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SOME PROBLEMS OF CENTRAL ASIAN EXPLORATION EVERT BARGER

Tenth Asia Lecture, Meeting of the Society, 20 December 1943

I DEEPLY appreciate the honour which the President and Council have conferred upon me in asking me to deliver the Asia Lecture for 1943, but it is with some hesitation that I have accepted an invitation which I have done so little to deserve. Five years have passed since I was last in this Hall and had the privilege of giving you an account of some explorations in the Oxus regions that lie close under the Roof of the World. I have spent most of the interval travelling in the interior of China on business more urgent than the study of ancient civilizations, without books or instruments or opportunities for scientific research. I must therefore ask your indulgence, if what I have to say about the raw material of the history of Asia contains too much wide generalization.

The half century of Central Asian exploration which has just drawn to a close was a golden age of discovery. It will perhaps be known in the international vocabulary of science as the period of the *Asienforscher*, of great travellers, each of whom collected data belonging to the many different branches of learning which bear on the climate, physical geography, peoples, and history of the regions into which they penetrated. There were the Russians, Przhevalski and Kozlov; Hedin, the Swede, whose great volumes on the Tarim river and on the structure of Tibet provide much of the material with which we still debate about the desiccation of Asia; the French, under Pelliot, who secured a goodly share of the Tunhwang manuscripts for the Collège de France, long the fountain-head of higher linguistic criticism, inspired as it was by the genius of the late Monsieur Chavannes; the Germans, Richthofen, giant among geographers who have studied China, and Grünwedel and Le Coq, who brought back to Berlin an art gallery of Central Asian paintings; and the Americans, Pumpelly and Huntington, whose detailed field-work was mostly done in the Caspian regions in the early years of this century.

On the British side we may claim with pride one colossus of Central Asian exploration, Sir Aurel Stein, the grievous news of whose death reached us only a few weeks ago. His small and wiry figure has so often graced this

platform, bringing with it, as it used to seem, a touch of the ageless grandeur of High Asia, that it is hard for us to realize that he was mortal and will return no more. Few men's lives have been so brightly lit by the lamp of learning, fed by a restless passion for discovery; few explorers have laid future generations under so great a debt by the scientific character and exhaustive detail of their records.

With the passing of Sir Aurel Stein, the last of the Nestors of Central Asian exploration has left the stage. We can detect in the field-work of the last two decades an increasing tendency towards specialization. Filchner has put geodesists in his debt by his magnetic observations in Chinese Turkistan and Tibet; Norin has brought the technique of modern geology to the study of the shores of Lop Nor; there have been archaeological surveys and excavations, by the French Mission which has opened up the unknown country of Afghanistan to scientific research, by Herzfeld and Upham Pope in Iran, and not least by Soviet archaeologists in Russian Turkistan whose work is important but still imperfectly known to us; and Lattimore has made the tribes of the Gobi his special province. Specialization is no doubt necessary owing to the growth of modern scientific techniques and the more rigorous definition which the disciplines of our Universities have consequently undergone. We can hardly now for instance expect a geologist who goes to Central Asia to be interested in skull measurements, or a botanist to be conversant with the theory and practice of modern archaeology. But if our purpose is to analyse the human geography of Asia as it is, and to reconstruct it as it was, there is a danger that specialization may obscure some of those central problems which continue to call for the synthesis of evidence drawn from a number of widely scattered fields of inquiry or spheres of learning. Perhaps we stand at the end of an epoch in Central Asian studies. We may now need some new methods in the field as well as some fresh ways of thought in the study.

In choosing my subject this evening, I thought I might best be able to pay a tribute to Sir Aurel Stein, who delivered the first of this series of Asia Lectures twenty years ago, if I attempted to review one of the main themes of the history of Asia, the impact of the nomads on the settled peoples. I must approach this subject, which is hardly less fascinating to the geographer and the climatologist, with the methods of synthesis and ways of thought appropriate to the historian. But I shall try nevertheless to present it to you as a practical problem awaiting further exploration in the field. I propose to confine my discussion in the main to one area, broadly the regions between the Indus and the Oxus and between the Caspian and the Pamirs. If specialization has its dangers, and if we must for instance look at the facts of history and the evidence of archaeology in their geographical context, it follows that we must first confine ourselves, in examining any given problem, to an area sufficiently small and homogeneous to enable us to survey all the relevant factors, before yielding to the temptation to range widely over the map of Asia. I have chosen the territory of modern Afghanistan and its adjacent tracts, because, for reasons which I will explain later, I believe that future field-work is more likely to throw light on my subject in that area than in the Tarim Basin or elsewhere.

There is yet another and sad reason why I should speak to-night about some

of the outstanding problems of research in Afghanistan. The war has claimed as its victims not only Monsieur Hackin, the distinguished Head of the French Archaeological Mission, but also his accomplished wife and his chief assistant who were his constant collaborators. It was due to Monsieur Hackin's open-hearted generosity that, with the assistance of this Society, I was able to take the first British expedition to Afghanistan five years ago.

Mr. Codrington, of the Victoria and Albert Museum, who went out to Afghanistan in 1940, and who spent some months working in close and fruitful collaboration with Monsieur Hackin until the latter's return to Europe, is in a better position to appraise the twenty years' work of the French Mission than I am, as well as to suggest ways and means by which research in Afghanistan should be continued. You may however be able to gather from my discussion of a general historical problem something of what Monsieur Hackin has done to increase our understanding of the history of Central Asia. I wish that, in the shadow of such a loss, I could pay a more worthy tribute to the memory of a great orientalist and a great man.

