

MOHENJO-DARO AND THE INDUS CIVILIZATION

Being an official account of Archæological Excavations at
Mohenjo-daro carried out by the Government of India
between the years 1922 and 1927

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Volume I Text Chapters I—XIX and Plates I—XIV

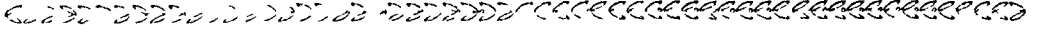


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CHAPTER VIII

THE AGE AND AUTHORS OF THE INDUS CIVILIZATION



Resemblance of Indus culture to Second Pre-diluvian culture of Elam and Mesopotamia and to the protohistoric culture of Sumer Common features of a general order

ANYONE familiar with the prehistoric archeology of Western Asia will perceive at once that the culture described in Chapters III and IV is of the Chalcolithic Age and that in many features, both general and particular, it bears a close resemblance both to what Professor Childe has called the "Second Prediluvian Culture" of Elam and Mesopotamia, and to the proto-historic culture of Sumer. Among the features of a general order may be mentioned the following: The organization of society in cities, the continued but sparing use of stone side by side with copper or bronze for the manufacture of weapons, tools, and vessels, the invention of the potter's wheel and the production with its help of improved kinds of pottery, the invention of wheeled vehicles to take the place of the older sleds, the construction of buildings with kiln-burnt and sun-dried bricks and their elevation on platforms, in order to place them beyond the reach of floods, the use of picture signs for writing, the use of masses of stone or metal along with spears, daggers, bows, and arrows as weapons of offence, the fashioning of ornaments out of fucence and shell and various kinds of stone, including amazonite, the development to a high pitch of the minor arts and crafts, particularly those of the goldsmith and silversmith. These are but some of the many features common to the chief river cultures of South-Western Asia in this period. Taken individually, their evidence would not be conclusive, but considered cumulatively they leave no room for doubt that the Indus culture was contemporary with the early culture of Sumer and with the Later Prediluvian culture of Elam and Mesopotamia. If, however, further proof be required, it is to be found in a variety of objects recovered from the Indus, Elamite, and Mesopotamian sites, which show that a lively intercourse must have been going on between these countries at the close of the fourth millennium B C, when Mohenjo-daro and Harappā were at the height of their prosperity.

Period of time covered by settlements at Mohenjo-daro and Harappā

But before we discuss this additional evidence, it may be well to say something about the period of time covered by the several successive settlements at these two sites. At Mohenjo-daro we have brought to light seven layers of buildings, viz. three of the Late Period, three of the Intermediate, and one of the Early, and it may be regarded as virtually certain that still earlier layers lie submerged beneath the sub-soil water. Now, in normal conditions we should be safe in affirming, on the analogy of other well-known sites, such as Troy, Knossos, Athens, or Rome, that a city rebuilt as often as Mohenjo-daro must have had a history of at least a thousand years. But at Mohenjo-daro conditions are not normal, for, as already explained, the city was in perpetual danger of inundation, and there is abundant evidence to prove that much of the ruin observable here is directly attributable to this cause. It is not unreasonable, therefore, to infer that the process of decay and revival may have been much

more rapid here than it would have been in ordinary conditions elsewhere, and this inference is strikingly corroborated by the surprisingly uniform character of its antiquities. Thus, the same sizes of bricks are used indiscriminately in all levels and afford no criterion as to the age of any given structure, and the only outstanding difference between the buildings of the seven levels hitherto laid bare, is that those of the uppermost levels comprised in the Late Period are meaner and more poorly built than their predecessors. Again, the seals from the different levels are so alike in style, material, form, and technique that it is impracticable to distinguish between them, and the same is true of the pottery, the bulk of which defies all efforts to arrange it in typological sequence. Uniformity such as this would not have been possible, had the period of Mohenjo-daro's occupation been a long one. For this occupation we have provisionally allowed a space of 500 years, that is, two generations apiece for each of the successive strata brought to light, without counting those that are still submerged.¹ This short period of 500 years must not, of course, be supposed to cover the whole rise and fall of the Indus civilization. At the moment when this civilization reveals itself to us, it is already fully fledged, and we are bound therefore to postulate for it a long period of antecedent evolution. The complexity of its city life, the elaborate nature of its buildings, and the excellence of its arts and crafts can only have resulted from long centuries of previous endeavour. Consider, for example, the pottery with its manifold shapes and the long development through which it must have passed before reaching the stage in which we find it. Or consider the beauty of some of the seals and the generations of effort that must have been expended in bringing the art of the engraver to such a pitch, or consider, again, the conventionalized and monumental forms of many of the signs of the Indus script and the long, protracted process by which they must have been evolved from the simpler pictographs in which they originated. Possibly some of the arts and crafts may have been imported in a more or less advanced state from abroad, and in their case it is not necessary to assume a long period of development on Indian soil, but, taken as a whole, it is manifest that the Indus civilization must have been evolved on the banks of the river for long ages before it comes within our ken. How long, one can only surmise, but it is safe to say that a thousand years would have been all too few for such a result.

