Indian diamond fields of Golconda, where the French traveller Tavernier in the 17th century reported that there were more than 60,000 people engaged in the industry, there is now poverty and unemployment.

Some nations, like Sweden, have turned their initial good fortune in possessing mineral wealth to good use. To mix a biblical parable, they have unburied their talents and invested them wisely. Other nations have not done so well. The world is full of ghost towns which are the relic of past mining booms; and the distress of many the coal mining areas of even the most developed countries is but an example of this type of phenomenon. In the history of mining and mineral exploitation, I believe, there is much food for thought for the leaders of both developed and developing countries. The mineral resources of a nation are a gift of nature which should be studied with diligence and exploited with care and foresight. Wangara, which once I have suggested was one of the great centres of the world's gold production, now barely earns a decimal place in the statistics of the gold industry. The people who inhabit the headwaters of the Senegal and Niger rivers, unlike the Swedes, do not enjoy one of the highest standards of living in the world. The cities of the southern Sudan which once thrived upon the Golden Trade of the Moors, if they survive at all, are now backwaters passed by in the inexorable march of history.

Postscript

In this lecture I advanced rather tentatively the hypothesis that the mechanics of "rushes" for gold and other easily won minerals of high value like alluvial diamonds, which one can see so clearly in the 19th century history of Canada, Australia, South Africa and the United States, might also apply to circumstances in ages and regions more remote from the technological strains and stresses of the Industrial Revolution and its consequences. In the typical 19th century "rush" one can detect certain distinct phases. First, there is the period of initial discovery of the deposit. Second, and this may follow very rapidly upon the first phase, there is the "rush" proper, the flooding into the mineral area of large numbers of fortune seekers, often from diverse places of origin. Third, the "rush" at its height tends to create a situation of anarchy in which the working of the mineral deposit becomes increasingly difficult. Fourth, out of this anarchy the participants in the "rush", those who in the 19th century often called themselves "Diggers", would organise some form of local administration, usually at first without outside assistance and at times in basic conflict with established administration. This fourth phase could lead to one of two possible fifth phases. Either the deposit was rapidly worked out and abandoned or it increasingly presented technical problems which could only be overcome by capital intensive methods, the use of elaborate (and costly) machinery and so on. Thus the "rush" tended to leave in its wake either a ghost town or a relatively small group of mining companies financed by investors who had in most instances not themselves taken part in the actual "rush". My tentative hypothesis in the lecture was that an analogy to this mechanism might perhaps be applied to the social and political consequences of the discovery of alluvial gold in West Africa south of the Sahara, an event or sequence of events which we know took place but on which the documentary record is virtually silent.

Since giving this lecture I was able in March 1971 to visit the diamond areas of Sierra Leone. Had I done so before the lecture I would have been far less tentative in my hypothesis because in the Kono district of Sierra Leone one can detect in actual progress an African version of the classic 19th century "rushes". Koidu, the centre of the illegal diamond mining industry in Sierra Leone, cannot fail to remind one of the mining camps which sprung up in

the gold fields of California or Australia and the diamond fields of South Africa. The impact of the Sierra Leone diamond "rush" upon the established structure of the Sierra Leone administration has clearly been traumatic. Harder to detect but certainly present are social consequences at least as profound as the political. It is probable that Koidu is in its way as great a melting pot of peoples as ever were the classic 19th century "rush" areas. If one were to extend the "rush" parallel to Sierra Leone, then there can be no doubt that the diamond areas affected by it are now well into the third phase, that of anarchy, out of which some kind of order will emerge. This process should certainly be studied for it could well provide a living case history of the response of traditional African societies to "rush" conditions; and, as such, might well throw some light on the kind of social consequences which the earlier "rushes" must have produced in the period of the pre-European trans-Saharan gold trade. One would very much like to know, for example, precisely what effects the diamond "rush" in Sierra Leone, characterised by the influx into the diamond areas of large numbers of "strangers", foreigners to the region, has had on local tribal structure and, even, on local language and culture. A similar case history though on a much smaller scale, might also be found in some of the diamantiferous regions of Ghana.

A.L.,
February 1972

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