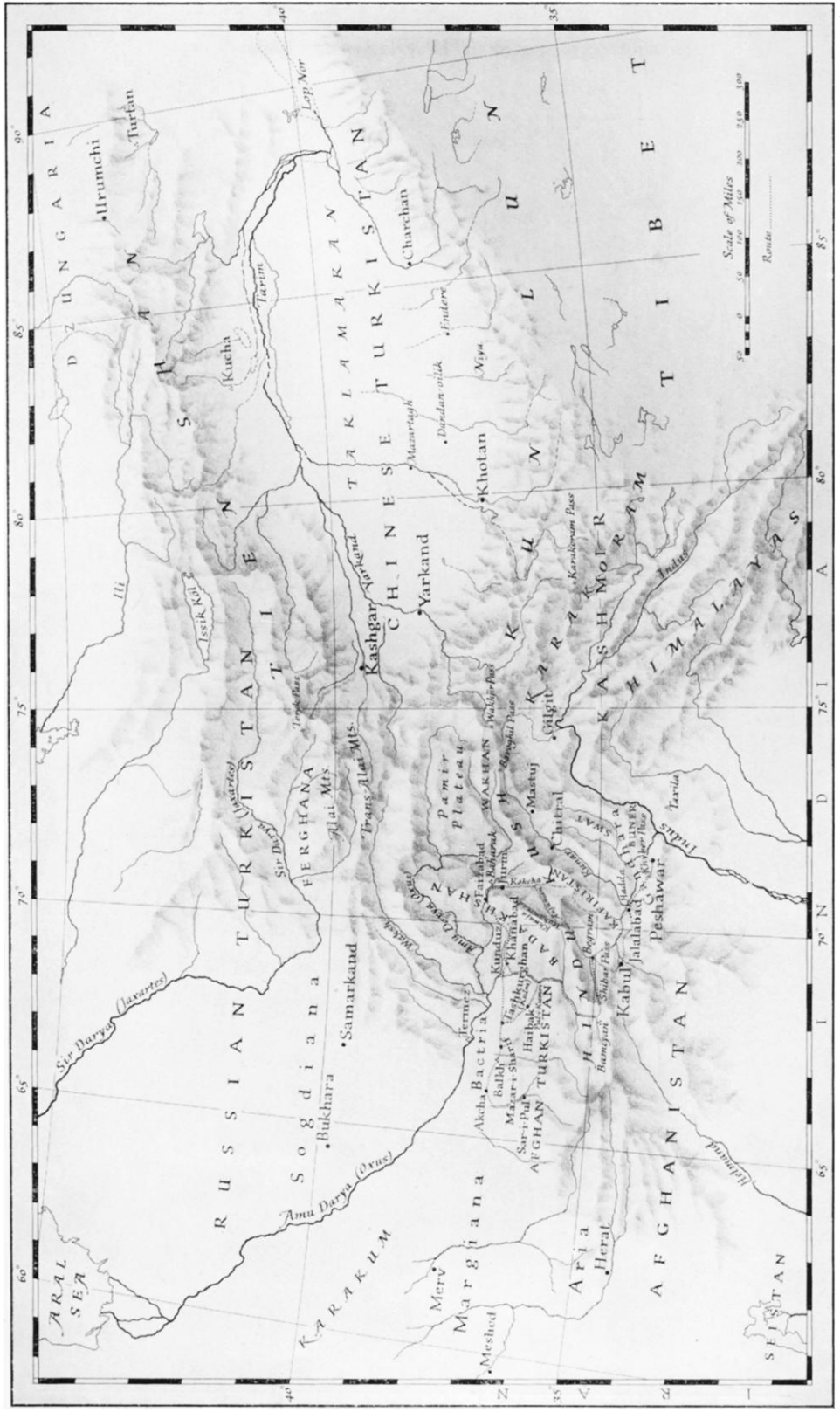
Whatever its causes or its meaning, the rhythm of the history of Asia is a striking fact. At irregular intervals barbarian invaders have surged across the frontiers of the Inner Asian steppe, as if driven by some unseen power. They have repeatedly overthrown the civilization of the sedentary peoples whose empires reach the fringes of the arid zone of the Continent in which only the nomad can live. The history of Asia is stamped with a pattern of destruction and reintegration; it would seem to turn on the interaction of steppe, desert, and fertile land. The stresses and strains of the conflict between nomadism and agriculture can be felt, at different times, as far from the heart of Asia as the Yangtze delta and the shores of the North Sea.

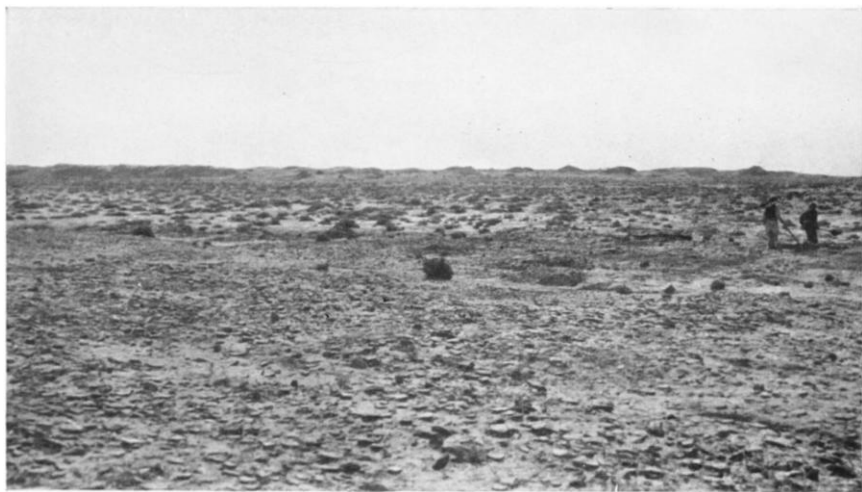
There are three main gateways from the steppe into the settled regions. The first is the plain between the Caspian and the Urals, which opens the way to the Black Sea and the Danube; the second is the region protected by the Great Wall of China and approached by the routes round or across the Gobi; the third is the Upper Oxus valley, which led across the Hindu Kush to India or westwards along the narrow rim of the Persian Desert to Mesopotamia and the Mediterranean. It is this central sector in the defences of civilization that I am in the main going to discuss this evening.

The oases which lie along the rim of the Tarim Basin, between the desert and the encircling mountains, form a fourth area into which the nomad hordes frequently penetrated. It is interesting to us because the archaeology of the Tarim Basin is better known than that of any other part of Central or Eastern Asia, and we can consequently study there some aspects of the impact of nomads on settlers in greater detail than elsewhere. But the passes across the Karakoram to India were not in use until comparatively modern times; and although silk caravans, Buddhist pilgrims, and occasionally even a Chinese army found their way across the Pamir massif, there was no route by which large-scale migration was practical. The Tarim Basin was not therefore a gateway on the main routes by which the nomads could break through to the great peripheral civilizations of China, India, and the Mediterranean. It was rather a sort of cul-de-sac in which we can feel the backwash of wider movements that can be traced across the map of Asia.

The first of the three exits from the steppe, that between the Caspian and the Urals, might at first sight claim our immediate attention in a study of the relations between nomads and settled peoples, because it was as a function of a vast and complicated movement in this direction that the Ancient World was overthrown. Much intimate study has indeed been devoted to the impact of the barbarians on the political and economic structure of the Roman Empire, and it is now possible to measure the contribution which they made to the genesis of feudal society. But although a well-known passage in Tacitus has often been interpreted in such a way as to describe the Germans of the first century A.D. as nomads, the fact is that the barbarians who overran the Roman Empire brought with them a far superior form of agriculture to any which the Mediterranean peoples had known or any practised in Asia to-day. The heavy eight-ox plough, with its elaborate concomitants of strip-fields and rotation of crops, the appearance of which in Europe is first chronicled in Pliny, is now agreed to be an invention of the European plains. This suggests that somewhere within the present frontiers of European Russia, but outside our ken, a fusion took place between the society of the Eurasian steppeland and that of the mixed forest which borders it on the north. It would therefore seem that generalizations about the impact of the barbarians as we observe it in our European sources would be a doubtful contribution to our discussion this evening. It is only rarely that the career of an Atilla, a Genghis Khan, or a Tamerlane precipitates the nomad horsemen directly into the floodlight of European history. Even then they appear on the European stage as an army rather than as a migrant people whose collision with a sedentary civilization we could examine in its economic or sociological context.