And if we have to take into our calculations this period of antecedent growth, we must also allow for the probability of this civilization having survived long after Mohenjo-daro had disappeared from the scene. In one part of the excavations at Harappā a level has been reached which is believed to be earlier than any yet disclosed at Mohenjo-daro, and on the same site also certain burials and other relics have come to light which are certainly posterior to anything found at Mohenjo-daro, though whether they represent a direct continuation of the Indus culture or some foreign culture imported from outside, still remains to be determined.

To revert, however, to the intercourse between the Indus Valley, Mesopotamia, and Elam—of the individual objects which afford proof of commercial or other relations between these countries and help therefore to determine the age of the Indus civilization, the most important are five seals of characteristic "Indus" pattern discovered on different sites in Elam and Mesopotamia, which in two cases at least must be definitely assigned to the Pre-Sargonic Period and in no case can be referred to a later date than the third millennium B.C. Particulars of these seals and their find-spots are given by Mr. Gadd and Professor Langdon in Chapters XXII and XXIII and need not be repeated here. From the two specimens found at Ur and Kish it has rightly been inferred that the Indus civilization must go back

Uniform character of antiquities

500 years provisionally allowed for occupation of Mohenjo-daro, but Indus civilization already fully fledged at outset

And probably survived long after the disappearance of Mohenjo-daro

Individual objects which afford proof of intercourse between Indus Valley, Mesopotamia and Elam Seals

¹ This period of 500 years is probably too long rather than too short. At Taxila, the six superimposed cities in Sirkap rose and fell within a space of 300 years (200 B.C.—A.D. 100).

to an age before 2800 B.C. This is incontestable. But we need not, therefore, conclude that the civilization ceased to exist after that date. The seals unearthed at Mohenjo-daro emanate from all levels and in point of style are indistinguishable from one another. The specimens, therefore, found at Ur and Kish might equally well have been produced in the Late, Intermediate, or Early Period. Now, it is possible that these particular specimens may have belonged to some period of the Indus civilization which is not represented either at Mohenjo-daro or Harappā—a period, that is to say, either subsequent to the latest settlements on these sites or anterior to the earliest ones, since it can hardly be supposed that the period during which seals of this class were turned out coincided exactly with the occupation of these cities, and that no similar seals were produced either before or after that occupation. Inasmuch, however, as there is at present no way of determining this point, we have assumed provisionally that the Ur and Kish seals belong to the Intermediate Period, and we have suggested accordingly that the occupation of Mohenjo-daro fell approximately between 3250 and 2750 B.C.

**Bone cylinder
seal of Susa II
period**

In regard to one of the five seals referred to above, viz. a bone cylinder seal of the "bull and manger" type, which was found in association with some Proto-Elamite tablets in a deposit of the Susa II Period and referred by Dr. Scheil to about the time of Sargon of Agade,¹ it is noteworthy that the design and technique are unusually crude as compared with the ordinary type of Indus seal, and Professor Langdon concludes from this that the seal in question was more archaic than the generality of its fellows. If Professor Langdon is right and if Dr. Scheil's dating of the seal is correct, the other and later seals would necessarily have to be referred to the Post-Sargonic Period. From its style and cylindrical form, however, which is Mesopotamian or proto-Elamite and not Indian, it seems more likely that this seal was engraved—possibly for an Indian settler—by a local Elamite craftsman, whose lack of skill would sufficiently account for the apparent degeneracy of the carving. Professor Langdon also takes the view that the script on the Indus seal is closely related to archaic Sumerian, as it appears in the earliest phase known to us at Jemdet Nasr, Nippur, and Kish, his arguments being that the two scripts had many signs in common that they employed numerical ideographs as syllables, and that both read from right to left. Granted, however, that this close connection with archaic Sumerian existed, it does not, unfortunately, carry us any further in our present inquiry, since the supposed resemblances between them are likely to have been due, not so much to borrowings by one country from the other during the age with which we are dealing as to their ultimate derivation from some common source centuries before they were crystallized into the form in which they have reached us.

**Other objects
and motifs**

Among the many other objects and motifs that demonstrate an intimate relation between the Indus, Early Sumerian, and Second Prediluvian cultures, the following are specially noteworthy: (1) Certain fragments of vases found at Al-'Ubaid, which are made of an Indian potstone², (2) the trefoil patterning on the robe of the statuette figured in Pl. XCVIII, which is identical with that on certain Sumerian "Bulls of Heaven" of early date³, (3) the horned figures on Seals 356 and 357, which there is a strong presumption for connecting if not for identifying with the Sumerian Hero-God Eabani, (4) a toilet-set comprising a piercer, earscoop, and tweezers, found in a deposit of the Late Period at Harappā⁴ and identical in pattern with one from the First Dynasty cemetery at Ur⁵, (5) the curious etched beads of carnelian figured in Pl. CXLVI, 43-5, which are identical in technique with certain

¹ See *infra*, p. 424.

