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✠ VALERIAN CARDINAL GRACIAS,

Archbishop of Bombay.

Bombay, 25th June, 1953.

Three-faced figure of Āṇ, the Supreme God of the people of the Indus Valley, bedecked with necklaces and armlets and displaying a colossal trident upon his head. He is seated on a throne under which there are two ibexes. Four *lāncanas* of Proto-Indian tribes, an elephant, a tiger, a buffalo and a rhinoceros surround him. The inscription that runs above says: *Āṇ naṇḍ valkei kuḍa mīn adu Āṇ*, which means: "The Lord of the Water-Jar and of the Fish is the weakening and strengthening of the Lord". (The months of the Water-Jar and of the Fish, corresponding to autumn, mark the period when nature seems to lose its strength, but causes a new strengthening when spring approaches. This healthy intermittence of the effects of the seasons is attributed to the Lord. In Sumer and in the Mediterranean the myth of the dying and rising God developed out of this simple idea).

Impression of a Mohenjo-Daro seal, much enlarged.

STUDIES

IN

PROTO-INDO-MEDITERRANEAN CULTURE

By the

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Director

INDIAN HISTORICAL RESEARCH INSTITUTE

ST. XAVIER'S COLLEGE, BOMBAY

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PREFACE

THE modern discoveries in the realm of archaeology of the ancient nations of the East and of the Mediterranean have opened an immense field to the research scholar for the elucidation of the early history of man. Egypt, from the time of the publication of the Rosetta stone and its decipherment by Champollion, has yielded up the secrets of her hieroglyphic inscriptions and opened the sealed gates of her Pharaohs' tombs. Babylon and Assyria, from the days of the first explorations by Layard, have uncovered their treasures of old, their temples and palaces and revealed the ancient lore of their libraries. Sumer, in more recent times, has sprung up from the sands of the desert as the original civilization of the Land of the Twin Rivers, disclosing her wealth of literature and art at the very dawn of the history of civilization. The Hittite Empire, still enveloped in the mist of uncertainty as regards its language and early script, appears nevertheless as a link between the civilized world of the East and that of the Mediterranean basin. Phoenicia, with her enterprising maritime activities, has surrendered her ancient treasures of literature to the excavators of Ras Shamra. Mycenae and Crete, thanks to the efforts of Schliemann and Sir Arthur Evans, appear now in their true light, the originators of the civilization of Greece. The Etruscans of Italy, owing to the studies of Nogara, Pallotino, Giglioli, Ducati, Ciaceri and other Italian scholars, have come forward as the founders of the Roman civilization. Even the Iberians of Spain manifest themselves now in the true perspective as a civilizing nation in western Europe radiating from Tartessos, whose site is still unfortunately unknown.

India has not lagged in this universal archaeological progress. When Prof. Rakhal Das Banerji discovered Mohenjo-Daro in the winter season of 1922-23, very few people realized the importance of that discovery for the history of India, much less for the history of the whole world. The linking of Mohenjo-

Daro with Harappā — the first relics of which had accidentally appeared somewhat earlier — and the excavations at Chañhu-Daro and surface explorations of other sites in Sind, have afforded an extraordinary amount of material for reconstructing the history of that early period. The most precious relics of that ancient civilization undoubtedly were the numerous seals bearing short and quaint inscriptions, which entitled the civilization of the Indus Valley to a place of prominence in the dawn of history.

The utilization of all these materials for the reconstruction of that unknown period of the proto-history of India, was the aim of the author when he began these studies. Three great ideas, like three beacon lights, have guided him in the prosecution of his work :–

1. It is now evident that the ancient nations of the world were not isolated, living as it were in water-tight compartments. Just the opposite. It was the period of the great migrations of mankind, not only overland but even by sea. *Genesis* refers to these early migrations. The literature of India mentions them in an unmistakable way. Hence the study of the civilization of the Indus Valley could not be undertaken without reference to the neighbouring nations of the ancient world. The archaeological discoveries concerning these nations carried out in modern times have facilitated our task a great deal.

2. India has peerless treasures of ancient literature which must not be overlooked while studying the history of her primeval age. Epic and purāṇic literature enshrine numberless recollections of those early days. Buddhist and Jaina works have kept most precious traditions of the early generations of Indian life. Ancient Tamil and Kannaḍa literatures reveal the past lore of the Dravidian race and disclose many legends and stories of most valuable significance. Vedic literature in general, with its wealth of high philosophy and ascetical ideas, might perhaps be the channel through which the ancient ideas of those early men have come down to us. The *Ṛgveda* itself in particular might have been influenced by the civiliza-

tion of the cities of the Indus Valley. Modern studies in Sanskrit, Pāli and Ardhamagadhi literatures, as well as the most recent research in philology, have helped us much in carrying out our work to a successful end.

3. For we may confidently and most solemnly aver that Mohenjo-Daro, Harappā and Chañhu-Daro are still alive in India. In the course of my seventeen years of study of this civilization, many friends have asked me: What causes have brought about the destruction of the civilization of the Indus Valley? That destruction is a postulate which has never been proved. The cities of Mohenjo-Daro, Harappā, Chañhu-Daro and many others have perished, it is true; but the civilization which flourished in those cities survived their end. India has not changed much in the course of ages. Invasions have taken place, wars have been waged in her vast plains, new nations and races have conquered the land and ruled over it, foreign civilizations have brought new notions and new ideals; but everybody and everything has been remodelled and reshaped and recast by the influence of the Indian nation and its ancient civilization. The ancient civilizations of Egypt, Babylonia and Assyria have been blotted out from the map of the world. But that of India, the first lights of which have been discovered in modern times along the banks of the Indus, is still alive.

This is, indeed, a great boon to the historian who carries on his work of reviving the past, while living in India itself. We are still breathing the atmosphere that nurtured those ancient heroes. The Mīnas and Paravas and Vēlāḷas and Kuḍagas are still living round us. The scripts that are being used by the different languages of India are acknowledged as the natural final development of the cryptic signs of the Indus Valley inscriptions. Echoes of the ancient language spoken by the Indus Valley dwellers resound in our ears continually. The belief in the existence of one God still leads the destinies of the Indian nation.

It has been the fashion in some quarters to ignore India while narrating the efforts of man to shape what we now call the civilization of the modern world. This conspiracy of silence will, we hope, be now over for good. If our studies have contributed their mite to make India's past known to the whole world, we shall consider our efforts well paid.

H. HERAS, S.J.

St. Xavier's College,
Bombay, 21st June, 1953.

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451	301	A skull discovered in a Meydum Mastaba, Egypt.	After Flinders Petrie, *Meydum and Memphis (III)*, pl. XI. Courtesy of the British School of Archaeology.
452	302	Portrait of a captive of the Lebu (Libyans), from a sculpture of Medinet Abu, Egypt.	After Lenormant, *op. cit.*, p. 270.
453	303	Portrait of an Iberian youth found in the Cerro de los Santos, Eastern Spain.	Courtesy of the Director, Museo Arqueológico de Barcelona, Spain.
454	304	A soldier of the land of Canaan, after an Egyptian painting.	After Lenormant, *op. cit.*, p. 276.
455	305	Portrait of an Etruscan, after a sarcophagus from Cerveteri, in the neighbourhood of Rome.	Courtesy of the Soprintendente alle Antichita dell' Etruria Meridionale, Roma.

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457	306	Skull from a long burrow in Britain.	After Sergi, *The Mediterranean Race*, p. 209. Courtesy of Mr. Walter Scott, London.
464	307	A portrait of Pharaoh Seti I, after an Egyptian bas-relief in a temple at Abydos, showing the dolichocephalic shape of his skull.	Courtesy of the Directeur General des Antiquités, Cairo, Egypt; and of the Casa Editorial Espasa-Calpe, S. A., Madrid, Spain.
466	308	Dark Egyptians sporting in the Fields of Lalu, after a painting in the Papyrus of Nebkopit, in Turin.	Courtesy of the Soprintendente alle Antichità Egittologia, Torino, Italy.
468	309	Contest of Herakles and Antaeos, in which the Mediterranean type of the latter is truly depicted; after a painting by Euphronios on a Greek vase.	After Bates, *The Eastern Libyans*, p. 260. Courtesy of Messrs. Macmillan & Co. Ltd., London.
469	310	The cup-bearer of the Palace of Minos, after a fresco in the same Palace.	After Mackenzie, *Myths of Crete & Pre-Hellenic Europe*, pl. 11. Courtesy of The Gresham Publishing Co. Ltd., London.
470	311	Two Keftiu (Cretans) of dark complexion, carrying rich gifts to the king of Egypt, after a painting in the tomb of Rekh-ma-Rā, Thebes.	After Dussaud, *Civilisations préhelleniques*, fig. 205. Courtesy of the Librairie Orientaliste Paul Geuthner, Paris.
471	312	Head of a 'coloured' Etruscan, from a painting in the Tomba Golini I at Orvieto.	Courtesy of the Direttore, Museo Archeologico, Firenze, Italy.
472	313	Portrait of an Iberian Lady of high rank, having almond-shaped eyes, from the Province of Alicante, Eastern Spain.	Courtesy of the Director, Museo Arqueológico de Barcelona, Spain.
473	314	Portrait of a Mīna from Rājastan, of clear dolichocephalic type.	After Helmuth von Glasenapp, *Indien* p. 14. Courtesy of Messrs. Albert Langen-Georg Muller Verlag, Munchen, Germany.
475	315	Portrait of a Bhill from Northern Gujerat displaying some negroid features.	After Ditto, p. 15.
483	316	A Keftiu from Crete carrying precious objects to Egypt, after a painting in the Tomb of Rekh-ma-Rā, Thebes.	After Lenormant, *op. cit.*, p. 275.
491	317	A group of "the people of the sea," after sculptures of Medinet-Abu, Thebes, of the time of Ramesses III. Those of the left are Tuirsha (Tyrrhenians), those of the right are Tikkarai (Teucrians).	Ditto, p. 298.

BIBLIOGRAPHICAL INTRODUCTION

A complete bibliography of the literature concerning the Indus Valley discoveries and allied subjects is not the scope of this Introduction. It is our aim to give an idea of the literature studied by the author while preparing this work; and while doing so, we shall at times briefly criticise some of the books mentioned herewith, particularly if they have been of especial use to us. Some, in fact, may have been in agreement with our views. Others, on the contrary, will be noted as opposing the thesis we consider true. Both will be faithfully recorded in all fairness.

Abbreviations

A. B. O. R. I.	..	*Annals of the Bhandarkar Oriental Research Institute*
B. D. C. R. I.	..	*Bulletin of the Deccan College Research Institute*
B. V.	..	*Bhāratīya Vidya*
E. C.	..	*Epigraphia Carnatica*
C. I. I.	..	*Corpus Inscriptionum Indicarum*
I. A.	..	*Indian Antiquary*
I. C.	..	*Indian Culture*
I. H. Q.	..	*Indian Historical Quarterly*
J. A. O. S.	..	*Journal of the American Oriental Society*
J. A. S. B.	..	*Journal of the Asiatic Society of Bengal*
J. B. B. R. A. S.	..	*Journal of the Bombay Branch of the Royal Asiatic Society*
J. B. O. R. S.	..	*Journal of the Bihar and Orissa Research Society*
J. E. A.	..	*Journal of Egyptian Archaeology*
J. I. H.	..	*Journal of Indian History*
J. K. H. R. S.	..	*The Journal of the Kalinga Historical Research Society*
J. R. A. S.	..	*Journal of the Royal Asiatic Society of Great Britain and Ireland*
M. A. S. of I.	..	*Memoirs Archaeological Survey of India*
M. E. R.	..	*Madras Epigraphical Record*
N. I. A.	..	*The New Indian Antiquary*
Q. J. M. S.	..	*Quarterly Journal of the Mythic Society*
R. H. A.	..	*Revue Hittite et Asianique*
S. I. I.	..	*South Indian Inscriptions*
T. A.	..	*The Tamilian Antiquary*
T. A. S.	..	*Travancore Archaeological Series*

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135. LABAT, RENE. *L'Akkadien de Boghaz-Köi.* Etudes sur la Langue des Lettres, Traités et Vocabulaires Akkadiens trouvés à Boghaz-Köi. Bordeaux, 1932.

136. LANGDON, S. "Notes on Sumerian Etymology and Syntax", *J. R. A. S.*, 1933, pp. 857-866.

137. LEVI, SYLVAIN. "Pré-Aryen et Pré-Dravidien dans l'Inde", *Journal Asiatique* (Paris), CCIII (1923), pp. 1-57.
A remarkable study of early Indian toponomy.

138. LIDDELL, HENRY GEORGE – SCOTT, ROBERT. *A Greek-English-Lexicon.* Oxford, 1896.

139. MACDONNELL, ARTHUR A. *A History of Sanskrit Literature.* London (Heinemann), 1900.

140. Madras University. *Tamil Lexicon* (6 Vols). Madras, 1924-1936.

141. MANNER, A. *Tulu-English Dictionary.* Mangalore (Basel Mission), 1886.

142. MAZUMDAR, BIJAYACHANDRA. *The History of the Bengali Language.* Second Edition. University of Calcutta, 1927.

143. MENENDEZ PELAYO, MARCELINO. *Estudios de Critica Literaria.* (2 Vols). Madrid, 1883.

144. MOUSSET-DUPUIS. *Dictionnaire Tamoul-Francais.* Pondichery (Mission), 1895.

145. POPE, G. U. "Notes on the South-Indian or Dravidian Family of Languages", *I. A.* (Bombay), V (1876), pp. 157-158.

146. THUMB, ALBERT. *Handbuch des Sanskrit mit Texten und Glossar.* Eine einfuhrung in das sprachwissenschaftliche Studium des Altindischen. (2 Vols). Heidelberg (Carl Winter), 1905.

147. WALDE P. *Vergleichendes Worterbuch der indogermanischen Sprachen.* (2 Vols). Berlin-Leipzig, 1930.

148. WALLIS BUDGE, F. A. *An Egyptian Hieroglyphic Dictionary.* With an Index of English Words, King List and Geographical List with Indexes List of Hieroglyphic characters, Coptic and Semitic Alphabets, etc. London (Murray), 1920.

149. ZILVA WICHREMASINGHE, M. DE. *Tamil Self-Taught,* Second edition. London (Marborough & Co.), 1906.

II. WORKS OF SPECIALISATION

I. INDICA

A. Indus Valley Culture

a. Archaeology

150. DIKSHIT, MORESHWAR GANGADHAR. *Etched Beads in India.* Decorative Patterns and the Geographical Factor in their distribution (Deccan College Monographs, 4). Poona, 1949.

A. describes a number of Indus Valley beads and compares them with other foreign beads and some Indian ones of a later period. A remarkable study.

151. GADD, C. J. *Seals of Ancient Indian Style found at Ur.* From the *Proceedings of the British Academy* (London), XVIII, 1932. (Oxford).

152. MACKAY, E. J. H. *Further Excavations at Mohenjo-Daro.* Being an official account of Archaeological Excavations at Mohenjo-Daro carried out by the Government of India between the years 1927 and 1931. (2 Vols). Government of India Press, 1937.

A review of this book : 153. HERAS, H., S.J., "Further Excavations at Mohenjo-Daro", *The New Review* (Calcutta), XI (1939), pp. 64-75.

154. MACKAY, ERNEST. *The Indus Civilization.* London, (Lovat Dickson), 1935.

A second edition of this book : 155. MACKAY E. *Early Indus Civilization.* Second Edition, Revised and Enlarged by Dorothy Mackay. London (Luzac) 1948. In an 'Addendum' at the end of the book Mrs. Mackay says : "The writing on the seals has attracted a great amount of interest and considerable ingenuity has been applied to the problem of its decipherment, among the first to undertake the task being Father Heras, S.J., who regards it as proto-Dravidian." (p. 158).

Two translations of the same :-
156. MACKAY E. *La Civilisation de l'Indus.* Paris (Payot), 1935.
157. MACKAY E. *Die Indus Kultur,* Leipzig (Brockhaus), 1938.

158. MACKAY, ERNEST. "The Indus Civilization. Some connections with Sumer, Elam and the West", *Journal of the Royal Central Asian Society* (London), XXI (1934), pp. 420-434.

159. MACKAY, E. "Excavations at Chanhu-Daro by the American School of Indic and Iranian Studies and the Museum of Fine Arts, Boston : Season 1935-36", *Bulletin of the Museum of Fine Arts* (Boston), XXXIV (1936), pp. 83-92.

160. MACKAY, ERNEST J. H. *Chanhu-Daro Excavations.* 1935-36. Published for American School of Indic and Iranian Studies and Museum of Fine Arts, Boston. Connecticut (American Oriental Society), 1943.

161. MACKAY, ERNEST. "Bead making in Ancient Sind", *J.A.O.S.* (Connecticut), LVII (1937), pp. 1-15.

162. MACKAY, ERNEST. "Great New Discoveries of Indian Culture in Prehistoric Sind", *The Illustrated London News,* 1936, Nov. 14th, pp. 860-864.

163. MACKAY, ERNEST. "Great New Discoveries of Ancient Indian Culture on a Virgin Prehistoric Site in Sind", *The Illustrated London News,* 1936, Nov. 21st, pp. 908-911.

164. MARSHALL, JOHN. "First Light on a Long Forgotten Civilization". *Illustrated London News,* 1924, Sept. 20th, pp. 528-532.

165. MARSHALL, JOHN. *Mohenjo-Daro and the Indus Civilization.* Being an official Account of Archaeological Excavations at Mohenjo-Daro carried out by the Government of India between the years 1922 and 1927. (3 Vols). London (Probsthain), 1931.

166. MAJUMDAR, N. C. *Explorations in Sind.* Being a Report of the Exploratory Survey carried out during the years 1927-28, 1929-30 and 1930-31 (*Memoirs of the Archaeological Survey of India,* No. 48). Delhi, 1934.

167. OSTEN, HANS HENNING VON DER. *Ancient Oriental Seals in the Collection of Mr. Edward T. Newell.* Chicago (University of Chicago), 1934.
There is a seal with an inscription in the Indus Valley script on pl. III, No. 23.

(107). STEIN AUREL. "A Survey of Ancient Sites along the 'Lost' Sarasvati River", *The Geographical Journal* (London), XCIX (1942), pp. 173-182.
A. describes some potsherds with incised characters of the same type as the characters of the Indus Valley. They were found in the old state of Bahawalpur.

168. VATS, MADHO SARUP. *Excavations at Harappā.* Being an account of Archaeological Excavations at Harappā carried out between the years 1920-21 and 1933-34. (2 Vols). Calcutta (Government of India), 1940.

169. WOOLLEY, C. L. "Fresh Link between Ur and Mohenjo-Daro", *Illustrated London News,* 1932, Feb. 15th, pp. 240-241.

b. *The Script*

170. AUTRAN, C. "Un problème de Paleographie", *L'Illustration* (Paris), 1925, No. 4282, 28 Mars, p. 289.
This is the first notice concerning the Indus Valley civilization published in France. It is accompanied by photographs of nineteen seals. A. suggests that the new civilization might possibly have been brought by immigrants from Asia Minor and the Aegean. (These connections were already realized in 1925).

171. CUNNINGHAM, ALEXANDER. *Corpus Inscriptionum Indicarum,* I, Inscriptions of Aśoka. Calcutta, 1877.
On pl. XXVIII a seal of the Indus Valley is published (one of No. 172) used by A. for studying the origin of the Indian alphabet.

172. CUNNINGHAM, ALEXANDER. Report for the year 1872-73. Vol. 5. Calcutta (Government), 1875.
On pl. XXXII there is a map of the ruins of Harapa (*sic*), and on pl. XXXIII a seal from this place (the same as in No. 171). A description of the ruins of Harapa and the local tradition about its destruction is found on pp. 105-108.

173. BALLHORN, FRIEDRICH, *Alphabete orientalischer und occidentalischer Sprachen,* Vierzebuter Unveränderter Abdruck der Auflage. Wurzburg, 1906.

174. BARUA, B. "Indus Script and Tantric Code", *Indo-Iranica,* Calcutta, I, pp. 15-21.
Cf. below, pp. 53-56.

175. DAMES, M. LONGWOOD. "Old Seals found at Harappa", *I. A.* (Bombay), XV (1886), p. 1.
The first two seals of the Indus Valley ever published.

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176. FABRI, C. L. "Latest Attempts to read the Indus Script", *I. C.* (Calcutta), I (1935), pp. 51-56.

177. FLEET, J. E. "Seals from Harappa", *J.R.A.S.* (London), 1912, pp. 699-701.
A. publishes three seals of the Indus Valley with inscriptions: one square (the most common type), one with rounded corners, like one fouud at Ur (Cf. No. 151) and one with inscription only. The latter corrects the position of one of the seals published by Dames (No. 175).

178. FLINDERS PETRIE, WILLIAM. "Mohenjo-Daro", *Ancient Egypt*, 1932, pp. 33-40.
Cf. below, pp. 33-36.

179. GADD, C. J.-SMITH, SIDNEY. "The New Links between Indian and Babylonian Civilizations." *Illustrated London News*, CLXV (1924), October 4th, p. 614-616.
The first connexions between Mohenjo-Daro and Sumer noted.

180. GELB, I. J. *A Study of Writing*. The Foundations of Grammatology. Chicago (University of Chicago), 1952.
A. is of opinion that the Proto-Indic (*sic*) writing probably "owed its origin to Mesopotamian influence" (pp. 195, 213).

181. GORHAM A. *Indian Mason's Marks in the Moghul Dynasty*. London (Societas Rosicruciana). (Dateless).
A very rare book. A number of marks studied by A. seem to hail from the Indus Valley period. Cf. pp. 6, 9, 12, 13, 14, 16, 17, 18, 22, 23, etc.

182. HEVESY, M. G. DE. "Sur une Ecriture Océanique paraissant d'origine néolithique", *Bulletin de la Société Préhistorique Francaise* (Paris), XXX (1933), pp. 434-449.
A summary of this article appeared in India: 183. HEVESY M. G. DE. "On a writing Oceanique of Neolithic Origin," *J. I. H.*, (Madras), XIII (1935), pp. 1-17. For a criticism of Hevesy's thesis, cf. below, pp. 36-37, and No. 268 of this Bibliographical Introduction. The author himself has given up his theory. Yet misled by his theory, an Indian writer developed a new thesis :-

184. BILLIMORIA N. M. "Did the Panis colonise Eastern Island ?", *The Daily Gazette* (Karachi), 1937, pp. 8 and 10.

185. BILLIMORIA, N. M. "The Panis of the Rig-Veda and Script of Mohenjo-Daro and Eastern Island," *The Journal of the Sind Historical Society* (Karachi), III (1937), pp. 46-54.

186. HROZNY, BEDRICH. *Die älteste Volkerwanderung und die proto-indische Zivilisation*. Ein Versuch die proto-indischen Inschriften von Mohendscho-Daro und Harappa zu entziffern. Prage 1939.

187. HROZNY, BEDRICH. "Inschriften und Kultur der Proto-Inder von Mohenjo-Daro und Harappa. Ein Entzifferungsversuch," *Archiv Orientalni* (Prague), XII (1941), pp. 192-259.

188. HROZNY, BEDRICH. *Ancient History of Western Asia, India and Crete.* Translated by Jindrich Procházka, Ph. D. Prague. (Dateless).
This is a translation of No. 225.

189. HUNTER, G. R. *The Script of Harappa and Mohenjodaro and its Connection with other Scripts.* With an Introduction by Prof. S. Langdon. London. (Kegan Paul) 1934.
It is a very systematic study. Cf. below, pp. 37-39.

190. JAYASWAL, K. P. "The Vikramkhol Inscription", *I. A.* (Bombay), LXII (1933), p. 58-60.

191. KARMARKAR, A. P. "The Aryo-Dravidian Character of the Mohenjo-Daro Inscriptions", *Prācyavāṇi* (Calcutta), I, pp. 99-101.
Cf. below, pp. 56-57.

192. LANGDON, S. "A New Factor in the Problem of Sumerian Origins", *J.R.A.S.* (London), LXI (1931), pp. 593-596.
A. publishes an Indus Valley unicorn seal found at the temple site Hursagkalamma. Kish, bearing an inscription that reads : *Perper kalakūr tir mun mīn cuni vel adu, i.e,* "that is the linga and the trident of the holy three fishes of the very great united countries."

193. MERIGGI, P. "Zur Indus Schrift", *Zeitschrift der Deutschen Morgenländischen Gesellschaft* (N. F.) (Leipzig), XII (1934), pp. 199-241.
Cf. below, pp. 39-43.

194. MUTTUKUMARU, S. R. "The Mohenjo Daro Script and the Thamil Language", *The Hindu Organ* (Jaffna, Ceylon), XLIX (1937), April 13th, pp. 6 and 14.
A. infers the wrong conclusion that the Mohenjo-Daro language was Tamil.

195. NATH, PRAN. "The Script of the Indus Valley Seals", *J.R.A.S.* (London), 1931, pp. 671-674.

196. NATH, PRAN. *The Scripts of the Indus Valley Seals.* With an Appendix containing extracts from the Sumerian and Indian literature throwing light upon the words occurring in the Inscriptions of the Indus Valley, Elam and Crete (No place and date of publication). It appeared as a supplement to *I.H.Q.*
Cf. below, pp. 31-33.

197. NATH, PRAN. "New Light on the Aryans before 1000 B.C. Did India's Culture come from Babylonia ? Rigveda a Sumerian Document", *Illustrated Weekly of India,* 1935, July 7th, pp. 15 and 66.

198. NATH, PRAN. "The Battle of Bel. Aryan Conquest of Chaldea told in the Rigveda", *Illustrated Weekly of India,* 1935, July, 21st, pp. 16 and 61.

199. NATH, PRAN. "Was Prehistoric Egypt India's Ancestor ? One fifth of the Rigveda comes from the Nile", *Illustrated Weekly of India,* 1935, August 4th, pp. 16 and 71.

200. NATH, PRAN. "Was India colonised from Egypt?", *Illustrated Weekly of India*, 1935, August 18th, pp. 17 and 67.

"As far as the pottery of Mohenjo-Daro and Harappa is concerned it shows the same workmanship we find in the Libyan pottery of the prehistoric age" (p. 67.)

201. NATH, PRAN. "How the Alphabet began", *Illustrated Weekly of India*, 1935, September 8th, pp. 18 and 73.

202. NATH, PRAN. 'A Sentence with 1004 Meanings. Is writing older than B.C. 1500?", *Illustrated Weekly of India*, 1935, September 22nd, pp. 27 and 61.

203. NATH, PRAN. "The Dawn of Indian Writing". *Illustrated Weekly of India*, 1935, October 13th, pp. 20 and 81.

204. NATH, PRAN. "Did Hinduism Begin in Egypt and Babylonia?", *Illustrated Weekly of India*, 1935, December 3rd, pp. 35, 69 and 77.

The A., in the above series of eight articles, propounds the theory that the Indians (*i.e.* the Aryans) (*sic*) migrated to India from Mesopotamia and Egypt, on the strength of the Indus Valley inscriptions and other sources. His fanciful contention cannot be countenanced critically. The connections between the Indus Valley script and the scripts of Sumer, Egypt and the Aegean are evident. The development of the script nevertheless is not from west to east, but the other way about. Their authors were not Āryas but Dravidians. The chronological perspective of the author is thoroughly mistaken.

205. OTTO, VON E. "Die Indusschrift. Ihre Entzifferungs- und Einordnungsversuche", *Zentralblatt fur Bibliothekswesen* (Leipzig), LIII (1936), pp. 101-14.

206. QUINTANA VIVES, JORGE. *Aportaciones a la interpretacion de la escritura protoindia*. Madrid-Barcelona, 1946.

207. ROSS, ALAN S. C. *The "Numeral-Signs" of the Mohenjo-Daro Script*. (*Memoirs of the Archaeological Survey of India*, No. 57). Delhi, 1938.

208. RAPSON, E. I. (Editor). *Cambridge History of India*, I. Cambridge 1922.

Sir John Marshall in a chapter on "The Monuments of Ancient India", with reference to some seals found at Harappā, before the actual discovery of Mohenjo-Daro, says:

"In this connexion a special interest attaches to certain seals of unknown date and origin (Pl. XI, 22, 23), which are said to have been found from time to time among the remains of brick structures at Harappā in the Montgomery District of the Punjab. The majority of these seals are engraved with the device of a bull with head outstretched over some uncertain object, possibly in the act of being sacrificed, and all of them bear legends in a pictographic script, which remains still to be deciphered", (pp. 617-618).

209. SANKARANANDA, SWAMI. *The Rigvedic Culture of the Pre-Historic Indus*. With a foreword by Bhupendra Nath Dutta. Calcutta, 1943.

210. SANKARANANDA, SWAMI. *The Rigvedic Culture of the Pre-Historic Indus*. With a foreword by Swami Pratyagatmananda. (2 Vols). Calcutta, 1944.

Cf. below, pp. 44-53.

211. SWARUP, BISHUN. "Harappa Seals and Antiquity of Writing in India", *J.B.O.R.S.* (Patna), IX (1923), pp. 347-352.

212. THOMAS, E. J. "Interpretation of the Indus Seals", *I. H. Q.* (Calcutta), XVI (1940), pp. 683-688.

213. WADDELL, L. A. *The Aryan Origin of the Alphabet.* Disclosing the Sumero-Phoenician Parentage of our Letters Ancient and Modern. London, 1927.

214. WADDELL, L. A. *The Indo-Sumerian Seals Deciphered.* Discovering Sumerians of Indus Valley as Phoenicians, Barats, Goths and Famous Vedic Aryans 3100 B.C. London (Luzac), 1925.

Cf. below, pp. 29-30.

215. WADDEL, L. A. *Egyptian Civilization, its Sumerian Origin & Real chronology : and Sumerian Origin of Egyptian Hieroglyphs.* London (Luzac), 1930 A. fancies that some seals of the Indus Valley are of King Sargon of Akkad (pp. 29-31), and others of King Menes of Egypt (pp. 42-47). Cf. 215a. Waddel, *The Makers of Civilization in Race & History,* pp. 225-228 (for Sargon) and pp. 263-269 (for Menes) (London, 1929).

c. *General Studies*

216. ARAVAMUTHAN, T. G. *Some Survivals of the Harappa Culture.* Bombay 1942.

217. BALFOUR, HENRY. "On some pottery from Raigir", *Man* (London), XXXII (1932), pp. 216 (No. 251).

A. points out resemblance of South-Indian pre-historic pottery with the pottery of pre-dynastic Egypt. Cf. below, p. 297.

(49). BURTON, RICHARD F. *Sind and the Races that inhabit the Valley of the Indus.* London, 1851.

(51). CADELL, PATRICK. "Who are the Descendants of the People of Mohenjo-Daro ?", *The Anthropological Society of Bombay,* Jubilee Volume (1937), pp. 20-30.

218. CHANDA, RAMPRASAD. *Survival of Prehistoric Civilization of the Indus Valley.* (*Memoirs of the Archaeological Survey of India,* No. 4) Calcutta, 1929.

(93). GHURYE, G. S. "Account of an Exploratory Tour in Certain Parts of Sind and in search of Pre-historic Culture", *Journal of the University of Bombay,* IV (1936), May No., pp. 1-18.

The 'pre-historic' culture the A. wants to find is the proto-historic culture of the Indus Valley.

219. CROWLEY, J. J. "The Indus and the Pentateuch. A Study of the Indus Civilization", *Blackfriars,* Oxford, XXVII (1946), pp. 264-269.

220. DAUNT, H. D. *The Centre of Ancient Civilization.* London, 1926.

221. DIKSHIT, K. N. *Prehistoric Civilization of the Indus Valley.* Sir William Meyer Lectures 1935. University of Madras, 1939.

222. DIKSHITAR, V. R. RAMACHANDRA. "The Culture of the Indus Valley", *Journal of the Madras University*, VI (1934), pp. 65-86.

223. FRANKFORT, H. "The Indus Civilization and the Near East," in *Annual Bibliography of Indian Archaeology*, (Kern Institute), VII (1934), pp. 2-12.

224. GORDON, D. H.-GORDON, M. E. "Mohenjo-Daro. Some Observations on Indian Prehistory", *Iraq* (London), VII (1940), pp. 1-12.

225. HROZNY, BEDRICH. *Die alteste Geschichte Vorderasiens und Indiens*. Melantrich, 1943.

226. JOSEPH, P. "The Near East and the Indus Valley", *Journal of the University of Bombay*, (N. S.), XII, (1944), pp. 7-17.

227. JOSEPH, P. "Dress in Mohenjo Daro", *Journal of the University of Bombay*, VI (1938), pp. 53-55.

228. KARMARKAR, A. P. "Mūruga or Kārthikeya. His Proto Indian origin and Development", *Journal of the Rama Varma Research Institute* (Cochin), XII (1945), pp. 12-17.

229. KIRFEL, WILLIBALD. *Die Dreikopfige Gottheit*. Archaeologisch-ethnologischer Streifzug durch die Ikonographie der Religionen. Bonn (Dummlers), 1948.
A mine of erudition. A. traces the custom of giving three heads or faces to images of gods to India and actually to Mohenjo-Daro; yet A. apparently does not know No. 280.

230. LEVI, SYLVAIN-PRZYLUSKI, JEAN-BLOCK, JULES. *Pre-Aryan and Pre-Dravidian*. Translated from French by Prabodh Chandra Bagchi. University of Calcutta, 1929.

231. MAHIRCHAND, BHERUMAL. *Mohenjo-Daro*. One of the most Ancient sites in the East which has aroused world-wide interest. Karachi, 1933.
A very poor specimen of historical literature.

232. MARIWALLA, C. L. *Ancient Sind*. A Study in Civilization. Karachi (No publication date).

233. MODE, HEINZ VON. *Indische Fruhkulturen*. Basel, 1944.

234. MORAES, G. M. "A Mohenjo Daro Figure", *The New Review* (Calcutta), X (1939), pp. 438-448.

235. MUTTUKUMARU, S. R. "Saivism. The Religion of the Mohenjo-Daro People", *The Hindu Organ* (Jaffna, Ceylon), XLIV (1937), April 29th, pp. 1 and 7; May 3rd, pp. 1-2.
A. hastily applies modern names with modern significance to very ancient institutions.

236. OJHA, K. C. "A note on the Ancient Political Geography of the Indus Valley", *J. I. H.* (Trivandrum), XXXI (1953), pp. 87-90.

237. PERICOT, LUIS. "Arqueología de la India". *Enciclopedia Universal Europea Americana*, Suplemento, 1936-1939.
An excellent summary of the Indus Valley discoveries.

238. PUSALKER, A. D. "The Religion of the Indus Valley People," *Modern Review* (Calcutta), LX (1936), pp. 697-703.

239. PUSALKER, A. D. "Indus Civilization", *Bhāratīya Vidyā Bhavan* (Bombay), III (1941-42), pp. 21-39, 140-159.

240. QUINTANA, JORGE. "El Gobierno teocrático de Mohenjo-Daro", *Ampurias* (Barcelona), IV (1942), pp. 3-19.

241. ROY, C. R. "Unicorn in the Seals of Mohenjo-Daro and its relation to the Religion of the Indus Valley Civilization", *Science and Culture* (Calcutta), XI, (1946), pp. 406-411.

242. SALETORE, B. A. "Identification of a Mohenjo-Daro Figure". *The New Review* (Calcutta), X (1939), pp. 28-35.

243. SARUP, LAKSHMAN. "Is the Indus Valley Civilization Aryan or non-Aryan?" *Summaries of Papers. The XIth All India Oriental Conference*, 1941, pp. 120-123.
See reply to A.'s contention in No. 284.

244. SASTRI, SRIKANTA. "Proto-Indic Religion", *Q.J.M.S.* (Bangalore), XXXII (1941-42), pp. 8-37, 158-177, 276-292, 383-398; XXXIII (1942-43), pp. 52-61.
The views expressed in some of these articles, characterized by great narrowness of mind, provoked the author's reply found in No. 666.

245. SHASTRI, M. M. LAXMIDHAR. "Harappa", *Proceedings and Transactions of the All-India Oriental Conference*, 12th Session (Benares), 1943-44.
About 3 Harappas, in Panjab, in S. India and in Mesopotamia.

246. TERRA, H. DE. "Dr. De Terra at Mohenjo-Daro. 'A Highly Developed Type of Civilization'", *The Times of India*, 1936, Jan. 10th, p. 10.

247. VENKATESWARA, S. V. "The Antiquities of Harappa and Mohenjo-Daro", *The Aryan Path* (Bombay), I, (1930), pp. 11-15.

248. VENKATESWARA, S. V. "The Art of Writing in Ancient India", *The Aryan Path* (Bombay), III, 1932, pp. 30-35.

249. VENKATESWARA, S. V. "The Technique of Carving at Mohenjo-Daro", *The Aryan Path* (Bombay), VIII (1937), pp. 359-363.

(169). WOOLLEY, C. L. "Fresh Link between Ur and Mohenjo Daro", *Illustrated London News*, 1932, February 13th, pp. 240-241.
It refers to the discovery of a round Indus Valley seal at Ur, one of those described by Gadd in No. 151.

d. Author's Articles

For convenience sake all the author's articles concerning the civilization of the Indus Valley, and in particular the script, have been grouped together here. The articles concerning the script have not been given a full reference in the notes to the text, owing to the numerous references to them, but the pages of the respective journals have always been noted. The journals where they were published will be found here easily.

250. HERAS, H. "A escrita dos proto-indios e o seu zodiaco de oito constelacões", *Broteria* (Lisboa), XXXII (1941), pp. 565-578.

251. HERAS, H. "A Proto-Indian Icon", *J.B.O.R.S.* (Patna), XXIII (1937), pp. 472-490.

252. HERAS, H. "A Proto-Indian Sign from Vala", *Q.J.M.S.J.* (Bangalore), XXVIII (1938), pp. 141-143.

253. HERAS, H. "A supposed Sumero-Babylonian Inscription discovered at Mohenjo-Daro", *I.H.Q.* (Calcutta), XIII (1937), pp. 697-703.

254. HERAS, H., S.J. "Chañhu-Daro and its Inscriptions", *St. Xavier's College Magazine* (Bombay), XXIX (1937), pp. 102-108.

255. HERAS, ENRIQUE, S.J. "El Primer Zodíaco descubierto en el Norte de la India", *Las Ciencias* (Madrid), IV (1939), pp. 555-558.

256. HERAS, H., S.J. "India, The Empire of the Swastika", in *Coronation Souvenir*, pp. 19-20. (Bombay, 1937).

257. HERAS, H., S.J. "Indian History goes back", *Bulletin of the International Committee of Historical Sciences* (Paris), XI (1939), pp. 496-500.

258. HERAS, H. "Inscripciones Dravídicas Descifradas", *Razon y Fe* (Madrid), CXIII (1938), pp. 279-289.

259. HERAS, H., S.J. "Karnāṭaka and Mohenjo-Daro", *The Karnātak Historical Review* (Dharwar), IV (1937), pp. 1-5.

260. HERAS, H., S.J. "La Escritura Proto-Indica y su Desciframiento", *Ampurias* (Barcelona), I (1940), pp. 5-81.

261. HERAS, H., S.J. "La Escritura di Mohenjo-Daro", *Revista Asiatica* (Roma), III (1937), pp. 69-72.

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III. SUNDRY SUBJECTS

1008. (Alarcon, Pedro Antonio de). *El Sombrero de Tres Picos.* Adapted from the Story of Pedro Antonio de Alarcón, and edited with Notes, Direct-Method and Vocabulary by J. P. Wickrsham-Crawfort. New York, 1939.

1009. BANOS, IGNACIO DE LA CRUZ. *Rapanui. Historia de la Isla de Pascua* Santander, 1935.

1010. DELPORTE, E. *Atlas Celeste.* (International Astronomical Union). Cambridge, 1932.

1011. (GOWER). *The English Works of John Gower.* Edited from the Manuscripts, with Introduction, Notes and Glossary by G. C. Macauly. (2 Vols). London (Kegal Paul), 1900-1901.

1012. MILTON. *Paradise Lost.* Edited by A. W. Verity, M.A. (2 Vols). Cambridge (University), 1929-1934.

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ADDENDA

A French translation of this work :-

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(191). This article was reproduced in *Proceedings and Transactions of the All India Oriental Conference*, 12th Session, Benares (1943-4), pp. 616-618.

205a. Pandey, Raj Bali. *Indian Palaeography.* Part I. Banaras (Banarasi Das), 1952.