If we turn to the movements through what I have described as the second gateway, we shall at once be struck by the fact that the history of China is more susceptible to cyclic analysis than that of any other part of the map of Asia. The Empire of the Tangs reproduces, after three centuries of anarchy, the political shape and structure of the dynasty of the Hans. But the outlines of Chinese history immediately reveal that inner resiliency of Chinese society, of which we have had such striking proof during the last six years. Once the Nomad conquerors have penetrated the Great Wall and reached China proper, their numbers appear to be few and their rate of absorption fast. I do not wish to minimize the influence of their periodic waves of conquest and destruction on Chinese history, which has been so ably traced by Chinese scholars, nor their positive contributions to the evolution of Chinese civilization as we know it to-day. China proper however has always been a densely populated country where irrigated and intensive agriculture could alone keep so many millions of people within the subsistence level; open spaces where cattle or sheep could graze are few—to this day China has no dairy industry; the bands of nomads, whatever their military power, could not govern so complex an economy without China's learned bureaucracy and conservative political institutions, the age and vitality of which are perhaps the chief characteristic of Chinese history during the last two thousand years or more. Tribes of herdsmen could survive for a time as Governors and mercenaries; but they could not understand the complex problems of the soil and they could not master Chinese politics which have their roots in the struggle for





Ancient sites on the Oxus plain near Tashkurghan

Phot. J. Hackin



Ruined city of Khulm near Tashkurghan

Phot. J. Hackin



Ancient irrigation canals near Balkh

Phot. J. Hackin

subsistence. They soon lost their identity as anything which we could call a people, or, in the archaeologist's sense, a culture.

These limiting factors are not found in the same measure in the history of the regions into which the Oxus gateway led. Moreover in part of the territories of modern Afghanistan it is still possible to study a nomadic society at work and examine its relations with the cultivators of the fertile valleys and the traders of the urban centres. In Mongolia, as Mr. Lattimore has so clearly shown, nomad society is in course of decay or of violent transition, through the aggression of Chinese marginal agriculture on the one hand and of Soviet collective farming on the other. It seems unlikely that we shall again be able, when Mongolia is no longer a battlefield and the spasms of the present war are passed, to study a primordial pastoral society in the Gobi. In order to recreate against a living background what we can discover about the interaction of nomad and settler in history, we shall increasingly turn to the sector of our map between the Oxus and the Indus.

The area enclosed by the frontiers of Afghanistan offers most of the characteristics of the desert belt that spans the continent of Asia. Its centre is a high plateau of snow-fed grassland rising on its northern flank to the peaks of the Koh-i-Baba and the Hindu Kush. They form the divide between the watersheds of the Oxus, the Indus, and the Helmand which flows into the inland drainage basin of Seistan to disappear in salt lakes and marsh on the Persian frontier. To the east, the Hindu Kush is linked to the Pamir Plateau and the main mountain system of Asia; to the west of what I may call the Afghan highlands lies the Dasht-i-Kavir, the great desert of salt which covers so much of the interior of Persia. In Afghanistan to-day cultivation is possible only in the valleys and wind-eroded hollows, and the main source of foreign trade is still the skins of the karakul lamb.

It is however to the low northern plain of Afghanistan that I would particularly like to direct your attention to-night, the ancient province of Bactria, now called Afghan Turkistan, which lies between the highlands of the Hindu Kush, the Pamirs, and the river Oxus. This narrow tongue of the Eurasian steppe, now semi-desert but once the well-watered home of sedentary peoples, received the first shock of nomad invaders coming along the narrow belt of habitable country between the Tien Shan and Alai Mountains and the Caspian-Aral depression. This belt is characterized by fertile loess soil and watered by numerous streams from the adjoining highlands which account for the existence of many oasis settlements. Bactria, at the southern extremity of this marginal zone, has to-day all the semblance of desiccation. It may therefore be a sort of microcosm in which we may be able to study the rhythm of Asiatic history. It was also the meeting-ground, and at different times the outpost, of the civilizations of India, China, and the Mediterranean. For at Balkh, the Mother of Cities, the routes across the Pamirs from China met the road from India up the Kabul Valley and the route from the Mediterranean which followed the northern rim of the Persian desert. By these routes, passing through Bactria, Alexander took his armies to the Indus; Buddhism and the Hellenistic art of Northern India went to China; and, in the reverse direction, caravans of silk and spices reached the markets of the Roman Empire and later the palaces of Byzantium.

During the fifteen centuries between Alexander's explorations in the east and the conquests of Genghis Khan, who, according to all our sources, did his best to earn the title of the Great Destroyer, Bactria suffered seven or eight major invasions. I am going to confine myself this evening to this period from, say, 300 B.C. to A.D. 1250. The raw materials out of which we have at present to piece together the story of this part of Asia in this period are scanty. But before we can examine the impact of successive invaders or state problems for future research in the field, I must attempt to outline, in summary fashion, our existing knowledge and discuss the sources from which it comes.

For about the first three hundred years of this period, roughly the last three centuries B.C., Greek kings were ruling in Bactria and later in the Kabul Valley. A few episodes in their history are referred to by classical writers, but Strabo (A.D. 20) and Ptolemy (A.D. 170) were dependent in the main on a few route books, the details of which are often inaccurate and occasionally imaginary, and which are uncritically repeated throughout the works of the Greek and Roman geographers. They have almost nothing to tell us about the human geography of these regions. Our solid materials for these three centuries consist almost entirely of the coins of the Greek kings, some thousands of examples of which have reached our museums and private collections, nearly all through the agency of the Indian bazaars. Genealogies of the dynasties have been worked out with great ingenuity. But there is no flesh and blood in this story. Archaeology has as yet told us nothing of the Bactrian Greeks.

The Saka horde broke through from the steppe in the middle of what we will call the Hellenistic period (about 120 B.C.) and after creating some confusion in Northern India eventually settled in Seistan. From the first to the fourth centuries A.D. their successors on the trail from Central Asia, the Kushans, ruled an Empire from their capital at Mathura near Delhi, which stretched, in a commercial, and probably in a cultural sense, to the Hindu Kush and probably to the Oxus. And here we come to one of the strangest paradoxes in the raw material of the history of Asia as at present supplied to us by the archaeologist: not long after Hermaeus, the last Greek king who ruled any part of Middle Asia, was dead, and at a time when the barbarous hybrid coins suggest that all touch with the Mediterranean world had been lost, the Buddhist shrines and monasteries of the Indian frontier and Southern Afghanistan began to be filled with sculptures and friezes, many of them more Greek than Indian, which represent perhaps the most remarkable efflorescence of late antique art.