- Cf. Hall and Woolley, *Al-'Ubaid*, p. 42, and Gordon Childe, *The Most Ancient East*, p. 200.

² For references, see *infra*, p. 356, note 2.

³ *ASR* 1923-24, pl. vii, 22.

Art Journ. viii (1928), pp. 1 ff., and Gordon Childe, *The Most Ancient East*, pl. vii, b, and p. 189.

beads from pre-Sargonic graves at Kish¹, (6) a peculiar type of jar cover figured in Pl LXXXII, Type X, specimens of which have also been found at Jemdet Nasr, (7) the wavy rings of shell inlay figured in Pl CLVI, 4 and 5, the squat carinated vessel of Pl LXXXI, 17, the offering's stands of Pl LXXIX, the barrel-shaped stone weights of Pl CLIV, 5 and 7, the stone toilet boxes of Pl CXXXI, 36 and 37, all of which, as Mr Mackay has pointed out, can be matched by similar objects from Mesopotamia of the fourth or first half of the third millennium B.C.² These examples—and their number might easily be multiplied—are enough to show that active intercourse must have been going on between the Indus Valley and Mesopotamia in pre-Sargonic or early Sargonic times, and thus afford strong confirmation of the chronological conclusions drawn from the seals.

The proposed chronology is not, however, wholly free from difficulties, since there are certain features of our Indus antiquities which seem to point to an earlier date than the one suggested, while there are others which seem to point to a later. Among the former is the peculiar "comb" motif illustrated in Plate XCI and XCII. This motif is found on the Indus red-and-black pottery and also Susa I pottery, but according to Mr Mackay, does not occur in the Musyān, Susa II, or Jemdet Nasr pottery, and, inasmuch as it is altogether too distinctive and unusual a device to have originated independently in different localities, we must suppose, provisionally at any rate, that it was borrowed by the Indus potters from those of Persia. Granted, however, that our chronology is correct, we are then confronted with the difficulty of explaining how this motif disappeared altogether from use in Western Persia after the First Prediluvian culture to reappear again on the Indus a thousand years or thereabouts later. A similar problem is presented by the "step" pattern, which is also characteristic of the Susa I pottery, and reappears again in the shell-inlay work of the Indus Valley (Plate CLV, 33), but is absent from the Second Prediluvian culture. The explanation of this phenomenon may be that the cultures of the Indus Valley, Balūchistān, and Persia had been closely related and mutually influenced by one another during the First Prediluvian Period, and that this influence was kept alive in the more eastern countries after it had been eclipsed in Persia itself. To this hypothesis some colour is given by the fact that the "comb" motif survives on the local Mehi ware of Balūchistān (where it is found in juxtaposition with motifs closely paralleled in the Second Prediluvian pottery) as well as on the Indus ware, while the "step" motif is one of the most characteristic traits of Nāl ware.

Possible objections to proposed chronology. The "comb" and "step" motifs

Another possible difficulty in the way of the proposed chronology is suggested by the very primitive character of some of the copper and bronze weapons and implements from Mohenjo-daro and Harappā. Thus, the flimsy leaf-shaped spear-heads and daggers are such as, judging by Mesopotamian parallels, we should hardly expect to find in use at so late a date. For in Sumer much superior types of socketted spear-heads and daggers with strengthening mid-ribs had been evolved well before 3000 B.C.,³ while most of our examples from Mohenjo-daro and Harappā appertain to the Late Period of occupation—that is according to our proposed chronology, to the opening centuries of the third millennium B.C. The blade-axes, again, of Type 1 (Plates CXXXVIII–CXXXIX) are paralleled, as Mr Mackay points out,⁴ by early examples from the Susa I culture, while the bronze saw with curved cutting edge illustrated in Plate CXXXVII, No 7, has its closest analogues among the most primitive saws of Egypt. That these

Exceptionally primitive character of copper and bronze weapons and implements

¹ See *infra*, pp 515–16

² While evidencing intimate intercourse between the countries concerned, objects such as these do not of course imply identity of culture. For every example in which a connection can be traced a dozen might be cited to prove that no such connection existed.

³ Cf p 498 *infra*

⁴ Cf p 495 *infra*

implements and weapons, however, are in reality less ancient than their form might lead us to suppose, is, I think, proved by the fact that at the time they were fabricated, the artificers of the Indus Valley were thoroughly familiar with bronze and capable of turning out elaborate and highly finished vessels and statuettes in that metal as well as in copper, and it is further proved by the discovery of a fine example of a socketted axe-adze which Mr Mackay unearthed at Mohenjo-daro in 1927-8 in a deposit of the Late Period. Possibly this axe-adze was a foreign importation, but whether it was so or not, there is no doubt that at the time it was manufactured metal-workers somewhere or other had reached the point of producing a far superior type of implement to the one commonly in use in the Indus Valley.