About the origin of the Indus Valley script, A. writes as follows:

"Some of the scholars, who believe that the Indus Valley civilization was pre-Aryan and, therefore, non-Aryan, hold the view that the people, the language and the script of the pre-historic Indus Valley were Dravidian. The strongest advocate of this view is Rev. H. Heras, S.J., though Sir John Marshall and his colleagues held, more or less, similar views. Heras reads the Mohenjo-Daro inscriptions from the left to the right and transliterates them into the Tamil language (*sic*). Our greatest difficulty in accepting this view is that we have absolutely no knowledge of the Tamil spoken or written in the fourth millennium B.C. and, therefore, the reading proposed by Heras cannot be verified; the equation of mediaevel or modern Tamil with the Indus Valley language under consideration cannot be regarded as correct. As regards story-telling about the symbols used in the Indus Valley script, it can be accomplished in any language without any real check, because the script is partly pictographic." (p. 30)

650a. Steele, Francis R. "If a Slave Girl Fled....", *Scientific American* (New York), CLXXVII (1948), June No., pp. 44-47.

About the law-code of Lipit-Ishtar, the fore-runner of the code of Hammurabi. See No. 643.

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INTRODUCTION

I

Out of a scholarly controversy, conducted with impartiality and sincerity, with the sole object of discovering truth, truth will always spring triumphantly in the long run. The excavations that have unearthed the ruins of Mohenjo-Daro, Harappā and Chañhu-Daro and the explorations of other sites along the river Indus raised a number of controversies which have helped us to understand many an obscure problem of ancient Indian history, nay of ancient world history. Race, language, civilization, art, migration history, comparative religions, social organization are but a few of these problems which the discoveries of the Indus Valley have wonderfully elucidated. Prof. Gordon Childe describes that civilization as "a civilization as old and venerable as the Pyramids, and in its wealth and art the peer of Ancient Egypt."[1] This book will deal with a number of practical conclusions to which the study of these controversial matters has led the author.

The existence of the Dravidian peoples in India prior to the Āryan invasion is a fact admitted by all. The Ṛgvedic *ṛṣis* were eyewitnesses of their prowess. They speak of the "magic arts of Bṛsaya"[2]; of "the many onslaughts of Śambara"[3]; of "the might of Śuṣṇa."[4] Yet it was for a very long time supposed that these Dravidians, the Dāsas or Dasyus of the *Ṛgveda*, were uncouth, savage people, who finally received the gift of civilization at the hands of the newcomers. "There was a continuous war between the Indo-Āryans and the dark-skinned aborigines during this age," said Romesh Chandra Dutt in 1900. "The aborigines retreated

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[1] Gordon Childe, "The Structure of the Past", *The Geographical Magazine*, XVI (1943), p. 168.

[2] *Ṛg.*, VI, 61, 3.

[3] *Ibid.*, 47, 2.

[4] *Ibid.*, VIII, 85, 17.

before the more civilized organization of the Āryans, but hung around in fastnesses and forests, plundered the peaceful villages of the Āryans and stole their cattle. With that tenacity which is peculiar to barbarians, they fought for centuries as they retreated; they interrupted the religious sacrifices of the conquerors, despised their 'bright gods', and plundered their wealth. But the Āryans conquered in the end; the area of civilization widened, waste and jungle lands were reclaimed and dotted with villages and towns, and the barbarians either submitted to the conquerors or retreated to those hills and mountains where their descendants still live."[1]

This was the general idea we had of the Dravidians before the Āryan invasion, in spite of a few isolated attempts to prove the contrary.[2] It was not strange, therefore, that as soon as the first news of the discovery of Mohenjo-Daro reached the scholarly world, Mohenjo-Daro was supposed to be an Āryan city and the wonderful civilization revealed by those ruins and relics was naturally the renowned Āryan civilization. Sometime after, different views were heard, among them being that of the Director General of Archaeology, Sir John Marshal: Mohenjo-Daro was not Āryan and very likely was Dravidian. Such a piece of news was really startling. How could those *savages* have created such a wonderful civilization? Such was my opinion when I began to study the report of Sir John Marshall, prior to the decipherment of the script. And yet as my study proceeded the foundations of this opinion little by little crumbled away. Others were not so easily convinced, for such a high state of civilization could not but be Āryan.[3] It was even affirmed that the worship of the *liṅga* at Mohenjo-Daro proved not the Dravidian origin of those people, but that this worship, which was only in an embryo state in the *Ṛgveda*, was already fully developed in the Indus Valley, and that consequently the people of Mohenjo-

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[1] Dutt, *The Civilization of India*, p. 3.

[2] For instance, Hewitt's in *J.R.A.S.*, 1888, and Slater, *The Dravidian Element in Indian Culture*.

[3] Dikshitar, "The Culture of the Indus Valley," *Journal of the Madras University*, IV, pp. 80-86.

Daro were Āryans living in India hundreds of years after their original inroad.[1]

Such nevertheless was not the prevalent view. The Āryan school of opinion lost strength every day. The very controversy strengthened the theory of the Dravidian origin in such a way that in 1936 I dared to write: "If some day it were proved that the Āryas had invaded India thousands of years before the date generally assigned to Mohenjo-Daro, we should still be compelled to admit that, though not pre-Āryan, it was certainly non-Āryan".[2] In the same way Dr Wüst, who thinks that the culture of Mohenjo-Daro was destroyed by the very Dravidians, yet concludes that that culture is not Indo-European and that it must have passed away before the Vedic Indians appear on the scene.[3] In any case, the old idea concerning the uncivilized state of the Dravidians is now absolutely given up in scholarly circles. "The myth of Āryan invasion of a 'barbarian civilization' has been successfully exploded. Perhaps in every age history will show that usually the invader is the barbarian trying to impose his language, culture and religion on people he tries to overcome. He never succeeds completely, if he uses forces which are not spiritually superior."[4] In the same way acknowledges Dr Betty Heimann: "The invading Āryans, moreover, found in India an already highly developed culture, the main representatives of which were the Dravidians who are still predominant in Southern India."[5] Similarly, Śrimatī Prof. Kalpalata

[1] Sarup, "Is the Indus Valley Civilization Aryan or non-Aryan?", *Summaries of Papers, The XIth All-India Oriental Conference*, 1941, pp. 120-123. The bias which had led some authors in this controversy may be seen in the following remarks published not so very long ago: "The Dravidian theory, notorious for the creation of a breach in the Hindu Society, is a still-born child of the Christian Fathers. These Fathers ignorant of their own religion pretend to know and understand everything religion (*sic*) of foreign people. 'Dravid' does not mean a nation nor does it mean a race. Originally the term was used to mean a clan. Like the Pandavas, Kurus, Panchalas, Dravid also was a clan in the Great Arya Family." Sankarananda, *The Rigvedic Culture of the Pre-Historic Indus*, (I), p. 94.

[2] Heras, "Light on the Mohenjo-Daro Riddle", p. 3.

[3] Keith, "The Age of the Ṛgveda," *Woolner Commemoration Volume*, p. 14.

[4] Sahayam, "Dravidianism and Christianity," *The National Christian Council Review*, LXV, p. 82.

[5] Heimann, *Indian and Western Philosophy*, p. 21. Some traditions about the Nāgas say that they were a race of beings superior to man. Cf. Mitra, *The Latita-Vistara*, p. 30.

Munshi speaking of the Mahiṣas, a Dravidian tribe spread throughout India, admits that "though regarded by the later Āryan as Śūdras, outside the pale of Āryan culture, they were certainly not barbarians."[1]

II

In spite of the controversy, we may now affirm that the prevalent opinion among scholars at present is that the Mohenjo-Darians were Dravidians. The general idea that the south of India was the cradle of the Dravidians has to be revised. Hewitt had already affirmed in 1888 that Northern India had been peopled by Kolarian and Dravidian tribes long before the Āryas came into the country.[2] They had innumerable walled cities, *puraḥ*.[3] Only of Śambara alone "a hundred castles" are often being mentioned, some of which are called "ancient", *pūrviḥ*.[4] Their castles are said to be "full of treasure."[5] Their riches in cattle, gold and jewels seem to be proverbial.[6] All these are clear signs of the high state of civilization of the Dravidians, which come to us through the documents of their very enemies. One Dravidian chief, named Kuvaya, is particularly referred to, who caused his two wives to bathe in milk.[7] This fact may be held as an index of a long epoch of luxury, which had entered a period of decay.

The existence of numerous Dravidian tribes in Northern India down to the historical period is now admitted by all historians. Dravidian were some of the tribes who fought against Sudās in the battle of the ten kings. Such were at least the Alīnas (squirrels), the Śivas (partridges),[8] the Ajas (goats), the Śigrus (horse radishes)

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[1] Munshi, "The Mahiṣa and The Māhiṣakas," *Bharatiya Vidya*, VI, (1946), p. 83.

[2] Hewitt, "Notes on the Early History of Northern India," *J. R. A. S.*, XX, p. 328.

[3] *Ṛg.*, IV, 26, 3; 30, 13; VI, 18, 15, etc. Some of them are said to be "iron fortresses," perhaps because its gates were of this metal. Cf. *Ṛg.*, IV, 27, 1.

[4] *Ibid.*, II, 14, 6; 19, 6; IV, 26, 3; 30, 20; VI, 31, 4. At times they are said to be ninety-nine: *Ibid.*, II, 19, 6; IV, 26, 3; VI, 47, 2, etc.; at times ninety: *Ibid.*, 130, 7.

[5] *Ibid.*, 1, 130, 7.

[6] *Ibid.*, I, 169, 2; 121, 15; II, 12, 5; 14, 3; X, 108, 2 and 7, etc.

[7] *Ibid.*, 1, 104, 3.

[8] Cf. Zimmer, *Altindisches Leben*, p. 431. Cf. Beschi, *Dictionarium Tamutico-Latinum*, word "*śivai*".

and the Yakṣus (dwarfs). The Kāṣis, Kīkaṭas, Māgadhas and Aṅgas in the East and the Gāndhāris, Mujavants, Bālhikas, Kāmbojas and Takhas in the West[1] were also Dravidians. The Mallas, Śakyas, Koṣalas, Bulis, Mātsyas, Garuḍas, Moriyas and many others likewise belonged to the Dravidian family. Some of them were still found along the Indus by Alexander the Great, in the 4th century B.C. Others like the Mātsyas, under their original Dravidian name *Mīnas*, still survive in Rājasthān. In the *Agni Purāṇa* we read : "The Gāndhāra was born from Gāndīra and thence the five *janapadas :* Gāndhāras, Keralas, Cōlas, Pāṇḍyas and Kolas."[2] In the same way the *Mātsya Purāṇa* says : "The Pulīndas, Sumīnas, Rūpapas along with the Śvāpadas and also the Kuru-mīnas are *all* Kathākṣaras".[3] All these tribes seem to have belonged to the Dravidian stock. Besides, the Purāṇas and Epics mention a number of tribes whose names have unexpectedly been found in the Mohenjo-Daro inscriptions, such as the Eruvus (ants), Eṭkālis (spiders), Kāvals, Kalakilas, Kuḍagas (monkeys, later Vānaras), Pavas (snakes or Nāgas), Kōlis (fowls).[4] Even the Purus are said in the *Ṛgveda*, to speak *mṛdhravācaḥ*,[5] an unintelligible language, an epithet which is always applied to the Dāsas.

Considering all this we have often been led to affirm that the Mohenjo-Daro civilization was not a civilization restricted to the Indus Valley ; it was a civilization that extended all over India, and eventually we should find relics of this civilization similar to those of Mohenjo-Daro all over the Indian sub-continent. My prediction began to be fulfilled in the year 1942, when the late Sir Aurel Stein explored the archaeological sites along the ancient bed of the lost Sarasvatī river in Rājasthān. In a place called Sandhanawala, situated in the State of Bahawalpur, he found "some sherds with

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[1] Even down in the time of Baudhāyana orthodox people were forbidden to visit Magadha. *Dharmasutra*, I, 1, 32-33. Cf. *Mahābhārata*, Karṇa Parva, 2081-2111.

[2] *Agni Purāṇa*, Adh. 277. v. 3.

[3] *Mātsya Purāṇa*, Adh. 57, v. 50.

[4] "It is an acknowledged fact that at times the Āryas, when naming Dravidian tribes, distorted the original tribal names, so as to give them an Āryan meaning." Hewitt, *op. cit.*, 1889, p. 194.

[5] *Ṛg.*, VII, 18, 13. Cf. Zimmer, *op. cit.*, p. 114 ; Hewitt, *op. cit.*, p. 216.

incised characters which appear on inscribed seals from Mohenjo-Daro and Harappa".[1] The present writer had discovered similar sherds at Vala (now Valabhi), Saurāṣṭra, a number of years before.[2]

III

Mr Hewitt realized long ago that the culture of the Dravidians before the Āryan invasion had developed extraordinarily in all branches of human activity. "The chief opponents of Āryan progress," says he, "were the Dravidian races, who had covered the country with a network of strongly centralized and well established governments."[3] And he continues elsewhere: "There is ample evidence to show that it was not the Āryans who made India a great exporting country."[4] "The Kolarian and Dravidian settlers," he adds, "had founded and maintained a flourishing inland and foreign trade long before the advent of the Āryans, and this trade could only have been begun and kept up by a people who had made great advances in civilization."[5]

The *Bāveru Jātaka* has undoubtedly kept the tradition of one of the earliest commercial expeditions that went abroad from the shores of India, when they successfully sold to the bewildered natives of Mesopotamia one crow and one peacock for a hundred pieces of silver and gold respectively.[6] The Dravidian origin of a number of words corresponding to articles of export clearly shows that they were exported by Dravidian merchants. "Apart from the existence of teak in the ruins of Mugheir Ur," says Prof. Sayce, "an ancient Babylonian list of clothing mentions *sindhu* or "muslin," the *śadin*

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[1] Stein, "A Survey of Ancient Sites along the 'Lost Sarasvati River'", *The Geographical Journal*, XCIX (1942), p. 180.

[2] Heras, "The Origin of the Round Proto-Indian Seals discovered in Sumer," p. 53; Heras, "A Proto-Indian Sign from Vala," pp. 141-143.

[3] Hewitt, *op. cit.*, *J. R. A. S.*, 1889, p. 188.

[4] *Ibid.*, p. 199.

[5] *Ibid.*

[6] *The Jātaka* (Trans.), III, pp. 83-84. It is possible that this is a traditional record of the *first* expedition of the Proto-Indians to Mesopotamia. The fact that they had taken a crow with them may suggest that they were going to unknown seas. Cf. *Heras*, "'The Crow' of Noe", *Catholic Biblical Quarterly*, X, pp. 131-139.

of the Old Testament, the *sindon* of the Greeks."[1] Similarly the Tamil *arisi*, "rice" had become the Greek *orydsa*, mentioned by Theophrastus and Arrian[2]. Monkeys are also mentioned in the Bible as *kophim*, a word which is akin to the Egyptian *gofe* and to the Greek *kebos* or *kepos*. The Egyptian word was by some supposed to come from the Sanskrit *kapi*, though others refuse to accept this derivation owing to the fact that the Egyptian word is older than the Sanskrit. It is now acknowledged however that the Sanskrit word comes from the Dravidian *kapi*, which is much older.[3] No other is the origin of the biblical *tukkim*, "peacocks," which may be connected with the Greek *taos*, "peacock," both deriving from the Dravidian *toka* or *tokai*.[4] It is also admitted that the Egyptian *eb*, "elephant," and the Greek el-*ephas* come from the Dravidian *ipa*.[5]

Further, the system of local administration now prevalent in the country is considered to be of Dravidian origin. Hewitt speaks of the six groups of five men who were ruling the cities, also mentioned by Strabo[6] and in the *Mahābhārata*,[7] whose remnants are still found in the modern Pañchāyats, as of Dravidian origin.[8] Such also is the wonderful institution of the village communities.[9]

In general, "the culture of India," says Hall, "is pre-Āryan in origin; as in Greece, the conquered civilized the conquerors. The Āryan Indian owed his civilization and his degeneration to the

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[1] Sayce, *Lectures on the Origin and Growth of Religion*, pp. 137-138.

[2] Hewitt, *op. cit.*, p. 205.

[3] Hagen, *Lexicon Biblicum*, III, word "*simiae.*"

[4] *Ibid.*, word "*pavus.*"

[5] *Ibid.*, II, word "*elephantus*"; Gnana Prakasar, *Etymological & Comparative Lexicon of the Tamil Language*, word "*ipam.*"

[6] Strabo, XV, 51. Cf. McCrindle, *Ancient India*, p. 54.

[7] *Mahābhārata*, Sabhā Parva, 135-263.

[8] Hewitt, *op. cit.*, p. 202. Cf. Altekar, *A History of Village Communities in Western India* p. 134; Heras, "Two Proto-Indian Inscriptions from Chañhu-Daro", p. 318; Kosambi, "The Village Community in the 'Old Conquests of Goa'", *Journal of the University of Bombay*, XV, pp. 63-74.

[9] Altekar, *op. cit.*, p. 135.

Dravidians, as the Āryan Greek did to the Mycenaeans."[1] Dr Heimann also acknowledges that once the period of invasion was over "the Āryas consolidated their own imported culture with that of the Dravidians who had preceded them, and together with whom they had to live within the comparatively isolated Indian continent. It may have been the Dravidians who, as already closely adapted to the *force majeure* of India's climatic conditions, assumed the lead in this composite Āryan-Dravidian culture."[2] Similarly Profs. Seiber and Mueller remark: "Much of the original culture content of the earlier inhabitants prevail to this day, because no strong Āryan state ever encompassed the whole territory of the Indian peninsula."[3] That is the reason why Mr Donald A. Mackenzie says: "As the 'miracle of Greece' no longer obtains in consequence of the revelations of the archaeologists in Greece and elsewhere in the Near East, so there is in India no longer an 'Āryan miracle.' "[4] The fact that the Āryan tribes which invaded India were not very numerous may have contributed to this strange phenomenon. "When the Indo-Aryans had conquered and colonized the basin of the Indus and its tributaries and that of the Ganges as far as Banaras, the Asuras surrounded them on all sides. They were certainly in possession of Magadha or South Bihar and modern Rājputānā at the time of the tribal war between the Pāṇḍavas and the Kurus. These Asuras were great builders, and their building operations were regarded with awe and reverence by the Āryans. In Vedic literature mention is made of the castles of the Dāsas built of stone. Cities belonging to the Asuras are called Pātāla, Sanbha, Prāgjyotiṣṣa, Hiraṇyapura and Takṣasila. In the eastern countries Girivraja, the capital of the Asura chief Jarāsandha, and its defences excited the admiration of the Pāṇḍava chief Bhīma. When Yudhiṣṭhira, the eldest of the Pāṇḍavas, performed the Rājasuya ceremony, the Asura architect Maya was called to design and build the buildings required for the sacrifice."[5]

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[1] Hall, *The Ancient History of the Near East*, p. 174, note 3.
[2] Heimann, *op. cit.*, pp. 21-22.
[3] Sieber-Mueller, *The Social Life of Primitive Man*, p. 406.
[4] In the Foreword to Banerji, *Prehistoric, Ancient and Hindu India*, p. VII.
[5] Banerji, *op. cit.*, p. 20.

The *Brāhmaṇas* seem to give the reason of this superiority of the Dravidians over the Āryas in point of civilization, which of course is a product of the intellectual activity of a nation. In the *Brāḥmaṇas* it is said that dark-skinned Brāhmaṇs are cleverer than white-skinned ones.[1] These dark-skinned Brāhmaṇs cannot be Brāhmaṇs by birth, but Brāhmaṇs by penance and knowledge of the Veda, according to the classification of Patañjali.[2] They were non-Āryan Brāhmaṇs, considered to be abler than the Āryan ones. That was, finally the reason why Dravidian civilization exercised such a great influence upon the whole Āryan nation from the very beginning of their stay in India. "The Vedic religion," says Sir Sarvapalli Radhakrishnan, "absorbed, embodied and preserved the types and rituals of other cults. Instead of destroying them, it adapted them to its own requirements. . It took so much from the social life of the Dravidians and other native inhabitants of India that it is very difficult to disentangle the original Āryan elements from the others."[3] This may explain the great difference between the high philosophical conception of the first and tenth *maṇḍala* of the *Ṛgveda* (*Vāk, Hiraṇyagarbha, Puruṣa,* Creation, etc.), which are now acknowledged as the last compiled *maṇḍalas,* and the primitive materialistic conceptions prevalent in the others, though some foreign influence is already discovered even in the latter.

Dravidian influence on the latter philosophico-religious books is now easily acknowledged by all independent scholars. Says Dawson : "This search for the Absolute found its earliest and most complete expression in India, where it developed, not, as might have been expected, from the comparatively advanced ethical ideas connected with the worship of Varuṇa, but from the more primitive type of religion which is represented by the ritual magic of the *Brāhmaṇas* and which perhaps owes its origin to the native tradition

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[1] Referred to by Chatterji, *Indo-Aryan and Hindi*, p. 7.

[2] Patañjali, *Mahābhāṣya* on Pāṇini, V, I, 115.

[3] Radhakrishnan, *Eastern Religions and Western Thought*, p. 308. Dravidian influence in Vedic civilization is likewise readily admitted by Mons. Silvain Lévi (*Journal Asiatique*, CCIII, pp. 1-15) and Dr Berriedale Keith (*The Religion and Philosophy of the Veda and Upanisads*, I, p. 269).

of the conquered Dravidian culture."[1] "To the orthodox Āryans," says Prof. Brown, "the doctrines of the *Upaniṣads* are the New Thought of their time; the kings and sages at the courts, where these doctrines are newly preached, hear them with wonder and amazement. Yet the doctrines are, in spite of their newness, apparently the result of a long period of elaboration, and new only to the Āryan court. One may venture the opinion, that these doctrines represent the highest phase of the ancient religion and philosophy of the Dravidians, interpreted by the Āryans who strove to be faithful to their hereditary cult, but who at best could produce only a syncretism in which the essentially non-Āryan predominated."[2] Similarly says Dr Berriedale Keith: "The Religion of the *Ṛgveda* is therefore the product of Āryas, who must have been affected considerably by their new environment and whose blood must have been becoming more and more intermingled by intermarriage."[3] Side by side with this religious influence of the Dravidians, all other cultural elements were little by little being introduced among the Āryas. "To give a brief résumé," says Prof. Suniti Kumar Chatterji, "the ideas of *karma* and transmigration, the practice of yoga, the religious and philosophical ideas centering round the conception of the divinity as Śiva and Devī and as Viṣṇu, the Hindu ritual of *pūjā* as opposed to the Vedic ritual of *homa*,—all these and much more in Hindu religion and thought would appear to be non-Āryan in origin; a great deal of Purāṇic and Epic myth, legend and semi-history is pre-Āryan; much of our material culture and social and other usages—*e.g.*, the cultivation of some of our most important plants like rice, and some vegetables and fruits like the tamarind and the cocoanut, etc., the use of the betel-leaf in Hindu life and

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[1] Dawson, *Progress and Religion*, p. 127.

[2] Brown, "The Sources of Indian Philosophical Ideas", in *Studies in Honor of Maurice Bloomfield*, pp. 82-83. Cf. Heras, "The origin of Indian Philosophy and Asceticism", in Karmarkar-Kalandani, *Mystic Teachings of the Haridāsas of Karnātak*, pp. XXXVII-XL.

[3] Keith, *The Religion and Philosophy of the Veda and Upanishads*, I, p. 12. The low state of culture of the Āryas before their invasion into India might have contributed a great deal to the final acceptance of an easy amalgamation with the culture of the Dravidians. It has been suggested long ago that "prior to their migration into India, the Āryas of that era were probably of a somewhat similar stage of culture to the Todas." Marshall, *A Phrenologist among the Todas*, p. 126.

Hindu ritual, most of our popular religion, most of our folk crafts, our nautical crafts, our distinctive Hindu dress (the *dhotī* and the *sāri*), our marriage ritual in some parts of India with the use of the vermilion and turmeric—and many other things—could appear to be a legacy from our pre-Āryan ancestors."[1]

The Dravidian influence in the field of Sanskrit literature (we do not speak here of Sanskrit language) is every day clearer. We are of opinion that many passages at least which we now read in Sanskrit works from Vedic literature down to Purāṇic works, are mere translations from ancient Dravidian works now lost. I expressed this view concerning the story of the Pāṇḍavas as found in the *Mahābhārata*, in an article contributed to the *Journal of Indian History*, Madras.[2] A few days after the publication of this article, unexpectedly I received a letter from the late Dr V. S. Sukthankar, in which that great scholar wrote:

"You are very likely right in saying that the story of Yudhiṣṭhira and enthronement dates from a period prior to the *Ṛgveda* and to the Āryan invasion. It is a story that has been adapted from pre-Āryan sources."[3]

Dr Berriedale Keith had already anticipated this view seventeen years before: "Whatever amount of Dravidian influence is to be traced in the religion of the Vedic texts, it is certain that the epic already cannot be regarded as representing pure Āryan religion and that indeed Dravidian influence may have been of great importance."[4] Prof. Ojha, after studying the Indra-Vṛtra myth of the *Ṛgveda* in comparison with its parallels in other civilizations, does not hesitate in affirming: "It seems very probable that the origin of this myth is pre-Āryan, and thus the greatest of the Vedic myths is,

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[1] Chatterji, *op. cit.*, pp. 31-32.

[2] Cf. Heras, "Were the Mohenjo-Darians Āryans or Dravidians?", *J.I.H.*, XXI, p. 32.

[3] Letter dated Poona, November 22nd, 1942, two months before Dr Sukthankar's death (Archives of the Indian Historical Research Institute), Cf. Heras, "The Age of the Mahābhārata War," *J.I.H.*, XXV (1948), pp. 1-20.

[4] Keith, *op. cit.*, I, p. 54.

most probably, pre-Āryan."[1] From a totally different point of view Prof. Sten Konow concludes that the Vedic god Indra is "not an Āryan, pre-Indian deity."[2] Hence we are not allowed any more to question "the predominance of the pre-Āryan element in the cultural structure of what we call 'Hinduism.' "[3]

IV

This borrowing of Dravidian culture by the Āryas, which proves the mythical character of the Āryanization of India, was doubtlessly fostered by the free mixture of both the races.[4] "The Indo-Āryans," says Prof. Rakhal Das Banerji, "came to India in very small numbers, and they did not make any attempt at preserving the purity of their stock. From the very beginning they admitted tribes of foreign or mixed origin into their communities and the statements of the present-day Brahmanical writers about the racial purity of the Indo-Āryans and the rigidity of their marriage regulations are inaccurate."[5] Thus, Purukutsa, of Ṛgvedic fame, was not a pure Āryan, but connected with the Dravidians.[6] Vyāsa, the supposed author of the *Mahābhārata*, was the son of a Mātsya (Mīna) princess, of an undoubtedly Dravidian family.[7] The Pāṇḍavas and Kṛṣṇa are said to be descendants of a Nāga king called Ariaka.[8] Yudhiṣṭhira himself says to the Nāga Nahuṣa: "In human society it is difficult to ascertain one's caste because of the promiscuous intercourse among the four orders. Men belonging to all the orders have children by women of all the orders."[9]

Considering that these unions were in vogue from very early days and taking into account the fact that the ethnical Āryan type —

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[1] Ojha, "The Indra-Vṛtra War and the 'Serpent People' ", *J.B.O.R.S.*, XXVIII, p. 59.

[2] Konow, *The Aryan Gods of the Mitani People*, p. 37.

[3] Ehrenfels, *Mother-right in India*, p. 1.

[4] "The task of organizing and Aryanizing so vast a mass of Dravidians along wholly Aryan lines would have been immense; it is difficult to conceive how it could have been accomplished." Brown, *op. cit.*, p. 77.

[5] Banerji, *op. cit.*, p. 24.

[6] Hewitt, *op. cit.*, pp. 214-215.

[7] *Mahābhārata*, Ādi Parva, 4222-4273.

[8] *Ibid.*, 4964-5033.

[9] *Ibid.*, Vana Parva, 14514-14628.

that is the brachycephalic—has practically disappeared from northern India,[1] modern scholars do not favour the opinion of the present existence of the Āryan race in India. "As time went on," says Keith, "Dravidian blood came more and more to prevail over Āryan."[2] Consequently Dr Hall, of the British Museum, states: "Among the modern Indians, as amongst the modern Greeks or Italians, the ancient pre-Āryan type of the land has (as the primitive type of the land always does) survived, while that of the Āryan conqueror died out long ago."[3]

On this account we have often expressed the view that the Punjabis and Kashmiris are probably much purer Dravidians, racially considered, than the Tamil and Malayalam speaking people of South India, whose physical characteristics reveal much mixture of negrito blood in the former and of Chinese blood in the latter.[4] The Āryas never reached the mountains of Kashmir nor settled in the Puñjāb on their way to *Madhyadeśa*. When Alexander, the Great, invaded India, Dravidian tribes were still peacefully living along the Indus. The purest representatives of the Dravidian race in South India are probably the Coorgies, well built and sturdy people, not very different from the Punjabi type; living in the mountains they had no occasion to mix with peoples of other races. In the very traditions of South India the Coorgies are said to be imbued with "the essence (or spirit) of the Pāṇḍus."[5] They probably are the ancient Kuḍagas (later Kuraṇgas and Vānaras) spoken of in one of the Mohenjo-Daro inscriptions.[6] Their language is still called Kuḍagu.

Where, then, are the Āryas in India? someone may ask. Elsewhere I have answered this question. If there are any Āryas in

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[1] Risley, *Tribes and Castes of Bengal*, I, p. XL. Cf. below, Chapter V.

[2] Keith, *op. cit.*, II, p. 497.

[3] Hall, *The Ancient History of the Near East*, p. 173.

[4] The numerous Chinese merchants who from very ancient times had frequented the harbours of Malabār may perhaps explain this Chinese ethnological influence. Ibn Batuta speaks of numerous Chinese junks seen by him in the ports of that country. Cf. Lee, *The Travels of Ibn Batuta*, pp. 172-173. Chinese influence is also seen in Malabar architecture.

[5] Cole, "Cromlechs in Maisur," *I.A.*, II, p. 88.

[6] Heras, "Karnātaka and Mohenjo-Daro", p. 3.

India, they may perhaps be found in the territory roughly corresponding to the States of Uttar Pradesh and Pepsu. Such was the territory inhabited by the Āryas who stopped their conquests there and called that land "the middle country," *Madhyadeśa*. Yet, we sincerely believe that the search will not be very successful. The Sanskrit scholar Dr Berriedale Keith speaks of "the generally accepted view that the population of India is predominantly Dravidian or at least of non-Indo-European origin."[1] With the Indian branch of the great Indo-European family a phenomenon took place similar to the phenomena that occurred likewise in Greece, Italy and Spain. It is what happens to a tree transplanted from a cold country to a warm one. The tree thus transplanted to a country of brighter sky and warmer breezes has an extraordinary growth in the course of one or two generations: luxuriant leaves cover its branches; its flowers count more petals than in former days; its fruits are of a size never imagined in its pristine habitat. Yet, after this unusual manifestation of exuberant life, the tree cannot live any longer in this new climate; one day the leaves fade away; the stem bends its head as if for the last time saluting that land that had given it that extraordinary growth, and finally the whole plant collapses at the first kiss of the winter wind. Something like this happened to the Āryan race in India.

"Before their arrival in the country watered by the streams that descend from the snow-capped Himālayas, this branch of the Āryan family, in the same way as the others, had not a single achievement to its credit. In the cold steppes where it developed along the southern course of the Volga river,[2] the future Īndo-Āryans enjoyed the peace and prosperity proper to the pastoral and agricultural tribes; nothing extraordinary occurred to them. Upon arriving at the new land of their destiny, their clash with new peoples, the novelty of all the surroundings, the caresses of the warm breezes of their new home also produced in their case a new efflorescence never dreamt

[1] Keith, *op. cit.*, p. 629.

[2] Cf. Heras, "The Cradle of the Āryans," *The New Review*, V, pp. 473-476.

of in former days. They became the authors of the most beautiful religious poetry, crystallized in the hymns of the *Ṛgveda*, which placed them among the first nations of the civilized world. At the same time they converted their rude matter-of-course speech—a speech of shepherds and husbandmen—into a classical, *Sanskrit*, language of marvellous elasticity, which may rightly be ranked as one of the languages of highest intellectual development that have ever been spoken.[1] But that was the swan-song of the Āryas in India. After a few generations the Āryas totally disappeared from the scene, bequeathing their inheritance to that matchless nation with which they had fought valiantly, but which they sincerely admired as a builder of cities and sumptuous palaces, a nation of enterprising merchants and courageous warriors. And the legacy of the Indo-Āryans fell into worthy hands."[2]

V

If the Āryas do not now exist in India, if the ancient Āryan invaders never passed beyond Kāśi (Banaras) in the East or beyond the Narbada river and the Vindhya mountains in the south, as Banerji states categorically,[3] how can we explain the fact that in Northern India, down to the limits of the State of Madras, practically everybody speaks languages derived from the ancient Sanskrit language? "It is regarded as certain," says Dr Suniti Kumar Chatterji, "that Dravidian speakers were at one time spread over the whole of Northern India as well, from Balochistan to Bengal."[4] In the period of the *Mahābhārata* war Vidura is said to have addressed Yudhiṣṭhira in the Mleccha language.[5] The Prāchya language of Oudh, East Uttar Pradesh and probably Bihār, was the most Dravidian of all Prakrits: the Āryas called any sentence in

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[1] This is probably the reason why this language was called Sanskrit, *i.e.*, "polished" "refined", in comparison with the earliest Indo-European and even with the later Āryan, immediately preceding the time of the Indian invasion.

[2] Heras, "La Cuestión Arya," *Razón y Fe*, CXX, pp. 318-320.

[3] Banerji, *op. cit.*, pp. 31-32.

[4] Chatterji, *The Origin and Development of the Bengali Language*, I, p. 28.

[5] *Mahābhārata*, Ādi Parva, 6357-7409.

this lingo difficult to pronounce *a priori*, even if it were not so.[1] Moreover, the influence which Dravidian exercised over the language of the invaders is now a fact acknowledged by all critical philologists. "As regards language," says Keith, "Vedic Indian naturally developed in a distinctive direction under the influence of separation from close contact with Iranian, and of intimate speech relations with a non-Indo-European population."[2] What was this non-Indo-European population that influenced the Āryan language is disclosed by Prof. J. Canedo, of the University of Madrid: "We admit . . . that Dravidian in particular is the language that has influenced most of the Āryan languages of India."[3] Similarly Dr Chatterji says: "In our language we have mainly accepted in the north of India the Āryan speech, but this speech has been very deeply modified, and that on the lines of the pre-Āryan languages; while in the south the old languages survive, although they have been profoundly influenced by the speech of the Āryan as naturalised in India and as it progressed in the various periods."[4] The mutual influence of Dravidian over Āryan and of Āryan over Dravidian cannot be denied. But how can we explain the almost complete disappearance of Dravidian from Northern India and its replacement by Āryan languages? "Āryan languages," says Prof. Brown, "have spread more than Āryan blood in the occupation of the land."[5]

I have tried to explain this strange phenomenon elsewhere—a phenomenon which is not unique in the history of human speech.[6] I said there that the intercourse between the people of the two races explains the Āryan craze of latter times, and then continued as follows :—

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[1] *Pañcaviṁśa Brāhmaṇa*, XVII, 4.

[2] Keith, "The Age of the Ṛgveda," *Woolner Commemoration Volume*, p. 145.

[3] Canedo, "Sobre las influencias Dravidicas en las Lenguas Aryas de la India," *Emerita*, IX, p. 137.

[4] Chatterji, *Indo-Aryan and Hindi*, p. 32.

[5] Brown, *op. cit.*, p. 76.

[6] A similar thing happened in all southern nations of Europe, where the racial Indo-European element has disappeared and the new linguistic element imported by the Indo-Europeans has remained. This exchange of languages may be traced perfectly well in Spain, where the old Iberian Hamitic language survived much longer than in Greece and in Italy. It may be followed step by step through contemporary Latin authors.

"Speech naturally was the only means for this social intercourse. Yet the Āryas always claimed that the language of the Dasyus was not understandable. Their ears could not get accustomed to those "funny sounds." Contrawise, Dravidian-speaking people, perhaps on account of the difficulty and complexity of their own language and especially of its construction, have always shown great facility in learning foreign languages. From the early times of the East India Company, its servants who were bound for Madras and its neighbourhood were not in need of studying any Indian languages, for the Indians whom they had to deal with spoke English; while those whose destination was North India always had to learn Hindi, Bengali, or other languages of the countries of the North. The Āryan-speaking people of North India did not speak English so much, nor did they learn it with the same facility as the people of the South. This is also experienced in our own days. In South India, all servants, Travellers' Bungalow cooks, *ghariwallas* and *rickshaw*-drawers, speak English. But go to Bombay, travel through Rājputānā, visit Delhi, Agra, Banaras, or Calcutta, and you will meet with very interesting and, at times difficult, experiences if you do not speak Hindi or know at least a few Hindustani words; no uneducated person will speak to you in English.

"So it happened in those early days. Since the Āryas did not learn a *mṛdhravācaḥ* (hostile) language, the Dravidians, who were living amongst them, learnt Sanskrit or the corresponding Prakrit. The Dravidians inhabiting the neighbouring kingdoms did the same, for social, commercial, and cultural purposes. Thus the modern North Indian vernaculars, Āryan in their origin but having indisputable traces of Dravidian influence, had their natural growth, while the old Dravidian languages were little by little forgotten. It was then that a very interesting and not uncommon psychological phenomenon took place; a phenomenon which explains many important later facts which are otherwise inexplicable.

"The true study of a language undertaken either for mere pleasure or for real need created at first a sort of enthusiasm for the

new tongue. This enthusiasm is reflected in a kind of respect for the people who speak that language as their natural tongue, followed by a natural depreciation of one's own language and people, according to the laws of the balance; the higher one pan rises the lower sinks the other pan. If to this high esteem of the new language and of the nation that speaks it, endless praises of the culture of that nation are added, one will finally begin to wish one were a member of that nation or race. At first one says it in whispers, but finally one will be persuaded of it and proclaim it to the four winds. The last stage of this metamorphosis will include the fabrication of fanciful pedigrees. If all this is true in the case of an individual, it is truer of a community, certainty of whose origin is inadequate and whose characteristics lack that note of individuality which is inherited from family and education.

"This is precisely what happened to the Dravidian communities of Northern India who came in contact with the Āryas. Even South Indian dynasties, like the Kadambas of Banavasi and the Cālukyas of Bādāmi, whose native language had always been Kannaḍa, and ancient Dravidian tribes whose tongue was never changed, as for instance the Paravas of the Tamil-nādu, intoxicated by the Āryan craze, either claimed descent from Vedic *ṛṣis*, or declared that their present denomination "*Paravas*" or "*Paravar*" was a corrupted form of the ancient Sanskrit name "*Bharatas*," or "*Bharatar*," the denomination of the famous so-called Āryan tribe of Brāhmaṇic and Purāṇic reputation."[1]

This historico-psychological explanation of the rise of Sanskrit languages in Northern India, while the original Sanskrit-speaking people were slowly vanishing from the land, is confirmed by the *Kauśītakī Brāhmaṇa*. This work avers that Northern India was distinguished by greater purity of speech. "In the *Udīcya*, speech is uttered with greater discrimination; people go to the Udīcya to learn speech; whoever returns from there, him people wish to hear."[2]

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[1] Heras, "New Vistas in the Field of Ancient Indian History," in Roberts, *What India Thinks*, pp. 122-134.

[2] *Kauśītakī Brāhmaṇa*, VII, 6.

Accordingly people wishing to perfect their language, *vācam śikṣitum*, travelled thither to the Udicya country (the country of the North), and on their return to their native towns and villages they enjoyed great authority among those who did not know that language. This passage shows the Dravidian people living east of Kāśi or south of *Madhyadeśa*, flocking to the cities and villages inhabited by the Āryas eager to learn their language, first for material purposes, then to quench their thirst for knowledge. The respect and authority enjoyed by them among their fellow citizens is the result of a sort of inferiority complex among the Dravidians, a feeling which is natural and is constantly verified in the history of immigrants to foreign lands returning to their original home.

VI

The relations between the Dravidian nations of India and the countries of the south-east of Asia and the Islands of the Pacific have been diligently studied for a number of years ;[1] the result of these studies being the denomination "Greater India" now given to those countries. But we had never dreamed of relations between India and the countries of the West. Meiners, in the 18th century was wondering that "the customs, doctrines and religions of India should have travelled only towards the east, and should never have extended throughout the countries of the west of Asia."[2] After the excavations of Sir Arthur Evans in Crete, however, new affinities between the earliest cultures of the Mediterranean — the real Mediterranean civilization — and some nations of the East were soon discovered.