Can we make history of this rich and fascinating material for the period to which it belongs, say the first five centuries A.D.? In a broad sense perhaps we can: here, on the Indian frontier, in the first century A.D., under the aegis of barbarian kings not long come from Central Asia, we find what are probably the first images of Buddha in stone and plaster; here is the familiar Buddha figure which travelled along the desert highways to China, to be multiplied there in many forms without, for many centuries, entirely losing his classical profile or some of the conventions of his Greek dress. But if we mean by history something more precise than the passage across our map of cultural



Nomad encampment near Herat



The citadel, Herat

Phot. J. Hackin



River Kokcha near Faizabad



Gorge of river Kokcha between Khanabad and Faizabad

Phot. J. Hackin

influences, uncertain in time and even indefinite in space, or if we are looking for cause and effect, the answer is: No, we cannot make history of these materials. Let me attempt to explain why.

The contents of the monasteries of ancient Gandhara (roughly the Peshawar Plain, Swat, Buner, and the Kabul Valley) are obviously a provincial art of great virility, adapted to the requirements of Buddhist iconography without losing its Hellenistic or Roman identity in the Indian scene. It is an intrusive culture, but one which at present has, so to speak, neither top nor bottom. If we look backwards, Indian archaeology offers us almost nothing with which to span the gap of thousands of years to the Indus Valley civilizations, now so well known to us from the excavation of the prehistoric cities of Mohenjodaro and Harappa. Looking forwards, we discern, as we would expect, in the Bacchic scenes, heavily ornamented Bodhisattvas and barbarian warriors which cover so many of our Gandharan friezes, the immediate ancestors of those brought to light in the buried cities of Chinese Turkistan. Indian archaeology passes on to the firm ground of the Gupta period, but we can speak only of influences and not of continuity. The sands of Gandhara and of Greek empire in India had already run out.

Moreover there are other difficulties in using this material, which we encounter as soon as we approach the excavation of the sites. Until comparatively recently, almost all the Greco-Buddhist art of our museums was of uncertain provenance: it had been traded out of tribal territory or dug up by treasure-seekers or well-meaning amateurs. Owing to the labours of the French Archaeological Mission at Hadda and elsewhere in the Kabul Valley and of Sir John Marshall at Taxila, and in a much lesser degree to the excavations which Wright and I made in Swat in 1938 (the results of which are in the Victoria and Albert Museum), we have now a sufficient quantity of excavated sculpture to enable us to form some provisional conclusions about the essence of Greco-Buddhist archaeology. We now know enough of the context in which the sculptures are found and of their relation to one another to contradict a stylistic chronology by which the Greekish figures could be called early and the Indian ones late. It is true that certain iconographic motives and conventions which we find on our Gandharan material cannot ante-date their appearance in the Hellenistic art of the Mediterranean, and we have therefore a few *termini ante quem non*. But we cannot date a single piece of sculpture within one hundred and fifty years, or offer any alternative explanation of the evolution of Greco-Buddhist art based on anything more solid than considerations of style alone. Apart from coarse pottery, the objects found in the shrines are nearly all of a religious character. There is scarcely any meeting-ground between their contents and those of the mounds on the Peshawar plain (or of the one we excavated at Charbagh in Swat), except certain architectural characteristics which show that both types of site belong to roughly the same period. These mounds are secular sites, mostly village settlements. They contain terra-cottas, plate, beads, seals, pottery, and other domestic objects, some of which have parallels in Mesopotamia and Egypt or appear elsewhere in a datable context; but sculpture is very rare outside the monasteries and stupas. There has been hardly any scientific excavation of these domestic sites, except at Taxila, where the

stratification will not be altogether intelligible until we have the long-awaited detailed report of Sir John Marshall's work, which may also enable us to judge how far a provincial capital seat of the Indus was an average site.

One of the objects of the excavations and surveys we made in Swat in 1938 was to show on a map not only the remains of shrines, monasteries, and fortresses, but also of their dependent villages and terraced cultivations, dead for fifteen hundred years. We wanted to show the relation between domestic remains and areas of cultivation, in fact, to see what a small and perhaps typical area looked like in Buddhist times. We wanted to discover how such a large population—the seventh century Chinese pilgrim Hiuen Tsiang speaks of one thousand four hundred monasteries and eighteen thousand monks—was supported in those bare waterless valleys. If in the main we failed to recover much of the human geography of ancient times, it was because, even after the floor had been laid bare by the removal of enormous quantities of wrecked masonry and detritus, the cells and domestic establishments of the monks contained virtually nothing. Finds were practically limited to the stupa courtyards, and indeed they were only abundant round the remains of the small votive stupas usually at considerable distance below the ground. The only consolation that I have in offering such a negative conclusion is that Mr. Codrington, who examined these sites two years after our excavations, agrees that the archaeology of Swat offers little further promise for the future.

Briefly, from the standpoint of the historian, it comes to this: Greco-Buddhist art is in the main just a mass of sculpture, some more Greek and some more Indian, monotonous material if you like, any and all of which belongs, so far as our knowledge goes, to a period lasting for the first five centuries A.D. In drawing such a discouraging picture, I have over-simplified some very complicated and technical archaeological problems, in order to put before you the kind of summary conclusion that the historian is perhaps entitled to require of the archaeologist, when collecting material from many sources for the purposes of historical synthesis.

I have taken up so much of your time with the problems of Greco-Buddhist archaeology, because it is the chief source for the cultural history of Afghanistan during five crucial centuries, and because, enigmatic as it is, it points with singular clarity to Bactria as the stepping-stone in the passage of Buddhism and Buddhist art from the Indus to the oases of the Tarim Basin and China. Of visible evidence of this passage, we now have seven Greco-Buddhist stucco heads, which came to light a few years ago at Kunduz, 20 miles south of the Oxus, when workmen engaged in making an irrigation canal dug into a mound which proved to be a Buddhist monastery. Monsieur Hackin was at first inclined to regard these fragments, which are the only sculpture that has so far come from Bactria, as the prototype of the Gandharan Buddha. This reasoning which is of course based on purely stylistic data would place these heads in the period of the Bactrian Greeks, say in the second century B.C. I need hardly point out how important such a conclusion would be: it would mean that Buddhism spread to Central Asia some centuries earlier than we suppose, and that the Buddha figure, the invention of which had such momentous consequences for the art of Asia, was created

not in India, but in Bactria. Chronology based on considerations of style alone sometimes degrades the facts of history into matters of taste. Here I must agree with Mr. Codrington that the Bactrian heads are not easily distinguishable from much of the plaster sculpture we have from Hadda and other sites in the Kabul Valley—and Hadda is almost the only fixed point in our scheme of things, as a coin of Theodosius II (A.D. 401–450) has been found inside a wall. The apse of the monastery from which the heads came belongs, as Mr. Codrington will point out, to the same school as the architecture of Bamiyan, which, being Sassanian, is not older than the third century A.D. I do not think we can at present say more on this matter than that we now have evidence that the Greco-Buddhist art of Gandhara is also found in Bactria.