**Mohenjo-daro
antiquities
probably not
earlier than
3250 B C**

So far, then, as Mohenjo-daro is concerned, there appears to be no sufficient reason for pushing back the *terminus a quo* of its antiquities earlier than 3250 B C. At the same time it is evident—and I should like to stress this point once again—that the culture represented must have had a long antecedent history on the soil of India, taking us back to an age that at present can only be dimly surmised.

**No light on
chronology
afforded by
domestic
architecture at
Mohenjo-daro**

It now remains to be considered whether the *terminus ad quem* of the Mohenjo-daro antiquities should be brought down lower than about 2750 B C. An argument that I anticipate may be brought forward in favour of a later limit concerns the surprisingly developed character of the domestic architecture of Mohenjo-daro, demonstrating a social condition of the people far in advance of what might be expected at the close of the fourth millennium B C. Here, we are without light from other countries. The little group of houses unearthed by Mr Woolley at Ur, which are the only ones known to us at all resembling those of Mohenjo-daro, are ascribed by him to the time of the Third Dynasty of Ur (2278-2170 B C) and of the succeeding Dynasties of Isin and Larsa, but, though the resemblance is undeniable, it is with the poorly built houses of the Latest Indus Period, not with the finer structures of the Intermediate and Early Periods that the Ur examples are to be compared, and, while it may be admitted that these houses at Ur probably owed their origin to imitation from Indian prototypes, there is no need to assume either that they were the first of their kind to be built in Sumer or that the Mohenjo-daro examples, on the other hand, were the last of their kind to be built in the Indus Valley. The probability is that houses of this class persisted in the Indus Valley long after the disappearance of Mohenjo-daro, and their influence may have permeated to Mesopotamia at any time during the third millennium B C. But, even if the late buildings of Mohenjo-daro prove to be less ancient by some centuries than we suppose, we should still be bound on the evidence of the seals to refer the better types of these buildings appertaining to the Intermediate and Early Periods to the Pre-Sargonic age, and to admit accordingly that Indian domestic architecture was so far ahead of that of other countries that it can hardly be used as a criterion of age.

**Nor by copper
and bronze
weapons and
implements
from Gangetic
basin and
Central
Provinces**

Nor is any help in this matter of chronology obtainable from the groups of copper and bronze weapons and implements found at Gungera in the Central Provinces and various sites in the Jumna-Ganges basin, notably at Rājpur (in the Bijnor District), Mainpurī, Niora (in the Etawah District), Pathgarh, and Bithūr (in the Cawnpore District). The objects referred to, which evidently belong to one period, comprise short, flat celts of several types, long bar celts, chisels, barbed harpoon heads and swords, besides a number of silver plates (from Gungera only), some of the last mentioned being in the form of conventionalized bulls' heads, others of circular discs. Some of the short celts with splayed crescentic cutting-edge are not unlike certain specimens from Mohenjo-daro and Harappā, but the type is too common and widely diffused for any conclusions to be drawn from it. On the other hand, most of the other objects, viz the long bar celts, swords, and barbed harpoon-heads are quite

peculiar to the Jumna-Ganges basin and different from anything known to us either from the Indus Valley or anywhere else. Possibly these objects give us our first glimpse of Indo-Āryan culture in the upper Gangetic Valley, but it may be that they represent some culture yet unknown to us of Dravidian or Proto-Australoid origin and distinct alike from both the Indus and the later Indo-Āryan cultures. Whatever their origin, the presence among them of swords with developed mid-ribs—weapons which are entirely absent at Mohenjo-daro and Harappā—leaves no doubt that they belong to a later age than that represented on the latter sites, and, inasmuch as all these objects appertain to the Copper and Bronze Age, it seems fairly safe to infer that a considerable period of time must have elapsed between the disappearance of Mohenjo-daro and Harappā and the beginning of the Iron Age