Thus writes Prof. Berriedale Keith : "Sir Arthur Evans found the most convincing evidence . . . that the neolithic people of Crete were already in communication with Egypt, Asia Minor, Babylonia

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[1] Cf. the works published by the "Greater India Society," (Calcutta), and Nag, *India and the Pacific World* (Calcutta).

[2] Meiners, *Historia Doctrinae de Deo Vero omniumque rerum Auctore atque Rectore*, p. 91, note.

and Turkestan. They had seals of a design which occurs in the more ancient graves of Egypt—predynastic graves; their stone maces and their black pottery have duplicates in Ancient Egypt and Babylon; their clay figures of idols, caricatures in miniature of a very fat type of woman, are also found in Egypt, Mesopotamia, and Turkestan as well as in ancient graves of Mediterranean countries to the west. Man had conquered the sea at a much earlier date than has been supposed hitherto."[1] Keith does not see any affinity between the Mediterranean and India as yet; but he clearly points out the way to the east through which this cultural intercourse took place.

The actual affinities between the culture of India and the culture of other nations of the west were soon found out by other authors. "It seems," says Dr Suniti Kumar Chatterji, "that there were Chaldaean (Sumerian as well as Semitic) and Western Asiatic, and possibly also Aegean elements in the oldest stratum of Indian Āryo-Dravidian Culture. These Western elements might have been pre-Āryan, having been already present in Proto-Dravidian, before the advent of the Āryas into India."[2] Not long after, even ethnological affinities between the Dravidians and the Mediterraneans were also pointed out. "The race or races," says Prof. Ojha, "seem to have spread from the Mediterranean coasts, along the sea coasts and river deltas right up to the Indian coasts and plains and even perhaps onwards."[3] At about the same time Fr. Allo, O.P., qualifies the Dravidians as "a race which shows many somatic relations with the Mediterraneans, their pigmentation having turned black, only owing to the climate or to their mixing with the aboriginal peoples of the country."[4] It was consequently supposed that the so-called Dravidians of South India were the same Mediterraneans of the heliolithic culture of South Europe, settled in India and here mixed with the pre-Dravidian population.[5]

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[1] Keith, *The Antiquity of Man*, I, p. 28.

[2] Chatterji, *The Origin and Development of the Bengali Language*, I, p. 27.

[3] Ojha, "The Indra-Vṛtra War and the 'Serpent People'", *J.B.O.R.S.*, XXVIII, p. 63.

[4] Allo, "Religions de l' Inde" in Brilliant Nedoncelle, *Apologétique*, p. 807.

[5] Cf. Slater, *The Dravidian Element in Indian Culture*, pp. 35-41; Keith, *The Religion and Philosophy of the Veda and Upanishads*, II. p. 630. Keith nevertheless does not agree with this view.

Further studies in the comparative history of early cultures have shown the possibility of a migration in the opposite direction, *viz.*, that the Dravidians did not travel from South Europe to India,[1] but from India to South Europe. Their seafaring activities for purposes of trade, from very ancient times add probability to this possibility. "Long before our era," acknowledges Mons. Courtillier, "the Dravidians enjoyed a culture of their own, and their commercial relations with the West, Mesopotamia and Egypt, which had begun in very early days, continued down to the disruption of the last forces of the Roman Empire."[2]

It was therefore not strange that scholars finally realised and definitely acknowledged the immediate first-rate role that India has played in spreading civilization through the South European nations of the ancient world. "It has been established beyond a possibility of doubt," says Prof. Frankfort, "that India played a part in that early complex culture which shaped the civilized world before the advent of the Greeks."[3] In the same way Dr Hall states : "There is little doubt that India must have been one of the earliest centres of human civilization, and it seems natural to suppose that the strange un-Semitic, un-Āryan people who came from the east to civilize the west were of Indian origin, especially when we see with our eyes how very Indian the Sumerians were in type."[4]

We are therefore forced to acknowledge that the Dravidians, of India, after a long period of development in this country, travelled westwards, and settling successively in the various lands, they found their way from Mesopotamia up to the British Isles, spread their race — afterwards named Mediterranean owing to the place where they were known anthropologically — through the west and made their civilization flourish in two continents, being thus the originators of the modern world civilization.

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[1] Cf. Banerji, *op. cit.*, p. 13.

[2] Courtillier, *Les anciennes civilizations de l'Inde*, pp. 111-112

[3] Frankfort, "The Indus Civilisation and the Near East," *Annual Bibliography of Indian Archaeology, VII*, p. 12.

[4] Hall, *op. cit.*, p. 174.

In this volume and in those that will follow, ample evidence of these migrations will be given. The discoveries of the Indus Valley, and in particular the decipherment of the Proto-Indian script, have opened new vistas to Ancient History. We are happy to point these out to our fellow-workers, with the humble suggestion that the results of these migrations may be collectively styled "the Greater India of the West."

VII

The importance of this final conclusion which our research has led us to formulate need not be emphasized. Traditionally Egyptian culture had for many years been held as the most ancient culture of the world. The excavations conducted in Mesopotamia after World War I made us change that view and opened wide vistas towards the east. The Sumerian culture was older than the Egyptian, and some very striking points suggested such affinities between both civilizations as to make us suspect that the former might be one day acknowledged as the source of the latter. The discoveries of the Indus Valley have now once more forced us to shift the birth of civilization to the East : India seems to be the cradle of Western Civilization, and the study of the Proto-Indian Civilization in relation to the ancient nations of the West, has disclosed that the latter are not only connected with India from ancient times with cultural and moral ties, but even with physical links. The Mediterranean nations of the ancient world were racial offshoots of the mighty Proto-Indian tree.

When studying the origins of Western Civilization scholars were of late inclined to look towards the East as its fountain head. Druids, Iberians, Etruscans, Minoans and Micaeneans were every now and then assigned an oriental origin ; they were at least connected with the eastern Mediterranean shores. Today we may go a step further. All those nations in union with the ancient great nations of Syria, Mesopotamia and Eastern Africa have but a common origin in India. The flow of migration that, starting from the western Indian shores, spread vital strength and cultural rever-

berations throughout so many lands, was the original spring of that culture, which flourished in the Mediterranean in ancient times and which, informed by the spirit of the Gospel at a later period, laid the foundation of modern European civilization. The modern materialistic tendency is totally foreign to it — a strange grafting of venomous influence — not the natural outgrowth of its own vital seed. The Indo-Mediterranean civilization is essentially spiritual; it is the civilization that acknowledges the Word of God and its transcendent influence upon man. Be it called *Vāk* in India, *Enem* in Sumer, "Lord of Divine Words" in Egypt, and *Lógos* in Greece, mankind is acknowledged as essentially connected with Him, as He is its Hiranyagarbha, its *lógos spermatikós*, its Archetype and Maker. "He supporteth this world's burden",[1] as said in India. He is "the Creative Word",[2] in Sumer. "He is the measurer of the earth" in Egypt.[3] "It was through Him that all things came into being."[4]

The origins of European civilization cannot be studied any more without reference to the ancient civilization of India. Many of those similarities, relations and connections which were already known and styled "Indo-European," will now be recognised as "Indo-Mediterranean". Thus the significance of the ancient civilization of India in the field of scholarship will be patent to all.

But there is still another point of view which should not be overlooked while emphasizing the importance of Indian cultural studies. One of the Hamito-Mediterranean nations which has, as well as all others, its origin in India is Canaan.[5] Ancient biblical tradition and modern archaeological evidence unanimously conspire

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[1] *Rg.*, I, 152, 3; *Ath.*, IX, 10, 23.

[2] Albright, *From the Stone Age to Christianity*, p. 145.

[3] Wallis Budge, *The Gods of the Egyptians*, I, p. 400.

[4] *John.*, I, 3.

[5] The author regrets to profess views contrary to the common opinion as regards the origin of this nation, as he is forced by the evidence of facts. The fact that later Canaanites spoke a Semitic language cannot be afforded any longer as a proof of its supposed Semitic origin.

towards that conclusion.[1] Now, it is well known how much did the civilization of Canaan influence the early Israelites settled there on their arrival from Egypt and the desert. As the newcomers lived together with the old children of the land,[2] they adopted many of their customs and at times even followed their idolatrous behaviour.[3] The sacrifice of the daughter of Jephte is only a striking instance of the deep roots the Canaanite customs had taken in the life of the people of Israel.[4] The civilization of Canaan, which at times seems inexplicable on the supposition of a Semitic origin, finds its full satisfactory explanation and foundation in the Proto-Indian civilization, of which Canaan was only a branch. The Indian vistas which are now open to biblical scholars have an unlimited horizon.

Yet, this is not all. Abraham, the Father of the Hebrew nation, himself being a Semite living among the Sumerians of Ur, inherited from them innumerable cultural traits and ancient traditions which he and his family transferred to the new land to which Jahve called him.[5] It is now acknowledged that "when Abraham migrated from 'Ur of the Chaldees,' a Sumerian city, he brought with him the oldest traditions of mankind, which Moses recorded in the first chapters of *Genesis*."[6] The Indo-Sumerian migration to the land of the two rivers seems now well established, and we may accordingly discover the roots of Sumerian civilization, which so much influenced Abraham and the Hebrew nation, in the land watered by the Indus. In particular all those venerable traditions which Abraham bequeathed to his children as a sacred heirloom, may now be traced, at times in a far purer state than in Sumer, to the ancient traditions of India. The original creation of the

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[1] Cf. Barrois, *Précis d'archéologie biblique*, pp. 11-12; McCown, *The Ladder of Progress in Palestine*, pp. 47-48; Garstang, *The Story of Jericho*, pp. 57, 63, 69-82; Albright, *From the Stone Age to Christianity*, p. 145.

[2] *Judg.*, I, 27-33.

[3] *Ibid.*, II, 12-13; VIII, 33-34, etc.

[4] *Ibid.*, XI, 30-39.

[5] Cf. Woolley, *Abraham*, pp. 143-258.

[6] Deimel, "De Populo Sumerorum", *Verbum Domini*, I, p. 159. Cf. Reply of the Biblical Commission of June 27, 1906; Murillo, *El Problema Pentatéuquico*, pp. 178-179.

waters out of which all other things sprang ;[1] the rebellion of the angels in heaven ;[2] the very name Taimata of the evil one, qualified as a serpent, similar to the Babylonian Tiāmat of the *Enuma Elis* ;[3] the installation of the faithful angels, as their eternal reward, in heaven ;[4] the evil influence spread by the rebel angels throughout the world ;[5] the creation of the spiritual soul by God ;[6] its infusion into the body of man ;[7] the nature of this soul created to the likeness of God ;[8] the creation of man after the animal world ;[9] the creation of the woman from the body of the first man;[10] the holy life of man in his original state ;[11] the first sin of man which ended the period of pristine happiness ;[12] the loss of immortality ;[13] the inheritance of the original sin ;[14] and the story of the Flood[15] are only

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[1] *Ṛg.*, X, 82, 5-6 ; 121, 6-9 ; 149, 2-3 ; 190, 1-3, 7 ; *Ath.*, X, 7, 38 ; *Taittirīya Saṁhitā*, V, 1. 5, 1; *Śatapatha Brāhmaṇa*, XI, 1, 6, 1; *Pañcaviṁśa Brāhmaṇa*, VII, 8, 1; *Taittirīya Brāhmaṇa*, I, 1, 3, 5; *Aitareya Āraṇyaka*, II, 1, 7; *Bṛhadāraṇyaka Upaniṣad*, V, 5, 1; *Jaiminīya Upaniṣad*. I, 56, 1; IV, 22, 1; *Rāmāyaṇa*, II, 110, 2ff; *Manu Smṛti*; I, 6-11; Yāska, *Nirukta*, X, 12-13.

[2] *Ṛg.*, I, 16, 8; 32, 11; 61, 8-10; 84, 3; 186, 3; II, 3, 15; 12, 3; 19, 3; III, 30, 5; 33, 6, 52, 7; IV, 30, 1; VI, 17, 8-10 ; 30, 4; 45, 5; 47, 6 ; VIII, 37, 2; 67, 7; 82, 14-16 ; *Yjr.*, VIII, 33; *Taittirīya Saṁhitā*, I, 5, 1; II, 1, 1; 2, 5; 5, 2 ; III, 4, 4; *Aitareya Brāhmaṇa*, III, 2, 21; 4, 39; IV, 4, 25-26 ; *Jaiminīya Brāhmaṇa*, I, 60, 1-7 ; *Pañcaviṁśa Brāhmaṇa*, IV, 5, 2 ; 6, 13 ; VI, 6, 8 ; VIII, 8, 9 ; IX, 10, 1 ; XII, 6, 8 ; XIV, 4, 5 ; 11, 14 ; XVIII, 52, 9, 6 ; 11, 1 ; *Śatapatha Brāhmaṇa*, IV, 5, 4, 1 ; *Jaiminīya Upaniṣad*, I, 18, 5 ; II, 4, 1 ; 10, 1 ; *Bṛhadāraṇyaka Upaniṣad*, I, 3, 1-16 ; *Chāndogya Upaniṣad*, I, 2, 1-9 ; *Aitareya Āraṇyaka*, II, 1, 7 ; *Mahābhārata*, Vana Parva, 14368-14387 ; Sānti Parva, 10098-10208; *Kathā Sarit Sāgara*, XX, 22AA (Tawney's, II, p. 102). The tradition of the sin of the angels in ancient Indian lore had already been noticed by Fr. Fenicio, S.J., in his *Livro da Seita dos Indios Orientais*, pp. 152-154. Cf. Heras, "The Devil in Indian Scriptures," *J.B.B.R.A.S.*, XXVII, pp. 214-241.

[3] *Ath.*, V, 13, 6 and 8. Cf. *ibid.*, 18, 4. This similarity had already been noticed by Tilak, "Chaldean and Indian Vedas," *Bhandarkar Commemoration Volume*, pp. 33-39.

[4] *Ṛg.*, I, 51, 8 ; 130, 8 ; II, 11, 18 ; IV, 26, 2 ; VI, 17, 8 ; VIII, 98, 3 ; 92, 32 ; *Taittirīya Saṁhitā*, I, 6, 10 ; *Aitareya Brāhmaṇa* VI, 4, 20.

[5] *Mahābhārata*, Adi Parva, 2481-2597.

[6] *Kauśītakī Upaniṣad*, II, 11 ; *Śvetāśvatara Upaniṣad*, V, 14 ; VI, 3, 5 ; *Maitrāyaṇa, Brāhmaṇa*, II, 6 ; *Aitareya Upaniṣad*, I, 1, 3, 11-12.

[7] *Ṛg.*, II, 5, 2 ; *Aitareya Āraṇyaka*, II, 2, 1.

[8] *Aitareya Upaniṣad*, I, 2, 2-3.

[9] *Śatapatha Brāhmaṇa*, XI, 1, 6, 1-2 ; *Bṛhadāraṇyaka Upaniṣad*, I, 4, 3.

[10] *Mahābhārata*, Āraṇyaka Parva, 11234-11245.

[11] *Ibid.*, 13018.

[12] *Ṛg.*, X, 13, 4. Cf. Barth, *The Religions of India*, p. 22.

[13] *Pañcaviṁśa Brāhmaṇa*, XIII, 6, 9 ; *Jaiminīya Brāhmaṇa*, I, 161 ; *Aitareya Brāhmaṇa*, 11, 2, 22.

[14] A study on this question will appear in Vol. II of this work. In the meantime cf. Heras "La tradición del pecado del Paraiso en las naciones protoindicomediterráneas," *Estudios Bíblicos*, I, pp. 53-74.

[15] Cf. below, Chapter IV.

a few souvenirs of the ancient traditions which are detected in Indian *Śruti* and *Smṛti* ; the origin of these traditions must be looked for in the very foundations of the Indian nation and they very eloquently proclaim the unity of the human race. In particular the attention of the readers is hereby drawn to the story of the original sin graphically represented in the Indus Valley and explained in one of the chapters of this work ; the story is a true parallel in most of its details to the account of *Genesis*, much more than the poems of the Sumerian Tagtug or the Babylonian Adapa. The carvings reproduce the "Tree of Life" with this very denomination, the animal-shaped tempter, its punishment, the closing of the original happy home, the shame of the guilty pair, the covering of their nudity with leaves, their punishment by God. Thus the biblical scholar will find innumerable sources of study in the ancient culture of Indostan.

In a recent article published in Oxford Dr J. J. Crowley already acknowledges that "Mohenjo Daro has a very large contribution indeed to offer to archaeology, comparative religion and biblical studies."[1] After examining the results, both archaeological and directly epigraphical, of the research done in the Indus Valley culture, Dr Crowley says : "The affinity of the Indus culture with those known as Mediterranean is established, but evidence is inclining some students to make the Indus older than any of them. May we hope that we have advanced another step towards the common origin of the cultures from which our Pentateuch came and towards the primitive revelation of which it speaks ?"[2] Crowley accordingly studies some of the religious tenets of those people, in particular their monotheism, which seems to have a clear tendency to deteriorate, and their dogma of a Triune God founded upon the "one life of three supernatural beings (*kadavul*)"[3] and finally concludes thus : "However that may be (and if it be true, then we may well

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[1] Crowley, "The Indus and the Pentateuch," *Blackfriars*, XXVII, p. 265.

[2] *Ibid.*, pp. 268-269.

[3] Cf. Heras, "The Religion of the Mohenjo-Daro People according to the Inscriptions," pp. 5-7, 15-17.

be in touch with a source of the Pentateuchal story far more ancient than that offered by the Marduk myth of the Tigris and Euphrates) we are certainly brought face to face with a people whose recorded culture and religion reach as far back as that of any other known race."[1]

The studies in this ancient civilization which are published in this volume, and those which will follow, will elucidate some of the most fascinating problems that the excavations of the Indus Valley cities have created, the first ones being the system of deciphering the inscriptions and the historical foundations of the first migrations westwards. These are the capital problems that have now arisen. We sincerely hope that once all these problems are solved, India will be acknowledged as the cradle of human civilization.

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[1] Crowley, *op. cit.*, p. 267.

Chapter I

THE DECIPHERMENT OF THE MOHENJO-DARO SCRIPT

After the decipherment of the hieroglyphs of Egypt by Champolion in 1797, the greatest epigraphical problem in the annals of ancient archaeology has undoubtedly been the study of the quaint script discovered in the ancient sites of Sind and the Puñjāb at Mohenjo Daro, Chañhu Daro and Harappā. It is true that the short inscriptions on steatite seals of the Indus Valley cannot be compared with the monumental epigraphs of the Egyptian temples and tombs. Yet the sudden appearance of that new script in Northern India, as well as the fact that similar seals bearing inscriptions in the same style appeared in Ur, Kish and other sites of ancient Sumer, increased the interest of all archaeologists and students of ancient history and civilization in those small characters which looked as cryptic as the characters of the Minaon script of Crete.

I

EARLY ATTEMPTS

Mr L. A. Waddell[1] was the first scholar who tried to decipher these seals after photographs of the same had been published in *The Illustrated London News*[2] and in the first volume of the *Cambridge History of India*.[3] This author considered that the apparent links existing between the Sumerian script and the Mohenjo Daro script—links to which attention was specially drawn by Mr C. J. Gadd and Mr Sydney Smith in one of the above articles—wonderfully and unexpectedly confirmed his views on the identity of the Sumerians and the Āryas, leading to the supposition without any further proof,

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[1] Waddell, *The Indo-Sumerian Seals Deciphered.*

[2] Sept. 20, 1924, pp. 528-532; Oct. 4, 1924, pp. 614-616.

[3] Pl. XI, 22, 23.

that the inhabitants of Mohenjo Daro were Āryas. Consequently he tried to read all the inscriptions in Sumerian by comparing the signs of both scripts, and thus claimed to have found in them names of Vedic and Epic heroes of India. His system, besides being baseless, was faulty for a number of reasons, the chief being the following: He is not consistent in giving the same phonetic value to the same sign;[1] he equates signs which have no resemblance at all, for instance:

and [2]

and [3]

and he takes the figure of the *totem*-like animal carved on the lower portion of the seals as part of the inscription,[4] which is not.

Nothing else was published for five years about the decipherment of the Mohenjo Daro script. In 1931 the three volumes of *Mohenjo Daro and the Indus Civilization* were edited by Sir John Marshall. In this work there are two learned chapters on the Indus Valley script where some hints are given for its final decipherment. In one of them Prof. S. Langdon of Oxford, led by the comparison between these signs and the characters of the Brāhmi scripts of India, supposes that the phonetic values of these signs were at most bicon-, sonantal, for instance, *bad, bag, ban,* etc., *tad, tag, tab,* etc., *gal, gan gab,* etc. Thus they would agree with the roots of the Sumerian and the so-called Indo-Germanic languages.[5] All the phonetic values of the Mohenjo Daro script are not precisely syllabic, though many of them are. The Mohenjo Daro signs represent full words, which in the majority of cases are monosyllabic. Towards the end

[1] Compare for instance, sign No. 5 of p. 65 with sign No. 4.
[2] p. 96.
[3] p. 71.
[4] Very often throughout the book.
[5] Marshall, *Mohenjo Daro and the Indus Civilization*, II, p. 423.

of his chapter Prof. Langdon suggests "to Sanskrit scholars that they choose the names of a few mythical heroes and of deities and with the few identifications here made, attempt to separate the constantly recurring groups of signs and compare them with these names."[1] This suggestion of the Oxford Professor seems to be based on the old prejudice of many scholars that whatever was great, noble, and civilized could not but be Āryan. Nevertheless, Sir John Marshall had quite convincingly proved that the authors of the Indus Valley civilization were not Āryas.[2]

Mr C. J. Gadd, of the British Museum, also arrives at similar conclusions, *viz.*, "that the writing is, at least in part, syllabic" and that the language of the inscriptions is "an ancient Indo-Āryan language." But he adds a third one. *viz.*, "that the seal inscriptions are, in general, names."[3] Accordingly, Mr Gadd after a number of gratuitous suppositions suggests that the combination of signs , , means "son" = *putra*, and therefore the value of the three signs will be, = *p(u)*, = *tr(i)*, and = *a*.[4] This reading, though very ingenious, is groundless and lacks all those characteristics which make the interpretation of an inscription scientific.

Not long after the publication of Sir John Marshall's work, Dr Prān Nāth published a short key-table by which, after comparing some signs of the Indus Valley script with the Brāhmi characters, he gave some alphabetic values to a number of signs of the former.[5] The principle upon which Dr Prān Nāth worked out his theory is true, i.e. that the Brāhmi characters are the natural development of the Indus Valley signs. Yet he failed to see that thousands of years had elapsed from the time of the Mohenjo Daro seals till the time when Aśoka's inscriptions were inscribed on rocks and pillars; and

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[1] Marshall, *Mohenjo Daro and the Indus Civilization*, II, p. 431.

[2] *Ibid.*, I, pp. 110-112.

[3] *Ibid.*, II, p. 314.

[4] *Ibid.*, Mr C. J. Gadd thinks that *putra* is a Sanskrit word, without knowing that its origin is purely Dravidian (Cf. Kittel, *Kannada English Dictionary*, p. xxix). A real Sanskrit word for "son" would be *jāta* or also *suta*.

[5] Nāth, "The Script of the Indus Valley Seals", *J.R.A.S.*, 1931, pp. 671-674.

during this long period the value of the signs had become alphabetic though originally their values were full words. The readings of 22 inscriptions suggested by this author seem to have some meaning "provided," as he himself says, "the language is understood to be some form of Prakrit or old pre-Vedic language."[1]

Dr Prān Nāth continued his studies on the same lines and in 1929 contributed two long articles on "The Scripts on the Indus Valley Seals" to the *Indian Historical Quarterly* of Calcutta. In this second work, Dr Prān Nāth maintains that the strokes which appear within or round the original signs "show a remarkable resemblance to the vowel signs used in the earliest Brāhmi writing of southern as well as northern India."[2] It is true that these strokes slightly modify the phonetic value of the sign, but not by adding a vowel sound, as we shall see later. Dr Prān Nāth's theory is weak, for it is built on a shaky foundation, *viz.*, the alphabetic values of the signs. He translates a number of "selected inscriptions" in which he claims to have found several names of Āryan and Sumerian gods.

Two of these deserve mention. In seal No. 80 he reads the word "*ssnaḥ*"[3] According to the author the god probably referred to by this word is "Sissna," which is found in Sanskrit literature as "Śiśna."[4] This word, which is found only twice in the *Ṛgveda*, does not seem to be a Sanskrit word, for there is no possible etymological explanation of it in any Āryan language.[5] The Ṛgvedic *ṛṣis* used a corrupted form of the word used by their Dasyu neighbours, i.e. the Dravidians. In Dravidian languages the *membrum virile* is called *cunni*.[6] Later on it was called *linga* in Sanskrit literature. Not only is the word Dravidian, but the cult of the *phallus* itself is a purely Dravidian cult. The Ṛgvedic Āryas could not tolerate a

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[1] Nāth, "The Script of the Indus Valley Seals", *J.R.A.S.*, 1931., p. 674.

[2] *Ibid.*, p. 674. Nāth, *The Scripts on the Indus Valley Seals*, I, p. 2,

[3] *Ibid.*, p. 16.

[4] *Ibid.*, p. 17.

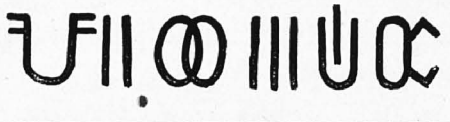
[5] *Ṛg.*, VII, 21, 5; X, 99, 3.

[6] In ancient Egyptian language it was called *śhnt*, a word which seems to have the same root. Cf. Wainwright, "Some Celestial Associations of Min", *Journal of Egyptian Archaeology*, XXI, pp. 152-170.

worshipper of the *phallus* near the sacrificial altar. Such a sacrifice was considered polluted. How then can Dr Prān Nāth explain that the *śiśna* was considered a deity by the Āryas in a "pre-Vedic" period ?

Kṛṣṇa is the second god who demands some comment. "Symbols or monograms of the Lord Kṛṣṇa are numerous."[1] Now how can Dr Prān Nāth explain that Kṛṣṇa, a historical person in the epic period, who was not deified till about the first millennium B.C.,[2] is referred to as a god so many times in inscriptions of a much earlier age ?

Dr Prān Nāth gives the interpretation of only 78 inscriptions. Neither is he very accurate in the transcription of the inscriptions, as may be seen in the two following cases :

	Original	Dr Prān Nāth
No. 97		
No. 541.		

Finally, his readings are not always consistent. For instance the sign 𒀭 is given the following syllabic values : *sinā* (123), *sin* (459), *ṣnnā* (537). In general Dr Prān Nāth works on the same hypothesis as Mr Waddell, that the Sumerians and the Vedic or "pre-Vedic" Āryas are the same people, a theory he explained at length in 1935-36 in a series of articles published in the *Illustrated Weekly of India*.[3]

After Dr Prān Nāth's attempt, the interpretation of Prof. Sir W. M. Flinders Petrie was the next in chronological order.[4] Sir W. M. Flinders was considered to be the most famous of all Egyptologists

[1] Nāth, *op. cit.*, I, p. 3.
[2] Cf. Hill, *The Bhagavadgita*, pp. 8-9.
[3] 1935, July, 7, 21 ; August, 4, 18 ; September, 8, 22 ; October, 13 ; December, 3.
[4] Petrie, "Mohenjo Daro", *Ancient Egypt*, 1932, pp. 33-40.

and he seems to have found in the Mohenjo-Daro script something in common with the Egyptian hieroglyphs. According to him, since we have no idea at all about the language used in those ancient days, the careful examination of the ideographs of Mohenjo-Daro remains the only way to interpret them; for which the study of the Egyptian ideographs will greatly help, "as they retained longest their original detail".[1] He furthermore supposes that the seals of Mohenjo-Daro were seals used by officials. The inscription does not contain the name of the official, but only his title. Once this principle is settled, by comparing them with the similar parallel seals of Egypt, Prof. Flinders Petrie easily interprets a number of inscriptions, which are given only as a specimen. But his translations have not been accepted by any scholar. The reasons of his failure may be the following:

1. He worked with the prejudice that the inscriptions contain titles of court officials only. To entertain a prejudice like this while commencing the decipherment of any inscription seems to be fraught with danger and may lead to failure.

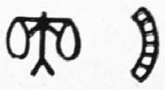
2. He has not tried at all to give the readings of the inscriptions, since he does not see any clue to the language of the Mohenjo-Daro people.

3. His interpretation of some of the signs is very far-fetched and improbable. Let us give a few specimens:

40 41

"No. 40 is a man bearing waterskins on a yoke, sometimes with branches over them to shade them (41): the sense is 'water supply'."[2]

47



"The sign 47, of curved lines barred across, is joined to the man with waterskins (40, 41)[3] pointing to water as the connection, and we take this as a canal with ripples on it."[4]

[1] Petrie, "Mohenjo Daro", *Ancient Egypt*, 1932, p. 35.
[2] *Ibid.*, p. 35.
[3] Not always. Cf. M.D. Nos. 333 and 434.
[4] Petrie, *op. cit.*, p. 36.

51

"51 has the curious theta-like sign with the water supply, an official of water service."[1]

53 54

"In 53 we may have a fork of a canal; with it is a similar sign (54), not barred, which may be a road, the seal belonging to a surveyor of roads and canals."[2]

62

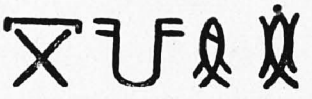
"62 seems obviously a table, though folding stands of tables are not figured in India; the crab sign after it would then refer to commissariat."[3]

4. The final interpretation of many inscriptions sounds almost ridiculous. Here are a few specimens:

M. D. No. 21

"Wakil of bows. Wakil of Inspector of trapped game".[4]

M. D. No. 53



"Deputy Inspector of the Wakil of the table".[5]

M. D. No. 18

"Registrar of infantry hostel of the fourth (highest) degree".[6]

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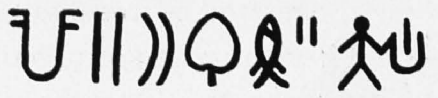
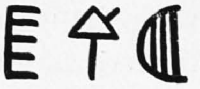
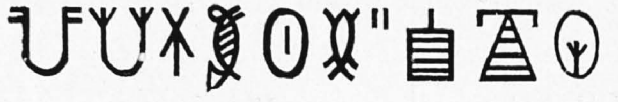
[1] Petrie, "Mohenjo Daro", *Ancient Egypt*, 1932, p. 36.
[2] *Ibid.*
[3] *Ibid.*
[4] *Ibid.*, p. 37.
[5] *Ibid.*
[6] *Ibid.*, p. 39.

M. D. No. 42 

"Wakil of hostel for men, second grade inspector of woods and canals".[1]

M. D. No. 46 

"Musician, knight of the court of five".[2]

M. D. No. 49 

"Deputy inspector of registry of mountain wagons, wakil of the wagon of the controller of game."[3]

5. As Dr C. L. Fábri has remarked, the most serious objection against Sir W. M. Flinders Petrie's interpretation is the extraordinary number of inscriptions, and therefore of court officials. "If all the seals had belonged to officials, then almost every inhabitant of Mohenjo-daro must have been an official personage and member of the Court."[4]

It is, however, only fair to add that Sir William seems to be correct in giving word values to the Mohenjo-Daro signs.

Shortly after Prof. Flinders Petrie had propounded the affinity and connection between the Mohenjo-Daro script and the Egyptian hieroglyphs, M. G. de Hévesy, in a lecture given in Paris, drew the attention of the scholarly world to the remarkable similarity between the Indus Valley script and the script of the Ester Island.[5] His comparisons between 130 signs of both scripts, and especially his remarks, have moved a number of scholars to accept his view that the Ester

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[1] Petrie, "Mohenjo Daro", *Ancient Egypt*, 1932, p. 39.

[2] *Ibid.*

[3] *Ibid.*

[4] Fábri, "Latest attempts to read the Indus Script," *Indian Culture*, I, p. 53.

[5] de Hévesy, "Sur une Ecriture Océanique paraissant d'origine néolithique," *Bulletin de la Societé Préhistorique Francaise*, XXX, pp. 434-449. An abridged English translation of this article appeared in *J. I. H.*, XIII, pp. 1-17.

Island script is the progenitor of the script of the Indus Valley. Yet this view seems to be scientifically untenable, for the absolute antiquity of the tablets where the Ester Island script appears is very doubtful. Moreover, after the publication of a short vocabulary of the Ester Island script,[1] it is evident, first that those signs which are similar have totally different meanings; second, that objects which are represented in both scripts are represented in different ways.[2] One is therefore forced to conclude that these similarities are merely accidental.

One year after this lecture, the first scientific treatise on this script appeared in the shape of a Ph.D. thesis submitted to the University of Oxford by G. R. Hunter.[3] Dr Hunter has made a profound study of the script in all its different aspects after copying 750 inscribed objects. He has compared signs with signs, combinations with combinations, inscriptions with inscriptions, script with script. But, unfortunately, some of the main principles settled by him in the beginning of his work have led him to evidently wrong conclusions. He readily admits the probability that the authors of the inscriptions were Dravidians and is even inclined to believe that they were the ancestors of the present Brāhuis,[4] but he also admits the possibility of "a riverine or maritime folk of a different race being responsible for Mohenjodaro and Harappa".[5] As to the script he believes it to be mainly phonetic,[6] never alphabetic,[7] though he acknowledges that its origin was pictographic and ideographic.[8] Furthermore, he is of opinion that the script constitutes a syllabary of open and closed syllables, roughly 250 in number, many of them being complete words.[9] Yet he thinks that the

[1] de Baños, *Rapanui, Historia de la Isla de Pascua*, p. 169 ff.

[2] Cf. Heras, *"The Ester Island Script and the Script of Mohenjo-Daro"*, *A. B. O. R. I.*, XXX, pp. 122-125. The present writer after examining all the signs of the Ester Island script has found only two, similar to the signs of Mohenjo-Daro, the meaning of which is also similar.

[3] Hunter, *The Script of Harappa and Mohenjo-Daro and its connection with other Scripts.*

[4] Hunter, *op. cit.*, pp. 12 and 17.

[5] *Ibid.*, p. 12.

[6] *Ibid.*, p. 21.

[7] *Ibid.*, p. 19.

[8] *Ibid.*, p. 21.

[9] *Ibid.*, p. 49.

inscriptions only contain proper names and at most some titles.

Following the views of Prof. Langdon, Dr Hunter realizes that the Brāhmi script of India is derived from the Indus Valley script,[2] and consequently he treats our script as if it were the Brāhmi script itself, forgetting that more than two thousand years had elapsed between the two scripts. This is the reason why he thinks that the signs stand for syllabic sounds; and on the same principle he interprets all the strokes that differentiate the signs as strokes that modify the vowels of the syllables.[3] Thus, though he suspects that the sign is a suffix of possession,[4] he prefers to give up this view and suppose, according to the later Indian custom, that it is an open syllable, the *-a* always added to a word ending in a closed syllable.[5] To give some practical examples of his Brāhmi theory applied to our script, we may take the characteristic sign and all its modifications. The consonant selected for completing the syllable was arbitrarily taken; but "the allocation of the given vowels to any particular variety of 'fish' is believed to be exact," says Dr Hunter:—

bab *bib* *beb* *bīb* *bob*[6]

In the same way these[1] two signs, and have only the vowel modified.[7] Similarly, has the same sound as , but modified by the vowel *u*.[8] The sign which is often found on each side of other signs, is, according to him, the Sanskrit *anusvāra*, suggesting a nasalized sound.[9]

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[1] Hunter, *op. cit.*, pp. 2, 27, and 47.

[2] *Ibid.*, p. 22.

[3] *Ibid.*, p. 1.

[4] *Ibid.*, p. 27.

[5] *Ibid.*, p. 52.

[6] *Ibid.*, p. 75. Dr Hunter does not give any explanation of four other modifications of this sign.

[7] *Ibid.*, p. 115.

[8] *Ibid.*, p. 123.

[9] *Ibid.*, p. 117. Dr Hunter claims to have fixed the meaning of five signs, for "god", "to", "from", "son", and "slave" (pp. 107, 125). Of these only the meaning "god" given to the sign is the correct one.

Dr Hunter is quite right in stating that the Brāhmi script comes from the script of Mohenjo-Daro. This nevertheless does not justify the thorough identification of both scripts. Certainly according to him the script of Mohenjo-Daro, which he considers purely phonetic, proceeds from a pictographic script which will accordingly also be the far ancestor of Brāhmi. But how can it be said that because Brāhmi is a syllabary, its pictographic ancestor must also be a syllabary? The comparison between the Indus Valley script and the Brāhmi script carried to an extreme mars the whole work of Dr Hunter. Relying on this comparison he passes from the script to the language, and without noticing it he applies to the language of Mohenjo-Daro (which was probably a Dravidian language) what is exclusively characteristic of the Sanskrit language: for instance, the changes of vowels, the open syllables and even the *anusvāra*. Had it not been for this defective system, the work of Dr Hunter would have been excellent and most useful to all future scholars.

Not long after the publication of Dr Hunter's book, Herr P. Meriggi contributed a long and scholarly article on the Indus script to the *Zeitschrift der Deutschen Morgenländischen Gesellschaft*.[1] Meriggi readily admits that the authors of the script were not Sanskrit-speaking people;[2] but he does not go further, nor does he try to reproduce the language of the inscriptions. His aim is to interpret the *meaning* of the inscriptions. We have already expressed our view about this system of interpretation. Though some signs and even short epigraphs might thus be interpreted correctly, it is impossible to arrive at the complete decipherment of these documents, without giving the phonetic values.

As regards the script itself, Meriggi rightly classifies it as an ideo-phonographic system of writing;[3] but he seems not to have sufficient reason for establishing *a priori* that the ideograms are found in the beginning of the words, while other simple signs that

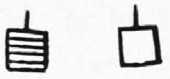
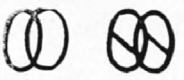
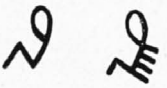
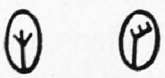
[1] Meriggi, "Zur Indus Schrift", *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, (N.F.), XII, pp. 189-241.

[2] *Ibid.*, p. 198.

[3] *Ibid.*, p. 202.

follow are phonetic modifications of the latter.[1] He acknowledges that the Hittite hieroglyphic script has apparently the closest similarity to the Indus script,[2] and he actually takes some meanings of Indus signs from the Hittite vocabulary.

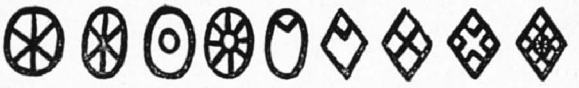
The interpretation of some of the signs is not without foundation, and appears sometimes very ingenious, as may be seen in the following table :—

No.	Signs	Meanings	No.	Signs	Meanings
1		Ape (p. 236)	8		temple (p.233)
2		mountains (p. 20)	9		mill (p. 235)
3		king (p. 20)	10		husk (fruit) (p. 236)
4		city (p. 20)	11		mortar (corn) (p. 227)
5		high city, a city of distinction. (p. 20.)	12		man (p. 220)
6		table (p. 21)	13		horse (p. 223)
7		cereals (p. 232)	14		a load (p. 223)

[1] Meriggi, "Zur Indus Schrift", *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, (N.F.), XII, p. 262.

[2] *Ibid.*, p. 200

Yet Meriggi does not pay attention to differences between sign and sign, differences which are evidently purposely introduced and must stand for at least a slightly different connotation. Such differences may be easily seen in Nos. 7, 9, 10, 11, 13 and 14 of the preceding table. Similarly according to him all the following signs mean "stamp" or "seal".

 [1]

Meriggi, like some of his predecessors, supposes from the very beginning that these documents are administrative seals, but unlike Hunter, he does not expect to find many proper names.[2] Moreover, he avers that verbs are scarcely to be found, but only nouns.[3] These *a priori* assertions are not fully satisfactory.

Nor is he convincing when he maintains that the small strokes found in the upper portion of the script are only word-dividers.[4] If that were so, there would be many inscriptions without any division of words. Moreover, in many inscriptions such word-dividers are found at the end of the inscription, where no word-divider is needed. Furthermore, the author identifies these little strokes | or || or ||| with the strokes that are found within the sign 𒀭, thus 𒀭 or 𒀭 or 𒀭.[5] They are placed inside, he says, for lack of space.[6] Such is certainly not the case of the Mohenjo-Daro inscriptions Nos. 16, 24, 41, 70, 106, 179, to mention a few. In all these inscriptions there is room enough to place these strokes outside the other sign. Moreover, he does not make any distinction between 𒀭, 𒀭 and 𒀭, 𒀭.