About the middle of what I will call the Gandharan period (A.D. 250) the Sassanids succeeded the Parthians as the wedge between Middle Asia and the Mediterranean. They maintained a shaky hold on the Oxus frontier against the nomads, until their own Empire crumbled before the followers of Mohammed (A.D. 650). The impulse from the steppe which precipitated the barbarians into the Roman Empire by-passed the Oxus gateway, partly because of the power of the Sassanid kings and partly because the Byzantine Empire held its ground. Western writers apparently knew next to nothing of what was going on in the lands between the Indus and the Oxus in this period. The Byzantine sources have however been insufficiently explored and related to the information we can draw from the Chinese annals during the intervals in which the Chinese were in direct control of the Tarim Basin. There remain three other pieces of archaeological evidence which complete the raw material which Afghanistan offers the historian in the pre-Islamic period. Each of these pieces is enigmatic, and cannot be confined within reasonable limits of time or space; and yet each of them, by increasing our knowledge of general cultural movements, points to unsolved problems, and tells us in some measure what it is we want to know, and, when we get into the field, what it is we want to find.

Firstly, there are the paintings which cover the caves of Bamiyan, a centre of pilgrimage which was evidently a sort of cross-roads, in the Hindu Kush to the north of Kabul. Buddhism, so far as we know, never penetrated the frontiers of the Sassanian Empire, which lay only a little to the west; moreover no painting of the Sassanian period has come to light within those frontiers, with the exception of a few remnants of frescoes found in Seistan. And yet, in a cultural sense, the art of Bamiyan is a Sassanian creation, which we find repeated, with some development, in the cave paintings of the northern oases of the Tarim Basin, the only other school of Sassanian Buddhist painting known to us. As was the case with Greco-Buddhist sculpture, the frescoes of Bamiyan and Turfan would seem to be an example of a wave of cultural influence from the west taking on new and ever revolutionary forms of expression in the culturally fertile lands to the north and south of Hindu Kush and gaining there, perhaps through contact with Buddhism, a new vitality, which carried it across the Pamirs to be a formative influence in the civilization of the China Road.

The two remaining pieces of evidence fall in the category known to the

archaeologist as hoards. The first is the so-called Treasure of the Oxus in the British Museum, which was bought by Sir Alexander Cunningham from Arab merchants in 1877. It is supposed to have come from the site of an ancient city just north of the Oxus not far from Kunduz. The other is the product of the excavations which Monsieur Hackin made shortly before the war at Begram (Kapisa) near Kabul. The Treasure of the Oxus, like the so-called Greek and Scythian treasures from the South of Russia and the Caspian now in the Hermitage, is a bewildering collection which includes Attic coins, gold Achaemenian ornaments, a Hindu figure, and Sassanian Persian plate, and other objects which were, so to speak, the artistic currency of this part of Asia during ten centuries. Monsieur Hackin's treasure, which was found in a mud-built room 10 feet square, in the middle of the site of a city otherwise barren (though there are several Greco-Buddhist shrines in the immediate vicinity), could all belong to the first or second centuries A.D. It consisted chiefly of magnificent Indian ivories, Mediterranean glass, and Pompeian bronzes (which are of precise date). Neither the Treasure of the Oxus nor Monsieur Hackin's hardly less remarkable finds are the stuff of which we can make history. They may be the remains of a palace treasure, a repository in time of invasion, or the collection, made possibly at a much later date, of some merchant with antiquarian interests who might, for all we know, have bought these objects in different places as souvenirs of his travels.

The period of which I have been speaking, dominated by the Kushans, came to an end in the fifth century, when the White Huns broke across the Bactrian frontier. They were soon followed by the Turks, and then by the Islamic invaders from the west. Our materials for the political history become much richer, especially during the tenth and eleventh centuries when Ghazni, in Southern Afghanistan, was the political and cultural centre of the eastern Islamic world. The Arab geographers provide us with itineraries of trade routes and lists and descriptions of cities. Some of these are drawn in a conventional mould, or even, on occasion, repeat some of the improbabilities of the Arabian Nights; but there were travellers like Istakhri, who gives us a first-hand account of a journey round the Caspian, and we shall hardly be far wrong if we say that the science of geography had now begun.

The chapter in the history of the barbarian invasions with which I am dealing to-night passes on to the Seljuk Turks, who followed the north Persian road to the Mediterranean and almost reached Constantinople, provoking a counter-offensive from the feudal states of Europe in the shape of the First Crusade. The highway which they followed through Khorassan is now strewn with the remains of their majestic monuments, built only a century or two after they passed that way as a plundering horde. The Mongols, who end my chapter, carried everything before them on a tide of destruction, only to create in the Oxus regions what are probably the most perfect flowers of Islamic architecture.

In attempting to trace through this sketchy material the impact of the steppe and the desert on the sown, as we see it in the successive waves of invasion which are the chief landmarks in the history of this region of Middle Asia, we must distinguish between three main types of invasion. First there



Exterior of ancient citadel, Kunduz

Phot. J. Hackin



Site of Buddhist monastery, Kunduz

Phot. J. Hackin



Walls of Balkh

Phot. J. Hackin



Buddhist monastery at Haiback, Afghan Turkistan

is the real migrant horde, trailing with them their women and children, their chattels and cattle: the passage across the width of Asia not only of a people searching for lands in which to roam or to settle, but of a political entity, and sometimes of a civilization which the archaeologist should be able to identify wherever it moves, in his own vocabulary, as a culture. To this category would appear to belong the Sakas, the Kushans, the White Huns, and the Seljuk Turks. Apart from the Kushans, who quickly became converted to Buddhism and presided over the civilization of Gandhara (and whose coins are plentiful over a very wide area), and the Seljuks, who went west to inherit the Caliphate, none of these migrant peoples has left any cultural traces that the archaeologist can follow. Their movements are known only from their depredations which found an anxious echo in the sources of the distant peripheral countries, India, China, and Mesopotamia. Invasions of migrant peoples are not however necessarily of this destructive and negative kind. Odoacer and Theodoric, though successively pushed into Italy by the land-hunger of their followers, wore the clothes of Patricians and tried to prop up the tottering structure of the Roman Empire. Even the Vandals were, as we now know, far from being the iconoclasts or savages which their name implies in modern speech. The second type of invasion is that of an army, without women and children, settling upon land which they have conquered. Such invaders are of course more rapidly absorbed, unless they represent a civilization of proved vitality and distinctive characteristics. To this class belonged the Greeks of Alexander, with their military colonies and urban ways of life, probably the sixth-century Turks, and some of the Arabs from the west. Finally there are the invaders who conquer territory merely to make it part of a far-flung empire, eruptions which bring no new population of settlers, but only a governing class content with political control and tribute. Such were the Mongols of Genghis Khan and the murderous expeditions of Tamerlane. The Mongols had of course a fixed capital at Karakoram, which Marco Polo has so vividly described to us, and the vast territories which their hordes overran were administered by means of a Turkish and Christian bureaucracy.