* * * * *

From the date of the Indus culture we turn to the question of its authors. Were they indigenous or were they immigrant in the Indus Valley, and, if the latter, from what direction did they come? Various theories on the subject have already been launched. Some writers have jumped hastily to the conclusion that they were Vedic-Āryans, and have sought to use the highly developed Indus culture to prove the great antiquity of the Āryan domination of India.¹ Others, again, have endeavoured to identify the Indus people with the Sumerians, or at least to find between them an ethnic connection which might account for the common elements in their respective cultures.² Let it be said at once that no evidence, anthropological or other, has yet been found to support either of these contentions. Of the human remains found at Mohenjo-daro I have already given some account in Chapter VI, with special reference to the circumstances in which they were buried, and I have shown there that, with one exception, all the skeletons probably belong to the Chalcolithic (Late I or II) Period and that there is no reason whatever for regarding them as other than representative of the city's population. From the anthropological point of view these remains are fully discussed by Colonel Sewell and Dr Guha in Chapter XXX. They comprise, in all, twenty-four skeletons or portions of skeletons referable to the Chalcolithic Age. Among them Colonel Sewell and Dr Guha identify four distinct ethnic types, viz the Proto-Australoid, Mediterranean, Mongolian branch of the Alpine stock, and the Alpine. The first of these types is represented by three markedly dolichocranial skulls (2 11 and M), which show a close affinity, on the one hand, with certain skulls from Kish, Al 'Ubad, and Ur in Mesopotamia and, on the other, with skulls from the ancient cemetery at Ādittanallur in the Madras Presidency as well as with characteristic skulls of the Veddahs of Ceylon. The second or Mediterranean type of skull, which is represented by six specimens (Nos 6, 7, 9, 10, 19, and 26), is also dolichocranial but exhibits much less brain capacity than the Proto-Australoid. To this type Colonel Sewell and Dr Guha also refer the Nāl skull,³ another from Kish (No 4), two from Anau (Nos 1 and 2), and the Sralkot and Bayāna skulls. Of the third or Mongolian branch of the Alpine stock there is only one example, viz the mesatocranial skull (No 3) which Colonel Sewell and Dr Guha consider to be typically Mongolian and with which they compare a characteristic Nāga skull in the Calcutta collection. Of the fourth or Alpine type there is also only one specimen, namely, the skull of a child (No 14), but though this is the only one which is unquestionably brachycranial, Colonel Sewell and Dr Guha consider it probable that three other specimens

The authors of the Indus civilization

Human remains at Mohenjo-daro comprise four ethnic types

¹ One Indian writer has sought to find in this civilization confirmation of his theory that the Āryans emanated from India itself, and had already reached the Iron Age while the Valley of the Indus was still submerged beneath the sea.¹ Such fantastic theories refute themselves and do not claim serious consideration.

² Cf Gordon Childe, *The Aryans*, p 35

³ Cf p 643 *infra*

(Nos 8, 13, and 20) may belong to the same Alpine group, one of these (No 13) being the skull of a woman who, they suggest, may have been the mother of the child (No 14)

Cosmopolitan character of population

The conclusions reached by Colonel Sewell and Dr Guha accord well with what we might naturally expect to find on this site. For, placed as Sind is on the western fringe of India, with easy land and sea communications along the southern coasts of Western Asia, and with the great mountain zone all but overshadowing it on the north, it can hardly have failed, even at this early age, to have been the meeting ground, as Mesopotamia also was, of widely divergent types of humanity—of Proto-Australoids from the Indian sub-continent, of Mediterraneans from along the southern shores of Asia, and of Alpines and Mongoloid-Alpines whose habitat was in the mountain zones respectively of Western and Eastern Asia. And this craniological evidence as to the mingling of diverse racial types at Mohenjo-daro finds some measure of confirmation in the sculptured heads and figures unearthed on the site, one of which (Pl XCVIII) appears to be mesaticephalic, two (Pls XCIX, 1-3, and C, 4-6) brachycranial, and one (Pl XCIX, 7-10) dolichocranial, while the bronze statuette figured in Pl XCIV, 6-8, vividly calls to mind a Proto-Australoid type still common in the jungles of Central India.

Craniological evidence borne out by sculptures

We should do well, however, not to attach overmuch weight at present to any of this evidence. So far as the sculptures are concerned, the artists were not anthropologists, and are hardly likely to have paid much attention to the shapes of the heads or to have given us very truthful transcripts of the originals. On the other hand, the skulls are far too few in number to warrant any conclusions being drawn from them as to the composition of the civic population.

But evidence of both sculptures and skulls must be accepted with reserve

Human remains at Harappā

The same remark applies also to the skulls from Harappā, for, though the human remains at that site are proving more plentiful than at Mohenjo-daro, only three skulls have so far been examined and measured by Colonel Sewell and Dr Guha. Two of these (Nos 5440 C and D) come from the fractional burial in Mound AB, which is referable to the Late III Period or thereabouts¹, the other (No 7435 B) is from one of the jar-burials (also fractional) in Cemetery H, which are posterior to the Indus period as represented at Mohenjo-daro². The two former are of an adult male and female, and are said to be unmistakably brachycephalic, with comparatively high-pitched nose. In Colonel Sewell's opinion they correspond with the brachycephalic type from Kish, and belong to the Alpine race—possibly to the Armenoid subdivision of it. The other skull is "mesaticephalic, with low cranial vault, medium nose and orbits, and marked alveolar prognathism, the frontal portion is well developed but rather sloping and the supra-orbital ridges moderate"³. It is said to be quite distinct in type from any of the other skulls (whether long-headed or broad-headed) found at Mohenjo-daro or Harappā, and is regarded by Colonel Sewell and Dr Guha as pointing to the presence of a different race at the latter site. This view of Colonel Sewell's and Dr Guha's is specially interesting, as it fits in with what the strange mode of jar-burial at Harappā and the peculiar decoration of the jars themselves would naturally lead us to infer, viz that after the eclipse of the Indus civilization, some new race of people must have established itself here. Obviously, however, many more skulls from the same cemetery will have to be examined before this tentative inference can be confirmed.