Besides these word-dividers, Meriggi has found another kind of auxiliary ideograms to isolate the main ideograms, thus empha-

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[1] Meriggi, "Zur Indus Schrift", *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, (N.F.), XII, p. 205.

[2] *Ibid.*, pp. 200 and 218.

[3] *Ibid.*, p. 216.

[4] *Ibid.*, pp. 2 and 9.

[5] *Ibid.*, pp. 206 and 209.

[6] *Ibid.*, p. 204.

sizing, as it were, the importance of the latter.[1] Such auxiliary ideograms would be, for instance : , , , , , , , ◯. But his reasoning is not acceptable. In any case all these eight kinds of isolating ideograms would have different meanings, and such meanings are not explained at all.

He also says that the sign stands for the genitive ending. Similarly, according to him stands for the nominative ending and and for the dative ending ; but strange to say, he says that they are only sound signs, not case signs ; so that not every word ending in will be a noun in the nominative, nor every word ending in a noun in the genitive, etc.

It will be useful to give a few samples of Meriggi's interpretation in order to judge of the results of his study :

M. D. No. 182

"Umbrella man (bearer) of the king."[2]

M. D. No. 146.

"Seal for the seven temple husks."[3]

M. D. No. 337.

"Store for the corn mill. Seal."[4]

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[1] Meriggi, "Zur Indus Schrift", *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, (N.F.), pp. 10 and 16.

[2] *Ibid.*, p. 214.

[3] *Ibid.*, p. 237.

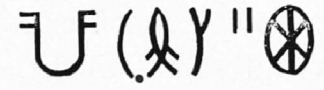
[4] *Ibid.*, p. 234.

M. D. No. 424.

"Seal for the overseer of the land."[1]

M. D. No. 10.

"Stamp for the horse and the fork man."[2]

M. D. No. 148. 

"Stamp of so-and-so."[3]

Probably H. 142.

"Cereals : corn for the temple."[4]

The result obtained by Herr Meriggi, as is easily seen from these few specimens of his decipherment, is not very different from that arrived at by Sir W. M. Flinders Petrie. Therefore the extraordinary number of such administrative seals stands against this interpretation also. Moreover, Meriggi interprets some of the inscriptions in the way we should expect from administrative officers in our own days. In a word, he makes these early people think and write as we think and write today. Even the grammar proposed by Meriggi seems too developed for those days. Hence his study of the Mohenjo-Daro script is in general not as useful as that of Dr Hunter, though here and there he arrives at the right solution more by good luck than by reasoning.

Very recently the theory of the Āryan origin of the Mohenjo-Daro people has been resuscitated, and three exponents of this view

[1] Meriggi, "Zur Indus Schrift", *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, (N.F.), XII, p. 232.

[2] *Ibid.*, p. 231.

[3] *Ibid.*, p. 211. The middle isolated sign stands for a person's name, according to Meriggi. The name is in a sort of *cartouche* that reminds one of the Egyptian fashion. Yet this *cartouche* has an identifying personal mark.

[4] *Ibid.*, p. 33.

have attempted to decipher the Mohenjo-Daro script in Sanskrit. The first of these three is Swāmi Śaṅkarānanda, of the Ramakrishna Mission. The Swāmi is a Tāntric student, and he sees everything from the point of view of Tāntrism. Accordingly the solution of the riddle of the Indus Valley script will, he thinks, be found in the Tantras. "The Tantras", says he, "are the Vedas written in a code language made of cryptic monolettered words",[1] and this "secret language of the Tantra" is declared by him to be "now lost".[2] The Swāmi first of all creates a great confusion between language and script, between sounds and signs, which he calls "alphabets," — a new meaning attached to this word, which he defines thus: "The alphabet is the symbol or the picture of a sound".[3] This confusion appears very clearly when he describes the Tāntric script: "The monolettered *words* of the Tantras are actually *pictures*. These pictures represent specific sounds. In this respect these pictures are actually the alphabets (*sic*) of the Tāntric language."[4]

The Swāmi speaks at length of the formation of the Tāntric script. The Tāntras, according to him, did not invent it, but formed it out of eight or nine different scripts.[5] "The science of script-making — they lay buried in the mass of Tāntric literature for ages".[6] But it is a fact that in this script there seem to be several signs or pictures bearing the same meaning. To this objection the Swāmi replies that the signs that have the same meaning have all a different origin, as they had been employed by different Āryan clans.[7] The Tāntras, he explains, collected all the scripts in actual use in India. The theory the Swāmi builds up to set this statement upon a basis is as weak as the statement itself. The unification of all scripts "was probably necessitated by a political fusion which required a common medium of speech. All the current dialects were thus

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[1] Śaṅkarānanda, *The Rigvedic Culture of the Pre-historic Indus*, II, p. 45.

[2] *Ibid.*

[3] *Ibid.*

[4] *Ibid.* (Italics in text are mine).

[5] *Ibid.*, p. 67.

[6] *Ibid.*, p. 66.

[7] *Ibid.*, pp. 66-67.

amalgamated into one whole, and the medium of speech was a resultant new language;... This medium of speech came to be known as the Sanskrit or the reformed language."[1] Evidently the Swāmi envisages events in ancient India in the light of current conditions. The attempt to make Hindi the language of a united India inspires in the Swāmi's mind the notion of similar efforts in ancient times ; and what can hardly be accomplished with all the machinery of the modern State was apparently successfully done in the far past — those times of city States and tribal differences! "When the variants were thus systematized," he adds, "and the Sanskrit language created, a greater India and a greater and nobler Ārya nation were in the making".[2] This is, indeed, a new theory of the creation of Sanskrit ; it is an artificial language, created just as Esperanto has been in modern times.

This fanciful explanation of the origin of Sanskrit shows that according to the Swāmi, the Tāntric amalgamation of scripts and the consequent creation of a new common Indian language took place at a period prior to that of the *Ṛgveda*, when the new language was already in vogue. As regards the script or scripts, which are all, according to our author, derived from the Tantra, they are of a posterior age, and the chronological sequence of these scripts is the following :

1. The Jaipurean script. Such is the denomination that the Swāmi gives to the collection of marks found in the punch-marked coins discovered at Rairh, Jaipur State.[3] He does not seem to be acquainted with the excellent works on such coins by Babu Durga Prasad[4] and Mr John Allan,[5] nor does he seem to have read the following words of Dr K. N. Puri, when he published the report of his excavations at Rairh : "Hoards of punch-marked coins have

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[1] Śaṅkarānanda, *op. cit.*, p. 233.

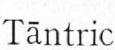
[2] *Ibid.*, p. 68

[3] Cf. Puri, *Excavations at Rairh*, pp. 46-49.

[4] Prasad, *Observations on the Silver Punch-Marked Coins of Ancient India and their Age* (Benares, 1931); Prasad, "Classification and Significance of the Symbols on the Silver Punch-marked Coins of Ancient India", *Numismatic Supplement*, No. XLV.

[5] Allan, *Catalogue of the Coins of Ancient India.*

been found at over forty different places in various parts of the country from Peshāwar in the north to Trichinopoly in the south and from Pālanpur (Pālanpur State, Bombay State) in the west to Midnapur (Bihar) in the east."[1] For the Swāmi only the Jaipur coins exist. In any case these marks are for him the oldest collection of marks, because of their correspondence with the meanings of the Tantras. "We may conclude by assuming that the Jaipurean pictograms are the Tāntric scripts in form".[2] That the signs of the punch-marked coins bear a great resemblance to the Tāntric signs was already discovered and explained by Babu Durga Prasad,[3] and the explanation of their resemblance is that both are more or less contemporary, though belonging to a much later period.

2. The next script after the Jaipurean in chronological order is the Egyptian, which is also derived from the Tāntric. "As a pictogram the Egyptian hieroglyphics (*sic*) are similar to the Jaipurean picture words".[4] Yet he contradicts this statement shortly after: "The Jaipurean and Egyptian hieroglyphics are not quite similar."[5] Anyhow "the Egyptian pictograms can be explained by the Tāntric science of alphabets (*sic*)."[6] He explains some cases of agreement between the interpretation of the Egyptologists and the Tāntric significances, but where such an agreement does not exist, the Swāmi states categorically that "the Egyptologist's effort to decipher them has been a failure."[7] As regards cases in which, according to the Swāmi, both meanings tally, I have examined only two, and both have in reality different meanings and even different phonetic values. He says that the hieroglyph of a river in Egypt reads *na* (न), as in the Tāntric texts. But that is not the case. The sign  sounds *na*, it is true, yet it is not the pictogram of a river, but of water in general. A river or canal is represented

[1] Puri, *op. cit.*, p. 48.

[2] Śaṅkarānanda, *op. cit.*, p. 69.

[3] Cf. Prasad, "Classification and Significance of the Symbols", pp. 16-55.

[4] Śaṅkarānanda, *op. cit.*, p. 70.

[5] *Ibid.*

[6] *Ibid.*

[7] *Ibid.*

thus or and reads *ma*.[1] Similarly the Swāmi gives the hieroglyph as meaning "mountains",[2] but it is not so; it means "foreign country" or "desert" and has no syllabic phonetic value.[3]

3. The next in chronological order is the Indus Valley script. The resemblance between this script and the Egyptian is beyond doubt, and the present writer has made use of this resemblance to decipher some signs of the former, as will be explained in the course of this chapter. The priority of the Egyptian hieroglyphs over the Proto-Indus script, according to his system, may supply a foundation for an objection which our author wants to obviate by all means. "If the Indus script is similar to the Egyptian and is much developed, so much so, that it is awaiting its transformation to alphabetic character (*sic*), then why not say that the Indus script originated in the Egypt (*sic*). The answer to this is that the science of script lies with the descendants of the Āryas and all the pictographic scripts can be deciphered with the help of that science. Moreover, the fact that the Egyptian script did not evolve to the alphabetic form, show (*sic*) clearly that the Egyptian people did not know the science of script-building."[4] In a word, the Egyptians, for the Swāmi, were mere *dāsas*, who derived all their culture from the Āryas. How can the Swāmi assert that the Egyptian script never became alphabetic, when two pages earlier he had acknowledged that the hieroglyph representing a river had the syllabic phonetic value *na* ?

4. After the script of the Indus Valley he considers the Chinese script to be the most ancient, but he does not say a word about the Proto-Chinese script discovered in recent years. "The Chinese picture words also come under the same system of the Tāntric script."[5]

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[1] Wallis Budge, *An Egyptian Hieroglyphic Dictionary*, p. CXX.

[2] Śaṅkarānanda, *op. cit.*, p. 80.

[3] Wallis Budge, *op. cit.*, p. CXXV.

[4] Śaṅkarānanda, *op. cit.* p. 72.

[5] *Ibid.*, p. 74.

5. The last development is the cuniform script (*sic*) (for cuneiform). Under this denomination he comprises "the old Persian, Median and Assyrian alphabets".[1] The Sumerian script which is now acknowledged to be the parent of the Babylo-Assyrian cuneiform is totally ignored by our author.

After the study of these five scripts our author gives his judgment about them, thus: "The simple Chinese alphabets (*sic*) have lost their identity. The pictograms of Jaipur and Indus (*sic*) have lost their sound values. The Chinese and Cuiniform (*sic*) script have retained and preserved the sound value of their alphabets while the Egyptian hieroglyphics retained partially their sound value. The Tāntric code can supply the sound value of all the pictograms, it is true, but unfortunately most of the terms of the Tāntric codes are not intelligible".[2] If the terms or sounds of the Tāntric codes are not intelligible, that is to say, are also lost, how can the Swāmi categorically affirm that "the Tāntric code can supply the sound value of all the pictograms"? The Swāmi seems to know this *a priori*.

After building these cloud castles our author gives a series of combinations which he reads according to Tāntric values.[3] Needless to say, these values are alphabetic, or at most syllabic. But the Swāmi is not consistent in the values he gives to the signs, and arranges them according to his fancy. Take the first three inscriptions he gives :

[4]

[1] Śaṅkarānanda, *op. cit.*, p. 75.

[2] *Ibid.*, p. 76.

[3] *Ibid.*, pp. 94-98.

[4] We were unable to collate this inscription with the original, because the author does not give any reference.

[1]

प गा म [?] हि प

A simple inspection of these three epigraphs will show how inconsistently he reads the signs. The first three signs ⍋ ||| ⋁ are always read **प गा म**. So far, so good; but at the end of each inscription the Swāmi reads **हि प**. Yet the end of each of these inscriptions is different from the end of the other two. How does he obtain the same reading? In the beginning of the inscriptions the sound **प** corresponds to ⍋ always, but how does he explain that the final **प** corresponds to three different signs, one of them at least ◇ so very different from the other two?

The final specimen he gives is the inscription on the so-called Paśupati seal,[2] in the examination of which we shall discover further developments of his system of decipherment.[3] The inscription proper of this seal contains seven signs only. Yet the Swāmi finds eleven of them. Let us examine it.

Signs of the Inscription placed from r. to l.	Signs as found by Swāmi Śaṅkarānanda	Remarks
	Buffalo	This figure does not belong to the inscription at all. On examining the seal one sees a totally different technique of carving between this figure of the buffalo and the signs of the inscription proper.

[1] Śaṅkarānanda *op. cit.*, p. 94.

[2] Cf. Heras, "The Plastic Representation of God in Mohenjo Daro", pp. 223-227.

[3] Śaṅkarānanda, *op. cit.*, p. 99.

Signs of the Inscription placed from r. to l.	Signs as found by Swāmi Sankarānanda	Remarks
	Rhinoceros	Ditto
	Man	
	Loin	Why does the Swāmi give this meaning to the sign ?
	(Not mentioned at all in his decipherment of the inscription).	
	The Jar	
	Fish	
	(Not mentioned either)	
	Elephant	Cf. first remark about "buffalo."
	The trunk of a man	It is not "trunk of a man" but "a full man."
	Tiger	Cf. remarks about "buffalo."
	Paśupati	The central figure of the seal is not to be included in the inscription at all. At most the inscription may be about it.
	Goat	The figure is under the throne of Paśupati. Cf. remarks about "buffalo."

The above chart will show that the Swāmi takes six figures of the seal to be signs of the inscription when they are not such : all the seals of the Indus Valley characteristically bear an animal, or a scene (in a few cases, as in this one) on the lower portion, while the inscription runs above. In one case the inscription is below.[1] In very few seals there is no animal or scene depicted as in a case of a three line epigraph.[2] Moreover in this case the Swāmi omits two signs of the inscription in the decipherment.

Now as regards the phonetic values given to all these signs, the correspondence is this :

1	2	3	4	5	6
Buffalo	Rhino	Man	Loin	Jar	Fish
ज	ल	:	तट	मथ	पध

7	8	9	10	11
Elephant	Trunk of Man	Tiger	Paśupati	Goat
श	कट	उ	न	ऐ

Now the full reading of the inscription with the corresponding numbers given above, is as follows :

ज	ल	:	प	थ	त	त	म्	शँ	कु	नै
1	2	3	6^a	5^b	4^a	?	5^a	7	8^a	10

Consequently we notice :

1. No. 9 has not been included at all in the text of the inscription.
2. The order of the sounds is changed to suit the theorist's own convenience. 6 and 5 are put before 4.
3. The two sounds assigned to 5 are considered in the reconstruction of the inscription ; while 4^a seems to be duplicated.

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[1] Marshall, M. D., No. 387.

[2] *Ibid.*, No. 400.

4. Nos. 8 and 9 are given different syllabic values from those of the first allotment.

The translation of this inscription thus *reconstructed* is: "The birds have covered all the waterways," which does not seem to be connected with the Paśupati at all, nor with God in general.

In conclusion, the system of decipherment of Swāmi Śaṅkarānanda does not seem acceptable:

1. Because of his original bias. The Indus civilization is Āryan, because for him all is Āryan in India.[1] All the scripts of the world are derived from the Āryan!

2. To support his thesis he disturbs the chronological succession of events, placing the Tantras, as we have seen, prior to the Vedas.

3. He maintains an artificial theory of the formation of Sanskrit, which is absolutely unscientific and thoroughly untenable.

4. To obviate all possible difficulties he denies the existence of any other race in India, for instance, the Dravidians, who are said to be an Āryan tribe.

5. He does not decipher the Indus Valley pictograms as pictograms should be; because for him there are no primitive stages of the script. The Āryas invented the script, already developed, all signs having at least syllabic values.

6. He is not consistent in the phonetic values he gives to the signs, nor does he translate all the signs or keep them in the same order of the inscription; he omits or transforms them, as he pleases. Consequently the system of decipherment proposed by Swāmi

[1] This bias is seen throughout the book even on other issues. For instance, he describes the effects of the rise of Buddhism as a fatal crisis for the Brahmanical cult, and he adds; "In this crisis great spiritual giants arose to save the Ārya (*sic*) society from a complete breakdown. In the south arose Madhvācārya and Rāmānuja, and in the north Śri Chaitanya". *Ibid.*, p. 43. One wonders why Śaṅkarācārya is not mentioned as well.

Śaṅkarānanda, notwithstanding the tremendous array of knowledge with which it is accompanied, cannot be considered to be a serious scientific attempt.

Following in the steps of the Swāmi Dr B. M. Barua, Professor of the Calcutta University, is also of opinion that the key to the Indus Valley inscriptions lies in the Tāntric texts.[1] Yet the system proposed by him is in its broad lines much more according to scholarship than that of the Swāmi. He does not deny the existence of the Dravidians as a separate racial unit in India, but he avers that "there is apparently no solid ground for thinking that there is anything peculiarly Dravidian or proto-Dravidian in the Indus seals and their inscriptions."[2] As regards the age of the Tantras, Dr Barua rightly declares that "the Tantra texts, as they are now extant, are admittedly compilations of a comparatively modern age."[3]

This relatively modern age of the Tantras is evidently the greatest drawback to the system of decipherment he proposes, as he himself acknowledges ; but he dismisses it forthwith by boldly stating : "One thing, however, is certain, namely, that it (the Tāntric code) is chiefly based upon the pictographs which stand for a syllabic form of writing;"[4] and without further discussion, owing to the similarity between the Indus Valley and the Tāntric signs, he presupposes that the former also must have syllabic phonetic values.

The writer has not the least doubt about the relationship between the Indus Valley and the Tāntric signs, though they are separated by centuries and even millenia; just as the image of the Tāṇḍavan discovered at Harappā is related to the traditions of the dancing

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[1] Barua, "Indus Script and Tantric Code", *Indo-Iranica*, I, pp. 15-21.

[2] *Ibid.*, p. 21.

[3] *Ibid.*, p. 16.

[4] *Ibid.*

Śiva that grew at a much later period at Chidambaram. The signs of the punch-marked coins may be a chronological link, if not a physical one, between the two distant dates. Yet this does not mean in the least that the signs of Mohenjo-Daro should read like the Tāntric signs, just as the hieroglyphs of the ebony label of Mina in Egypt, cannot be read as the hieroglyphs of the famous Rosetta stone; because the script had evolved a great deal in the course of centuries, from the time when it was in its primitive stage, in which signs stood for words, to one in which a few consonant sounds were only the phonetic value of each sign.[1] The same happened in India; from the time of the Indus Valley civilization down to the period of the Tantras the system of script evolved in an extraordinary fashion. A clear proof of it is Brāhmi, which is now acknowledged to be a development of the Indus Valley script,[2] and is, besides, syllabic. Yet in its first stage the Indus Valley script cannot be syllabic, for a pictographic script in its original stages is one whose signs correspond to words either monosyllabic or otherwise. "The signs," says Hunter, "are clearly of ideographic origin."[3] This is the greatest original defect of Dr Barua's system. Moved by the fact that all Indian scripts known hitherto are syllabic, and considering especially the syllabic character of the Tāntric signs, he comes to the conclusion that the Indus Valley script also would be "a syllabic form of writing."

Now passing to the actual decipherment of an inscription — again that on the Paśupati seal — Dr Barua maintains there is some relationship between the signs of the inscription and the figures represented below; as if the sculptor, foreseeing the difficulties that scholars of future generations would find in the work of deciphering the scriptures, obligingly gave them a clue to the solution. Accordingly the schematic and stylized designs of the

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[1] Cf. Naville, *L'Ecriture Egyptienne*, pp. 31-64.

[2] Cf. Hunter, *op. cit.*, pp. 1-2.

[3] *Ibid.*

inscription would correspond to some portion of the animals shown below, thus :

No. 1 Signs of the inscription	No. 2 Corresponding original portion of an animal of which the signs are an evolution	No. 3 Meaning of No. 2	No. 4. Phonetic value of No. 3
	?	Man-lion (Narasimha)	*a*
	The head of a buffalo	Buffalo-killer	*ja*
	The head of a rhinoceros, snout upwards.	Rhinoceros	*gha, la,* or *va*
	Tiger's legs, upside down.	Tiger legs	*u* or *da*
	Fish	Fish	*pa*
	Front legs of an elephant upside down.	Elephant	*sa*[1]

Thus the final reading he obtains is *ajala-upāsa* ; which put in ordinary Sanskrit becomes *acala-upāsya*, meaning : "The mountain worshipped one," which translation does not seem so unconnected with the main figure of the seal, as in the translation of Swāmi Śaṅkarānanda.

Yet we notice several strange details in all this arrangement which condemn this decipherment of the inscription :

1. The first sign he deciphers is a "man-lion", but nobody ever observed a man-lion in this seal. Apparently he supposes that the first sign of the inscription to the right which is a man is a man-lion; but the sign does not show any lion face.

2. There is another sign representing a man, at the end of the inscription to the left which he does not mention at all.

[1] Barua, *op. cit.*, p. 20 and pl. I.

3. Of the five signs interpreted in the above chart only , representing a fish, is beyond doubt. But why does represent the head of a buffalo, and not that of a rhinoceros is not explained. The same may be said of the two signs that correspond to the legs of the tiger and the elephant.

4. The second sign does not exist in the inscription. He takes this sign to be the same as , but that is not the case: both signs are found in the inscriptions,[1] and being different from each other, must have a different meaning.

5. Dr Barua omits, and consequently does not explain, the three strokes within the middle sign, which sign he interprets as tiger legs.

6. Having included the buffalo, the rhinoceros, the tiger and the elephant, in the interpretation of the inscription, why has Dr Barua omitted the goat or ibex which is under the Paśupati's throne ?

All these remarks may reveal how faulty is the system proposed by Dr Barua in its essential bearings, and even in its details.

Before concluding this subject, I must refer to the very latest attempt made by Dr A. P. Karmarkar to read the inscriptions in Sanskrit.[2] According to him the Indus Valley civilization is pre-Vedic and post-Vedic. Though it preceded Vedic civilization and ran parallel to it, it remained uninfluenced by it. In point of fact, the author suggests that "some of the Āryans, like the Bhṛgus, must have picked up the fancy of mixing themselves with the Dravidians — the main outcome of which are these inscriptions."[3] Yet Dr Karmarkar does not say clearly what is his view as regards the script and its authors. Was the script invented by the indigenous inhabitants of Mohenjo-Daro, or by their guests the Bhṛgus ? If by the former, why did they not use the script for writing in their own language ?

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[1] Cf. for instance, Mackay, *Further Excavations at Mohenjo-Daro*, pl. LXXXVI, No. 184; Mackay, *Chanhu-Daro Excavations*, pl. LI, No. 13.

[2] Karmarkar, "The Aryo-Dravidian Character of the Mohenjo-Daro Inscriptions," *Prācyavāṇi*, I, pp. 99-101.

[3] *Ibid.*, p. 101.

If by the latter, it is strange that only the Āryas who mixed with the Dravidians invented that script, for we do not know of any written monument of the Ṛgvedic period. Apparently, according to our author, the Dravidians must have invented the script; yet they expected the arrival of the Bhṛgus to put it immediately at their disposal, and the latter made use of it at once; and these inscriptions are the outcome of Bhṛguid energy and labour!

Consequently Dr Karmarkar sets himself to read the inscriptions in Sanskrit. He says: "One of the inscriptions, according to Fr Heras, reads '*Mūn Mīnkan*'. The same may be read त्रि मत्स्यनेत्र.[1] Quite so, it is easy to read this inscription in Sanskrit, after another one has deciphered it in Dravidian. I may even add that the first two signs of the inscription might have been easily deciphered by Dr Karmarkar 𝌡 |||. But what about the third ⍭? In what way is a lance or arrow associated with the Sanskrit word नेत्र? The only possible connection is that this word has the connotation of leading, and in this connection it is applied to the eye as a guiding organ of the body; now it may be said that the leader of the army should carry a lance. But the connection in Dravidian is much clearer. The Dravidian word *kaṇ* means "to pierce," and because the eye pierces a thing, though in a moral sense, in its vision, it is applied to the eye. Consequently a lance may very well signify the action of piercing and also the eye and the action of seeing.

Dr Karmarkar properly does not propose a new system of deciphering the inscriptions, but a new medium of expression. There is no objection to his reading them in Sanskrit after another has deciphered them in Proto-Dravidian.

When this chapter was going to the press we received full information of a new pre-war attempt made in Europe at deciphering the Indus Valley script. We refer to the studies of Prof. B. Hrozny, of the University of Prague, the famous interpreter of the Hittite

[1] *Ibid.*

inscriptions.[1] Owing to the war we had not been acquainted with the result of his research, but were able to get a glimpse of it through a short article contributed by Prof. A. J. Thomas to an Indian scholarly journal.[2] Yet this short article, which summarized a lecture given by the Czech Professor, did not give the systematic process of the decipherment, which we are now able to study minutely.

Prof. Hrozny takes for granted that the Proto-Indians of the Indus Valley were Indo-Europeans and even Proto-Hittites—an early wave of Indo-European invaders, much earlier than the later Āryas of the Ṛgvedic period. The foundation for all his decipherment is a seal discovered at Ur in Mesopotamia. This seal, which is now in the British Museum, and has been described several times,[3] has some characteristics which place it very near those discovered in the Indus Valley; yet other marks place it far off from the latter beyond any doubt. "Not only the inscription", says Mr Gadd, "but the style of the object and of the carving make it unlikely that this seal should be ascribed to the Indus Valley. It is either a local imitation, made at Ur, of a foreign type, or, more probably, a product of some place under the influence both of the Indus and of the Sumerian civilization."[4] The inscription on this seal, which is in archaic cuneiform writing, has been read as KA (or SAK)—KU (or LV)—SI.[5]

Hrozny without any hesitation takes this seal, though bearing a cuneiform inscription, to be of the Indus Valley. This is his first *a priori* assumption. The second one is not less striking; he reads the inscription SAG KU-SI and takes this last word Kusi to be the name of the tract of land where the Indus Valley cities are situated.

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[1] Hrozny, *Die älteste Volkerwanderung und die proto-indische Zivilisation. Ein Versuch die proto-indischen Inscriften von Mohendscho-Daro und Harappa zu entziffern*, (1939); Hrozny, "Inschriften und Kultur der Proto-Inder von Mohenjo-Daro und Harappa. Ein Entzifferung, sversuch", *Archiv Orientalni*, XII (1941-42); Hrozny, *Die älteste Geschichte Vorderasiens und Indiens*, pp. 203-224.

[2] Thomas, "Interpretation of the Indus Seals," *I.H.Q.*, XVI, pp. 683-688.

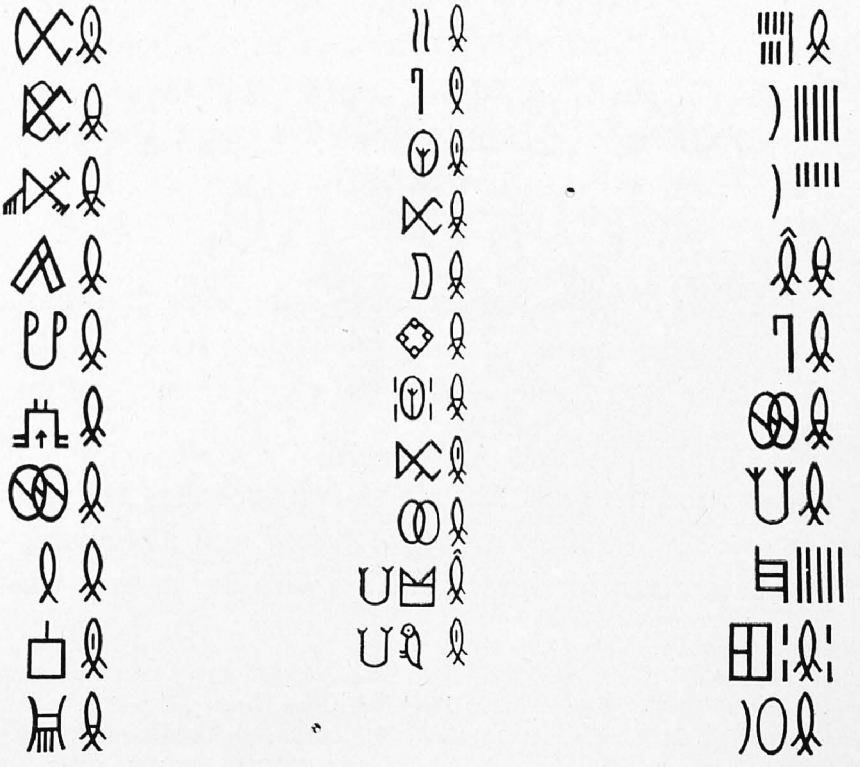
[3] Woolley, "Excavations at Ur, 1926-27, Part II", *Antiquaries Journal*, VIII, p. 26 and pl. XI, No. 2; *Museum Journal* (Philadelphia), 1929, pl. XLI; Gadd, *Seals of Ancient Indian Style found at Ur*, (From the Proceedings of the British Academy, XVIII) (London).

[4] Gadd, *op. cit.*, p. 6.

[5] *Ibid.*; Woolley, *op. et loc. cit.*

A young Professor of the University of Barcelona has already shown how baseless is the whole construction built upon such flimsy premises.[1] But Hrozny is not yet satisfied in his career of gratuitous assumptions. He naturally presupposes that this name being the name of the Indus tract, will also be found in the inscriptions discovered there, and accordingly he finds this name in the following inscription :

wherein he takes for granted that the sign ⍋, which in the Hittite script seems to be the determinative of city, will also have the same meaning in the Indus Valley. Accordingly he reads the two preceding signs as Kusi. Moreover he thinks that this name must be found in many of the seals discovered at Mohenjo-Daro and Harappā, and naturally he finds it in them, though the characters he reads as Kusi are not always the same. He reads the name Kusi in not less than fifty-nine inscriptions, out of which the following are specimens of the different ideograms reading Kusi :—



[1] Quintana Vives, *Aportaciones a la interpretacion de la escritura proto-India*, pp. 21-27.

Rightly therefore does Prof. Quintana Vives, mentioned above, remark that by the use of this interchange of signs Hrozny may find in the inscriptions anything he wants.[1]

It is again another *a priori* assumption to suppose that these seals have always a sign corresponding to the word *seal*, a word which though perhaps found in inscriptions of seals of other lands is not found on Indian seals at all. One seal reads *Guttasia*, "of Gupta";[2] in the same way the inscriptions of the ancient coins *Basileos Basileon megalou Azilizou*, which in Kāroshti reads: *Mahārājasa rājatirājasa mahātasa Ayiliṣasa*.[3] They are always in the genitive. Again Harṣā Vardhaṇa signs a document with his own hand and writes Śrī Harṣasya, "of Śrī Harṣa".[4] It is but natural, being seals, coins or documents, the word 'seal', 'coin' or 'document' was supposed unnecessary. Yet Hrozny, ignoring this general Indian custom, finds in the inscriptions a sign which means seal, and since the sign is not always the same he concludes that several signs, in fact thirty-three in all, mean "seal", and these signs are as different among themselves as the following:

[5]

This interchange of signs meaning the same idea and having the same phonetic value is one of the principles of Hrozny's interpretations. We have noted above that the signs corresponding to the supposed name of the Indus country are not always the same.

This has been the main fault in the work of the Czech Professor. He has *interpreted* the inscriptions *a priori*, and afterwards he has tried to substantiate his interpretation with arguments which are,

[1] Quintana Vives, *op. cit.*, p. 63.

[2] Cf. below, p. 66.

[3] Whitehead, *Catalogue of Coins in the Punjab Museum, Lahore*, I, p. 133.

[4] See Harṣā's Madhuban Plate Inscription in Mookerji, *Harsha*, pl. facing p. 10.

[5] This list of signs meaning 'seal' is much longer and with far more striking differences than the one proposed by Hunter. Cf. above, p. 41.

to say the least, not plausible, much less convincing. The real process to follow should be very different : it comprises three stages ; first the deciphering of the signs, i.e. to ascertain their meaning ; in which stage one must part from the principle that never two different signs will have the same phonetic value, and consequently the same meaning, unless clearly suggested by their phonetic interpretation. Second, the reading of the inscriptions, and third, the final translation. This is the long process we have followed and which we shall try to explain in the following pages.

II

PREPARING THE DECIPHERMENT

Before commencing the work of deciphering the inscriptions of Mohenjo-Daro and Harappā, I first laid down the following principles as the basis of my study :

1. *The remains of Mohenjo-Daro and Harappā are certainly non-Āryan.* This has been conclusively proved by Sir John Marshall.[1] The attempts of other scholars to prove the Āryan origin of those cities have only strengthened the argumentation of Sir John Marshall and emphasized the weakness of his opponents.[2] The "un-Āryan" origin of Mohenjo-Daro and Harappā is so certain that if some day scholars agree in assigning to the Āryan invasion a date earlier than Mohenjo-Daro and Harappā, even then we shall be forced to call the civilization of these two cities if not pre-Āryan at least certainly non-Āryan.

2. *The remains of Mohenjo-Daro are most likely Dravidian.* Prior to the Āryan invaders there had been in India three races : the Negritoes, the Austric tribes, and the Dravidians. It has not yet

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[1] Marshall, *op. cit.*, I, pp. 110-112.

[2] Cf. for instance, Dikshitar, "The Culture of the Indus Valley", *Journal of the Madras University*, VI, (1934), pp. 65-86; Pusalker, "Indus Civilization", *Bhāratīya Vidyā Bhavan*, III, pp. 21-39 ; Pusalker, "The Religion of the Indus Valley People", *Modern Review*, LX, pp. 697-704 ; Sarup, "Is the Indus Valley Civilization Āryan or non-Āryan ?" *Summaries of Papers. The XIth All-India Oriental Conference*, 1941, pp. 120-123 ; Heras, "Were the Mohenjo-Darians Āryans or Dravidians ?", pp. 23-33.

been proved that the first two were highly civilized. The pyramids and other megalithic monuments of the islands of the southern seas, supposing that they were built by people of the same Austric races, were certainly built at a much later date.[1] Of the Dravidians, spoken of as *Dāsas* or *Dasyus*, the *Ṛgveda* says that they had *puraḥ* (walled cities),[2] of which the Āryas could not boast. This seems to point to a superior state of culture. That the Dravidians were spread all over Northern India before the Āryan invasion, the existence of Brāhui, a Dravidian language, spoken in Balochistan, clearly proves. Moreover, Vedic and Epic literatures mention a number of Dravidian tribes settled in the Punjab or its neighbourhood. The Bāhlikas,[3] the Vāhikas,[4] the Mādras,[5] the Śivas,[6] the Mātsyas,[7] the Gāndhāras,[8] the Mahāvṛṣṇis,[9] the Mūjāvants[10] and many more had not disappeared from Northern India after the Āryas had settled there and finally lived in peace with them.[11]

3. *The inhabitants of Mohenjo-Daro could not have been the ancestors of the present Brāhuis.* The vicinity of the Brāhuis of Balochistan has induced some authors to suppose that the inhabitants of Mohenjo-Daro probably were the ancestors of the modern Brāhuis.[12] Once it is established that the authors of the Indus Valley civilization were, most likely Dravidians, it is tempting to identify them with the Brāhuis, people speaking a Dravidian tongue and living as it were next door, in the mountains of Balochistan. Yet, even putting aside the fact that 5,000 years have elapsed between the people of Mohenjo-Daro and the modern Brāhuis, and that it is difficult to suppose such an early ancestry without positive proof,

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[1] Cf. Heras, "The Ester Island Script and the Script of Mohenjo-Daro", p. 122.
[2] *Ṛg.*, I, 103, 3; II, 20, 8; III, 12, 6, and *passim*.
[3] *Ath.*, V, 225, 7, 9.
[4] *Śatapatha Brāhmaṇa*, I, 73, 8; *Mahābhārata*, VIII, 2030ff.
[5] *Bṛhadāraṇyaka Upaniṣad*, III, 3, 1; 7, 1; *Aitareya Brāhmaṇa*, VIII, 14, 3.
[6] *Ṛg.*, VII, 18, 7.
[7] *Ibid.*, VII, 18, 6; *Kauśītakī Upaniṣad*, IV, 1.
[8] *Ibid.*, I, 126, 7; *Ath.*, V, 22, 14.
[9] *Ath.*, V, 22, 5, 7, 9.
[10] *Ibid.*, V, 22, 5, 7, 9, 14.
[11] Cf. *Cambridge History of India*, I, pp. 593-594.
[12] Cf. Marshall, *op. cit.*, I, p. 109.

this relationship cannot be established at all, because the Brāhuis, though speaking a Dravidian language, do not seem to belong to the Dravidian stock. They have been recruited from different tribes and races like the Afghans, Kurds, Jadgāls, Baloch, and others.[1] Their existence in Balochistan only proves that in ancient times Dravidian peoples inhabited that country or its neighbourhood from whom that mixed population borrowed their actual language. Those former peoples were most likely the inhabitants of Mohenjo-Daro.

4. *The Dravidians are a branch of the Mediterranean race.* Such is the opinion of modern anthropologists.[2] Accordingly, there must exist some relationship between the Dravidians of India and the other branches of the great Mediterranean race, the Iberians of Spain,[3] the Ligurians,[4] the Pelasgians,[5] the Etruscans,[6] the Libyans,[7] the Minoans of Crete,[8] the Cyprians,[9] the Egyptians,[10] the Hittites,[11] and the Sumerians,[12] It is therefore not strange that some of the signs of the Mohenjo-Daro script should have some resemblance to the signs of the scripts of these nations.

5. *The people of Mohenjo-Daro, being probably Dravidians, spoke a Dravidian language.* Language and race are two things totally different. There are now Dravidian pocket groups in India who speak an Āryan language ; others have perhaps taken a Kolerian language ; while some Austric tribes speak Dravidian or Āryan dialects. Yet if we consider the early age of that civilization — about 3,000 B.C. according to Sir John Marshall[13] — and the relative

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[1] *Imperial Gazetteer*, I, p. 310.

[2] Ripley, *The Races of Europe*, pp. 450-451 ; Banerji, *Prehistoric, Ancient and Hindu India*, p. 13.

[3] Sergi, *The Mediterranean Race*, pp. 159-162 ; Melida, *Arqueologia Espanola*, pp. 70-1.

[4] Sergi, *op. cit.*, pp. 162-165.

[5] *Ibid.*, pp. 165-172.

[6] *Ibid.*, pp. 180-185.

[7] *Ibid.*, pp. 45-83, 114-127.

[8] Burrows, *The Discoveries in Crete and their bearing on the History of Ancient Civilization*, pp. 146-147.

[9] Sergi, *op. cit.*, pp. 152-156.

[10] *Ibid.*, pp. 84-113.

[11] *Ibid.*, pp. 144-148.

[12] Barton, *Semitic and Hamitic Origins*, p. 39 ; Frankfort, *The Sumerian Problem*, pp. 40-42.

[13] Marshall, *op. cit.*, I, pp. 106-107.

importance of their race in India, it does not seem probable that they would speak a language borrowed from a neighbouring foreign nation.

6. *The language spoken by the Mohenjo-Darians was not any of the modern Dravidian languages, but an older language, perhaps the parent of these languages, which may be styled Proto-Dravidian.* The Tamiḷas claim a very ancient literature, but their language cannot be as old as is traditionally supposed. A living language is continually changing, both in grammar and in phonetics and in the course of 5,000 years cannot remain the same. We have witnessed this within the historical period : the Tamiḷ of the Saṅgam age is not the Tamiḷ language spoken at present. Similarly Haḷe Kannaḍa — the old Kanarese language spoken between the 11th and the 14th centuries—is different from modern Kannaḍa.