I have sketched the raw material from which we have to write the history of Afghanistan in ancient and medieval times, and I have told you what little we know about the invasions which make the rhythm of history on the Oxus frontier. I want to turn again to Bactria, to discuss some problems that may yet be solved by research in the field. Bactria shows all the signs of desiccation, so characteristic of the fringes of the desert belt of Asia, from the ruins of Palmyra to the abandoned cities and dead tamarisks of the Tarim Basin. There is no question at all that the plain now covered partly with sand and partly with thorn and camel-scrub supported a much denser population than it does to-day. The Chinese explorer, Chang K'ien (*c.* 130 B.C.), who first brought China into contact with the west and who gives us a cross section of Bactria in the last years of Greek rule, describes Bactria as a land of walled towns. He says that in Ferghana there were "fully seventy." Hiuen Tsiang (seventh century A.D.), another eye-witness, speaks of hundreds of monasteries, and the Arab geographers list numerous large towns with gardens throughout the whole of what are now the provinces of Afghan Turkistan

and Badakhshan. Of the visible evidence of desiccation, the landscape has all the familiar traces which, observed in the Caspian regions and in the Tarim Basin, inspired Huntington to put forward his dramatic theory of the periodicity of climate as an explanation of the history of Asia. Bactria is indeed covered with mounds, from many of which walls and towers protrude. The fortifications of Balkh, seven miles in circumference, enclose an enormous area of shapeless wreckage. There are ancient or medieval irrigation canals, and dried-up rivers.

I do not propose to discuss this evening Huntington's doctrines on the interaction of climate and civilization. Some of the important observations which he made when still a comparatively young student of geography in Asia, may have been lost sight of among the controversies which have surrounded his efforts to make climatic change in other continents a universal explanation of human history. The ruins in Bactria and the apparent signs of desiccation (as in other parts of Central Asia) are facts which the historian must account for, whether in terms of climatic change or of man-made geography. I cannot offer such an explanation, but I may be able to suggest some ways in which, through work in the field, an explanation might yet be attempted.

It must seem at first sight, as it did to Huntington, that the fluctuations in the levels of those four great lakes, the Caspian, the Aral Sea, Lop Nor, and Lake Balkash, which are formed by the main drainage system of Central Asia, would provide a rough-and-ready indicator of climatic change. Unfortunately, as we know beyond doubt from our historical sources, there were periods during the last two thousand years when the Oxus and the Jaxartes flowed not into the Aral Sea, but into the Caspian. And as the Caspian was also fed by the Volga, from a watershed in a climatic zone far removed from Central Asia, we can hardly press into service the evidence observed on its shores to prove, or, for that matter, to contradict theories about the desiccation of Central Asia. At periods when the Oxus and the Jaxartes flowed into the Caspian, the Aral Sea at one time disappeared altogether, but at another time appears to have formed part of the Caspian. The testimony of the ancient shores of Lop Nor is hardly of greater weight, for, as we now know, the Tarim estuary was a wandering lake which at different periods filled separate sections of the huge salt-encrusted basin. Of the four great lakes therefore only Lake Balkash appears to have had a continuous history which might enable changes of level, observed to-day by the geomorphologist or archaeologist or recorded in our historical sources, to reflect fluctuations in the amount of water coming down from a Central Asian watershed.

There are of course many other difficulties in interpreting the levels of lakes or the length of rivers as evidence of climatic change or as an explanation of the abandonment of settlements. The rivers which have their source in the highest mountain ranges of Asia are fed partly by glaciers and partly by precipitation on the slopes. A drier period with less rain or snow might at the same time be a warmer one in which more ice melted. I mention this as an illustration of the difficulty of making wide-ranging deductions about changes of climate, when the evidence is drawn from the history of rivers which, in their long course from glaciers to an inland marsh or sea, are sub-

ject to so many and variable influences, some physical and some of human agency. In his masterly contribution to the Centenary Meeting of this Society, thirteen years ago, Professor Penck showed how small a diminution in the discharge of a river may be the cause of considerable shrinkage in its length and account for the abandonment of settlements over a wide area. Professor Penck would however have been the last person to claim that the final word had been said on the problem of desiccation and climatic change in Asia. The evidence on which it was possible for Huntington and his disciples to draw was indeed too flimsy and ambiguous to support so heavy a superstructure of theory; but what it is difficult to prove, it is equally impossible, with the same inadequate data, to disprove. We need to know much more of the relation of the water systems of Central Asia to glacial conditions, of the behaviour of individual rivers, of the rate of evaporation in different temperatures and seasons, of diminution through soaking into the sand and into other soils, of the wastage of water through different systems of irrigation, of the effect of different saline contents on agriculture, and finally of the equation between irrigated land and population.

In Bactria we may have an area sufficiently small and self-contained to collect some of this data and therefore to throw some light upon the question of climatic change. The Oxus itself, if we are to believe the testimony of the Arab geographers, was not used for irrigation in this region. Bactria was watered by the rivers which flow down the northern slopes of the Hindu Kush, only one of which (the Kunduz river) now reaches the Oxus. The remainder dry up in the plain, although the remains of ancient settlements show, as in the Tarim Basin, that they formerly flowed farther from the mountains than is now the case. The watersheds of these rivers have no glaciers, so that our hydrographic problems are simplified in one important respect. Research here may be able to reconstruct some of the conditions of ancient settlement.