So far, then, as our limited skeletal material is concerned, the only conclusion that can be drawn from it is that during the Late Period the population of Mohenjo-daro included at least the four racial types enumerated above, but which, if any, of the four was indigenous in the Indus Valley and which, if any, was the prime author of the Indus civilization, are questions that yet await solution. It may be, nay it is more than likely, that this civilization was the offspring, not of any one race in particular, but of several—born, perhaps,

¹ Cf Chap VI, p 84

² *Ibid*, p 84

³ Extract from a note by Dr B S Guha

rather of the soil itself and of the rivers than of the varied breeds of men which they sustained For, as far back as its history can be traced, the population of Sind and the Panjāb has been a blend of many diverse elements, and there is no reason for assuming that it was other than heterogeneous in the earlier age with which we are now concerned

To return to the supposed connection between the Indus people and the Sumerians— it may be recalled that, before anything whatever had been discovered of the Indus civilization, Dr H R Hall proposed to locate the homeland of the Sumerians somewhere to the east of Mesopotamia, and suggested that they might belong to the same ethnic type as the Dravidians of India, who, though now restricted to the South of India, are believed on linguistic and ethnological grounds to have once populated virtually the whole of the peninsula, including the Panjāb, Sind, and Balūchistān, where, as is well known, the Dravidian speech is still preserved in the language of the Brāhūis Following on the discoveries at Mohenjo-daro and Harappā which revealed various points of resemblance between the material cultures of these places and of Sumer, it was natural that a fresh impetus should be given to this theory and that the resemblances referred to should be interpreted as additional proof of its correctness Pending, however, the discovery of further evidence, it is well that we should realize on what a very insecure basis this theory really rests What, in effect, is the supposed similarity of type between these two races—the Sumerian and the Dravidian—which is coming to be accepted as an established fact? Sir Arthur Keith says that the people who spoke Sumerian were dolichocephalic, with large brain capacity, like a certain section of the pre-dynastic Egyptians and like the present-day Mesopotāmians “They had,” he writes, “big, long, and narrow heads, their affinities were with the peoples of the Caucasian or European type, and we may regard South-western Asia as their cradle-land until evidence leading to a different conclusion comes to light” Mr Woolley also states that, judging by their physical type, the Sumerians “were of the Indo-European stock, in appearance not unlike the modern Arab”¹ On the other hand, Professor Langdon holds the view that the dolichocephalic skulls found at Kish were Semitic and the brachycephalic ones Sumerian² If, however, we are uncertain about the physical type of the Sumerians, we are just as uncertain about that of the ancient Dravidians, for the very good reason that we possess no remains whatever that can be identified with them The modern Dravidian stock is officially described as being “of short stature, complexion very dark, approaching black, hair plentiful, with an occasional tendency to curl, eyes dark, head long, nose very broad, sometimes depressed at the root but not so as to make the face appear flat” It would be absurd to assume that this represents the Dravidian type of 5,000 years ago In the case of the Brāhūi-speaking people of Balūchistān we know that, though they have preserved the Dravidic speech of their ancestors, they have entirely failed to preserve their racial character, which thanks to continuous recruitment from without has now become mainly Iranian³, and we know, also, that the Dravidian type in the south of the peninsula has been largely transformed by the free admixture of aboriginal, i e Proto-Australoid, blood as well perhaps as of other elements So shadowy, indeed, is the distinction between the Dravidians and many of the aboriginals, that in the case of the Mundā-speaking people most authorities incline to doubt if any distinction at all

**The Indus
people
Dravidians and
Sumerians**

Brāhūis

Sumerian type

Dravidian type

¹ Cf Sir Arthur Keith in Hall and Woolley, *Al'Ubad*, vol 1, pp 216-40, and Woolley, *The Sumerians*, p 6

² Langdon, *Kish*, pp 59-64, G A Barton in *JAOI* Sept, 1929, pp 263 ff I am given to understand, however, that Professor Langdon's view is not shared by Mr Dudley Buxton From the earliest times the population of Kish, like that of Mohenjo daro, appears to have been a thoroughly mixed one, the racial types represented there being the dolichocephalic Eurafian and Mediterranean, and the brachycephalic Armenoid

³ Cf *CHI* p 42

can be drawn. Any attempt, therefore, to equate the Sumerians with the ancient Dravidians is complicated at the outset by the difficulty of defining either the Sumerian or the Dravidian type.¹ If, as most authorities on the subject maintain, the Dravidians came out of the west and entered India as invaders, we might suppose that they were originally related to the Mediterraneans who are represented at Kish, Anau, Nal, and Mohenjo-daro (where the largest proportion of skulls belong to this type), and that the type was subsequently transformed in India itself by intermarriage with proto-Australoids and others. If, however, they were indigenous, as others hold, in India, we must suppose that they were proto-Australoid in origin and developed their Dravidian character by intermingling with foreign elements and by processes of natural evolution. But, in whatever direction they may have moved, whether from east to west or west to east, it would obviously be very rash in the present uncertain state of our knowledge to endeavour to identify as "Dravidian" either the skulls classed by Colonel Sewell as Proto-Australoid (Nos 2, 11 and M) or those classed as Mediterranean (Nos 6, 7, 9, 10, 19, and 26), rather still to identify any of these skulls as "Sumerian".