7. *The morphology of the Proto-Dravidian language will be determined either by the roots of the words, in their original meaning, or by those words immediately formed by determining the roots, in derivative meanings.* Dravidian languages are agglutinative, i.e. generally forming words by the addition of suffixes or by the prefixing of initial intensive consonants.[1] If those suffixes or consonants are properly removed, we shall easily arrive at the root of the word, which has always remained unchanged. Thus the word *sāvu*, "death", is composed of the root *sā*, which means properly "to fall on one side" and by the suffix *vu*. Now *sā*, and in more ancient times *kā*,[2] "to fall on one side" meant "death" for those early people, for their corpses were buried resting on one side (practically always the right).[3] Therefore, that root will be the proper noun for death in the Proto-Dravidian language. In other cases one cannot select the root when the meaning is derivative. For instance, in the word *maram*, "tree", the root is *mar*, but this word

[1] Gnana Prakasar, *An Etymological & Comparative Lexicon of the Tamil Language*, pp. X-XI.

[2] The conversion of the initial *k* into *s* is a common phenomenon in many words, for instance *kei* < *sei* = "to make" Cf. Caldwell, *A Comparative Grammar of the Dravidian or South-Indian Family of Languages*, pp. 582-583. The original *k* of *ka* has remained in the Tamil word *kāvu*, "sacrifice", "oblation to an inferior deity".

[3] Cf. Marshall, *op. cit.*, I, p. 80, Fig. 2.

means "hard", the nominal suffix *m* is added to mean "something hard", i.e. a tree. This shows that the words themselves of Proto-Dravidian on many occasions will not be so different from the words of modern Dravidian languages ; the difference nevertheless will be great in grammatical forms.

8. *The grammar of the Proto-Dravidian language must have been in a state of infancy and totally undeveloped.* There were not different forms to express the noun, the verb, or the adjective. The same word had the three meanings, for instance, *kaṇ*, "eye", and "vision", also meant "to see" and something "seen". This still happens in languages whose grammar is not very developed. For instance, in Basque there is no difference between nouns and verbs.[1] A similar thing sometimes happens in English : thus we have "walk" and "to walk", "function" and "to function", etc. But the different parts of speech were beyond doubt recognized by their respective position in the expression.

9. *The script is a picto-phonographic script.* A careful examination of the Mohenjo-Daro signs reveals a very great number of pictographs not yet conventionalized, but in their primitive and original shape (though there are others which have suffered some simplifications).[2] There are also many signs which do not convey any idea to the careful observer; they almost look like alphabetic.

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[1] Ripley, *op. cit.*, p. 186.

[2] That the ancient Dravidians used to write by drawing pictures of objects to express their thoughts is recorded in the *Yāpparuṅkala-Virutti*, a commentary of the 10th century quoting it from an unknown ancient Tamil work. Cf. *Yāpparuṅkalam*, II, p. 528; Heras, "Were the Mohenjo-Darians Āryans or Dravidians ?", p. 30. The same may be concluded from the narrative of the *Lalita Vistara*, in spite of its relative recent date of composition. When the young Bodhisattva is led to the school for the first time he is introduced asking the teacher, what sort of writing he is going to teach, and in order to make a show of his knowledge he mentions sixty-four ancient writings used in India, among them Brāhmi, Khāroṣthi, the writings of Variga and Magadha, of Dakṣiṇā, of Huṇa and of the Nāgas, and besides others, also *picture-writing*. *Lalita Vistara*, X, pp. 182-183. Ancient Indian tradition tells us that the Gāndharvas were noted for this picture writing, *citra-lipi* (*Mā'sya Purāṇa*, Adhyāya 9) ; so much so that one named Citraratha was appointed as their king by Pṛthu. *Padma Purāṇa* II Bhūmi Kāṇḍa, ch. 26, 13-14. Similarly Yama's attendant in hell who was supposed to record the good and evil deeds of men was styled Citragupta (secret of pictures, or of painting). *Mahābhārata*, Anuśāsana Parva, 6114-6135. The *Mahābhārata* mentions some early writing in the shape of marks inscribed on arrows, which Arjuna shot during the battle before the death of Jayadratha. Droṇa Parva, 3660. (Also in China figure script was inscribed on weapons in ancient times. Cf. Perceval, "'Bird Script' on Ancient Chinese Swords", *J. R. A. S.*, 1934, pp. 543-552). It has been suggested that they "were probably spells to make them reach their mark". Crooke, "Some Notes on Homeric Folk-Lore", *Folk-Lore*, XIX (1908), p. 155. For this writing some special skill seems to have been necessary, because the producer of this writing was called "painter", *citrakāra ivālekhyam*. *Mahābhārata*, Udyoga Parva, 5021. In 1067 A.D. the sculptor Rudra is said to have been inscribing beautiful letters in the shape of elephants, lions, parrots and others. Cf. *Karnatak Śāsan Saṁgraha*, No. II, p. 31.

They are signs that have a conventional phonetic value and may consequently be called phonetic or phonographic signs. The existence of such signs in this early script is quite natural. No script can be purely pictographic, for abstract ideas like virtue, love, etc., cannot be expressed in a pictographic way.

10. *The signs of Mohenjo-Daro do not stand for syllables and much less for consonant sounds only, but express full words.* The study of the script and the prevalence of pictographs clearly disclose the grammatical nature of the inscriptions. They are not nouns, but descriptions, statements, in general, portions of language, the intrinsic nature of which cannot be known before the inscriptions themselves are deciphered. In fact, though at the back of my mind there was the view that the inscriptions reveal the name or property of merchants only, as some of the authors who had studied the inscriptions suggested, yet my mind remained quite open and unbiased as regards the subject of the inscriptions in the course of the decipherment. The inscriptions themselves would say what their contents were. Beyond that I could not say anything.

III

METHOD OF DECIPHERING THE SIGNS

The first sign deciphered was . This is the most common sign in the whole list of Mohenjo-Daro signs. Moreover, it is easily noticed that as a general rule it is always found at the end of the inscriptions, supposing that the latter read from right to left, as practically all the scholars that had studied the script affirmed. The position of this sign at the end of the inscriptions is worth noticing. At a later period the inscriptions on seals found in India bear the name of the owner in the genitive, for instance, *Gutasya* (for *Guptasya*), i.e. of Gupta.[1] So were also the inscriptions on ancient coins,[2] as if saying : "seal" or "coin *of* such and such a person" or "king".

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[1] Rapson, "Notes on Indian Coins and Seals", *J.R.A.S.*, 1905, p. 814.

[2] Cf. Whitehead, *Catalogue of Coins of the Lahore Museum*, I, *passim*.

Now if some of our seals at least were likewise the property of private persons or families or of societies, they would also probably have the inscription in the genitive, and then the sign 𝍐 could possibly stand for the suffix of the genitive. I tried to discover the suffix of possession—something like the preposition of the genitive—in Dravidian languages, and I found that its most ancient form was *adu*. This word could besides be the demonstrative pronoun "that", and in ancient times "this". Yet when it is used as a demonstrative pronoun, its position is in front of the noun. Therefore the use of the word *adu* would be as follows :

"of the tree" = *maram adu*

"this tree" = *adu maram*

This satisfactorily explains the two positions of this sign ; for though in the majority of cases it is found at the end of the inscription (sometimes also in the middle), in a few cases it is also found in the beginning.[1]

This was the only sign deciphered independently of any inscription. Otherwise the signs were studied and interpreted as they appeared in the inscriptions, commencing naturally from the shortest inscriptions. After all, it was easier to find the proper meaning of each sign in particular, while the context of the inscription or inscriptions was made known. At times all the inscriptions having the same signs had to be consulted before finally settling the value of an individual sign. Needless to say that once the reading of a sign was, after long consideration, fixed, it was never changed.[2] Yet at times the context of the inscription would demand the acceptance of another meaning of the same reading. That was a proof that the sign was then used phonetically. For instance, the word *tēr* as the reading of the sign 𝍖 was found to be "to reach", "to arrive"; yet in a few cases this sign has the meaning of *tēr*, "chariot".

[1] Cf., for instance, Marshall, M.D., No. 419.

[2] Yet, it is to be said that frequently the established readings were slightly improved.

The ordinary routine in our work of decipherment was this. Once the meaning of a sign was finally settled, according to the nature of the sign, as will be explained later, I studied all the words used in all modern Dravidian languages, not excluding Tuḷu, Brāhui, Kuḍagu, Urāon and Kūi.[1] When these words were gathered, the most ancient word was selected, sometimes the root only, and deprived of all suffixes and initial consonants, to obtain the probable word used by the Mohenjo-Darians. This probability finally became a certainty by the wonderful and unexpected result, which I shall refer to at the end of this chapter.

This being presupposed, we shall now examine the interpretation of some of the signs of this script, dividing them into four main groups.

A. PICTOGRAPHS

It is not very difficult to determine the meaning of these signs, for they naturally represent the objects to which they refer in a graphic way :–

Pictographs	Remarks	Values	Meanings
	A man with two pairs of arms. Something beyond human nature. Traditional way of representing gods in India.	*kaḍavuḷ*	god, supernatural being
	The most simple and primitive form of man. Cf. paintings in pre-historic caves.	*āḷ*	man
	A man with a tail, i.e. a monkey. A member of the monkey tribe.	*kuḍagu*	monkey

[1] It is to me a cause of great pleasure to mention here the names of two of my post-graduate research students who helped me a great deal in the course of the decipherment. They were Mr Periyanayagam Joseph and Mr Venkata Rao Sashital. The mother-tongue of the former was Tamil; that of the latter Tuḷu, and both being very proficient in the knowledge of the language were for me like "living lexicons". I am much indebted to them.

Pictographs	Remarks	Values	Meanings
	Man crossing over, going beyond. Cf. Wallis Budge, *An Egyptian Hieroglyphic Dictionary*, p. CIX, No. 104.	*tāṇḍavan*	dancer, dancing god
	A man playing the drum.	*parean*	drummer
	A man lifting something.	*tūkan*	lifter, teacher
		vilan	archer
	Cf. Langdon, *Inscriptions from Jemdet Nasr*, Nos. 127-130; Burrows, *Archaic Texts*, Nos. 18 and 19.[1]	*kaḷude*	ass
	A ram with the head downwards.	*ēḍu*	ram
	The final angular development of a sign of round shape—the original pictograph—which has been discovered on a stone statue. Cf. Heras, "A Proto-Indian Icon", *J.B.O.R.S.*, XXIII, pp. 478-479.	*naṇḍ*	crab
		eruvu	ant

[1] This sign may refer to an ancient tribe. If our suggestion is correct, the tribe might perhaps be the later tribe of the *Kīkaṭas*, very powerful in Magadha, (*kate* is an ancient Dravidian contracted form for *kalude*). In the Vedic period there existed also the tribe of the *Aśvas*, "horses". A Ṛgvedic *ṛṣi* was named *Aśva*, *Ṛg.*, I, 111, 10; VIII, 24, 14. The *Periplus* mentions a tribe called of the "Horse-faces" on the Eastern Coast of North India. Schoff, *The Periplus of the Erythraean Sea*, p. 47.

Pictographs	Remarks	Values	Meanings
		eṭkāli	spider, a member of a tribe
		pāv	a snake, a member of a tribe
		parava	bird, a member of a tribe
		maraṅkoṭi	wood-pecker
	A flying headless bird, supposed to show the action of flying.	*para*	to fly
		mīn	fish
		maram	tree
		alar	flower
	A leaf of the pippal tree.	*aramaram* (This is the ancient form of the word. The modern form *arasa-maram*, "the royal tree", is Sanskritized.)	pippal tree

Pictographs	Remarks	Values	Meanings
	Two leaves joined together, the back leaf being upside down. Cf. Heras, *Two Proto-Indian Inscriptions from Chanhu-Daro*, pp. 311-312.	*kalakila*	a member of the tribe of the Kalakilas
		kō	mountain, excellence, domination
		mala	mountains
		nīr	water
		ār	river
		ir	house
	A funeral monument—the future *stūpa*—with a person buried underneath.[1]	*kā*	death
		kūḍe	umbrella
	A pictograph representing something like a Sumerian tablet. Cf. Smith, *Early History of Assyria*, pl. III, b and c.	*tīrpu*	judgement, decree
		cuṇi	liṅga, phallus

[1] Cf. below, Chapter II, I

Pictographs	Remarks	Values	Meanings
		yāḷ	harp
		tēr	chariot
		vēl	trident
	The binding of a cord.	*kūḍu*	to bind, to join, to unite
	A receptacle having some liquid at a low level.	*kīḷ*	below

Sometimes a pictograph cannot be easily recognised on account of its being conventionalized and simplified to an extraordinary degree. The sign represents a leg and reads *oḍu*, "to run". Two previous stages are found in our inscriptions and . In the same way is easily mistaken for , *āḷ*, "man" though the former sign reads *Āṇ*, "the Lord", "God".[1] This confusion comes from the fact that the latter sign has already been simplified. In a few inscriptions God is represented thus ,[2] viz. with a lock of hair on the side of his head, as is shown also in a few carvings.[3]

The signs that represent the numerals may also be considered as pictographs, for the natural way of representing a numeral is by drawing as many strokes as the units which the numeral stands for. In this group a few signs require explanation. The sign that reads *ai*, "five", usually is . The sign only twice stands for five. Otherwise it represents the furrows of a field and

[1] Heras, "The Religion of the Mohenjo-Daro People", pp. 2-4.

[2] Mackay, *Further Explorations at Mohenjo-Daro*, II, Pl. CX, No. 53.

[3] Marshall, *op. cit.*, I. Pl. XII, No. 18; Mackay, *op. cit.*, II, Pl. LXXXVII, No. 235. Cf. Heras, "About a 'Wild Identification'", pp. 104-105. Cf. below, Chapter II, I.

means "cultivated lands"[1], and reads *nād*. Contrariwise the ordinary sign for "eight" is , *et*, that has sometimes the phonetic meaning of "reaching", also, *et*. The two signs and , *et*, "eight" are found only once or twice. The signs and are not equivalent to *onpad*, "nine" and *padrad*, "twelve", but both mean "a water fall", in our language, *jog*.[2]

There are besides a number of pictographs which may be called *conventional pictographs*, in opposition to the *natural pictographs* explained before. I call them conventional pictographs, for one cannot easily see the depicted object, but after knowing it one finally realizes that the signs are real pictographs. A few specimens will illustrate our explanation.

Pictographs	Remarks	Values	Meanings
	Two rivers joined by a canal; since there is already a pictograph for *river*, this must stand for *canal*.	*kāl*	canal
	The plan of a house.	*il*	house
	Four houses within an enclosure; "four", *nāl*, in Dravidian languages, means many. Therefore this is the plan of a city.	*pali*	city
	A house which all the streets lead to: a temple.	*kōvil*	temple

[1] Marshall, M.D., No. 37.

[2] For the question of numerals cf. Heras, "The Numerals in the Mohenjo-Daro Script", pp. 136-146. The author, being absent from India at the time of the publication of this paper, was unable to correct the proof and he regrets to say that a number of mistakes crept in it.

Pictographs	Remarks	Values	Meanings
	Rooms or apartments on one side of a sort of *caravansarai*. Cf. Mackay, *The Indus Civilization*, pp. 52-53.	*nālvīd*	four houses
	A space more indefinite than the limits of a house, i.e. a city and the country round a city.	*ūr*	city, country
		kalakūr	united countries
	See representation of the sun in Babylonian sculptures.	*uyarel*	the high sun
	Cf. Egyptian hieroglyph for sun ; Wallis Budge, *op. cit.*, p. CXXIV, Nos. 8 and 9.	*el*	sun
	From comparison with preceding sign.	*nila*	moon
	The path of the sun.	*elvali*, (*"the path of the sun"*.)	the Zodiac
	Plan of a well fortified and prosperous city. Cf. Heras, "India, the Empire of the Swastika" *Bombay Coronation Memorial*, pp. 19-20.	*nalam*	prosperity
	A sprout springing out of the seed.	*puy*	to produce, spring, issue, descendants

Pictographs	Remarks	Values	Meanings
	Cf. Capart, *Primitive Art in Egypt*, pp. 118-121, figs. 90-94.	*koḍi*	flag
	A gate placed at the entrance of gardens and fields in South India to prevent cattle to enter the premises. Persons may cross over it : *kaḍavu* in Tamiḷ, *kaḍamba* in Malayalam.	*kaḍa*	boundary, limit, end, horizon, to cross
	The central line divides the triangle into two halves.	*ari*	half, to know

There are 241 pictographs in this script.

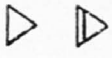
B. PHONETIC SIGNS

These are signs that do not represent any object in a pictographic way. Of this kind are many signs to which abstract ideas correspond, for such abstract ideas cannot be shown pictographically. Other signs that are now placed within this range were probably pictographs in more ancient times. These signs, having developed and lost their pictographic appearance, are now being classified among the phonetic signs.

These signs themselves could not help us much to know their meaning. Hence they were compared with signs of other ancient scripts in the hope that similar signs of those scripts might have the same meanings. The Iberian, Etruscan, linear Minoan, Cypriote and Phoenician could not give us any help, for all these writings are alphabetic. Moreover, some of these scripts have not yet been deciphered. Amongst the ancient scripts of old Mediterranean nations, Sumerian, Egyptian and Hittite scripts supplied us with many meanings. Another non-Mediterranean script which was of great help, was the Proto-Chinese script which has been recently

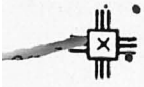
discovered. The neighbourhood of India and China sufficiently explains the similarity between signs of the first scripts of these two nations.[1] Moreover two terracotta heads with evident Chinese features, which were discovered at Mohenjo-Daro, prove beyond any possibility of doubt that there existed intercourse between the Chinese and the Mohenjo-Darians.[2]

Let us now examine some of these phonetic signs. In the following tables they will be grouped according to signs of ancient scripts with which they were compared :–

Sumerian Signs	Phonetic Values	Meanings	Proto-Indian Signs	Phonetic Values	Meanings
	du	to make		*kei*	to make
	nu	stone with inscription		*kal*	stone, inscribed stone
	igi	eye		*kaṇ*	eye, to see
	gal	great		*per*	great
	nin	lady, queen		*kōpen*	queen
	dib	to catch, to imprison		*piḍi*	to catch, to imprison
	en	lord		*kōn*	lord, king
	kur	lands		*nila*	lands
	ba	to divide		*pak*	to divide

[1] Cf. Heras, "The Velālas of Mohenjo-Daro", p. 47.

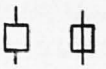
[2] Mackay, *Further Excavations at Mohenjo-Daro*, II, pl. XXVII, Nos. 8 and 9.

Sumerian Signs	Phonetic Values	Meanings	Proto-Indian Signs	Phonetic Values	Meanings
	*bar*	shrine, temple		*kōvil*	temple
	te	to attack, enemy		*edir*	enemy, opposite
	zi	life		*avi*	life, spirit, soul
	es	decree, sentence		*tīrpu*	decree, judgement
	tar	judge, to judge, to decide		*tīr*	judge, to judge, to decide
	ur	city		*pali*	city

A thorough comparison of the above and other Proto-Indian signs with the signs of Sumerian script has shown that the latter proceed from the former.[1]

Proto-Chinese signs	Phonetic Values	Meanings	Proto-Indian Signs	Phonetic Values	Meanings
	yu	rain		*mala*	rain
	shih	arrow		*kaṇi*	arrow
	wang	king		*kon*	lord, king

[1] Cf. below, Appendix I to Chapter II.

Proto-Chinese signs	Phonetic Values	Meanings	Proto-Indian Signs	Phonetic Values	Meanings
	jih	day		*pagal*	day
	tshung	middle		*naḍu*	middle
	tsi	son		*maga*	son
	yun	clouds		*mukil*	clouds

Two signs of the latter table deserve special mention. The Proto-Indian sign that reads *kon*, "king", has been compared with the Proto-Chinese sign meaning "king". Now, independently of this comparison, the sign phonetically reads *kōn*, "king", as we shall see presently.

The other sign , after being compared with the two corresponding Proto-Chinese signs, was found to mean "clouds" and was consequently read *mukil*. Now, reading this sign phonetically, we have arrived at the same reading *mukil*, as we have explained elsewhere.[1]

Two Proto-Indian signs have similar signs amongst the Egyptian hieroglyphs: in the Egyptian script means "to think". The same sign is found in the Mohenjo-Daro inscriptions and will consequently read *eṇ*, which means "to think", "to meditate", or "to calculate".[2] The Proto-Indian sign may very well be compared with the Egyptian meaning "life" and reading *ankh*. Hence it will read *uir*, which means life in Dravidian languages.

[1] Cf. Heras, "The Story of two Mohenjo-Daro Signs" pp. 1-3.

[2] This sign may have had a pictographic value of a very abstract idea. A thought is caused always by an impression or impressions from the outside world through the senses. The sign seems to represent a vessel into which a rod has been introduced. If our explanation is correct, it may point out the beginning of psychological studies in the ancient world.

The Hittite script, not fully deciphered as yet, furnished us with a sign for comparison, . This sign is also found in the Proto-Indian script. In the Hittite script it means "ruler". To express this idea in Dravidian, we use the word *āḷva*, which may even mean "king". Later I realized that this is a compound sign, and as such it reads *mukililmukan*, which means, "One who draws the house of clouds", a bombastic title, much in agreement with Dravidian customs,[1] which befits the king of the Veḷāḷas perfectly; for these people in the historical period were called *kārālar*, "rulers of the clouds".[2]

The Proto-Indian script has furthermore sign-families or groups; within each group the signs have very slight differences. This is an indication that the reading of the signs is also slightly differentiated, though sometimes the meanings differ much from each other. In order to find out the reading of these signs, all the inscriptions having the same sign were tabulated and that phonetic value was finally selected whose meaning was in accordance with the text of the inscription or inscriptions.

In the following table all the signs belonging to the family of will be given. Almost all the phonetic values of the signs of this family begin with *t-*[3]:–

Signs	Values	Meanings	Signs	Values	Meanings
	tīr	judge, to judge		*tūr*	to fill up
	tiru	holy		*tar*	to lead, to conduct
	ditto	*ditto*		*tari*	to dress, to have on

[1] Cf. *Ibid.*, pp. 3-6. See *Job*, XXXVII, 15.

[2] *Ibid.*, p. 5. Cf. Heras, "The Veḷāḷas in Mohenjo-Daro", pp. 45-55.

[3] Another family of signs may be seen in Heras, "Light on the Mohenjo-Daro Riddle", p. 13.

Signs	Values	Meanings	Signs	Values	Meanings
	tīrtu	finished, complete		*ten*	south
	tīrta	finished		*tira*	to open, waves, sea
	tūr	to disappear		*tere*	tribute
	ter	to examine, to investigate		*tiri*	to move, to wander, to walk about, to drift
	tēr	to reach, to approach, chariot		*tar*	dry, dryness, to become dry
	er	over, to go up, above		*tari*	to stand firm, to control
	teli (*teri*)	to appear, to look like			

Other phonetic signs were derived from their similarity to some of the pictographs. For instance :—

Pictograph.....		*oḍu*	to run[1]
Phonographic signs		*iḍi*	lightning
		oḍa	boat
		aḍe	royal land tax

There are 125 phonographic signs in this script.

[1] Cf. above, p. 72.

C. COUMPOUND SIGNS

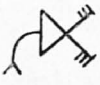
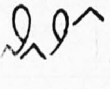
These signs may be compounded of two or more signs, or of a sign and a determinative. We shall study them separately.

The first category may further be divided into signs compounded by mixture or by ligature. The former are easily read, as all their elements are read as in the single signs. We shall give a few specimens in the following table:–

Compound signs	Compounding elements	Values	Meanings
		vēḷāḷ	a member of the Veḷāḷa tribe
		perāḷ	the Great Man (the primitive shorter form of *Perumāḷ*)
		ruruāḷ	the man of the school-noise, i.e. the school master
		naṇḍor	the people of the Crab (the inhabitants of Naṇḍūr)
		naṇḍūr	city of this name ("the city of the crab")
		maramūr	city of this name ("the city of trees")
		tenkaḍa	southern direction
		udayūr	city of this name ("the leading city")
		valil	strong house, fort

Compound signs	Compounding elements	Values	Meanings
		mūṇmala	name of a place ("the three mountains")
		ruval	noisy happiness, merriment
		eṭuda	eight dresses
		udayeṇ	broken speech, stammering
		tīrtēr	the arrival of the judge
		vēḷūr	city of this name ("city of the trident")
		kōḍikō	the hoisting of the flag
		talnālūr	the bright Nālūr
		mīnādari	the toddy of the Country of the Fish
		eikeior	people having arrows in their hands
		mīntīrpu (now *mīntīrvei*)	fish tax
		kālārorlak	the rising of the people of the rocky river

In the case of signs that are compounded by ligature, the ligature itself does not read, but only the two signs ligated, as may be seen in the following table :–

Compound signs	Compounding elements	Values	Meanings
		eḍukōl	dancing rod
		orūren	a citizen of Orūr
		*naṇḍalil*	the end of Naṇḍal
		nannan	a proper name of a man, the moon[1]
		kōlūr	name of a city
		erikōl	the thrown stick
		*mukilil-mukan*	The one who draws the house of clouds (Cf. above, p. 79)

As regards the signs compounded with determinatives, the latter may be grammatical or non-grammatical.

Non-grammatical determinatives are of three kinds : of personality, of collectivity, and of totality. The determinative of personality takes two shapes: or , according to the breadth of the upper portion of the sign. (Once only a horizontal curved line like this is used as a determinative of personality).

The determinative of collectivity (or plurality) is shown by two small strokes above each other placed on each side of the main

[1] Cf. Heras, "Chanu-Daro and its Inscriptions", pp. 104-105.

sign, thus : |...|. Finally, the determinative of totality is expressed by two continuous strokes placed at each side of the main sign, thus : |...|. As is obvious, it is extremely easy to apply these determinatives.

The following table will show the use of these determinatives :–

	Signs	Values	Meanings	Signs	Values	Meanings
Single sign		*mīn*	fish		*uda*	to lead
With determinative of personality		*mīnan*	a member of the Mīna tribe		*udayan*	the leader, chief
With determinative of collectivity		*mīnanir*	the Mīnas		*udayanir*	the chiefs
With determinative of totality		*elamīnanir*	all the Mīnas		*elaudayanir*	all the chiefs

A few cases that occur in the use of the determinatives :–

Original Signs	Values	Meanings	Signs with determinative	Values	Meanings
	or	one		*orvan*	one person
	vēḷ	trident		*vēḷan*	the one of the trident
	ina	race		*inan*	one of the race

Original Signs	Values	Meanings	Signs with determinative	Values	Meanings
	nan	friend		*nanan*	a proper name
	kāl	canal		*kālan*	canal supervisor
	arup	harvest		*arupan*	harvester
	orilūr	name of a city		*orilūran*	an inhabitant of Orilūr
	kō	mountain		*kōn*	king
	kōn	king		*kōnan*	a man of the king, a shepherd
	kaṇ	eye		*kaṇan*	one who has eyes, probably a member of a tribe
	aḍe	royal land-tax		*aḍekan*	royal land-tax collector
	nila	lands		*nilavan*	land owner
	eṇ	to speak		*eṇan*	speaker
	kā	death		*kāvan*	a dead person.
	aivīḍ	five houses		*aivīḍan*	a five-house man

Original Signs	Values	Meanings	Signs with determinative.	Values	Meanings
	mīn	star		*mīnir*	stars
	sere	prisoner		*serevir*	prisoners
	pati	village		*pativir*	villagers
	pali	city		*palivir*	citizens
	kalakūr	united countries		*kalakūrir*	people of the united countries
	kōn	king		*kōnir*	kings
	āḷ	man		*elāḷ*	all men
	mūnkāl	member of the *munkāl* tribe (three-legged men)		*elamūnkāl*	all the Mūnkāls

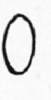
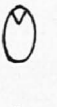
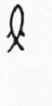
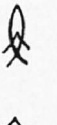
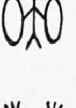
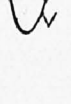
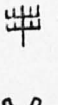
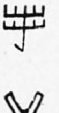
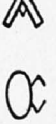
The determinative of totality for the gods is not , but, thus, *elakaḍavul*, "all the goods".

The grammatical determinatives are of two kinds. Some determine the parts of speech. Others determine some cases of the noun. Thus a small stroke placed inside the sign or attached to it shows that the sign must be taken as an adjective, though the reading often is the same. Thus , , *min*, must be taken as "bright", "glittering", "shining"; , *kāli*, legged; , *kaṇi*, eyed. Sometimes the stroke is difficult to detect for it appears

as the continuation of one of the lines of the sign. Thus from , *naṇḍ*, "to weaken", and , *valkei*, "to strengthen", we have and which read the same, but have the meaning of an adjective, "weakening" and "strengthening" respectively.

Participles are determined by a dot, sometimes two. Thus *naḍu*, "being the middle"; , *kei*, "making"; , *ari*, "known".

Determinatives of the locative are two : a small angle reads "il" ahd means "in"; or two angles placed against each other which read *veli*, "outside". The working of these determinatives will be seen in the following table :–

Original Signs	Values	Meanings	Signs with determinative	Values	Meanings
	il	house		*ilil*	in the house
	*ūr*	city, country		*ūril*	in the city or country
	*mīn*	Fish (constellation)		*mīnil*	in the Fish
	tūk	scale		*tūkil*	in the scale
	ten	coconut plantation		*tenil*	in the coconut plantation
	*perper*	very great		*perperil*	in the very great
	kaḍa	end		*kaḍil*	in the end
	ūr	city, country		*ūrveḷi*	outside the city or country

Original Signs	Values	Meanings	Signs with determinatives	Values	Meanings
	eṭūr	the eight countries		*eṭūrveli*	outside the eight countries
	arup	harvest		*arupveli*	outside the place of the harvest

There are 290 compound signs in our script.

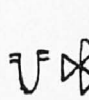
D. PHONETIC COMBINATIONS OF SIGNS

They are not many, only 60, but they are of great importance for testing the language. In these combinations each sign has its own independent and always consistent reading ; but their phonetic values combined, the result being a meaning at times totally different from the meaning of the independent signs. The independent values of the two or three signs then work like syllables of a word. A few samples will illustrate our statements[1] :–

Combining signs	Values	Meanings
	mīnavan	"Fisherman", title of a king[2]
	mīnvale	fishing net
	kalvel (now *karuvel*)	*"acacia arabica"*

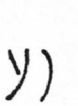
[1] These phonetic combinations had misled Langdon, Hunter and others to conclude that the phonetic value of the signs of the Indus script was syllabic.

[2] Cf. Heras, "The Minavan in Mohenjo Daro", pp. 281-288.

Combining signs	Values	Meanings
	mūnen	"one who is three" (a name of God)[1]
	aralir	flowermen
	kudir	granary
	mūnet	twenty-four
	iralar	the Iralar (a tribe)
	mūnmala	"The three mountains" (*Triparvata*)
	iruven	"one who exists" (name of God)[2]
	iruven	ditto
	ūrukal	to melt, to boil excessively, to liquefy
	*nilamadu*	landed property
	tenādu	southern country
	kudavūrveḷi	outside Kudavūr

[1] "In it (Brahma) there is a *trayam* (triad)". *Śvetāśvatara Upaniṣad*, I, 7.

[2] *Svayambhū*, *passim* in the Upaniṣads

Combining signs	Values	Meanings
	nimir	to be erect, to extend, to spread
	minūr	the city of "Minūr"[1]
	tirlak	as if it were finished
	*kalteri*	learned
	etadu	reaching

Before ending this section it will be of interest to notice that the script was not standardized. Occasionally there are two signs to express the same idea. It is more noticeable in the compound signs and phonetic combinations. Let us give some of these duplicate signs and combinations :–

Duplicate signs and Combinations		Values	Meanings
		kadir	corn ear, ray of light
		tēr	chariot
		nalam	prosperity
		nalan	gentleman
		vēlan	one who holds a trident

[1] Cf. Heras, "The Origin of the Round Proto-Indian Seals discovered in Sumer", p. 50.

Duplicate signs and Combinations		Values	Meanings
		āḷor	men
		iralar	members of the Iralar tribe
		naṇḍal	naṇḍal (feast after harvest) (now *poṅgal*)
		aṟupir	harvesters
		mūnmala	name of a town
		talir	spring (season)
		nanan or *nannan*	proper name of a person
		iruven	"one who exists" (name of god)
		adir	to shake, to tremble, to fear, road, path

This diversity of writing is not after all to be wondered at, for there was no central authority controlling and fixing the way of writing throughout the country.

IV

EXTERNAL CRITICISM OF THE SCRIPT

The Mohenjo-Daro script seems to have been, partly at least, an original script, for a pictographic script cannot be derived from

any other sort of script. The first script of man was necessarily pictographic. But our script had undoubtedly passed through a long period of development before reaching the stage with which we are now acquainted. Putting aside those signs which show different stages of development in the inscriptions we possess, some other signs clearly show that they are a development of other signs the pictographic character of which was once most likely openly discernible. For instance, the sign *sere*, "prisoner", was evidently a pictographic sign originally; that sign could be , for instance, viz. a man with lifted arms as a sign of distress, within a circuit from which he cannot come out. Our surmise is confirmed by the sign of the proto-Chinese script meaning prisoner, which is this . In this sign the legs of the prisoner are kept, just as the lifted arms and head of the prisoner appeared in the proto-Indian sign. Similar is the sign *maga*, "son". Its corresponding proto-Chinese sign , *tzu*[1] is much nearer the original pictograph, which evidently represented a child in this guise, for instance, , as children are shown in prehistoric cave paintings.[2]

Moreover, there are portions of some signs that have always the same phonetic value, which seems to point to an original sign having that value only. These signs as we find them now are real elements of other compound signs. But the fact that the phonetic value of these compound signs contains a common syllable always, say *il* (in one of the cases), corresponding to those small portions, seems to suggest that the latter were originally independent signs. We have not found them independently in the inscriptions up to now. In any case this proves how methodical this system of writing was and how methodically it was used.

The following table shows four of these probable original signs and some of their compound signs that occur in the inscriptions :–

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[1] Cf. Ball, *Sumerian and Chinese*, p. 30.

[2] Cf. Breuil, *Les peintures rupestres schématiques de la Peninsule Ibérique*, III, p. XXXVII.

Probable original single signs	Phonetic Values	Compound signs with values and meanings		
^ or v	*il*	ūr*il*, "in the country"	il*il*, "in the house"	Āṇ*il*, "the son of Āṇ" *il* = son (now *pillai* in Tamiḷ)
		muk*il*, clouds	or*il*, in one	lak*il*, a shrub
		ten*il*, in the palm grove	mīn*il*, in the Fish	kad*il* at the end
=	*a*	kal*a*lak, stone weapon	kalam*a*lak, field-measuring	kal*a*lakmala, mountains of stone weapons
╥	*am*	kal*am*alak, field-measuring	malay*am*, Malabar	nal*am*, prosperity
≡	*m*	*m*erugu, to glitter, to shine	*m*eṭu, palisade	*m*iru, dominion, to domineer

On the other hand, the script reveals the cleverness of the people who invented it and improved it. The system of forming the phonetic signs is so logical and uniform that at times we were able to read the signs even before knowing their meanings. The following family of signs is typical of this sort of reading.

The sign is found in Sumerian, meaning "one-sixth".[1] In our writing it means "a quarter", "one-fourth" (The sign is a real pictograph, as this figure may show . It is a quarter of the circumference, in fact one of the seasons). This being the meaning, in our language this sign will read *kāl*. Some time after in another inscription another sign was found totally similar to the previous one, but in the opposite direction, thus: . "If the former reads *kāl*", I said, "the latter will read the reverse, i.e. *lak*". My Tamiḷ student at once told me that it could not be so, for in Tamiḷ they have no words beginning with *l*–. "But this word exists in our language", claimed the Tuḷu student. "We say, *laku*, 'to rise', 'to get up' ". (The final *u* was evidently a later addition). Soon the two signs combined appeared in another inscription, thus: (sometimes they are thus:). It is natural that if one sign reads *kāl* and the other *lak*, both signs combined would read *kālak*. Now *kālaku* (*u* is modern) in Tamiḷ and Kannaḍa means "union" or "mixture". Another sign, , could be read very easily ; the three elements are *kal-a-lak* and combine this way : *kal-alak*. Now *kal* phonetically may also mean "stone" ; and *alak* means weapon. So the sign means "stone weapon".[2] The same sign, a little modified, , was also read without difficulty *kal--am-a-lak*, i.e. *kalam-alak*, which means "field measuring". The following sign, , cannot but read *kalai-alak*, i.e. *kal-ai* (five) *a-lak*, which means, "measuring the learning", "examining the knowledge". With these two signs, a number of other signs may be easily read without any difficulty. For instance :–

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[1] In Dravidian languages there is not a single word meaning "one-sixth", an idea which is only expressed in a round about way.

[2] Precisely the inscription (Marshall, H. No. 97) in which this sign is found also speaks of another weapon, the bow.

Signs	Values	Meanings	Signs	Values	Meanings
	kālāḷ	foot-soldier		*kālorlak*	the rising of the Kālors
	kālei	dawn, morning, morning star		*nalak*	dancing
				kālārorlak	the rising of the people of the Rocky River
	lakil	shrub or small tree called "*Vitex negundo*" or "*trifolia*"			
				arikāl	toddy measure
	kālor	the Kālars, infantry		*talak*	shining, glittering
	kūdulak	united rising		*mūnkāl*	a member of the Mūnkā tribe (three-legged people)

The script therefore being so natural and easy was without difficulty adopted by the Āryas, when the latter, years after, settled in *Saptasindhu* and in *Madhyadeśa*. The Āryas, a primitive tribe without any other knowledge than cattle breeding and tilling the land, and with no script of their own, soon began recording their thoughts on pieces of tree bark or on palm leaves, using the signs of the Dasyus, then naturally in a state of further development. Thus the proto-Indian script became the parent of the Brāhmi script, as has been already stated by some authors.[1]

[1] Cf. above, pp. 38-39.

V

THE READING OF THE INSCRIPTIONS

After having studied the signs of this ancient script one can easily read a selection of inscriptions. The inscriptions read always from right to left; when there are two or more lines, odd lines read from right to left, and even lines from left to right, in the *boustrophedon* fashion. The easier inscriptions have been put first and thus the reader will, little by little, find the inscriptions less difficult. (The grammatical Dravidian construction is so different from the English that generally the translation commences from the end of the inscription, viz. from the left).

1. [1]

pakilāḷ

"A man in distress"

2. [2]

sere adu

"Of the prisoner"

or

"This (is) the prisoner"

3. [3]

kalakila ulavan

"The farmer (ruler) of the Kalakilas"

4. [4]

vilāḷ arup nila

"The moon of the harvest of the Bilavas"

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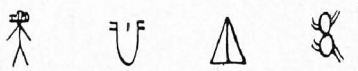
[1] Marshall, M.D., No. 169.
[2] *Ibid.*, No. 217.
[3] *Ibid.*, No. 244.
[4] *Ibid.*, No. 69.

5. [1]

ēḍu oḍu para

"The running of the Ram (is) flying"

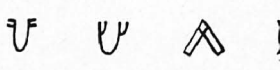
(The inscription refers to the zodiacal constellation of the Ram)

6.  [2]

erubūru ari ēḍu amā

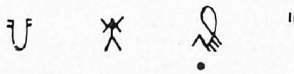
"The Mother of the middle of the year walking ant-like"

(The Mother is the zodiacal constellation afterwards called "Virgin")

7.  [3]

mīn valil ari adu

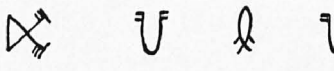
"This (is) the weak *toddy* of the Mīnas"

8.  [4]

ārel ire karumukil kaḍavul adu

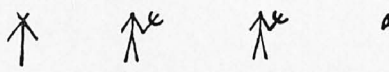
"This (is) the god of the rain clouds which are in six suns (six months)"

(The inscription refers to the rainy season)

9.  [5]

karumukil adu mīn adu naṇḍal

"The *naṇḍal* (feast) of the (month of the) Fish of the (in the time of) rain clouds"

10.  [6]

mūmaga kūḍe vēlāḷ vēlāḷ kodi

"The flag of the Veḷāḷas of the (under the) rule of Mūmaga"

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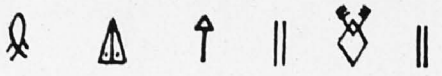
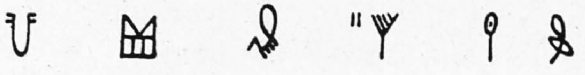
[1] Marshall, M. D., No. 194. Cf. Chapter II, V.
[2] *Ibid.*, No. 182. Cf. *Ibid.*
[3] *Ibid.*, H., No. 320.
[4] *Ibid.*, M. D., No. 28.
[5] *Ibid.*, M. D., No. 119.
[6] Von der Osten, *Ancient Oriental Seals in the Collection of Mr. Edward T. Newell*, pl. III, No. 23.