Of the archaeology of Bactria we know nothing but the unhappily barren results of Monsieur Foucher's excavations of the great Buddhist stupa outside the walls of Balkh. Before we can approach the question of periodicity or change of climate, we must put some of the signs of desiccation into a datable context. I have already given you reasons for supposing that these numerous mounds with which the plain is dotted cover the remains of a Greek civilization of walled towns; of Buddhist monasteries such as the one from which the heads I have already mentioned came to light accidentally a few years ago; of Sassanian fortresses or outposts perhaps not unlike the great castle that Mr. Pope has examined at Takht-i-Suleiman, on the western marches of the Sassanian Empire; and of early Islamic cities, described by the Arab geographers, which were probably destroyed by Genghis Khan. The astonishing outbreak of Greco-Buddhist art to the south of the Hindu Kush, some three hundred years after Alexander had settled his colonists in Bactria, can only be explained in one of two ways: either it was the continuation in an Indian background of a branch of Hellenistic art (now lost) in Bactria, or it may have been the result of a new wave of trade and cultural contacts along the frontier of the Roman Empire; both explanations may be true and would be warranted by the Gandharan material as we have it to-day. Whether the

Greeks built their settlements of stone, of brick, or of the mud of which modern towns consist, whether they were civic centres of trade and industry, perhaps on a smaller scale but of the pattern of Dura Europos, or whether they were military colonies, the technique of modern archaeology should be able to recover something more substantial than the many coins of the Bactrian Greek kings and of the Roman emperors which are still offered for sale to the modern traveller in almost every bazaar in Afghan Turkistan. The remains of crumbling mud walls and collapsed buildings which cover the top of many of these mounds are strewn with fragments of pottery, most of it of the splash-glazed type of which we can only say that it is Central Asian and early Islamic in date. How far below this early medieval surface-level other civilizations lie, only the spade can show.

My theme this evening was the rhythm of Asiatic history, the impact of the nomad invaders on the settled peoples. You have here in Bactria the landscape in which it may be possible to study the successive waves of destruction and trace the cycles of reintegration which everywhere follow the absorption of the nomads by the civilization of the settlers. The excavation of the mounds of Bactria may be able to provide us for each historical period with some definite archaeological norm, which we still lack in the archaeological complexes which I have described to you in Southern Afghanistan and on the Indian frontier. The excavation of even one Hellenistic forum, Parthian palace, or Sassanian castle, might give us a fixed point in time and a definite archaeological level, to which much of the material scattered over a very wide area could be related. I believe we are now more likely to have the good fortune to do this among the virgin mounds of Bactria than in the wrecked stupas of Gandhara or other sites on the Indian frontier.

If we can recreate with the spade some ancient settlements on the Bactrian frontier, the materials and methods are ready at hand with which to examine the problems of population and agriculture, to reconstruct the irrigation systems of which there are still many traces in close association with these mounds, and to apply the data to research on the hydrography of the Hindu Kush. A study of the present discharge, length, and use of the relatively short and independent streams which flow down the northern slopes of the Hindu Kush towards the Oxus, as compared with what we may estimate from our reconstruction of the conditions of life at different periods, would offer some evidence on the question of climatic change; such evidence would be free from complexities due to such variable factors as extent of glaciation and changes in the course of rivers which make the data offered by the lake-levels of Central Asia so difficult to appraise.

I remarked that Afghanistan was possibly the only country in which it was still possible to study a nomadic society at work. To-day we find feudal relationships even in the nomadically-conditioned tribal society of the central plateau: the ownership of public rights and duties appears to be bound up with the possession of the narrow but valuable land on the valley floors. What we can discover therefore of the water-supply of ancient and medieval Bactria, and of the use to which it was put, may tell us something of the political organization of the sites and settlements. If we may argue backwards from the political importance attached to irrigated land in modern

Afghanistan and place this evidence in a wider context, it may well be that the possession of the oases in the middle Oxus and Jaxartes valleys: Bokhara, Samarkand, and Merv, with the wealth of their irrigated fields, may have given hegemony over the frontiers of the steppe; in fact the walls of these oases may have played the same historical role in the defences of civilization as natural obstacles which the invaders had to surmount such as the passes over the Hindu Kush.

The panorama of nomadic invasion which I have tried to survey to-night on the Bactrian frontier is a hazy tale of destruction. I have been able to tell you almost nothing of the destroyers and very little about the peoples whom they destroyed. I hope however that I may have been able to turn your eyes towards the mounds of Afghan Turkistan and interest you in the problems of desiccation which may be explored in the valleys of the Hindu Kush. If I have not attempted to put before you any explanation of the pulse of Asia, it is because I am convinced that in the area which we have discussed only excavation and trained geographical observation can offer us materials with which we can write history.

I cannot close this address without asking your permission to say a few words about the future of scientific research and exploration in Asia. It would be sad indeed to let the interest of British scholarship in the regions beyond the Himalaya and the Hindu Kush come to an end with the passing of a generation of such distinguished pioneers. The object of this Society is the promotion and diffusion of geographical knowledge. It was largely due to its continuous efforts over the last fifty years that Schools and Chairs of Geography were established and that geographical science took its proper place in the curricula of our Universities. I fear that a similar effort, backed by the authority and prestige of this Society, may now be required if this country is to continue to take a worthy place in the field of Asiatic study and exploration.

I do not believe that any one could travel in Asia to-day without feeling how greatly the relations between East and West have been transformed by the impact of this war, even in countries such as Persia and Afghanistan which lie outside the main theatres of conflict. Expeditions from the West will no longer be welcomed in Asia, if their purpose is to bring the historical treasures of the East back to the museums of Europe. It is right that this should be so, for these countries value their own cultural heritage and it is natural that they should wish to keep the results of exploration for the training of their own students and scholars. This training has been grievously handicapped in the past by the fact that so much of the excavated material and so many of the manuscripts necessary for teaching and research were lying in the museums of Europe and India. On the other hand, the countries of Asia will be greatly in need of technical assistance from the West in developing their assets after the war; it will be a great pity if we only offer them assistance in the search for oil and other material resources, and do not give what help we can towards the understanding of their own civilizations of which they are so justly proud. The Chinese have made a remarkable beginning in modern scientific archaeology by the systematic excavation of the prehistoric sites at Anyang under the direction of Professor Li Chi, and I

have observed at first hand much research that is being done on the Central Asian manuscripts in the Universities scattered throughout the back regions of China. In Kabul the Afghan Government have spent a great deal of money and effort in building and arranging a museum in which their treasures may be worthily housed. In Persia I have also observed an earnest desire to bring about collaboration between Persian scholars and scholars from the West who are working on Islamic sources.

How can we offer the peoples of Asia the scientific collaboration and assistance which they seek in the understanding of their geographical environment and historical background, so essential to the solution of many of their problems of to-day and to-morrow? This is a question of very wide significance, for it would be difficult to imagine any better way of putting cultural relations on a sound footing than by offering this practical assistance. We have now a great opportunity, which may not recur, of strengthening our cultural ties, especially with Afghanistan. We are indeed under an obligation, because we have here in London in trust much of the comparative material so indispensable for future research in Asia. What we lack is anything that could be called a base for teaching and research or for future expeditions in the field, such as may be found in several American Universities, and such as the Musée Guimet in Paris was with regard to work in Afghanistan. If that is the goal towards which we must work, it is obvious that it may take some time and a good deal of money to create the necessary organization and facilities. It is a question of national importance, and ultimately one which is in the main perhaps the responsibility of the Government. In the meantime, as a first stage, I hope that the learned Societies may pool their wisdom and resources and consider in a practical spirit what can be done now to promote exploration and research in Asia. I hope that in such an effort this Society may take a leading part.