Vedic Āryans

It remains, finally, to consider if there are any grounds for identifying the authors of the Indus civilization with the Indo-Āryans of Vedic literature. Here, again, the ethnological aspect of the problem is beset with difficulties. The Indo-Āryan type of Northern India is described by ethnologists as "generally tall of stature, with fair complexion, dark eyes, plentiful hair on face, long head, narrow and prominent but not specially long nose". This type would accord well enough with what the Vedas tell us of the Indo-Āryans, whose features and fair complexion were not infrequently contrasted with those of the dark-skinned, noseless Dasyus, and in the case of the Indo-Āryans it is a plausible supposition that the exclusiveness of their caste system tended to keep their stock more than usually pure. Even so, however, we cannot be sure that their type has not been greatly modified in the course of the centuries, nor can we, without more precise data in the shape of contemporary human remains, determine to what race or races they were physically related. It is still debatable whether they were blonde Nordics, or brunette Mediterraneans or broad-headed Alpines (though this is hardly likely) or perhaps a mixture of all three. But, although for this reason the human remains at Mohenjo-daro afford no help in this question, a comparison of the Indus and Vedic cultures shows incontestably that they were unrelated. Thus, the picture of Indo-Āryan society portrayed in the Vedas is that of a partly pastoral, partly agricultural people, who have not yet emerged from the village state, who have no knowledge of life in cities or of the complex economic organization which such life implies, and whose houses are nondescript affairs constructed largely of bamboo. At Mohenjo-daro and Harappā, on the other hand, we have densely populated cities with solid, commodious houses of brick equipped with adequate sanitation, bathrooms, wells, and other amenities. The metals which the Indo-Āryans used in the time of the R̥gveda are gold and copper or bronze, but a little later, in the time of the Yajurveda and Atharvaveda, these metals are supplemented by silver and iron. Among the Indus people silver is commoner than gold, and utensils and vessels are sometimes made of stone—a relic of the Neolithic Age—as well as of copper and bronze. Of iron there is no vestige. For offensive weapons the Vedic-Āryans have the bow and arrow, spear, dagger, and axe, and for defensive armour the helmet and coat of mail. The Indus people also have the bow and arrow, spear, dagger, and axe, but, like the Mesopotamians and Egyptians, they have the mace as well, sometimes of stone, sometimes of metal, while,

Indus and
Vedic cultures
contrasted

¹ In the *Cambridge History of India*, vol 1, the similarity of the Sumerian and Dravidian ethnic types is said to be "undoubted". Yet on p 85 we read with reference to the epithet *ar̥śiśā* that it is a clear indication that the aborigines to which it is applied were of the Dravidian type, as we know it at the present day. From this it might easily be inferred that the Sumerians also were flat nosed. Could any inference be further from the truth?

on the other hand, defensive armour is quite unknown to them—a fact which must have told against them in any contests with mailed and helmeted foes. The Vedic-Āryans are a nation of meat-eaters, who appear to have had a general aversion to fish, since there is no direct mention of fishing in the Vedas. With the Indus people fish is a common article of diet, and so, too, are molluscs, turtles, and other aquatic creatures¹. In the lives of the Vedic-Āryans the horse plays an important part, as it did in the lives of many nations from the northern grasslands. To the people of Mohenjo-daro and Harappā the horse seems to have been unknown, it has no place, at any rate, among the many animals figured at these places, and, though some bones of a horse (*Equus caballus*) were found on the surface at the former site, it is more than probable that they belonged to a later, maybe quite modern, period. By the Vedic-Āryans the cow is prized above all other animals and regarded with special veneration. Among the Indus people the cow is of no particular account, its place with them being taken by the bull, the popularity of whose cult is attested by the numerous figurines and other representations of this animal. Of the tiger there is no mention in the Vedas, and of the elephant but little, but both these animals are familiar to the Indus people. The Vedic religion is normally aniconic. At Mohenjo-daro and Harappā iconism is everywhere apparent. In the Vedic pantheon the female element is almost wholly subordinate to the male, and neither the Mother Goddess nor Śiva (with whom, however, the Vedic Rudra was afterwards to be identified) has any place among its members. Among the Indus cults those of the Mother Goddess and Śiva are prominent, and the female elements appear to be co-equal with, if not to predominate over, the male. Fire (Agni) ranks among the foremost deities of the Veda, and the domestic hearth or firepit (*agni-kurda*) is a characteristic feature of every house. In the houses of Mohenjo-daro the firepit is conspicuously lacking². To the Indo-Āryan phallic worship was abhorrent. Among the Indus people there is abundant evidence of its existence.