11.  [1]

īr taltalilil īr kaṇ ari mīn

"The Fish (was) known through the two eyes in the two glittering houses".

(It refers to an observatory to look at the stars)

12. 

alar uir maram ire karumukil malayam adu

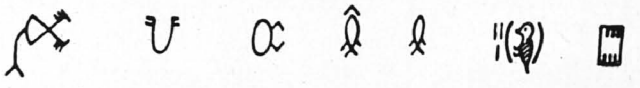
"The rain clouds which are in the flowery luxuriant trees (are) of Malayam (Malabar)".

13. [3]

adu tali pēr mīn orida et kaḍavul

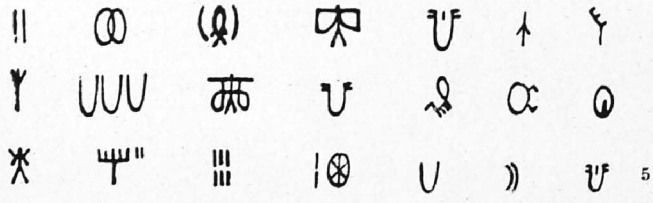
"This is the eight (formed) God one of whose sides (formes) (is) the sprinkled great Fish.

(It speaks of the eight forms of God, and of the individual form of the Fish)

14.  [4]

duḳ marankotināḍ mūn mīn
mīnan ūrveli adu naṇḍalil

"There is no *naṇḍal* (feast) in the place outside the country of the Mīnas of the three fishes of the despised country of the Woodpecker".

15.  [5]

(The reader is reminded that this inscription is *boustrophedon;*

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[1] Marshall, H., No. 44.
[2] *Ibid.*, M. D., No. 58.
[3] *Ibid.*, No. 419.
[4] *Ibid.*, No. 306.
[5] *Ibid.*, No. 23.

accordingly first and third lines read from right to left, second from left to right.)

taral oṛl ēḍu pey mīnād kalakūrir
nan ruruṛu tūk adu karumukil ūrveḷi Orūr
ēḍu etru uyarel ir ār ire per kaḍavul

"The great god, who has the two sides (forms) of the high Sun of the eight (parts) of Orūr, (which is) outside the land of the rain clouds of the (constellation or month of the) Scale, which approaches with peals of thunder, of the united lands of Mīnād (the country of the Fish), (is) the rain of the year of a house of bushes."[1]

These few specimens will give an idea of the inscriptions themselves, and of the various subjects referred to in these short documents. It may be asked what the purpose of such seals was. This is a question which I do not intend to answer in this chapter. It will be discussed at length in another study published in a further volume. I merely mention here that apparently not all the seals were used for the same purpose.

VI

INTERNAL CRITICISM OF THE SCRIPT

Fig. 1
Impression of a seal of Chañhu-Daro showing the use of 𓆟

Before ending our task it will be useful to take a bird's-eye view of the work carried out while deciphering all the inscriptions available till now, in all above one thousand eight hundred.[2]

First of all, there are some signs in our script whose values can only be explained in Dravidian languages. To give an instance, let us take the three following signs which are evident pictographs of a fish :—

[1] This is the longest inscription discovered up to the present. Cf. Heras, "The Longest Mohenjo-Daro Epigraph", pp. 232-238.

[2] Only about a dozen inscriptions have defied all my efforts owing to a few signs the meaning of which could not be ascertained. I readily take this opportunity to thank the Director-General, Archaeological Survey of India, for supplying me with photographs of the seals and other inscribed objects from Mohenjo-Daro and Harappā which were then not yet published.

mīn, "fish", "the Fish".

min, "shining", "glittering," "glorious".

mīn, "star" and proper name or title of a king.

Only in Dravidian languages these three signs have the same phonetic values corresponding to three different meanings, according to the three differences shown in the signs themselves. If we suppose for a moment that the language of Mohenjo-Daro was Sanskrit, we should read the three above signs *mātsya* or even *mīna*—a word borrowed from Dravidian languages; but these two words in Sanskrit have no other meaning than fish, and therefore we shall not be able to assign a proper meaning to the other two signs.[1]

Fig. 2.
Impression of a seal of Mohenjo-Daro which mentions the cemetery of Naṇḍūr

Another case. The sign reads *naṇḍ* and means "crab". By compounding this sign with *ūr*, "city", we shall have *naṇḍūr*, "the city of the Crab", which seems to be the ancient name for Mohenjo-Daro. Let us add the sign that stands for "one", , *or*, to the centre of that original sign, thus and this will read *naṇḍor*, "people of the Crab" with reference to the inhabitants of *Naṇḍūr*. If we now depict four small legs on the lower portion of the original sign, like this, , we shall be forced to suffix the word *kāl*, "leg" to the word *naṇḍ*. The sign will read *naṇḍukāl*, that is the name of a plant scientifically styled *bergera verticillata* or *ischaemum aristatum*. Let us turn the sign to the left, thus . Now according to the usual system of the script we must read *naṇḍ* in the opposite direction, thus *danan*, which means "a generous" or "liberal man". Let us now shorten a little

[1] *Mīna* means also "constellation" in Sanskrit, but even then one of the signs would remain without proper explanation.

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the two ends of the front of the crab, like this ⋉ . This will be equivalent to suppressing a sound in the reading. By cutting the sound *d* we have *nan*, which means "good". By duplicating the last sign by ligature 𓀀 , the result is *nannan* (or *nanan*[1]), which is the proper name of a man, very common even at present. Let us finally unite these two duplicated signs by means of a right angle > which, being the shortened form of ▷ *kei*, "to make", will read *ei*, and then we shall have 𓀁 , *naneinan*, i.e. good Einan, a proper name or a member of the tribe of the *Einans*, "people who carry arms". Neither in Sanskrit nor in any language other than Dravidian, could all these combinations be made, each having a logical and perfect meaning.

Fig. 3
Impression of a seal of Chañhu-Daro illustrating the use of 𓀀

Another sign deserves a passing reference.

The sign ↑ *kaṇ*, "eye", "to see" has the same meaning in Sumer.[2] Yet it is most extraordinary that the "eye" and its function "to see" should be represented by an arrow. Most probably on account of this, in Sumer, in spite of the tendency of its writing to become angular, a pictogram of an eye ⊂— was adopted at a later period.[3] But if one knows the etymological meaning of *kaṇ* in Dravidian, one will not wonder any more. *Kaṇ* originally means "to pierce", and since by seeing an object we spiritually pierce it, in order to know it thoroughly, both the eye and its function are called *kaṇ*; and consequently this word is represented as an arrow. Very likely we should not be able to explain this sign so satisfactorily, were not the language of the inscriptions Dravidian.

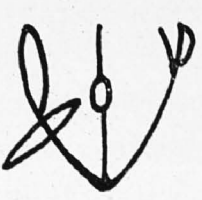
Moreover, there are some signs which clearly reveal the character of the Dravidian languages. A characteristic one is the following compound sign :–

---

[1] Cf. above, p. 91

[2] Langdon, *Pictographic Inscriptions from Jemdet Nasr*, No. 182 ; Burrows, *op. cit.*, No. 185 ; Barton, *The Origin and Development of Babylonian Writing*, No. 406.

[3] *Ibid.* ; Heras, "Sumerian Epigraphy", p. 260.

 [1]

This sign has been formed by four signs in this guise :-

taṇ, "to reduce"

kadir, "corn ear", and phonetically "ray of light"

el, "the sun"

alar, "flower"

The sign will read *taṇkadirelalar*, which literally means, "the flower of the sun of reduced ray of light". Now in Tamiḷ, or Kannaḍa or Tuḷu, cold water is *taṇṇīr*, which could be literally translated as "reduced water", i.e. "water of reduced temperature" or "cool water". Our sign therefore means "the flower of the sun of cool ray of light", which cannot but be the moon, whose rays are not hot. In a word, the sign under study stands for "the moon flower". Why therefore all this intricate circumlocution in order to say such a simple thing ? Such is the nature of Dravidian languages. In a stanza of the Saṅgam poet Opillamaṇi Pulavar there is a similar expression. Addressing the King Vananghamudi Pāṇḍiyan, he says : "Pāṇḍiya, who never bowest thy head to any one : Dost thou lie prostrate at the feet of Āṇḍivanan (Śiva) while the progenitor of thy holy race, the *cool-beamed* moon, to whose rays the lotus flower closes, and the nymphae flower expands, is sitting on his radiant lock of hair ?"[2]

This stanza, besides showing the use of a similar expression, tells us what was the moon flower, that closes its petals to the rays of the moon, i.e. the lotus flower. Some centuries later, in an ins-

[1] Mackay, M.D., 246

[2] *Thanipaddattrirattu*, Opillamaṇi Pulavar, No. 17

cription of the Kadamba King Śāntivarman of Banavāsi the idea of the lotus closing its petals at the rays of the moon is once more brought forward in the opposite way, i.e. mentioning that the sun causes "to expand the splendid lotus-groups".[1] This expression of the Kadamba epigraph seems a quotation from the famous poet Bhartṛhari, who nevertheless explains a further connection between the moon and the lotus-flower: "The sun causes the group of sun-lotus to expand without a solicitation; the moon though unmasked causes the moon-lotuses to bloom".[2]

A number of combinations besides those shown above, especially those that have one or more pictographs, could not have any other meaning if the language used were not Dravidian. Take for instance this combination:–

In Sanskrit there could not be any possible meaning if *kurkura* or *śuna* and *triśūla* were mentioned; while in Dravidian *nāivēl* makes a perfect meaning not only as regards the combination itself, but in its position in the inscription.[3] It is a creeper.

We must also here refer to a few cases of double collectivity or plurality and double totality , which at first sight appear superfluous. But it is not so in Dravidian languages, which have the double plural.

If we now pass to the consideration of the language itself, we shall discover clear proofs of its Dravidian character. In an inscription which we have published several times,[4] there is a mention of *nāl Kuḍaga*, "four Kuḍagas", who conquered a fort "of Mīnan of the Kālors". It would seem quite strange, nay, even absurd that four Kuḍagas, even supposing that they were very strong, as

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[1] Kielhorn, "Tāḷagunda Pillar Inscription of Kākusthavarman", *E. I.*, VIII, p. 36.

[2] Bhartṛhari, *Nīti Śataka*, śl. 73 (Kale's, p. 13).

[3] Marshall, M.D., No. 150. Cf. Heras, "Mohenjo Daro—The Most Important Archaeological Site in India", p. 3. The inscription speaks "of a pippal tree that has a *nāivēl* (creeping along)".

[4] *Ibid.*, No. 253.

they are said to be, *valkei*, could conquer a fort; yet *nāl* in Dravidian, besides "four", may also mean "many". This meaning is much used in folk-lore and proverbs. In Tamiḷ they say:

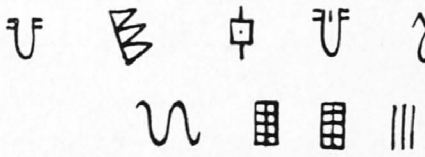
Nallathethukum
nālu taḍaṇgal

"Every good thing has (four) many obstacles"; and again:

Nalla manithanku
Nālu mair

"(Four) many hairs for a good man". Evidently if the Kuḍagas were many, the conquest of the Kālors' fort would not be so impracticable.

A much more powerful test to determine the language family of the inscriptions is the construction of the phrase, which is purely and exclusively Dravidian. It is a construction which may be called qualificative: the main word is always relegated to the end, but it is preceded by a number of qualificatives which have likewise other qualificatives of their own. Moreover, according to Dravidian construction the verb must always be at the end of the sentence and the adjectives in front of the nouns. Let us read, for instance, the following inscription:–



[1]

The inscription reads thus:

Pakūrir katu eḍu naḍu mala adu
ār tīrpu tīrpu mūn

which means: "The three decrees about the river of the middle (properly middling) mountains of the union of the separate countries". Let us analyse this epigraph:

---

[1] Marshall, M.D., No. 253.

Main words : *mūn tīrpu tīrpu* "the three decrees".

Qualificatives : A. of main words : *ār*, "the river"
B. of A : *mala aḍu*, "of the mountains"
C. of B : *naḍu*, "middle"
D. of main words again : *eḍu*, "the year"
E. of D : *katu*, "union"
F. of E : *pakūrir*, "separated countries".

All this arrangement is fully according to the rules of Dravidian construction. All the inscriptions deciphered up to the present show this very interesting grammatical construction.

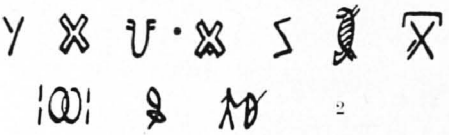
One more remark may be added here. Dravidian languages do not have the relative pronoun. Accordingly no personal pronoun has ever been found in the inscriptions, though possessive and demonstrative pronouns are often seen. Instead of the personal pronoun, they use a participle ; for instance, the Tamiḷs say *irukkira*. That is instead of saying, "Who is", they say "being". Now in the participle *irukkira*, the termination *-kkira* smacks of Sanskrit. So the real old Dravidian word will be *iru*. Let us now consider the sign that stands for this word. This sign 𐃘, independently of the above reading, cannot but be read *ire* phonetically. The numeral 𐃘𐃘 reads *ir*, "two". So those two small strokes must read *ir* also. But besides, those two small strokes are always placed in the upper portion of the writing line. This location, *above*, is always expressed by the sound *e* in Dravidian languages.[1] Therefore this sign necessarily reads *ire*, meaning "who is" or "who was", properly "being".

Fig. 4
Impression of a seal of Mohenjo-Daro having the numeral 𐃘𐃘.

[1] Heras, "Light on the Mohenjo-Daro Riddle", IV, p. 15 ; Heras," Karṅāṭaka and Mohenjo-Daro", p. 3; Heras, "The Numerals in the Mohenjo-Daro Script", p. 146.

The decipherment of the inscriptions of the Indus Valley has supplied us with yet another proof of the Dravidian family to which the language spoken there belongs. Almost mechanically I had placed the respective values under each sign in every inscription, once values were known. When all the inscriptions were deciphered, in October 1937, I could, thanks to the generosity of the University of Bombay, go to Nallur, Jaffna, Ceylon, to revise all my interpretations with Rev. Fr S. Gnana Prakasar, O.M.I., who is rightly held as the foremost Dravidian philologist.[1] What was my surprise when, while reading my interpretations of the inscriptions, Fr. Gnana Prakasar found that about twenty-five of them were fragments of poetry. These are written in different metres; five of them bring in the famous *kural* metre, the most beautiful metre of Tamil literature. Our readers may like to examine two or three specimens of this early poetry :–

1. *Inscription :*



[2]

Reading and scanning :

"udayanor ēḍu oḍu / kaḍa-il
adu kaḍa tĕr(u) / sere adu
kalakūrir / alar vilan

Translation :

"The flowery (prosperous) Bilava of the people of the united countries of the prisoners that have reached the end that has no end of the running of the Ram, of the leaders".

(The last word refers to the prisoners. The expression "to reach the end that has no end" refers to the death of the prisoners and their reaching eternity in the month of the Ram)

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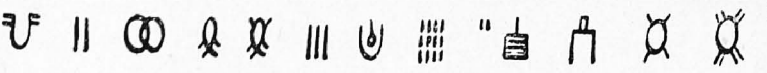
[1] Fr Gnana Prakasar has since passed away.

[2] Marshall, M.D., No. 12.

2. *Inscription :*

 [1]

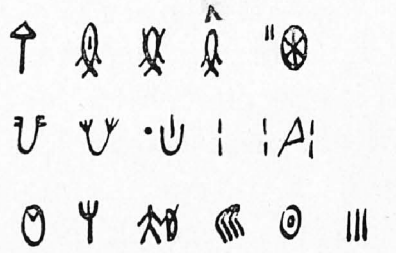
Reading and scanning :

Etūr udayūr / ir cuṇi / ire padrad
avan mūn / mīn mīn / kalakūr-/-ir adu

Translation :

"These (are) the united countries of the three starred Fish, he of the twelve (stars), which is in the living *liṅga* of Udayūr of the eight countries".

3. *Inscription :*

 [2]

Reading and scanning :

uyarel / ire mīnan / mīn
mīn kaṇ / adu ten eṇ
ir āyir/mūn pākil[3] */ arup*
vilan / vēlūril
ā

Fig. 5
Impression of a seal of Mohenjo-Daro bearing one of the longest inscriptions.

Translation :

"The cows (which are) in Vēlūr of the harvest-afflicted three Bilavas of the two southern known shepherds of the Fish-eyed of Mīna of the Mīnas who are in the high sun".

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[1] Marshall M.D., No. 400.
[2] Vats *Excavations at Harappā*, II, pl. XCII, No. 271.
[3] First syllable of this word is long on account of the versification.

VII

INTERNAL EVIDENCE OF THE INSCRIPTIONS

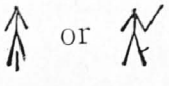
As to the internal evidence revealed by the inscriptions themselves, the confirmation of our decipherment could not be more satisfactory. We never expected to find the very foundations of Indian history and civilization in those short inscriptions, which, according to some, could not reveal more than names of persons or offices, and according to the more optimistic not much more than that. And yet, what the inscriptions have revealed is a tale of wonders, but such wonders as fit perfectly well into the hitherto vacant space of the proto-history of India.

And commencing from the geography of the country, besides the denomination ,[1] *Mīnād*, which corresponds to the Mātsya country of ancient Sanskrit literature, the inscriptions have disclosed a number of names of regions or cities well-known to us in the historical period. It is now difficult to identify such places. Yet the existence of the same or similar geographical names at a later period proves the correctness of the reading of the Mohenjo-Daro signs. The following list includes some of these geographical denominations :

Aiyūr

Mackay, H., No. 316

"The five cities" or "the city of five". A city of this name appears in the ancient history of the Tamiḷas.[2] A town named *Aiyārru* is mentioned by Mānikkavasagar.[3]



Āḷor

Marshall, M.D., No. 50

It means "men" properly. It sounds like the Latin *civitas*, as opposite to the *urbs*. A city of this name exists in the province of Sind, near Rori, not far from the Mohenjo-Daro site. This circumstance, and the fact that it is a very ancient city mentioned in some of the early Islamic chronicles about India,[4]

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[1] Mackay, M.D., Nos. 451, 598, 688; Marshall, M.D., No. 148

[2] Sivaraja Pillai, *Chronology of the Early Tamils*, p. 152.

[3] Mānikkavasagar, *Tiruvasagam*, II, v. 85.

[4] Elliot, *The History of India as told by her own Historians*, I, pp. 192-193, 256 ff, 292, 363.

makes one suspect that the Aḷor of the inscriptions is the modern place of this name. There is a city named Malad-Alur, in the Gadag Taluka, which is mentioned in an inscription of the Chālukya King Vikramāditya VI.[1] There is a place called Aḷūr in Mysore.[2] Another city called Alūr in Tiruchirapalli District, is referred to in many Cōḷa inscriptions.[3]

Ārirūr

Mackay, M.D., No. 471

"The city of rivers". There is a town of this name in Malabar. In ancient times there was a place called Tiruvaiyāṛu, the town of "the five sacred rivers".[4] Āṛūr "the city of the river" is a sacred Śaiva place, mentioned by Sambandar,[5] Tirunāvukkavaru Swāmi,[6] Sundaramūrti Swāmi[7] and especially by Mānikkavasagar.[8] It is now called Tiruvallur or Tiruvāḷur, in the Negapatam Taluka of the Tanjore District.[9] According to a Tamiḷ saying "in Āṛūr the god (Śiva) dwells for the first watch of the night."[10]

Elnād

Marshall, M.D., No. 231

Mackay, H., Nos. 11, 355

"The seven countries". Two countries of India are mentioned with the qualificative of seven in ancient Sanskrit literature: *Saptā-Sindhavah*[11] and *Sapta-Koṅkaṇa*.[12]

Kālār

Marshall, M.D., No. 474.

"The rocky river". There are two rivers of this name, one in the Nilgiris and another in Ceylon. (The sign is not found in this way

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1 *I.A.*, VIII, p. 22.

2 *E.C.*, IX, NL, 7 (a).

3 Nilakanta Sastri, *The Cōḷas*, I, pp. 364, 370 and *passim*.

4 *S.I.I.*, V, p. 538; *M.E.R.*, 239 of 1894; Nilakanta Sastri, *op. cit.*, I, p. 381.

5 Kingsburry-Phillips, *Hymns of the Tamil Saints*, p. 25.

6 *Ibid.*, p. 47.

7 *Ibid.*, p. 75.

8 Mānikkavasar, *Tiruvasagam*, II, v. 73; IV, v. 147; V, v. 323; X, v. 8; XXXIX, v. 3; etc.

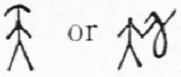
9 Cf. *Imperial Gazetteer*, XXIII, p. 400.

10 Pope, *The Tiruvasagam*, p. 260.

11 *Rg.*, VIII, 24, 27.

12 *Rājatarangiṇī*, fourth taranga, v. 159.

Kolūr
Unpublished. Neg. H. 4371, No. 6.



Kūdal
Illustrated London News, 1924, October 4th; Heras, *A Proto-Indian Icon*, pp. 12-14

Kuḍavūr
Marshall, M.D., No. 420.

Malayam
Marshall, M.D., No. 140.

but compounded with other two signs and forming the expression: *kālārorlak*, "the rising of the people of the rocky River").[1]

"The city of the rod". The ancient history of the Tamiḷas mentions the kingdom of Kol.[2] In modern India there is the city and old State of Kolhapur.[3]

"The joining of two rivers". This is the ancient name of the city of Madurai.[4] It appears written in two different ways.[5] It is mentioned in the *Tiruvasagam*.[6]

"The jug city". (It is found only in the expression *kuḍavūrveli*, "outside the Jug City"). A portion of Malabar, North of Travancore, was called *Kuttanādu* or *Kuḍanādu* in ancient times. It corresponds roughly with the modern state of Cochin.[7]

"Land of mountains". It is the Tamil name for Malabar, read phonetically.[8] It is also mentioned as *Malainādu* in ancient inscriptions.[9] Malabar products were known in Rome under the Republic.[10]

Fig. 6
Impression of a seal of Mohenjo-Daro which mentions Malayam.

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1 Cf. above, pp. 82 and 95.
2 Sivaraja Pillai, *op. cit.*, p. 90.
3 Cf. Sankalia-Dikshit, *Excavations of Brahmapuri*, p. 8.
4 Cf. below, Chapter IV, II.
5 Cf. Heras, "A Proto Indian Icon", pp. 14-15. Cf. above, pp. 90-91.
6 Mānikkavasagar, *Tiruvasagam*, IV, v. 91.
7 Sivaraja Pillai, *op. cit.*, p. 81.
8 Cf. above, p. 93.
9 *M.E.R.*, No. 263 of 1910; Nilakanta Sastri, *op. cit.*, I, p. 368.
10 Horace, *Odae*, II, 5.

Mīnanārir
Marshall, M.D., No. 323

"The rivers of the Mīnas". Were these rivers the Indus and its affluents? The *Mātsya-Nadī*, "the river of the Mātsyas" is referred to in purāṇic literature.[1]

Minūr
Marshall, M.D., No. 188

"The shining city". This evidently is the ancient Dravidian name of the city of *Minnagara*, which is already half sanskritized, referred to by the author of the *Periplus*.[2] The identification of this city has been discussed by many authors.[3] Some place it in Sindh.[4] The present writer is of opinion that its name was fully Sanskritized, named Hiraṇyapura[5] and later Prabhāspatan, and situated in Saurashtra.[6]

Mūnmala
Marshall, M.D., No. 140

"Three mountains". This is the Dravidian form of the Sanskrit name *Triparvata*, mentioned in inscriptions of the early Kadamba kings and apparently situated in the state of Mysore.[7] Other places are called *Trikūta*.

Mūnūr
Marshall, M.D., No. 302
Mazumdar, *Explorations in Sind*, pl. XVIII, No. 38

"The three cities". For this reason some of the inscriptions call it *or Mūnūr*, "one Mūnūr", i.e. three cities in one. In the historical period there are many cities all over India called Tripura, which is precisely the Sanskrit rendering of Mūnūr.[8] One of these Tripuras is said to have been destroyed by Śiva, in Purāṇic literature.[9] Was this city the same Mūnūr which appears as conquered

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[1] *Mātsya Purāna*, 22, 49.

[2] Schoff, *The Periplus of the Erythraean Sea*, p. 39.

[3] Cf. Cunningham, *Ancient Geography of India*, pp. 334-335.

[4] Haig, *Indus Delta Country*, p. 32; Pottinger, *Travels in India*, p. 382; McCrindle, *Ancient India*, p. 52.

[5] *Mahābhārata*, III, 12209; V, 1932, 3567.

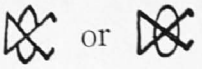
[6] Heras, "The Identification of the Round Proto-Indian Seals found in Sumer," p. 50.

[7] Cf. Heras, "Triparvata", *Journal of the Karnatak Historical Research Society*, I, pp. 21-29. Cf. above, pp. 89 and 91

[8] Cf. Heras, "The Numerals in the Mohenjo Daro Script", p. 139.

[9] *Mātsya Purāṇa*, ch. 187; *Karṇa Purāṇa*, chs. 24ff. *Droṇa Purāṇa*, ch. 203; *Śalya Purāṇa*, chs. 16, 25; *Liṅga Purāṇa*, 1st Part, ch. 71, etc.

by the Mīnas in one of the inscriptions of Mohenjo-Daro?[1]



Naṇḍūr

Marshall, M.D., No. 33, 35
Mackay, M.D., Nos. 151 301.
Marshall, H. No. 348.
(Cf. Fig. 2)

"The city of the Crab". This seems to be the ancient name of Mohenjo-Daro itself.[2] There are several villages in India called Naṇḍūr, in the districts of Nasik, Surat,[3] Guntur, etc. The capital of the old State of Rajpipla called now Nandod, is also called Nandor, a corrupted form of Naṇḍūr. It was the ancient capital of the Gurjara Dynasty of Broach.[4] After the identification of the Naṇḍūr of the inscriptions with Mohenjo-Daro by the author of these lines, two professors of the Osmania University informed him that the ancient Arabic geographers called Sind, where Mohenjo-Daro is situated, Naṇḍūrbar which means "the harbour of Naṇḍūr". This is a very interesting denomination, for ancient geographers at times knew the coasts only. The fact that they called Sind the harbour of Naṇḍūr shows that Naṇḍūr was the most important city of that province. There is a town in western Khandesh called Naṇḍurbar, which is one of the oldest, if not the oldest town in Khandesh.[5] Later on one of my research students, Mr A. P. Karmarkar, Ph.D., drew my attention to the fact that the *Varāha Purāṇa* mentions a sacred city called *Sānaṇḍūr* which has the *Malaya* (mountains) to the north and the ocean to the south.[6] The geographical situation of this sacred city, as described in the Purāṇa, exactly corresponds

[1] Cf. Heras, "Mohenjo-Daro, the People and the Land", p. 710.
[2] Cf. Heras, *op. cit.*, p. 709.
[3] *Bombay Gazetteer*, XVI, p. 461.
[4] *Ibid.*, I, pl, I, pp. 107-108.
[5] *Ibid.*, XII, p. 457.
[6] *Varāha Purāṇa*, Ch. 150, v. 5.

to that of Mohenjo-Daro. Now the syllable *Sā-* prefixed to Naṇḍūr is the same as the proto-Dravidian *kā*, "death" or "dead", converted into *sā* in more recent times (now *sāvu*). Therefore the word *Sānaṇḍūr* means "the dead *Naṇḍūr*", a name which is in perfect agreement with the modern name of the place, *Mohenjo-Daro*, which in Sindhi means "the dead city", or "the city of the dead". Perhaps on account of the sacredness of the spot, even after the destruction of the city, the Buddhists built a monastery and a *stūpa* upon those mounds, in the 1st century A.D.

Pakūr

Marshall, M.D., No. 253

"Divided cities" or "countries". There was a city of this name, in the softened form Pāgūr, in South India, in ancient times.[1]

Sid

Vats, H., Nos. 3508, 3578, 11077

Marshall, M.D., No. 445

"The flowing one". This word originally referred to the river; but was soon applied to the whole country. Later on the nasal sound *-n-* was, as usual, added to it, thus becoming *Sind*. The Iranians changed the initial S- into H-, *Hind*; and the Latins completed the transformation by eliminating the H-, *Ind*.[2] (*Sindhu*, "a stream", was afterwards introduced into the Sanskrit lexicon.)

Talnālūr

Marshall, M.D., Nos. 203, 330

"The illustrious good city". We do not know whether the adjective *tal* was an integral part of the name of this city, or appears here only as a qualification of the same. The name Nālūr is very common in Indian geography, both old and new.[3] The city of Nellore, in the Telugu country, was evidently called Nālūr in ancient time. There is a village

[1] *M.E.R.*, No. 479 of 1917; Nilakanta Sastri, *op. cit.*, I, p. 530.

[2] Cf. Heras, "La India y los Indios", *Eca*, III, pp. 399-400; Heras, "How India got her Name", *The Times of India Republic Day Supplement*, 1, 1950, 26 Jan., p. 24.

[3] Cf. Nilakanta Sastri, *Studies in Cōḷa History*, pp. 85ff.; Nilakanta Sastri, *The Cōḷas*, I, p. 363; *S.I.I.*, III, p. 90; *M.E.R.*, No. 321 of 1910.

called Nallur, that was the capital of an ancient kingdom, in one of the suburbs of the city of Jaffna, in northern Ceylon.

Udayūr

Marshall, M.D., No. 329
Vats, H., Nos. 271, 275

"The leading city". There are many Udayūrs both in the North and in the South of India. The early capital of the Cōḷa kings in the South was Urayūr.[1] In Rājasthān there is the old city and State of Udaypūr.

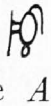
Vēlūr

Marshall, M.D., Nos. 20, 52, 121, 139, 175, 247, 322, 367, 555, etc.
Mackay M.D., Nos. 216, 465, 466, 674

"The city of the trident". The city of this name in the historical period is situated in the North Arcot District. It was the last capital of the Vijayanagara Empire.[2] This is apparently the city mentioned by the Proto-Indian inscriptions.[3] In ancient inscriptions Vennādu is mentioned.[4] (Ven is the euphonic changing of Vel.) It means the country of the trident and may be the country round Vēlūr.

Fig. 7
Impression of a seal of Mohenjo-Daro which mentions Vēlūr.

Among the people inhabiting India a number of tribes are referred to in the inscriptions, tribes which are fully known in the historical period. Some of these tribes exist till the present day. Let us examine them :–



The *Alina*

Marshall, H., No. 340

"Squirrels", spoken of in the *Ṛgveda*.[5]

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[1] Cf. Heras, "Story of a Battle in Stone", *Mārg*, I, pp. 48-49 and 66.
[2] Cf. Heras, *The Aravidu Dynasty of Vijayanagara*, I, pp. 316-321.
[3] Cf. Heras, "Mohenjo Daro, The People and the Land", pp. 713-714.
[4] *M.E.R.*, Nos. 423 of 1908 and 27 of 1922; Nilakanta Sastri, *op. cit.*, I, pp. 360-509.
[5] *Ṛg.*, VII, 18, 7.

The *Eruvu*

Marshall, M.D., Nos. 276, 544; H., 92

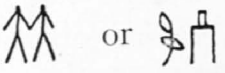
Mackay, M.D., No. 204

"Ants". They are mentioned by Herodotus,[1] Strabo,[2] and Pliny.[3] They were supposed to be real gigantic ants, that brought out gold from the interior of the earth. In point of fact they were apparently an ancient tribe of miners who were exploiting an old gold mine. Because they built underground burrows, as ants do, they were called ants. Later on they were called *Erumbus*; and *Pipīlikas* by the Āryas.[4] A city named *Erumbur* is well known. In the mountains of Coorg there is a semi-savaged tribe, called the tribe of the Yeruvas.[5]

The *Eṭkāli*

Marshall, M.D., Nos. 15, 47, 60, 83

"Spiders". They are called so very likely because they were weavers. They are very probably mentioned in vedic literature.[6]



The *Iralar*

Marshall, M.D., Nos. 84, 139

Mackay, M.D., No. 509

"Living flowers". Mountainous tribe said to be in the neighbourhood of Vēlūr, in the inscriptions. They live now in the forests round Gingi, not far from Vēlūr itself[7] and in the Nilgiris.[8]

The *Kalakila*

Marshall, M.D., Nos, 75, 271, 464; H., No. 40, etc.

"United leaves", and phonetically "united children". Mentioned in Purāṇic literature as Kalakilas or Kilakalas.[9]

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[1] Herodotus, III, 102.

[2] Strabo, XV, 37.

[3] Pliny, *Historia Naturalis*, XI, 31.

[4] Macdonell-Keith, *Vedic Index*, I, p. 531.

[5] Holland, "The Coorgs and Yeruvas, an ethnological contrast", *J.A.S.B.*, LXX, 1901, pp. 59-98.

[6] *Maitrāyaṇi Samhitā*, I, 6, 9; *Taittirīya Brāhmaṇa*, I, 1, 2, 6. Cf. Heras, "La Torre de Babel en las tradiciones de la India", *Estudios Biblicos*, VII, pp. 295, 307 and 313.

[7] *North Arcot Manual*, pp. 37, 220-222; *South Arcot Gazetteer*, pp. 110-111.

[8] Breeks, *An Account of the Primitive Tribes and Monuments of Nilagiris*, ch. V.

[9] Cf. Pargiter, *The Dynasties af the Kali Age* pp. 48 and 72.

The *Kālor*
Marshall, M.D., No. 321

"People having legs". The robber tribe still existing in the Tiruchirapalli District. The inscriptions mention them as living in South India.[1]

The *Kaṇanir*
Mackay, M.D., No. 465

"People having eyes", probably the Kannaḍigas of Sanskrit literature, called now the Kanarese people or people speaking the Kannaḍa language. Two or three forms of the language of Mohenjo-Daro are purely Kannaḍa dialectal forms.[2] Kṛṣṇa is at times called *Kāṇan*.[3] In ancient poetry we come across the *Nakkannei*, people who have good eyes.[4] One of the tribes mentioned in the *Tolkapiyam* is the tribe of the *Kaṇars*.[5]

The *Kāval*
Marshall, M.D., Nos. 18, 38, 331, 348, 406, 450, 555; H., Nos. 96, 118, 243, etc.
Vats, 2482, 4553, 12752, etc.

"Guards". A robber caste still existing in the U. P. and also in the peninsula of Saurashtra. They are called "Guards" because they by night guard the houses which should not be looted by their companions, down to the present times.

The *Koḷi*
Marshall, M.D., No. 207

"Fowls". Still represented by the people of the same name in the surroundings of Bombay, in the Koṅkaṇ and in the North and the South Kanara Districts. They are especially spread through the Koṅkaṇ.[6] The dynasty of the Cōḷas of Tanjore probably belonged to this tribe.[7]

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[1] Cf. Heras, "Karnāṭaka and Mohenjo-Daro", p. 3.
[2] Cf. *Ibid.*, p. 2.
[3] Cf. Jouveau-Dubreuil-Martin, *Iconography of Southern India*, p. 88, fig. 28(A).
[4] Sivaraja Pillai, *op. cit.*, p. 70.
[5] Cf. Law (B.C.), *Tribes in Ancient India*, pp. 357-263.
[6] Cf. Nairne, *The Konkan; an Historical Sketch*, pp. 144-146.
[7] Cf. Heras, "The 'Kōḷikōn' in Mohenjo Daro", pp. 276-279; Heras, "Story of a Battle in Stone", *Mārg*, I, 60-66.

The *Kōnanir*
Marshall, M.D., No. 275

The *Kuḍaga*
Marshall, M.D., No. 321

"People of the king". Shepherd caste still existing in South India.

"Monkeys". Called *Kuraṅgas* at a latter period, and made famous as the *Vānaras* in the *Rāmāyaṇa*. At present they are in South Kanara where they are called Koragar,[1] and in Coorg, the real name of this country being *Kuḍagu*. This tribe apparently is one of the five original tribes of the Tamiḷas.[2] The history of this tribe, called "The Race of Monkeys" is told in canto VI of the Jaina poem *Paumacariya*. These *Vānaras* are said to live in an island, the main city of which is Kiṣkindhāpura. They are in reality a race of Vidyādharas, which is called of monkeys because it has a monkey, by way of a badge, on their banners, on the arches of their gateways and the like. The Kannaḍa poem *Pampa-Rāmāyaṇa* also suggests that they were called monkeys because they had the figure of a monkey on their banner, *Kapidhvaja*.[3]

Fig. 8
Impression of a seal of Mohenjo-Daro which speaks of the tribe of the Kuḍagas.

[1] Cf. Miley, *Canara Past and Present*, p. 20; *I.A.*, III, pp. 195-199.
[2] Sivaraja Pillai, *op. cit.*, p. 64.
[3] *Pampa-Rāmāyaṇa*, canto X, gloss on śl. 2.

In a carving on a pillar of the temple of Sāraṅgapāṇi at Kumbakonam, the Vānaras, helpers of Rāma in the conquest of Laṅka, are still depicted as men, not as monkeys.

The *Mīnanir*

Marshall, M.D., Nos. 316, 463, 425, etc.
Mackay, M.D., No. 234

"Fishes". The tribe most mentioned in the inscriptions. Naṇḍūr seems to have been their capital. Called *Mātsyas* by the Āryas and much spoken of in Epic and Purāṇic literature. *Mīnas* of a remarkable type still live in some of the old States of Rājasthān, especially in Jaipur, where they enjoy some ancestral privileges which seem to prove that they ruled that part of the country prior to the present Rājput dynasty.[1] Some think that the *Mīanas* of Kathiawar are also descendants of the old *Mīnas*;[2] similarly the *Minhanas* or *Mianis* of Sind are also supposed to be the descendants of the *Mīnas*.[3] According to the inscriptions of Mohenjo-Daro, a section of the *Mīnas* had then already settled in South India.[4] This migration of the *Mīnas* to South India is hinted at in the *Karnāṭaka Mahābhārata* of Kumāravyāsa, when narrating the journey of one Jimtitamabla from North to South India. It is said that he along with others started from Gajapura (*Hastināpura*) towards the Mātsya country; he crossed the Ganges, Godāvarī and Kṛṣṇa rivers, reached Viṇāthapur and afterwards entered into the dominion of

[1] Tod, *Annals and Antiquities of Rajasthan*, III, p. 1429-1430.

[2] Cadell, "Who are the Descendants of the People of Mohenjo Daro ?", *The Anthropological Society of Bombay*, Jubilee Volume, pp. 24-26.

[3] Burton, *Sind and the Races that inhabit the Valley of the Indus*, p. 252.

[4] Cf. Heras, "Mohenjo Daro, the People and the Land", pp. 714-715.

the Mātsyas.[1] It is also traditionally held that the Pāṇḍyas themselves had come down to the South with the Ayyars or Abhiras.[2] There must have also been a section of the *Mīnas* living west of the Khyber Pass and on the slopes of the Hindu Kush, for they are found there in later times under the denomination of *Mīnajanas*. In one of the ceremonies of the *aśvamedha* an ancient king of the *Mīnas* is mentioned, parallely with Yama and other immemorial Dravidian kings. The Hotṛ says: "King Mātsya Sāmmada, his people are those who move in water (*udakecarā*), and they are staying here". And then the text adds: "Both fish and fishermen have come thither".[4] This statement clearly shows that the reason why the *Mīnas*, later Mātsyas, were called so was their sea-faring activities. The story of Śaktideva confirms the same view. This youth had fallen in love with a king's daughter, who nevertheless would marry no one, but the man who had seen the Golden City (Kanakapura). In the course of his wanderings he embarks on board a ship bound for the island of Utsthala, where lived the rich king of the Fishermen — a Niṣāda (non-Āryan) tribe — named Satyavrata. This king being informed by his subjects about all lands they visit in the course of their voyages would, so a *ṛṣi* told Śaktideva, tell him about the goal of his journey.

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[1] Kumāravyāsa, *Karnāṭaka Mahābhārata*, Virāṭaparva, 4; Samayāpālanaparva, vv. 18ff.
[2] *Kalitogai*, 104.
[3] Karandikar, *Dāsa Rātnya Yuddha*, pp. 63-66.
[4] *Śatapatha Brāhmaṇa*, XIII, 4, 3, 12.