DISCUSSION

Before the paper the PRESIDENT (The Rt. Hon. Sir GEORGE CLERK) said: Mr. Evert Barger is an historian and archaeologist as well as a distinguished geographer and traveller. In 1938 he made an expedition into northern Afghanistan, and in February 1939 he read to the Society a paper on his exploration of ancient sites in Bactria. Then he went on a more ambitious journey farther east: a journey soon, unfortunately, interrupted by the war. During the last four years he has been with the Chinese armies, and he has recently arrived in this country by air from Chungking in connection with the task he has been carrying out there. I may say, though he himself is too modest to admit it, that he is a Colonel in the Chinese armies and is doing very valuable International Red Cross work. After he has completed his mission in London he will be returning to China. We have been so fortunate as to be able to take advantage of his presence in London. That is why we have, so to speak, interpolated this, the Tenth Asia Lecture, which Mr. Barger is about to deliver, on "Some problems of Central Asian exploration."

As you all probably know, the Founder of the Asia Lecture was Mr. P. L. Dickson, a Fellow of the Society. I am sorry that in these days difficulties of locomotion and remoteness from London will not allow him to be present to hear what I am sure will be a most interesting paper.

Mr. Barger then read the paper printed above, and a discussion followed.

The PRESIDENT: Mr. Codrington, head of the Indian Department of the Victoria and Albert Museum, has been a fellow-worker in Afghanistan. We shall be glad if he can make any comments on the lecture we have heard.

Mr. K. de B. CODRINGTON: Mr. Barger's survey of the present state of Central Asian studies is timely. He is perhaps a little hard on those of us who concern ourselves with the art of these regions. We are beginning to know a little about western influence on India and can draw attention to some interesting comparisons, even with regard to the old, and rather stale, problem of Gandhara. It is not untrue to say that science suffers from two major vices. The first is specialization, though it is not a vice my generation has been encouraged to develop. Sir Aurel Stein owed as much to the enlightened patronage of the Government of India, as to his own courage and determination. It is worth remembering how thin the spider's web of traverses is upon which our knowledge of Asia depends, and how long ago some of them were plotted. There is plentiful room for the specialist, if he can be sure of a patron. The vice of generalization is more difficult to control. So much of geographical description has been hung upon an entirely abstract terminology. We talk of the sown and the desert, forgetting that man makes the desert blossom, just as he, not seldom, creates a desert around him. The real distinction lies in the soil. Man can make soil, but if he neglects husbandry or is mistaken in his methods, he can easily unmake it and let in the desert. There is no such thing as Nomadism, though there are many kinds of Nomads. They find their living-space within the framework of the settled districts. Archaeology is almost entirely confined to the settled areas, though it is not true to say that the Nomad has no history. It is only that his history is more difficult to get out. My own approach to these problems is through the soil, for man can only live where he can live, and in the long run, his fields remain his fortune. A cataclysmic history of invasions or dramatic alterations of climate do not account for the facts of archaeology.

I am glad that Mr. Barger has paid a tribute to the great interest taken in these studies in the East. The best form of what are spoken of as Cultural Relations is, perhaps, scientific work carried out in terms of cooperation. I have been wondering if your Society, of which I am not a Fellow, would not do well to set up a committee to investigate the possibilities of research after the war.

The PRESIDENT: We have had a most interesting paper which you will agree is well worthy of the standard of the Asia Lecture and not less interesting have been Mr. Codrington's comments. With regard to the lecture, what appealed to me immensely, probably an inheritance from childhood's romance, was that slide of what might well have been a brass in Canterbury Cathedral. That seemed to me one of the most interesting things I have ever seen. But that is by the way.

What has come out of the discussion of this very important subject is the point that I am sure we all have in mind in this Society. Personally, I entirely agree with our lecturer when he says that hereafter excavations must be made not to obtain treasures to bring to England to our museums. We must use our knowledge and experience to help those countries where the treasures exist to recover them and to have their own museums and show their own history.

This is war-time and we can do little or nothing at the moment, but I look forward, when the war is over, to seeing this Society, in conjunction with other scientific societies, carrying out its mission of the spread of geographical knowledge very much on the lines Mr. Barger has described. In those days I hope that the young men of his generation will be working for the honour of this

Society and for the benefit of the countries to which they are giving their services, and our part may be both to squeeze a hard-pressed Treasury, and seek other ways to provide the funds for which those explorations will call.

It only remains for me, on your behalf, to thank our lecturer for his paper and Mr. Codrington for his valuable observations.

THE EXCLUDED AREAS OF ASSAM

SIR ROBERT REID, K.C.S.I., K.C.I.E.

Evening Meeting of the Society, 7 February 1944

THE title "Excluded Areas" which has been given to this paper is, I need hardly say, indicative of nothing forbidden or mysterious, but is a purely official phrase taken from the Indian Constitution Act of 1935. It is the lineal descendant of the older phrase "Backward Tracts," and means that the areas enumerated as such in the Government of India (Excluded and Partially Excluded Areas) Order 1936 are excluded from the operation of the said Act. They are directly administered by the Governor, and the elected Ministry have no jurisdiction over them. Finance however and staff have to be found by the province as a whole.

A feature of the Excluded Areas of Assam which differentiates them from Excluded Areas elsewhere in India, is that they form a block, irregular in shape if you like, and far from compact, but a continuous block, on the borders of and within Assam itself. In other parts of India Excluded Areas are in comparatively small packets, islands in "included" areas, and therefore difficult to treat on special lines. The map explains my point, I think, as clearly as need be. Along the northern boundary of the province we have Balipara Frontier Tract and Sadiya Frontier Tract: along the eastern boundary we have Tirap Frontier Tract,¹ the Naga Hills District, Manipur State, and the Lushai Hills. These, with the exception of Manipur, which of course is an Indian State under a ruling chief and therefore outside the Constitution altogether, are all Excluded Areas. Then, as a sort of projection from Manipur State and the Naga Hills District across to the western boundary of the Province, we have, first, one more Excluded Area, the North Cachar Sub-Division of the Cachar District, and then three Partially Excluded Areas, the Khasi and Jaintia Hills and the Garo Hills in a continuous line; and, thirdly, the Mikir Hills adjoining the northern corner of the Khasi and Jaintia Hills.

This term "Partially Excluded" is also a legislative expression, invented for the purposes of the 1935 Act, and means that they have elected representatives in the Legislature, that the Ministry is primarily responsible for the administration, but that the Governor is charged with a special responsibility for their peace and good government, a responsibility which it is far from easy to discharge to one's own satisfaction.

¹ Tirap Frontier Tract was made a separate district as recently as 1942, therefore it has not been possible to show it on the sketch-map.