As time goes on, doubtless many other salient points of difference will be revealed, but for the moment the above will suffice to demonstrate how wide is the gulf between the Indus and Vedic civilizations. Now it may, perhaps, be argued that the difference between them is a difference of time only, that the Vedic civilization was either the progenitor or the lineal descendant of the Indus civilization. Neither hypothesis, I fear, is tenable. Let us assume, in the first place, that the Vedic civilization preceded and led up to the Indus civilization. On this hypothesis the progress from the village to the city state and from the nondescript houses of the Vedic period to the massive brick architecture of Mohenjo-daro and Harappā would find a logical explanation, though we should have to postulate a long interval of time in order to account for the evolution. But what about other cultural features? If the Vedic culture antedated the Indus, how comes it that iron and defensive armour and the horse, which are characteristic of the former, are unknown to the latter? Or how comes it that the bull replaces the cow as an object of worship in the Indus period, only to be displaced again by the cow in succeeding ages? Or, again, how comes it that the Indus culture betrays so many survivals of the Neolithic Age—in the shape of stone implements and vessels—if the copper or bronze and iron culture of the Indo-Āryans intervened between the two? Clearly these considerations put out of court any solution of the problem which postulates an earlier date for the Vedic than for the Indus civilization. But if it was not earlier, are there any grounds for supposing that it was evolved out of the latter? In other words, could the Indo-Āryans have been the authors of the

**Vedic and Indus
civilizations
unrelated**

¹ Cf *supra*, p. 27.

² In HR Area, Section B, Block 2, House IX, Room 85, there is a depression in the latest floor which might conceivably have been an *agni kurda*, but at best it is a very doubtful example.

Indus as well as of the Vedic civilization? Here, again, we are faced with a like dilemma. For, though on this assumption we could account for such phenomena as the introduction of iron, of the horse, and of body armour, all of which might have signalized merely a later phase of the same culture, we are wholly at a loss to explain how the Indo-Āryans came to relapse from the city to the village state, or how, having once evolved excellent houses of brick, they afterwards contented themselves with inferior structures of bamboo, or how, having once worshipped Śiva and the linga and the Mother Goddess, they ceased to do so in the Vedic Period, but returned to their worship later, or how, having once occupied Sind, they subsequently lost all memory of that country and of the Lower Indus.

We need not, however, labour the subject further. Enough has been said to show that, from whatever angle we view these civilizations, it is impossible to discover for them a common source, or to explain their divergent characters on any hypothesis other than that the Vedic was not only the later of the two, but that it had an independent development.

Sequence of
Indus and Vedic
civilizations

And this brings us to another question. Are we to assume that the Vedic followed directly after the Indus civilization in the Panjāb, or that there was an interval between them? In Chapter XXIII Professor Langdon expresses the view that the Āryans in India are far more ancient than history has hitherto admitted. "Their migration," he writes, "across Anatolia, where traces of them are found in the inscriptions of the Hittite capital as early as the seventeenth century B.C., is an hypothesis entirely contradictory to the new situation revealed by the discoveries in the Indus Valley. Far more likely is it that the Āryans in India are the oldest representatives of the Indo-Germanic race." Professor Langdon does not seek to identify the Indo-Āryans with the authors of the Indus civilization, but he is led by his theory on the derivation of the Brāhmī from the Indus script to infer that the Āryans must have been established in India and in contact with those authors long before the middle of the second millennium B.C., when, according to the majority of Vedic scholars, they first entered India. With this view of Professor Langdon's I must confess that I find it impossible to agree. His derivation of early Brāhmī from the Indus script may or may not be substantiated. Granted, however, that it is well founded, and granted, too, that it was the Indo-Āryans who evolved the Brāhmī script out of the Indus pictographic signs, is there any evidence that they did this before the latter half of the second millennium B.C.? So far as I am aware, not a shred. The remains at Mohenjo-daro may not carry us later than the first quarter of the third millennium B.C., but we cannot suppose, because this particular city ceased to exist then or because Harappā may have followed suit a few centuries afterwards, that therefore the Indus civilization was totally eclipsed at that time. On the contrary, the remains at Jhukar only a score of miles or so from Mohenjo-daro seem to indicate that this civilization lingered on long after the disappearance of both Mohenjo-daro and Harappā. The days of its glory had doubtless passed, but, even so, there is no justification for supposing that so all important an art as that of writing would have ceased to be practised. In my own view nothing has yet been found either at Mohenjo-daro or Harappā that conflicts with the orthodox theory that the Indo-Āryans entered the Panjāb about the middle of the second millennium B.C., but from the picture we get in the Vedas of the pre-Āryan population, I incline to think that the Indus civilization could then have been but a mere shadow of its former self.