The king, in fact, told him where the Golden City was, which he finally reached, after many more adventures.[1]

The *Pāva*

Marshall, M.D., No. 251

"Snakes", not much spoken in the inscriptions perhaps on account of their probable Kolerian origin. The most famous *Dāsa* tribe of Epic and Purāṇic times. It was spread all over India under the Sanskrit name Nāgas. The country called *Pāva* of the Mallas ("people of the mountains") in Pāli literature is perhaps the original centre of the Nāga race in India.[2] Inscriptions of the 5th century of South India mention them as ruling some kingdoms of the south.[3] In the Tamiḷ land there are a number of castes which are supposed to be Nāga sub-tribes, for instance, the Maravar, Eyinar, Oliyar, Aruvaḷar, etc.[4]

The *Parava*

Marshall, M.D., Nos. 8, 36, 228, 338

"Birds". Very often mentioned as a sub-tribe of the Mīnas,[5] living now on the Fishery Coast of South India, in Manar and in Ceylon. Similarly to the Mīnas, the Paravas were also mentioned during the performance of the *aśvamedha* by the Hotṛ, saying: "King Tārkṣya Vaipaśśyata, his people are the Birds (*vayāṁsi*) and they are staying here"; and then the text adds as an explanation: "Both, Birds and those acquainted with the knowledge of the Birds (*vāyovidyika*)."[6] The *Markaṇḍeya Purāṇa* is the story and dialogue of four Birds who were living ascetical life within a cave.

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[1] *Kathā Sarit Sāgara*, V, taraṅga 2. Cf. below, Chapter II, III.

[2] *Sutta Nipāta*, Pārāyanavagga, (*P.B.E.*, X, p. 180). Cf. Keny, "The Nāgas in Magadha", *J.B.O.R.S.*, XXVIII, p. 161, note 2.

[3] Heras, 'The Origin of the Pallavas", *Journal of the University of Bombay*, IV, pp. 313-314.

[4] Srinivasachari, "The Ancient Tamils and the Nagas", *J.I.H.*, III, pp. 523-524.

[5] Cf. Heras, "The 'Mīnavan' in Mohenjo Daro", pp. 284-286.

[6] *Śatapatha Brāhmaṇa*, XIII, 4, 3, 13.

The *Vēḷāḷir*
Van der Osten, pl. III, No. 23

"Trident People". Called so very likely on account of their devotion to the *vēl* of Murugan the son of Āṇ, who is supposed to be their patron.[1] They are a powerful sub-caste of Vaiśyas in the Tamiḷ country.

The *Vilāḷ*
Marshall, M.D., Nos., 12, 65, 69, 87, 400, 417, etc.

"Archers". Their descendants are the Bhils of Rājputānā and Gujerat and the Bilavas of South Kanara. A Bhil goes about always with his bow and arrows, even when he goes to a religious function. The pictogram depicts them to perfection.

The *Vilāḷ Mīnanir*
Marshall, H., No. 54

"Fish Archers". The union of these two tribes is commemorated in the inscriptions.[2] Within the historical period we find them still united and named *Villavar Mīnavar*.[3]

If we now turn to the religion of the Mohenjo-Daro people, the Supreme Being *Āṇ*, now called *Āṇdavar*,[4] is the proto-type of the historical Śiva, as he is the god of destruction and fertility, the god of three eyes, and of fish eyes, having a trident on his head and holding an axe and a *nāga*, having in a word eight forms.[5] He is called *tāṇḍavan*, "the dancer", *vidukaṇ*, "the open eyed", and *perāḷ*, the abbreviated form of *Perumāḷ*, three names now associated with Śiva.[6] Āṇ is also called *venkō avan*, "the one of the white mountain", which seems to refer to the Himālayas, where Śiva is supposed to dwell according to Indian mythology.[7]

Fig. 9
Impression of a seal of Mohenjo-Daro which speaks of the Tāṇḍavan.

[1] Heras, "The Veḷāḷas in Mohenjo Daro", pp. 52-53.

[2] Heras, "Mohenjo Daro, the People and the Land", pp. 710-711.

[3] *M.E.R.*, No. 54 of 1893; *S.I.I.*, IV, p. 867; Nilakanta Sastri, *op. cit.*, I, p. 574; Srinivasachari, *op. cit.*, p. 521.

[4] In the Koṅkaṇi of Mangalore the father is called Āṇ. If addressed the father is styled as Ānna by the Hindus, and as Āna, by the Christians. Referring to him they say, "He is my Āṇ", as a term of dearness and respect. He is the representative of God in the family.

[5] Cf. Heras, "The Religion of the Mohenjo Daro People according to the Inscriptions", pp. 71-11. Śiva is called *Aṣṭamūrti* by Kālidāsa.

[6] Marshall, M.D., No. 449.

[7] Cf. Heras, "The Veḷāḷas in Mohenjo-Daro", pp. 53-52.

Among the inscriptions bearing on religious subjects one, though very short, is a notable link between those ancient times and the religious traditions of the historical times in South India. It is this :–

[1]

It means : *tāṇḍavan ir nāl maram*, "The living four trees of the Tāṇḍavan"; but since the expression "four trees" also means "many trees", and since many trees make a forest, the proper translation would be: "The living forest of the Tāṇḍavan". Now the Tāṇḍavan is the dancing Śiva who was supposed to have for the first time danced in a forest at Chidambaram. The inscription therefore is a clear allusion to the same tradition.

Not less remarkable is another religious inscription which is substantially repeated in several longer epigraphs. Here it is :–

Fig. 10
Impression of a seal of Mohenjo-Daro which connects God with the chariot and the cultivated fields.

[2]

That is : *ter nād perāḷ uyareḷ*, "The high sun of Perāḷ of the chariot and cultivated fields." Perāḷ is a name of God. Both Viṣṇu and Śiva are now called Perumāḷ in South India. It may be remembered that the Sun is supposed to be the dwelling of God in many Upaniṣads.[3] The connection between the Sun and Perumāḷ is here but natural. Why should the chariot and cultivated fields be predicated of Perumāḷ? The chariot, much used in war, is a symbol of destruction. On the contrary the cultivated fields are a symbol of fertility

[1] Cf. *Ibid.*, p. 11.
[2] Marshall, M.D., No. 37.
[3] *Īśa Upaniṣad*, 16; *Chāndogya Upaniṣad*, I, 6, 6; *Maitri Upaniṣad*, 6, 4.

and generation. That Perāḷ in ancient days should be denominated Perāḷ of destruction and fertility is not strange at all, since his historical counterpart Śiva is so often called the god of destruction and fertility. These are the two poles round which all the external activity of God is pivoted in ancient Indian scriptures.

We have also found in the inscriptions two names which are attributed to Subrahmaṇya, Śiva's son; these are: *vēlan*, "the one of the trident" and *murugan*, "the boy" (which was translated by the Āryas as Kumāra); Murugan is the most ancient Dravidian name of Subrahmaṇya.[1] Under this name he is worshipped in Paḷni, Madurai District.

And since now we speak of names, a few names of persons have been found which are still common at present, among the Dravidian speaking peoples of India; for instance, *Nannan*, which is the name of an ancient king of a country near the western Ghats,[2] and of a chief of Chenkanma,[3] the hero of the poem *Malayapadukalam*, the 10th canto of the *Pattupāttu*. Another name found is *Einan*, which also appears in old historical records.[4] Another inscription mentions the "Mīnavan of the Two Fishes of the Paravas" which expression contains a title of, and has characteristic references to, the Pāṇḍya kings of Madurai.[5] In two other inscriptions there is a reference to the "Kōḷikōn", which is a title of the Cōḷa kings.[6]

Fig. 11
Impression of a seal of Mohenjo-Daro which mentions the 'Mīnavan' of the two fishes.

As regards the *liṅga* cult, the inscriptions have revealed a drama of hatred, never dreamt of before, which was partly repeated

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[1] Cf. Heras, "The Veḷāḷas in Mohenjo Daro", p. 53.

[2] Sivaraja Pillai, *op. cit.*, p. 77.

[3] Cf. Kanakasabhai Pillai, *The Tamils Eighteen Hundred Years Ago*, p. 106.

[4] Sivaraja Pillai, *op. cit.*, p. 78.

[5] Marshall, M.D., No. 8; Heras, "The 'Mīnavan' in Mohenjo Daro" pp. 281-288. The Pāṇḍya king is mentioned as "the Mīnavan" by Mānikkavasagar, *Tiruvasagam*, XXXVI, vv. 22 and 39.

[6] Heras, "The 'Kōḷikōn' in Mohenjo Daro", pp. 276-279.

at the time of the Āryan invasion when the Vedic *ṛṣis* condemned the *śiśnadevah*.[1]

The inscriptions have also disclosed the eight constellations in the Mohenjo-Daro Zodiac, which number exactly tallies with the eight constellations in the Dravidian tongues, found in the list of zodiacal constellations of the Tamiḷas and the Tuḷus, and with the eight forms of Śiva, misinterpreted at a later period of pantheistic influence.[2]

A number of social customs which are still in practice are likewise mentioned in those ancient epigraphs. We may mention a few :–

mīntīrpu, Vats, H., No. B. 110 Mackay, M.D., 616 — "the fish tax", which is now called *mīntīrvai*.

naṇḍal, Mackay, M.D., Nos. 84, 335 — now called *poṅgal*, the feast of boiling rice celebrated at the end of the harvest.[3]

tenkol, Marshall, M.D., No. 108 — "palmyra written leaf".

eḍukol, Mackay, M.D., No. 500 — "the dancing rod", used now in the devil's dances of South Kanara.

kalamalakol, Marshall, H., No. 37 — "the measuring rod" used for measuring fields.[4]

It is not out of place here to refer to the present custom of using four logs to support the roof or even the second floor of a house, a custom alluded to a number of times in the Mohenjo-Daro epigraphs.

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[1] Cf. Heras, "The Religion of the Mohenjo Daro People", pp. 13-15.

[2] Cf. below, Chapter II, I.

[3] In some places of the Tamiḷ country the boiled rice itself is now called *naṇḍal*. Cf. Mouset-Dupuy, *Dictionaire Tamoul-Francais*, word '*naṇḍal*'. A city called Naṇḍalūr is mentioned in *M.E.R.*, 580 of 1907. There is a village called Naṇḍalūr in the Anantapur District.

[4] A measuring rod is mentioned in *M.E.R.*, 165 of 1921.

One of these inscriptions contains an ancient proverb which will be useful to copy here, as popular proverbs are still a characteristic feature of Dravidian social life. The inscription runs as follows :-

[1]

mūn kālvel valilire kāl

It reads in English: "Three *kālvels* (*acacia arabica*) which make a weak support"; for three are not enough for building a house, four are required. (Notice the beautiful alliteration of this inscription, a typical feature of Dravidian literature.)

Moreover, in these inscriptions references to two ancient traditions of the Dravidian peoples have been found. One refers to an historical event, the other to a mythical story. The first is the Flood. The account of the Flood is found in several Sanskrit works, but the geographical description of Manu's country,[2] and the denomination of "king of Dravida" given to Satya Vrata — another name of the Flood hero[3] — clearly show the Dravidian origin of the Flood tradition.[4] Now the Fish that advises Manu to construct the ship, gets a rope tied from the ship to its horn, and is finally recognised as God himself.[5] In the inscriptions of the Indus Valley references have been found to the horned fish[6] and to the fish god.[7]

The other tradition refers to the foundation of the city of Vēlūr in South India. It is related in the *Pattupāttu*, a Tamiḷ poem of the Saṅgam period, that a certain chief named Nalliakōdan being afraid of his enemies asked Murugan (Subrahmaṇya) for help. The latter appeared to him in the neighbourhood of a well, plucked a flower and giving it to him ordered him to throw it at his enemies. As

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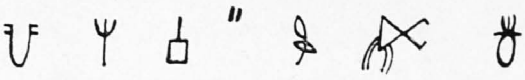
[1] Marshall, M.D., No. 473.
[2] *Mātsya Purāṇa*, Ch. I.
[3] *Bhāgavata Purāṇa*, VIII Skanda, Ch. XXIV.
[4] Cf. Peake, *The Flood*, pp. 25 ff. Cf. below, Chapter IV, III.
[5] *Śatapatha Brāhmaṇa*, I khaṇḍa, Ch. VIII; *Mahābhārata*, Āraṇyaka Parva, CLXXXVII.
[6] Marshall, M. D., No. 347; Mackay, *op. cit.*, II, pl. XCVIII, No. 614.
[7] Marshall, M.D., Nos. 198, 214, 419, 468, etc. Cf. below, Chapter IV, II and III.

he did so, the flower became a trident that killed his enemies. In commemoration of this event Nalliakōdan founded the city of Vēlūr near the apparition well.[1] Two inscriptions of our collection allude to this tradition. Here is one of them (Fig. 7) :–



It reads :

vēlūr naṇḍukāl alar ire pati vēl adu

which means : "This (is) the village trident which has the Naṇḍukāl flower of Vēlūr".

Another inscription has an expression which is found later on in Tamiḷ literature. It is one of the most interesting inscriptions of the whole collection from several points of view :–

It reads as follows :

naṇḍukolir mīnil sereir irul

which means : "darkness of the prisoners in the Fish of the at-audience-seated Crab". The inscription records in a poetical way what other inscriptions also say, viz. that the prisoners were kept in darkness from the month of the Crab to the month of the Fish,[4] which is the period of rains. But other inscriptions use the phrase "of the Fish reaching the Crab", viz. in the period when the Sun from the Crab reaches the Fish. Yet the inscription under study uses the expression *kolir* "seated at audience" (read phonetically), which is an expression common even in modern Tamiḷ.

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[1] *Paṭṭuppāṭṭu*, III, pp. 172-173.
[2] Marshall, M.D., No. 52.
[3] *Ibid.*, No. 332.
[4] Cf. *S.S.I., Report*, 1923-4, pl. XIX, No. 7.

In this connection another inscription will also be of great value ; it indicates the system of reckoning the temperature in those ancient days, which is still followed by some Dravidian tribes at present. The inscription runs :-

[1]

which reads :

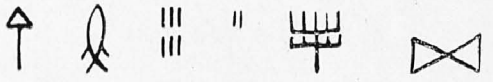
ēḍu koḍi ēḍu mūn uḍa adu

Fig. 12

Impression of a seal of Mohenjo-Daro which shows that the month of the Ram was in winter.

It means : "The beginning of the year of the Ram (is) of three garments", viz. in the beginning of the year when the Sun is in the Ram, three garments are required. Now from other inscriptions[2] we know that the Ram was in the winter solstice, which was supposed to be the beginning of the year. The fact that three garments were then required proves the same, and discloses the natural way of reckoning the intensity of cold in those days when there were no other means to do so. The Gaudas, a Kannaḍa-speaking tribe of the Western Ghats, South Kanara, use a similar expression even at present. They say, for instance : *mūru kambli chali*, "cold of three blankets", thus showing a certain affinity of thought and expression with the ancient people of Mohenjo-Daro.

Two popular beliefs or superstitions, still common among the Hindus of southern India, have also been found recorded in these inscriptions. One is the special luck attached to the seeing of the Pleiades, the *āṛu mīn*, "the six stars", as they are always called. An inscription of Harappā simply mentions "the six stars", *āṛ mīn* ;[3] but another of Mohenjo-Daro refers to the action of actually seeing them :

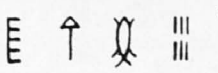
 [4]

This inscription reads :-

kūḍu perper ire ār mīn kaṇ

[1] Marshall, M.D., No. 179.
[2] Cf. above p. 97, and below, Chapter II, V.
[3] Marshall, H., No. 17.
[4] *Ibid.*, M.D., No. 314.

which means: "the six stars (the Pleiades) which are in the very great (Fish) of the union are seen".[1] A third inscription states the interesting fact that the Pleiades may be seen during the period of four houses of the sun, i.e. for half a year :–



The inscription reads :

āṛ mīn kaṇ nālvīḍ

which means: "four houses of the vision of the six stars".

The other belief is expressed in the popular way of showing gratitude to a person bestowing a favour. The recipient usually exclaims: "I shall remember this in my seven births", or in the negative form: *Elupirapilum maravēn*, "I shall not forget this in my seventh birth". These seven births plus the actual birth of the recipient make eight births. I once heard a Dravidian scholar actually wondering why precisely the rebirths should be eight when a numberless cycle of rebirths are supposed to take place. One of our inscriptions gives a satisfactory solution to this problem. It runs as follows :

Fig. 13
Impression of a seal of Mohenjo-Daro mentioning the "eight dresses" of a man.

The inscription reads :–

el kā āḷ eṭuda adu

meaning: "Of the eight dresses of a man dying seven times". According to the inscription those early people beleived the body to

[1] The qualificative *perper* is applied to the Fish on several occasions. Cf. Marshall, M.D., No. 117.

[2] Marshall, H., No. 339.

[3] *Ibid.*, M. D., No. 393.

be something like a dress, so that by changing the body the individuality of "the man" was not changed.[1] The man referred to had already died seven times. One more dress was still *available* to end the cycle of his possibilities. Why only eight and no more? As I have explained elsewhere, God was supposed to have eight forms. Consequently, man could not possibly have more than eight *dresses*. This seems to be the beginning of the doctrine of re-birth, which has so degenerated in modern Hinduism.

Finally, the Mohenjo-Daro people were similar to modern South Indians in their fondness for riddles. Several of these have been found among the inscriptions. We have already referred to one in the preceding pages.

Thus the external and internal evidence of the inscriptions of the Indus Valley shows that the inhabitants of those cities were Dravidians who spoke a Dravidian language.

We may have committed a few mistakes in our interpretation of the inscriptions, but in general our rendering of those ancient epigraphs seems to reveal the mind of those early writers.

Appendix

THE LANGUAGE OF THE PROTO-INDIANS

The first step of Champollion in his attempt to decipher the hieroglyphs of Egypt was to establish the fact that the Coptic language (spoken now in Egypt by the *ancient* Christians of Egypt and even used in their religious ceremonies) was the ancient language of Egypt. This he maintained for the first time at a lecture at Grenoble in 1807. The study of the Rosetta Stone, already housed in the British Museum, confirmed him in his original idea. The year 1821 witnessed his first decipherment of the hieroglyphs, and three years later he published his *Précis du système hieroglyphique des anciens Egyptiens*, which saw a second edition in 1828. In it he maintained that in the Egyptian system of writing there were ideographic and phonetic elements.

1 Cf. *Bhagavad-Gītā*, II, 22.

His claims were hotly disputed for many years. Many a scholar of his age supposed that the most ancient language of the world had been Hebrew, a language which was especially spoken in Egypt where Moses learnt it from the Egyptian priests (!). When they heard of the opinion of Champollion about Coptic being the language of ancient Egypt, their judgment of the French Egyptologist was very severe. "Hebrew was the pre-diluvian language", wrote His Highness the Landgrave Charles de Hesse to Champollion, in 1824, "the language which Noah and his children transmitted to their descendants. Such was the language which Thōt began writing, by using hieroglyphs instead of letters. The Coptic language was written much later using Greek letters in its writing : it was but under the Ptolomies that this took place, and particularly under Amasis, who protected the Greeks for the first time. I believe this was the work of the Ptolomies who tried to lift the people to the disregard of the priesthood and the military ; the two languages have no analogy whatsoever and I do not dare to discuss their origin here. The priesthood spoke Hebrew : Moses, educated among the priests, knew it to perfection".[1] On the contrary Champollion was writing to His Highness : "No historical document has ever been brought forward to prove that the Egyptians had ever spoken Hebrew. All proves the opposite, and shows that we must look for the Egyptian language entirely in the Coptic or Cophtic books, books which are written in Egyptian language though in Greek characters. This language, which I have studied thoroughly, does not show in its radical or grammatical forms, any resemblance with the Hebrew language".[2]

In spite of all his efforts the claims of Champollion were not acknowledged by all. The result of his studies excited a protracted controversy that lasted even after his death, which occurred in 1832. Today he is recognized as the father of modern Egyptology. The scepticism that looked suspiciously at his discovery was after all natural. It is therefore not strange either that our decipherment

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[1] Hesse, *La pierre zodiacale du temple de Dendérah*, p. 68.

[2] *Ibid.*, p. 66.

of the Mohenjo-Daro script has not received a heartier welcome in some quarters. The question of the language is in particular in the forefront.

Some persons who have heard lectures of mine or read some of my papers on the decipherment of the Proto-Indian script or of some of the inscriptions, have wrongly deduced the conclusion that my contention is that the ancient inhabitants of Mohenjo-Daro and Harappā spoke the Tamiḷ language, or at most the Tamiḷ language spoken in the beginning of the Christian era. Not a few of them have become my enthusiastic partisans, as my contention and the actual decipherment of the script were, according to them, further proofs of the antiquity of the Tamiḷ language, which has, as tradition says, been spoken for thousands and thousands of years. This view, which cannot be styled scientific at all, seems to maintain that Tamiḷ is the parent language of all the Dravidian languages spoken in India nowadays, which should accordingly be like dialects of Tamiḷ. My decipherment of the Proto-Indian inscriptions in Tamiḷ (so they say) eloquently proves that Tamiḷ was the only language spoken in the whole of India about five thousand years ago; the other languages sprang from it at a later period.

Others, more scientifically-minded and from a purely scholarly point of view, having misunderstood my contention, have criticized it in their writings, one of them somewhat severely. I shall faithfully quote their statements below, giving at the same time the date of their publication, which may be compared with the dates of my own statements about the matter.

1941. Prof. K. A. Nilakanta Sastri, of the Madras University, referred to "the most strenuous efforts of Fr H. Heras to demonstrate that Tamiḷ was the language spoken and written by the Mohenjo-Daro people".[1] "I am all admiration," he continued, "for the industry and the consistency with which the learned Father has set about this business, and he has not yet published in their final form the processes leading him to his conclusions . . . . But his

[1] Nilakanta Sastri, *Historical Method in Relation to Problems of South Indian History*, p. 48

interpretations seem to me to take no account whatever of the many difficulties philological, morphological, cultural and historical in the way of our accepting them."[1]

1942. Prof. C. R. Ramachandra Dikshitar, of the same University, while speaking of the cults prevalent in the Indus Valley, cautiously remarks in a foot-note that "no finality can however be claimed until the script is satisfactorily deciphered"; and then adds: "The Rev. Fr Heras is endeavouring to decipher it as Tamil."[2]

1942. Prof. Suniti Kumar Chatterji, of the Calcutta University, in the course of his second lecture on Indo-Aryan and Hindi, delivered in Ahmedabad in 1940, while mentioning some of the attempts made at deciphering the Proto-Indian script, stated: "Father H. Heras's very self-convinced excursions into the field by reading *Cen-Tamiz* of c. 500 A.D. (itself admitted by linguisticians to be very far removed from the still more ancient Tamil of pre-Christian times) into the inscriptions on Mohenjo-Daro seals, lack all sound philological methods."[3]

I fully agree with the above authors, all of them intimate friends of mine, that to read Tamil, or *Sen-Tamil*, or even "the still more ancient Tamil of pre-Christian times" would be absolutely a wrong method of interpretation from the philological point of view; as a matter of fact, at the very beginning of my work of decipherment, after I realized that the Proto-Indians were most likely Dravidians and probably spoke a Dravidian language, I absolutely discarded the idea of any modern Dravidian language as the probable language of those ancient people. Thus, for instance, I wrote in the first article I published on this subject, when all the inscriptions unearthed up to that date had not yet been deciphered:–

1936. "Being Dravidians, the inhabitants of Mohenjo-Daro and Northern India naturally spoke a Dravidian language; yet this

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[1] *Ibid.*, p. 48-49.

[2] Ramachandra Dikshitar, *The Lalitā Cult*, p. 39, n.1.

[3] Chatterji, *Indo-Aryan and Hindi*, p. 42.

language was not one of the Dravidian languages now spoken in India, but probably their parent, which may be called Proto-Dravidian."[1]

When all the inscriptions had already been deciphered, I once more wrote the following about the language of the Proto-Indians :–

1937. "The language used in these inscriptions most certainly belongs to the family of Dravidian languages. I style it Proto-Indian language. It must be older than all the Dravidian languages spoken in India at present, and may finally be acknowledged as the parent of all these languages."[2]

These two quotations, published three years at least before the above Professors had uttered their respective statements, show how fully in agreement with them I am since the very beginning of my work. The language spoken by the Proto-Indians may be styled Proto-Indian, and even better Proto-Dravidian (as I stated in 1936), and may be supposed to have been the parent language of all the modern Dravidian languages in India. In 1939 Prof. Gray, an American philologist of great reputation, gave also the same denomination "Proto-Dravidian" to the first, for him still hypothetical, language spoken by the Dravidians, which would be the origin and source of all modern Dravidian languages.[3]

This is precisely what Prof. Suniti Kumar Chatterji also feels about this question : "All these would make it a plausible assumption that it was the Dravidians who had built up the great city cultures of the Panjab and Sindh before the Āryans came. Whether this assumption is correct or not will be settled finally only when we can read the Mohenjo-Daro script, and when the language is proved to be the source or an early form of the present day Dravidian languages."[4] But he continues forthwith : "It will not do to read Old Tamil straight away into the inscriptions on this assumption, as Father Heras is doing".[5] Hardly could Fr. Heras read Old Tamil into the inscriptions, when he does not know Old Tamil.

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[1] Heras, "Light on the Mohenjo-Daro Riddle," p. 14.
[2] Heras, "Mohenjo-Daro—The Most Important Archaeological Site in India", p. 11.
[3] Gray, *Foundations of Language*, p. 388.
[4] Chatterji, *op. cit.*, p. 43.
[5] *Ibid.*

Our work of reconstructing the early Proto-Dravidian language has been more accurately described in a more recent article contributed by Dr J. J. Crowley to an Oxford review: "Heras then attempted the reconstruction of early Dravidian, or more correctly of Proto-Dravidian, which he assumed gave origin to the various Dravidian languages spoken today, or at least showed them in a primitive stage. This entailed a careful study of the comparative grammar and morphology of all Dravidian languages, with especial regard to the earliest literary remains, in an effort to reveal the nature and rapidity of the development in each, and the degree of convergence and divergence between them. It was expected that this would show the root-language in its simplest and most persistent form. The criteria applied were in strictest accord with the established laws of philology and comparative grammar."[1]

It is therefore quite clear that I am in perfect agreement with my critics as regards the nature of the language spoken by the Proto-Indians of the Indus Valley. But this is a theoretical question. Have I perhaps in practice not taken into account this theoretical principle? Or in other words, have I actually read the inscriptions in "Old Tamil straight away", as my friend Suniti Kumar seems to think?

As a general reply to this question I may refer the readers to my explanation of how the actual words of Proto-Dravidian were little by little found by denuding the actual—though acknowledged ancient—words of their modern raiment of suffixes and prefixes, thus obtaining at times the original root, at times the most ancient word already derived from the root,[2] (for we cannot suppose that all the original words of the Proto-Dravidian language were roots only). Moreover, in each particular case other philological problems of development were taken into account. Let us take, for instance, the modern Tamil word *sāvu*, "death." The suffix *-vu* smacks of mordernity. Hence it was at once suppressed and the original root *sā* remained, which probably means "to fall on one side." But that was not all. We know that the initial *s-* in Dravidian comes from an initial *k-*.[3] Hence we converted *s-* into *k-*. The

[1] Crowley, "The Indus and the Pentateuch", *Blackfriars*, XXVII (1946), p. 266.

[2] Cf. above, pp. 66-68.

[3] Cf. *J. A. O. S.*, LVII, p. 115.

result *kā*, "death", is undoubtedly the Proto-Dravidian word which cannot be understood by any modern Tamiḷ (not knowing Dravidian philology), nor could, as a matter of fact, be understood by any Tamiḷ of the Saṅgam age.

On some other occasions the signs were read phonetically. Such was for instance the case of the sign (which phonetically reads *lak*, a word totally against the character of the Tamiḷ language, but which could be equated to the modern Tuḷu word *lakku*, "to rise", which evidently is the development of the word read in the inscription by the addition of the suffix *-u* and repetition of the middle consonant.[1] Similarly the word *rā* meant "light" or "Sun"; it is now found in the compound word *ira* > *ilra* ("no light" ="darkness" ="night"), and in the proper name of the famous king of Laṅka, Rāvaṇa ("the elder brother of the Sun").

We could give a number of similar cases to confirm our general treatment of the Tamiḷ, Tuḷu, Kannaḍa and other Dravidian words before adopting them for reading the inscriptions. If the cases in which the Proto-Dravidian words are not so different from the modern Tamiḷ words are not more numerous, the reason for it is the conservative character of Dravidian languages in general, and Tamiḷ in particular. Take the word *kaṇ*, "eye", as a specimen. It has the original meaning of "piercing", from which "to see" is derived. It has not changed in the least in the course of thousands of years.

As regards our practical results, we may study them under two sections : Lexicon and Grammar.

A. *Lexical Results*

In the following table we shall give a number of words of the Proto-Indian inscriptions which cannot be found in the Tamiḷ lexicon. In the following columns of the table we shall add the corresponding forms in Tamiḷ, if any, so that the readers may see the change, or in any other Dravidian languages, which at time are more similar than the corresponding Tamiḷ words. If the Proto-Dravidian word was read phonetically in the course of the study of the inscriptions, it will be noted down in the column of remarks.

[1] Cf. above, p. 94.

Proto-Dravidian	Saṅgam Tamiḷ	Tamiḷ	Haḷe Kannaḍa	Kannaḍa	Telugu	Tuḷu	Malayalam	Brāhui	Other languages	Remarks
ai "five"		Only used in compound expressions as: *aimūnru* (five times three); otherwise: *aindu*.		*ay* "five"		*ai* "five"	*ai* "five"			
ai "tutelary deity" "god"		*aiyanar* "village god"		*āyi* "mother"				*āi* "mother"		
ala "waves" "sea"		*alai* "waves" "sea"								
alar "flowers"										
alina "squirrel"		*aṇil* "squirrel"		*alilu* "squirrel"						
ama "mother"		*amma* "mother"		*amma* "mother"	*ame* "mother"	*amene* "mother"	*ame* "mother"			
Amāṇ "Ardhanarīśvara"		*Ammān* "God as father"								read phonetically
Āṇ "God"		*Āṇdavar* *Āṇdivanan* "God" *āṇ* "man" "manliness"		*āṇ* "male"		*āṇ* "male"	*āṇ* "male" *Tāmburan* "God"			
andur "years"		*andukal* "years"								

Āṇil "the Son of Ān" (Subrahmaṇya)								Sanskrit and Bengali *āṇil* "wind"	read phonetically
āṛ "six"		used in compounds only *arti* or *āṛu* "six"	*āṛ* "six"	*āṛu* "six"	*aṛu* "six"	*aji* "six"	*aṛu* "six"		
ār "river" "stream"		*āṛu* "river"	*ār* or *ar* "to dive" "to immerse"						
aramaram "pippal tree"		*arasamaram* "pippal tree"		*aladamara*, "banyan tree"					
ari "toddy"	*ari* "toddy"	*kal* "toddy"				*kali* "toddy"			read phonetically
āṛmīn "the Pleiades"		*āṛumin* "the Pleiades"							
aruṕ "harvest" "crops" "to harvest"		*aruppu* "harvest"							
atari "the thrashing of the grain with cattle"	*atari* "the thrashing of the grain with cattle"								
avi "life"		*avi* "breath" "spirit" "soul"				*ayasya* "age", "duration of life", "term of life"			

Proto-Dravidian	Saṅgam Tamiḷ	Tamiḷ	Haḷe Kannaḍa	Kannaḍa	Telugu	Tuḷu	Malayalam	Brāhui	Other languages	Remarks
pes or *bes* "fertility"				*besal* "birth" "production" "bringing forth children"		*besaya* "cultivation" "agriculture"			Singhalase *pesi* "egg of a bird"	
duk "to tread" "to despise" "enemy"		*tugai* to tread" "to despise" "enemy"		*duḍuka* "a man of bold, impudent, of wicked contrivances"		*dudukum* "to be violent" "to defy"				read phonetically
eḍu "rain"		*āḍu* "rain"				*eḍ* "rain"				
eḍu "the year" "this year"		*āṇdu* "the year"				*evoḍu* "this year"			Koṅkaṇi *aundun* "this year"	
elakaṇel "the sun seeing every thing"		*ellamkāṇumel*, "the sun seeing everything"								
elāḷ "all men"		*ellarum*, "all men"		*ellavaru* "all people" "all men"						
eṇal "the man of eight" (A name given to Āṇ)						*enmaiyya* (A name given to Śiva)				read phonetically
enma "eighth day"						*enma* "eighth day"			Sanskrit *aṣṭam(i)* "eighth day"	read phonetically

erubu "ant"		*erumbu* "ant"	*irupe* or *iṟumbe* "ant"	*iruve* "ant"				
erudu "mortar"		*erundu* "mortar"						
eṭ "to reach" "to attain"		*eṭṭu* "to reach" "to attain"		*etta* or *ettu*, "to reach"				
eṭ or *en* "eight"		*eṭṭu* "eight"		*en* "eight"	*enimidi* "eight"	*enma* "eight"	*ett* "eight"	
il "son"		*pillai* "son"						
ila "leaf"		*ilai* "leaf"						
iṟ "two"		*īṟ, īru* or *irandū* "two"		*irū*, or *eradu* "two"	*īrū* "two" (in compounds)	*iṟ, iru* "two" "double"	*randu* "two"	*irā* "two"
iṟ "to be" "to exist" "current" "present"		*iru* "to be" "to exist"		*iṟ, irū* or *il* "to be" "to exist" "to remain" "to stay" "to rest"				
iṟ "house" (place where one is)								
Iruven, "One who is" "One who exists"		*Iravan* "One who is"						

Proto-Dravidian	Saṅgam Tamiḷ	Tamiḷ	Haḷe Kannaḍa	Kannaḍa	Telugu	Tuḷu	Malayalam	Brāhui	Other languages	Remarks
kā "death" "to die"		*sāvu* "death" *kāvu* "animal sacrifice"		*sāvu* "death" "corpse"		*sāyyu sei* "to die" *sāvu* "death"	*kah* or *kas* "to die"	*kah* "to die"	Malto *kie* "to die" Old Egyptian *kā* "soul separated from the body"	
kaḍa "limit" "boundary" "horizon" "gate"		*kaḍai* "limit" "boundary" *kaḍavu* "gate"		*kaḍavu* "almyra"		*kaḍavu* "turning lathi"	*kadamba* "gate"	*kad* "pit" "hole"		
kadekodi "beginning and end"		*kadaikodi* "beginning and end"		*kadekodi* "beginning and end"		*kadekodi* "beginning and end"				
kalak "union" "to unite" "united"		*kalakku* "union" "mixture" "to mix"		*kalasu* "to mix" "mixed"						
kalakila "united" leaves" (name of a member of a tribe)		*kalakkuili* "united leaves"								
kālvel "black acacia"		*karuvel* "black acacia"								
kap "flag" "banner"										

kat "to bind" "to tie"		*kattu* "to bind" "to tie"	*kattu* "to bind" "to tie"	*kattu* "to bind" "to tie"	*kāttu* "to bind" "to tie"	*kettu* "to bind" "to tie"	*kat* "bedstead"	
kei "to make"		*sei* "to make"	*kai* (*kei*) "to do"					
komb "horn"		*kombu* "horn"	*kombu* "horn"	*kombu* "horn"	*kombu* "horn"			
kuḍa "water jar"		*kuḍam* "joag"	*koda* "earthern pot"					
kuḍaga "monkey"		*kuranga* "monkey"	*kuranga* "species of antilope" "deer"		*kuranga* "monkey" "musk deer"			
kuta "pond" "tank"		*kuttam* "tank"						
kuti "kid" "small sheep"		*kutti* "kid"						
lak "to get up" "ti rise" "rising"					*lakku* "to get up" "to rise"			read phonetically
lakil "shrob called '*vitex negundo*'"				*lakki* "a medicinal plant"				
maga "son"		*magan* "son"	*maga* "son"	*mage* "son"				

Proto-Dravidian	Saṅgam Tamiḷ	Tamiḷ	Haḷe Kannaḍa	Kannaḍa	Telugu	Tuḷu	Malayalam	Brāhui	Other languages	Remarks
mala "mountains"		*mallai* "mountains"		*mala* or *male* "a mountain"	*male* "a mountain"	*male* "a jungle" "a mountain overgrown with forest"	*male*, "a mountain"			
maḷa "rain"		*maḷai* "rain"		*maḷe* "rain"		*maḷe* "rain"	*maḷe* "rain"			
mār "barter"		*māru* "barter"				*mārātā* "sale", "barter" "exchange"				
met "fence" "palisade"		*mettu* "fence", "palisade"		*muttu* "to surround" "to enclose"						read phonetically
min "royal title"									*Mina* name of a dynastic Egyptian King. *Minos* title of the early Kings of Crete	
muk "the bud of a flower"		*mugil* "to close as a flower"		*mugi* "to close as a flower"						
mukil "cloud"		*mugil* "cloud"								read phonetically
mukilil-mukan "ruler"										read phonetically

mūn "three"		*mūnru* "three"		*mūru* or *mun* "three"	*muguru* or *mūdu* "three"	*muji* "three"	*mūnnu*, "three"		Urāon *mūnd* "three".	
nād "country" "cultivated lands"		*nādu* "country" "cultivated lands"		*nādu* "country" "cultivated lands"	*nādu* "country"	*nād* "district" "village"	*nādu* "country"			
nāl "four" "many"		*nālu* "four" "many"	*nāl* "four"	*nālku* "four" "many"	*nālugu* "four"	*nāl* "four" "many"	*nal* or *nālu* "four" "many"			
nad "to ruin" "to destroy to weaken"		*nandu* "to ruin" "to destroy" "to weaken"		*nandu* "to be ruined" "to perish"		*nādu* "to destroy"				
naṇḍ "crab"		*naṇḍu* "crab"								
naṇḍal "harvest feast"		*pongal* "harvest feast"					*oṇam* "harvest feast"		Sumerian	read phonetically
nannan "moon"									*nannar* "moon"	read phonetically
natal "growth" "to grow"		*natal* "to plant"								
nuk "to soften" "to reduce" "to loose" "soft"		*nugai* "to soften" "to reduce" "reduction" "to loose" "soft"								
oduk "to turn the water to water a field" "to divide"		*odukku* "to turn the water to water a field"				*woḍḍuni* "to turn"				

Proto-Dravidian	Saṅgam Tamiḷ	Tamiḷ	Haḷe Kannaḍa	Kannaḍa	Telugu	Tuḷu	Malayalam	Brāhui	Other languages	Remarks
or "one"		*or* or *oru* "one"		*or* "one"		*or* or *oru* "one"		*or* "a finger"	Urāon *or* "beginning" "commencement"	
pagal "the sun" "the day"	*pagal* "the sun" "daytime"	*pagal* "the sun"	*pagal* "the sun"	*hagal* or *hagalu* or *agalu* "a day" "daytime" "in the day time" "by day" *pagal* "a day" "daytime"	*pagalu*, *pavalu* or *pagulu* "day"	*pagal* or *pagel* "day time"		*pagga* or *paggai* "early morning"		
pakil "to be afflicted" "to be in distress"				*pagil* "to be afflicted" "to suffer distress"		*pagi* "a rent" "a split"				read phonetically
pak "to divide"		*pākai* (pagam), "part" "division", "section" *ṭāngu*, "a division" "a section" "village"		*pāngu* "side" "neighbourhood" *bhāgion* "to divide"		*bhaga* "a part"	*pannu* "side" "neighbourhood"			read phonetically
pali "city"		*palli* "city"		*halli* or *palli* "village"	*palliye* or *palle* "abode" "hamlet" "village"		*palli* "dormitory" "bed"	*pal* "hedge" "border of matting tent"	Urāon *palli* "home" "household" "family"	

pati "town"	*patti* "city" "town"				*pattana* "city" "town"		
pav "serpent"	*pambu* "serpent"	*pavu* "snake"	*havu* "snake"	*pāmu* "snake"	*pavori* "a leech"		
per "great"	*periya* "great"		*perme* "grandeur" "honour"		*per* "large" "superior"		
perāḷ "the great One" (a name of Ān)	*perumāl* a name of Śiva and Viṣṇu			*perumallu* a name of Viṣṇu			read phonetically
perper "very great"	*mikaperiya* "very great"						
puk "smoke"	*pugai* "smoke"		*hoge* "smoke"		*puge* "smoke"		
ra "light" "sun"	*ira* "darkness"						
ru "noise"	*ru* "noise" (only used round Pondichery)				*ruyya* "noisily" "with noise"		read phonetically
ruru sound of words repeated to commit them to memory "noise of the school"	*ruru* "noise of the school"						read phonetically
rururu "the rumbling of thunder"	*urum* "thunder"	*rururu* "the rumbling of thunder"					read phonetically

Proto-Dravidian	Saṅgam Tamiḷ	Tamiḷ	Haḷe Kannaḍa	Kannaḍa	Telugu	Tuḷu	Malayalam	Brāhui	Other languages	Remarks
ruruāḷ "school master"										read phonetically
ruvāl "noisy happiness" "merriment"										read phonetically
sid "to flow"		*sindu* "to flow"	*sindhu* "a river" "a stream" "the Indus" "the Ocean" "sea"		*sindhuvu* "sea"				Sanskrit *sindhu* "a stream" "to flow"	
tala "the head" "growth" "to grow"		*talai* "head"		*tale* "head"		*tare* "head" "generation"				
taltal "very bright" "very shining"		*talatala* "very bright" "very shining"								read phonetically
taral "bush"				*taral* "bush"						
tenkadu "southern direction"		*teṛkku* "southern direction"		*tenku* "southern direction"						read phonetically
tir "holiness" "holy"		*tiru* "holy"				*tiru* "holy"				

tira "waves" "sea"	*tirai* "waves" "sea"					
tira "tribute"	*tirai* "tribute"					
tuk "to weigh" "scale" "justice"	*tūkku* "to weigh" "scale"	*tūk* "measure" "weight"	*tūku* "to weigh" "weight"			Koṅkaṇi (Goan) *tog* "measure" "weight" "to weigh" *tūkam* "to weigh"
uda "to break" "to lead" "to cut" "to possess" "to dress"	*udai* "to break" "to lead" "to cut" "to possess" "cloth"		*udu* "to wind round the waist" "to clothe"	*ude* "to break" "to split"		
uḍa "united" (adjective) "together with"	*uḍai* "together" "with" (used only as an adverb)		*kuḍo* "in company" (used adverbially)	*kuḍa* "together" "with"		
uḍa "garment" "dress"	*uḍai* "garment" "dress"		*uḍa* "cotton string round the waist" *uḍapu* or *udupu* "clothes"	*uḍa* "cotton string round the waist"		
uk "strength" "power" "to force" "to march"	*ugai* "force" "power" "to force" "to march"		*ukku* "to rise" "to swell beyond limit"	*ukku* "to rise" "to swell beyond limit"		

Proto-Dravidian	Saṅgam Tamiḷ	Tamiḷ	Haḷe Kannaḍa	Kannaḍa	Telugu	Tuḷu	Malayalam	Brāhui	Other languages	Remarks
ukal "to jump" "to run about" "to slip off"		*ukalu* "to rise and roll in large waves"		*ukku* "to rise or swell as the sea"		*ukkuni* "to swell up" "to boil" "to bubble"				
ula "to possess" "to own" "proprietor" "one who has"		*uḍai* "to possess" "to own"		*ulla* "having" "possessing"		*ullāya* "a master" "a lord"				
valav "a strong man"		*vallavan* "a strong man"				*balavante* "a strong man"				
valil "fort" (strong house)										read phonetically
vel "king"	*vel* honorific suffix in proper names								*vel* used in Etruscan inscriptions after names of kings	
veli "silver"		*velli* "silver"		*belli* "silver"		*bolli* "silver"				
vīd "house"		*vīdu* "house"		*vidu* "house"						

The study of the preceding chart will show how many words of the language spoken in Mohenjo-Daro are not words of the Tamiḷ language, some of which (many times read phonetically) find their corresponding ones in Tuḷu, Kannaḍa or any other Dravidian languages. The fact that some of the Mohenjo-Daro words, for instance *atari*, not found in modern Tamiḷ, are traced to Saṅgam Tamiḷ is not to be wondered at, nor does it prove that the Mohenjo-Daro language is the language of the Saṅgam period. For the words and forms of the Saṅgam period are nearer to the Proto-Indian period than the modern language is. Our language therefore, the Proto-Dravidian we are studying, should naturally be nearer to Saṅgam Tamiḷ than to modern Tamiḷ, without being Saṅgam Tamiḷ in any way ; as it should be nearer to Haḷe Kannaḍa than to modern Kannaḍa, without being Haḷe Kannaḍa either.

Nor may it be objected that many of the words of Mohenjo-Daro given as different from Tamiḷ, are only different by the elimination of a suffixed letter or sound, (for instance *-u*, in *ār* < *āru*, *ir* < *iru*, etc.); or by the change of a double consonant into a single consonant (for instance in *ama* < *amma*, *kuti* < *kutti* etc.), for this suppression and this change constitute a really different lexicon. In Castillian (Spanish) they say *blanco*, "white" ; in Catalan, white is *blanc*, in French *blanche*, in Italian *bianco* ; in Portuguese *branco*. All these words differ in one, or at most two sounds only ; and yet they are different words belonging to different languages. Nor does the fact that they may be easily understood by those who speak the other language or languages prove anything to the contrary.

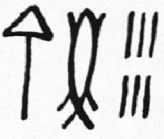
B. *Grammatical Results*

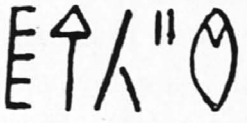
As regards the Grammar of Proto-Dravidian, it is in a very primitive state of development, totally different from Saṅgam Tamiḷ grammar, as the following notes will easily show :–

1. *Morphology.* There is no difference in the morphology of the noun, verb or adjective. The same word, for instance *kaṇ*, may be a noun, "eye" or "vision" ; a verb, "to see", or an adjective

"visible". The respective grammatical character is to be discerned from the position the word occupies in the phrase; for instance :–

Noun: *mīn kaṇ Āṇ*, "Āṇ of fish eyes".

Verb :  *āṛmīn kaṇ*, "See the Pleiades"; or "The Pleiades (are) seen".

Adjective :  *ūril ire tīr kaṇ nāl vīd*, "the visible four (or many) houses of the judge who is in the city".

2. *Noun.* It has not the full declension as yet. Two cases only have been found :–

The genitive: *naṇḍil*, "of the crab", (for modern *naṇḍin*).[1]

The locative : *ilil*, "in the house".[2]

tūkil, "in the scale".[3]

3. *Plural number.* It is formed in four different ways :–

(a) The most primitive way is the repetition of the same noun, viz. twice; for instance; *parava parava pali*,[4] "the city of the Paravas"; *ūril ire orvan orvan per mīnkaṇ*,[5] "the great Fish-eyed

[1] Mackay, *op. cit.*, II, Nos. 19 and 142.
[2] *Ibid.*, Nos. 177, 187, 256 and *passim*.
[3] *Ibid.*, No. 371.
[4] Marshall, M.D., No. 338.
[5] *Ibid.*, No. 32.

Fig. 14
Impression of a Mohenjo-Daro seal showing the plural of rain, is a downpour, i.e. much water ; *"parpala"*, (euphonic transformation of *palapala*) meaning "very many" (*pala*, "many") ; *aneka aneka*, "very many" ; *sirsila* (*sila sila*), few ; *samya samyam*, "at times" ; *athikam athikam*, much ; *saram saramai*, "innumerable" ; etc. This is the natural, most primitive way of forming the plural, for Dravidian languages have no dual ; whatever is more than one is already plural. In the archaic Chinese script which was in use during the Yin Dynasty (c. 1000 B.C.) the forest was represented by two trees next to each other.[3] This is exactly according to the same system of the Indus Valley script. In the same way the place of the land of Canaan wherein Josua encamped after crossing the river Jordan was marked by twelve huge stones, set there by his order ; and the spot was called in later times Galgal (*kal*, "stone"), "the stones".[4] This very word *galgal* or *gagal* is used (though without knowing its real meaning) by the people of Small Brittany, in France, and of the Basque Provinces, in Spain, to denote the ancient mounds covering the dolmens, when they are made of stones and rocks.[5] Such a form of plural has passed to other modern non-Dravidian languages, in some way or other. For instance in Marāthi in order to emphasize that the noise (*kat*) is great, they say : *kat-kat*. Even in the Portuguese dialect spoken in Diu (Saurāshtra) the reduplication of nouns to form the plural is

One (God) of the men who are in the city". In these cases the signs repeated are inscribed separately ; hence they should be read separately.[1] Such repetition of words to denote plural was common in Sumerian language : *kur-kur* "the mountains" ; *dug-dug*, "the commands".[2] A few cases of this repetition still remain in the Tamil language, for instance *kottu-kottu*, "branches" ; *sāraisārai*, with regard to

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[1] Cf. Marshall, M.D., Nos. 83, 180 ; Mackay, M.D., Nos. 29, 50, 72, 73, 119, 292, 301, 343, 346, 350, 423, 427, 512, 654.

[2] Gadd, *A Sumerian Reading-Book*, p. 25.

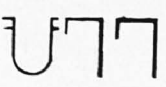
[3] Maspero, *La Chine Antique*, p. 38.

[4] *Jos.*, IV, 19 and 20.

[5] Goury, *L'Home des Cités Lacustres*, II, p. 493 ; Aranzadi-Barandiarán-Eguren, *Exploración de seis dólmenes de la sierra de Urbasa*, p. 8.

common ; for instance *cao-cao*, instead of *caes*, "dogs" ; *fi-fi*, instead of *filhos*, "sons".[1]

(b) This repetition of the word was soon changed into the word, followed by the suffix *-ir* (meaning two). This reading must have already been accepted even in cases of repetition of the sign, for instance in this inscription :–

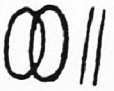
 [2]

which cannot but read: *Tirair adu*, "of the Tirayir", for the Tirayir, or (later) Tirayar, formed one of the most ancient Dravidian tribes. This reading is confirmed by the following inscription in which the sign of *tira* is followed by the sign for *ir* ("to be"), consequently reading *tirair* :

[3]

which reads : *valarpiṛe ēr ēḍu tirair kaḍavuḷ adu*, which means: "This (is) the God of the Tirayirs in the year of the rising of the waxing moon".[4] Sometimes two strokes are added behind the sign meant to be in plural or placed across the sign in question. Since two strokes stand for the numeral "two", read *ir*, this syllable must be added to the phonetic value of the main sign, thus :–

[5] *kalakūrir*, people of the united countries. When the united countries are two only the expression is written thus :–

 [6] *ir kalakūr*, "two united countries".

[7] *arupir*, harvesters.

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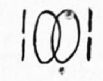
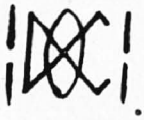
[1] Entwistle, *The Spanish Language*, p. 315.
[2] Vats, *op. cit.*, pl. LXXXIX, No. 150.
[3] Mackay, *op. cit.*, pl. LXXXIV, No. 71.
[4] Cf. Heras, "The Tirayars in Mohenjo Daro", p. 74.
[5] Marshall, M.D., No. 369.
[6] *Ibid.*, No. 552.
[7] *Ibid.*, No. 548.

The determinative of plurality, consisting in two strokes over each other placed on each side of the sign,[1] seems to remind the reader of this termination in *-ir*, thus :–


[2] *kalakūrir*, "the people of the united countries".


[3] *naṇḍūrir*, "the people of *Naṇḍūr*".

This plural in *-ir* is still found in very rare cases in modern Tamiḷ, for instance *Velir*, ancient chiefs of the Tamiḷ land.

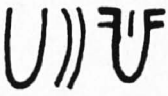
(c) At times the termination *-or* is added to the noun to make the plural, thus :–

[4] *naṇḍor*, "the people of the crab".

[5] *kālor*, "the Kālors".

[6] *āḷor*, "men". Now it would be *āḷkaḷ*, in Tamiḷ.

(d) Sometimes the plural termination in *-ru* is also used, for instance :–


[7] *eḍu etru*, "the eight (parts) of the year". This form of plural is more akin to the Kannaḍa language.[8]

[9] Also we find *nālru*, "four persons", in the inscriptions. In Tamiḷ it would be *nālvar* ; in Tuḷu, *nālver* ; in Kannaḍa *nālaru*.

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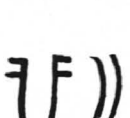
[1] Cf. above, p. 86.
[2] Marshall, M.D., Nos. 12 and 397.
[3] Mackay, *op. cit.*, pl. LXXXV, No. 151.
[4] Marshall, M.D., Nos. 17, 245.
[5] *Ibid.*, No. 321.
[6] Mackay, *op. cit.*, II, pl. LXXXII, No. 702 ; pl. LXXXV, No. 111.
[7] Heras, "The Longest Mohenjo-Daro Inscription", p. 232. Cf. above, p. 99.
[8] Cf. Heras, "Karnāṭaka and Mohenjo Daro", p. 4.
[9] Mackay, *op. cit.*, II, pl. XCIV, No. 413.

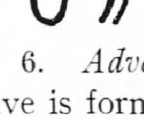
The ordinary Tamiḷ form of plural in *-ar* is found not even once in the inscriptions.

4. *Pronoun.* The determinative pronoun *adu* means "this", not "that", as at present.

No personal pronoun has ever been found; in its stead the participle is used. In the inscriptions it is *ire*, read phonetically;[1] not *irukkira*, as in Tamiḷ, nor *iruvike*, as in Kannaḍa.

5. *Verb.* It has been said that "in most of the Dravidian languages . . . the verb can be characterized as an inflected noun . . . The Dravidian verb is half adjective and half noun, denoting as it does the subject as the doer of the action in question".[2] This very present state of the Dravidian verb may disclose its humble origins. In the Mohenjo-Daro inscriptions there is no full conjugation of the verb as yet, though we may say that it is found in its infancy. Besides the participle *ire* mentioned above, the following forms have been found :-

(a)  [3] *kaṇadu*, "he saw". Tamiḷ: *kaṇḍadu*, properly: "that was seen"; Kannaḍa: *kaṇḍanu*, "he saw".

(b)  [4] *etadu*, "reaching". Tamiḷ: *etturadu*.

6. *Adverb.* The comparative has not been found. The superlative is formed by the repetition of the adjective thus:

(a) *tal*, "bright"; *taltal*, "very bright"; *taltalilil*, "in the very bright house". Tamiḷ: *talatala*.

(b) *per*, "great"; [6] *perper*, "very great". Tamiḷ: *magāperiya* or *mikaperiya*.

7. *Syntax.* The construction in general seems to be the same as in modern Dravidian languages.

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[1] Cf. above, p. 105.
[2] Grierson, *Linguistic Survey of India*, IV, p. 295.
[3] Marshall, M.D., No. 556.
[4] Marshall, M.D., No. 23; H., No. 331.
[5] *Ibid.*, H., No. 6, 44.
[6] *Ibid.*, M.D., No. 234; Mackay, M.D., Nos. 154, 158, 166, 178, 421, 588, 596.

All these differences between the Proto-Dravidian language of Mohenjo-Daro and the modern Dravidian languages are so striking that no ordinary Tamilian would be able to understand the Proto-Indian inscriptions. A scholar in Tamiḷ, with some attention and meditation, may arrive at a probable interpretation. This may finally be realized while comparing the texts of a few inscriptions taken at random with what their redaction in modern Tamiḷ language would be :—

Inscription	*Translation*	*Modern Tamiḷ*
P. Marshall, M.D., No. 321. (Cf. Heras, "Light on the Mohenjo-Daro Riddle", p. 15).		
Kālor mīnan mīn kaṇ kaḍa er vālil adu kalakūrir vālkei kudaga nāl	"Many strong-built Kuḍagas of the people of the United Countries who have a fort which was seen with great perfection, crossed and taken over by Mīnan of the Kālors".	Kālōr Mīnanāl sariyāik kāṇappaṭṭu, kaḍakkappaṭṭu, eḍukkappaṭṭa kōttaiyai udaya aikkiya nāṭṭu vāsikaḷuḷ pala valiya Kuraṅgar.
2. *Ibid.*, M.D., No. 553. (Cf. Heras, "Mohenjo Daro. The most Important Archaeological Site in India", pp. 710-711).		
El Āṇ ūril ire mīn adu el kā adu	"This is the death of the seven of the king who is in the country of the Sun (who is) Aṇ".	Āṇdivananāna Sūriyanuḍaya nāttil ulla arasan adu ēḷu pērin sāvu idu.
3. *Ibid.*, M.D., No. 87.		
Duk vilāl vel ire mīnan mīn ir mīn eḍu oḍu kaḍekoḍi adu.	"This is the beginning and end of the running (the month) of the Ram of the two fishes of the King of the Mīnas who has the king of the despised Bilavas".	Tukaikkappaṭṭa Billavarin arasanaippiḍitta Mīnavarin arasanadu irumīnkalin Mesha Mādam idu.

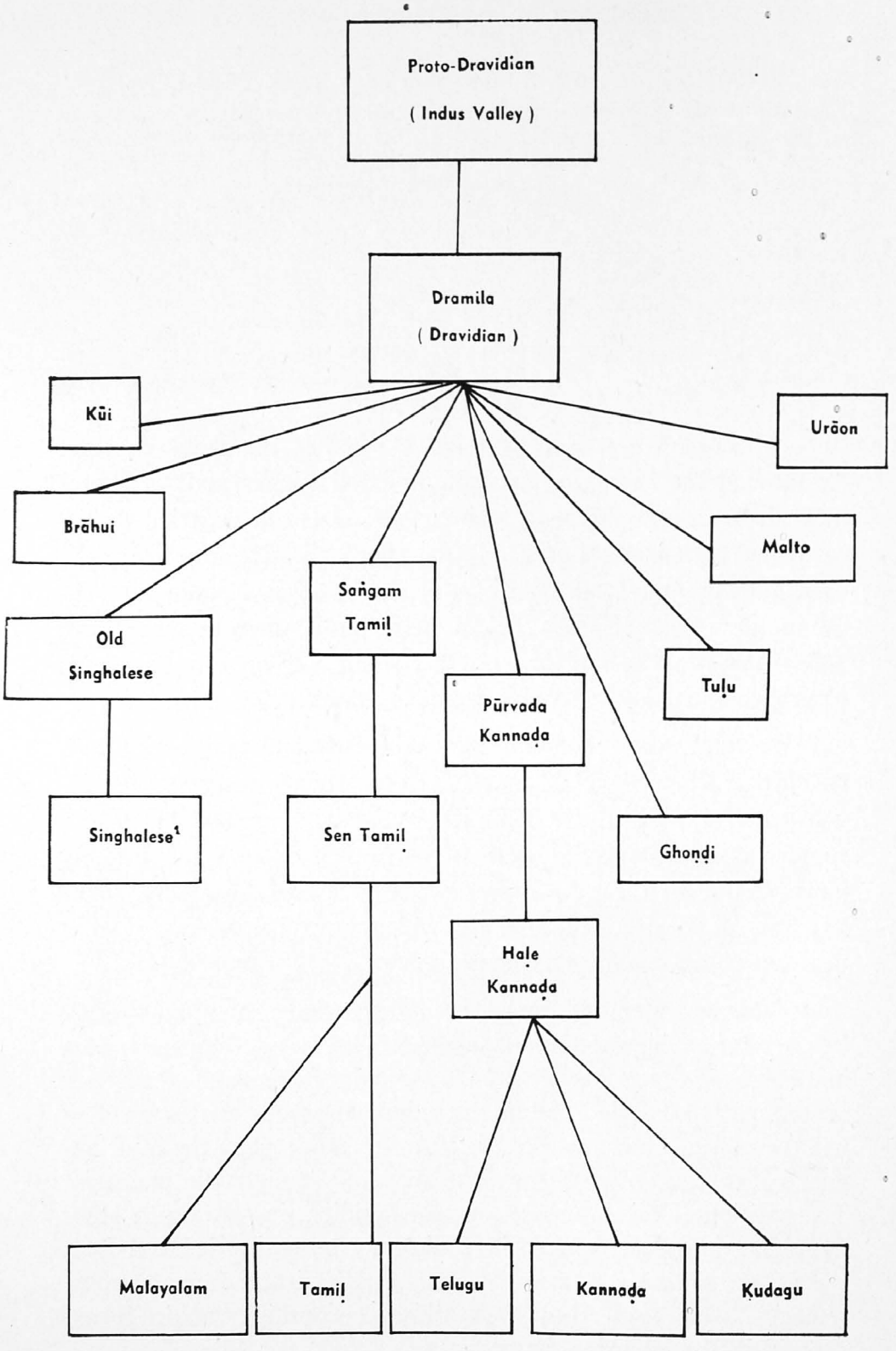
Inscription	*Translation*	*Modern Tamil*
4. Mackay, *op. cit.*, II, pl. XCIV, No. 420. (Cf. Heras, "The Plastic Representation of God amongst the Proto-Indians", p. 225).		
Nila Naṇḍūr kuḍa mīn adu Aṇ vāl.	"Let the Lord of the Water-Jar and of the Fish of Naṇḍūr who has lands be happy".	Nilankaḷaiudayavanum Kuḍamum Mīṇum udayavanumana Naṇḍūrin Devan vāḷka.
5. Vats, *op. cit.*, II, pl. LXXXV. No. 8.		
Kāḷei kudu ir kaḍa tira valarpiṛe.	"The waxing moon of the opening of the existing horizon of the conjunction of the morning star".	Kālai nakshattirattāi vānattin ellaiil ippoḷudu sēṛum valarpiṛai.
6. *Ibid.*, II, Pl. LXXXVI, No. 22.		
Ūril ire sere mīnan mīn naṇḍil ulavan tir maram.	'The tree of judgment of the illustrious king of the imprisoned Mīnas who is in the country".	Nam Nāṭṭu perpōna arasan siraippaṭṭa Mīnavar mīdu taṇḍanai viditha maram.
7. Majumdar *Explorations in Sind*, pl. XVII, No. 44. (Cf. Heras, "Two Proto-Indian Inscriptions from Chañhu Daro", p. 316).		
Ir arup kalakūr oduk ru, ir aramaram adu ru.	"The noise of the water turned to water a field of the united countries that have two harvests is like the noise of the two pippal trees"	Iruviḷaichchal ulla aikkiya nādukaḷin nilattil pāichchina nīrin saptam iru arasamarangalin saptam pōl irukkiradu.
8. Mackay, *op. cit.*, II, pl. XCVI, No. 518. (Cf. Heras, "The Veḷāḷas in Mohenjo-Daro", p. 54).		

Inscription	*Translation*	*Modern Tamiḷ*
*Kōpoturir tīrtadu *karumukil adu Āṇ uyarel ūril.*	"In the city of the high sun of the Lord of the rain clouds the carriers of domination have finished (perished)".	Kārmukil Āṇḍavanin uyar sūriyanadu ūril or vamsattai sernthor māṇḍu pōyinar.
9. Marshall, M.D., No. 8. (Cf. Heras, "The 'Mīnavan' in Mohenjo Daro", pp. 281-282).		
Parava nila īr mīn Mīnavan mūn kaṇ.	"The Three-eyed One of the Mīnavan of the two fishes of the moon of the Paravas"	Paravaradu Nilāvin irumīnkaḷin Mīnavanadu mukkaṇṇan.

The impartial reader may judge whether the language used for reading the Mohenjo-Daro epigraphs has been Tamiḷ or Proto-Dravidian. From the very beginning of our work we tried to discard whatever smacked of Tamiḷ, for we clearly understood that the Mohenjo-Daro language could be neither modern Tamiḷ, nor Sen-Tamiḷ, nor Saṅgam Tamiḷ. This we have often stated in our lectures and writings. The contention that Tamiḷ was spoken thousands of years ago is absolutely preposterous, unscientific and baseless.

We fully agree therefore both in theory and in practice with our friend Prof. Suniti Kumar Chatterji; though we may, we sincerely acknowledge, have committed mistakes, here and there, in a subject as vast and as difficult as the present one. I am sincerely indebted to Rev. Fr S. Gnana Prakasar, O.M.I., for some very valuable philological suggestions, which have helped me a great deal not to have committed many more.

If our attempt has finally been successful we may reasonably be proud of having reproduced some short literary specimens written in a language which was silent for thousands of years and which may consequently be styled one of the oldest languages of the world. if not the oldest, known at present ; but on no account the first language of man, as some overzealous lovers of Tamiḷ would maintain. The position of this language, Proto-Dravidian, in relation to other Dravidian languages spoken in India may be easily deduced from the above quoted statement of Prof. Chatterji and from our own remarks. Our readers may see this relationship graphically expressed in the following diagram :–



[1] Cf. Gnana Prakasar, "The Dravidian Element in Sinhalese", *Anthropos*, XXXII, pp. 155-170.

Chapter II

MOHENJO-DARO AND SUMER

I

SIMILARITY BETWEEN THE CIVILIZATIONS OF MOHENJO-DARO AND SUMER

When the discoveries of Mohenjo-Daro were first announced to the world,[1] some extraordinary connections between Northern India and Sumer were at once pointed out. The similarities between the two scripts were most striking.[2] The people of Sumer, according to many archaeologists and anthropologists, actually belonged to the same Mediterranean race, of which the Proto-Dravidian people were only a branch.[3] Was there, therefore, something more than a mere similarity due to neighbourhood between the Sumerians and the Mohenjo-Darians ? This is precisely what the inscriptions of Mohenjo-Daro have revealed — that there was.

First of all, there is no doubt that there is a great similarity between the Dravidian languages and the Sumerian tongue. Rev. Fr S. Gnana Prakasar, O.M.I., the foremost Dravidian philologist, had already announced this several years ago.[4] The earliest Sumerian records date from about 4,000 B.C. The language became extinct in the third century B.C.[5] It is now admitted by all that the Sumerian language was agglutinative,[6] though naturally influenced by the speech of the pre-Sumerian ethnic substratum.[7] Gray gives a

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[1] Marshall, "First Light on a Long Forgotten Civilization," *Illustrated London News*, Sept. 20, 1924, pp. 528-532.

[2] Cf. Gadd-Smith, "The New-Links between Indian and Babylonian Civilization", *Illustrated London News*, Oct. 4, 1924, pp. 614-616.

[3] Barton, *Semitic and Hamitic Origins*, p. 39.

[4] Gnana Prakasar, *Sumerian and Tamil*, pp. 6-10. Cf. Gnana Prakasar, *Etymological & Comparative Lexicon of the Tamil Language, passim.*

[5] Gray, *Foundations of Language*, p. 479.

[6] Speiser, *Mesopotamian Origins*, p. 13 ; Barton, "Whence Came the Sumerians ?", *J.A.O.S.*, XLIX, p. 263 ; Barton, *Semitic and Hamitic Origins*, p. 36 ; Deimel, "De populo Sumerorum", *Verbum Domini*, I, (1921), p. 157.

[7] Speiser, *op. cit.*, p. 47

summarized idea of what Sumerian was, in which he seems to have described a Dravidian language in a very early stage of its formation. According to him "Sumerian does not distinguish genders and its inflexion of the epithetologue is rudimentary, prefixes, infixes and postfixes being employed to denote syntactic relationships. It indicates the plural either by doubling the singular or (more frequently) by affixing *-(e)ne* to the singular". It has three tenses and four moods (indicative, imperative, subjunctive and optative). "The verb is really a verbal noun and does not ordinarily indicate the person; so that *mu-gar* may mean "he made", "thou madest", "I made", (literally "his made-ness", etc.) and *mu-gar-ene*, "they, ye, we made".[1] Attempts have been made to connect Sumerian with a number of languages,[2] even with Burmese.[3]

Prof. A. S. Thyagaraju, some time after Fr Gnana Prakasar, drew the attention of Indian scholars to the many affinities existing between the old Sumerian language and the Dravidian languages spoken now in India;[4] while Mr Ramaswamy Aiyar had already published a list of geographical names showing the same relationship.[5]

It is not within the scope of our study to give here a similar list; yet we shall gather here only a few Sumerian names much repeated in Sumerian history and show their Dravidian relationship:-

SUMERIAN	PROBABLE DRAVIDIAN AFFINITY
a, "water"	*ā*, "water" in Kannaḍa
ba, "to divide"	*pak*, "to divide"[6]
ama, "mother"	*ama*, "mother"
an, "high"	*āṇ*, "the lord" in Dravidian
bītu, "house"[7]	*vīdu*, "house" in Dravidian

[1] Gray, *op. cit.*, pp. 378-379.

[2] *Ibid.*, pp. 276, 366, 369, 376, 379, 381, 397, 403.

[3] *Ibid.*, p. 379.

[4] Thyagaraju, "Sumero-Dravidian Affinities", *Q.J.M.S.*, XXIII, pp. 223-228.

[5] Ramaswami Aiyar, "Dravidic Place-names in the Plateau of Persia", *Q.J.M.S.*, XX, pp. 51-53.

[6] The Sanskrit *bhāgā* "to divide" seems to be of Dravidian origin. Caldwell, *op. cit.*, p. 573.

[7] Used in Akkadian language according to Labat, *L'Akkadian de Boghaz-Koi*, p. 113. A number of Akkadian words seem to have been borrowed from the early Sumerian language.

SUMERIAN	PROBABLE DRAVIDIAN AFFINITIES
elim, "ram"	*eli*, "ram" in Dravidian
gal, "great"	Used in modern Tamiḷ in compound proper names after the plural termination with the same connotation of greatness, for instance *Svāmiargaḷ*.
galu, "man"	*āḷ*, "man" in Dravidian
ia, "five"	*ei*, "five" in Dravidian
id, "river"	*sid* "to flow", "water" in Dravidian.
Im-dugud, a mythical bird, the name of which means "heavy storm"	In Kannaḍa *dege*, *gide*, or *giduga* means "hawk" and "falcon". *Im-giduga* means "the double falcon" in Kannaḍa.
kalam, "the land"	*kalam*, "place", "locality", "open space", "agricultural tract" in Tamiḷ.
kuduru, "boundary stone"	*kudūror*, "united countries" in Dravidian (Notice that where the union of two countries is found the boundary stone is placed).
kur, "mountain"[1]	*kō*, "mountain", in Dravidian; *kuriṅji*, "high lands", "hilltops" in Sen Tamiḷ (*Nannuru*).
Kurkur, "foreign countries" or "foreign cities"[2]	*kurukūr*, "the countries across" or "opposite ", in Tamiḷ.
nannar, the moon God of Ur	*nannan*, "the moon" amongst the Proto-Dravidians.[3] It means "the one who is near".

[1] Kortleitner, *De Sumeriis*, p. 19.

[2] Cf. King, *A History of Sumer and Akkad*, p. 14, note 1.

[3] Cf. Heras, "Chañhu Daro and its Inscriptions", pp. 104-105; Puri, "Nana, The Mother Goddess in India and Western Asia", *I.C.*, VII, pp. 225-228.

SUMERIAN	PROBABLE DRAVIDIAN AFFINITIES
pateśi, "the governor of a city"	*Patti*, "city" in Tamiḷ; *ese*, "to be distinguished", "to be brilliant", "to shine" in Kannaḍa. Hence *pattesi*, seems to mean "the distinguished one of the city"
Sargon, name of a King, the founder of the Akkadian Dynasty	*sari*, "straight", *kōn*, "king" in Dravidian. *Sarikōn* would mean "the straight king"
udu, "sheep"	*āḍu*, in Tamiḷ; *ēḍu*, in Kannaḍa, sheep; *ēḍu*, "ram" in Proto-Dravidian.
ur, "city"[1]	*ūr*, city in Dravidian
Idīgna "always flowing" (name of the river Tigris)	This word evidently comes from the Dravidian root *id* "to flow", later *sid* < *siṅd*. The initial *s-*, as not belonging to the original root, easily drops, as later in Persia (*Hind*) and in Rome (*Ind*). Even in Tamiḷ the *s-* has dropped in the case of *iḷi* < *sid*. Thus the word *Idīgna* may be explained by comparing it with the Tamiḷ word *Iḷintāṇ*. "The form *Iḷintāṇ*", says Fr Gnana Prakasar, "is past tense, *Ili* + (n)t + āṇ, meaning "the continual flower," if I can make a verbal noun with "flow". In popular speech it would become Iḷincāṇ, t/c, and then *Idīgna* could easily follow, ḷ/d. The ending *-āṇ* could have dropped. All this is phonetically possible".[2]

[1] Kortleitner, *op. cit.*, p. 31, n. 1.

[2] Letter of Fr Gnana Prakasar to the author, Nallur, Jaffna, Ceylon, 17.XII.46. Cf. Gnana Prakasar, *Etymological & Comparative Lexicon*, p. XVII.

As to the grammar of the Sumerian language, Langdon maintains that "the love of grammatical learning was characteristic of the Sumerian people," already in the Jemdet Nasr period.[1] This is not strange indeed, if we consider the extraordinarily advanced development of grammar that can be discovered in the Proto-Indian inscriptions.[2] Such a development is also noted by Langdon in the early Sumerian inscriptions.[3] Briefly the Sumerian grammatical construction is reduced to this: the verb is always placed at the end of the phrase, the adjective precedes the noun, and genitives are located before the substantive.[4] This is precisely the construction we have discovered in the Mohenjo–Daro inscriptions.[5] It should also be remembered that the Sumerian language was an agglutinative language, just as all languages belonging to the Dravidian family are also agglutinative.[6]

As regards the script, the discoveries of Sumerian tablets at Jemdet Nasr made the connection quite clear. Even Prof. Langdon, who at first did not want to acknowledge it, was forced to recognise it later on.[7] And certainly after a detailed study of the Mohenjo-Daro and the Sumerian signs one is inclined to state that one of the two scripts was the development of the other, and even that the Mohenjo-Daro script looks older than the Sumerian.

First of all, in Mohenjo-Daro we find the pictographs which, as Prof. Langdon himself had wisely foreseen, were the original signs out of which the Sumerian signs developed.[8] The Kish tablet of the Ashmolean Museum is the link between these two kinds of scripts.[9] (Fig.15). Sir W. M. Flinders Petrie acknowledges that the signs of the Mohenjo-Daro script "are certainly ideographic signs, such as lie at the foundation of Egyptian, Sumerian and Chinese writing; but at

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[1] Langdon, *Pictographic Inscriptions from Jemdet Nasr*, p. VIII.

[2] Cf. for instance, Heras, "The Numerals in the Mohenjo-Daro Script", pp. 136-138.

[3] Langdon, *op. cit.*, p. VII. Cf. Langdon, "Notes on Sumerian Etymology and Syntax", *J. R. A. S.*, 1933, pp. 857-866.

[4] Kortleitner, *op. cit.*, p. 49.

[5] Heras, "Mohenjo Daro—The most Important Archaeological Site in India", pp. 3-4; Heras, "The Longest Mohenjo Daro Epigraph", p. 237. Cf. above, pp. 104-105.

[6] Cf. Urquhart, *The Bible Triumphant*, p. 51.

[7] Marshall, *Mohenjo-Daro and the Indus Civilization*, II, pp. 453-455.

[8] Langdon, *Pictographic Inscriptions from Jemdet Nasr*, pp. IV and VIII.

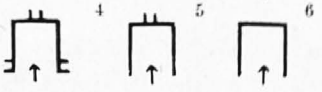
[9] *Ibid.*, p. III.

so early a stage that the forms can mostly be recognised".[1] Langdon himself admits that the Indus script was known in Sumer in pre-Sargonic times.[2]

Fig. 15
Obverse and reverse of the stone tablet of Kish.

Secondly, in the Indus Valley the pictographs are straight, in their natural position, excepting a few which are slanting or turned thirty degrees to the left, owing to lack of space in the particular inscriptions. One of these signs which is always found in the vertical position is the sign of the Ram.[3] In Sumer the Kish tablet still keeps the pictographs in the same position; but from the Jemdet Nasr period all the signs are turned 90 degrees to the left.

Finally, comparing a number of signs of Mohenjo-Daro with the corresponding signs of Sumer, one easily discovers the process of development usual in all pictographic scripts. Let us take for instance, the sign meaning *death*. In the seals of the Indus Valley this sign is found in the three different stages of simplification marked below :–



[1] Petrie, "Mohenjo Daro", *Ancient Egypt*, 1932, p. 39. Cf. Kortleitner, *op. cit.*, p. 19.

[2] Langdon, "A New Factor in the Problem of Sumerian Origins", *J.R.A.S.*, 1931, p. 593.

[3] Cf. above, p. 69 and Appendix to Chapter III.

[4] Marshall, M.D., Nos. 14, 20, 393, 553, 557 and *passim*; Mackay, *Further Excavations at Mohenjo Daro*, II, pl. LXXXIII, No. 12; pl. LXXXVI, No. 214; pl. LXXXVIII, No. 301 and *passim*.

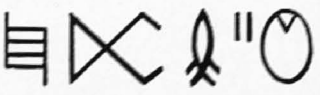
[5] Vats, *Excavations at Harappā*, pl. LXXXVIII, No. 95.

[6] Mackay, *op. cit.*, pl. LXXXIV, No. 99; pl. XC, No. 465; pl. XCVIII, No. 595.

In Sumer as early as Jemdet Nasr, *death* is represented by the arrow-like little sign seen under the main portion of the above sign, thus: ↑ . This little sign is formed by the Mohenjo-Darian numeral | , *or*, "one" and the determinative of personality 𒀭 *-an*, (the personal termination), the whole reading ↑ *oruvan* "one man". It is one person buried under the funeral monument, which is represented by the upper portion of the pictograph that totally disappeared in Sumer. This is only a striking example of this development. Many more instances could be brought forward.[1]

Fig. 16
Impression of a Mohenjo-Daro seal which speaks of 'the Farmer of the Crab of the Mīnas'.

Now coming to the inscriptions themselves, one of the phrases often found in them is this: *naṇḍ uḷavan*, "Farmer of the Crab". For instance :–

 [2]

This inscription reads: *ūril ire mīn naṇḍ uḷavan*, which means: "The Farmer of the Crab, of the Mīnas who is in the country". Another inscription, with more grammatical accuracy, reads: *Mīnan naṇḍ uḷavan*,[3] i.e. "the Farmer of the Crab of the Mīnas". Now, who is "the Farmer of the Crab"? In ancient times the city known at present as Mohenjo–Daro was called Naṇḍūr, the City of the Crab. Its inhabitants are often called *naṇḍor*, "People of the Crab", in the inscriptions. The denomination "farmer of the Crab" is evidently another royal title. The government at Mohenjo–Daro, just as in many ancient nations,

Fig. 17
Impression of another seal of Mohenjo-Daro which mentions 'the Farmer of the Crab of the Mīnas'.

[1] Cf. Appendix I to this chapter.
[2] Marshall, M. D., No. 96.
[3] *Ibid.*, No. 269.

was theocratic. God was supposed to be the king of the country. The ruler, or the leader, or the lord,—for all these names are used instead of king—was only the lieutenant administrator on behalf of God. Apparently in India the kings were called *farmers* ; and in Naṇḍūr, since the Crab was one of the forms of God,[1] the ruler was called "the Farmer of the Crab". In Sumer also the kings were styled "farmers" on behalf of God.[2]

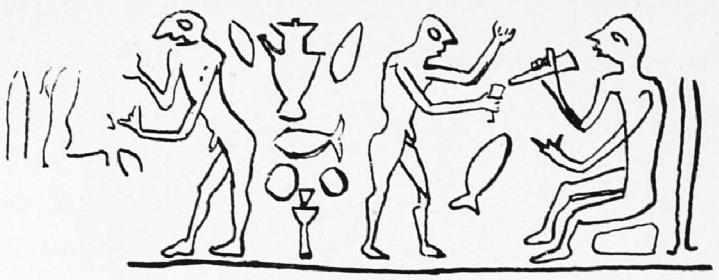


Fig. 18
Archaic seal of Ur showing a king on his throne, qualified as a fish, *mīn*.

Moreover the Proto-Indian kings, as found in the inscriptions of the Indus Valley, received the title of "*min*", which means "shining", "illustrious", and is phonetically represented by the sign of a fish, *mīn*.[3] Now we know at least of two archaic Sumerian seal impressions in which a king seated on a throne appears, and just in front of the king the figure of a fish is seen, as if related to the king.[4] (Figs 18, 19). The fact of the perseverance of the title *min* in Egypt and in Crete makes us suspect that this figure of a fish in early Sumer had also to be read phonetically as *min*, "the illustrious one". Finally the kings of the Indus Valley were at times also called "*vēl*",[5] a denomination which continued in the full historic period of India among the Dravidian speaking nations. Several

Fig. 19
Another archaic seal of Ur depicting a king having in front the emblem of a fish.

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[1] Cf. above, p. 121 and below, pp. 174-175, 177.

[2] Cf. Woolley, *The Sumerians*, p. 128.

[3] Cf. above, p. 100.

[4] Legrain, *Archaic Seal-Impressions*, pl. 8, No. 169, p. 19, No. 381. Cf. Woolley, *The Development of Sumerian Art*, pl. 68, j.

[5] Cf. Heras, "The Veḷāḷas in Mohenjo Daro", p. 51.

Pāṇḍya kings of Madurai are styled *"vēl"*.[1] *Vēl* means a trident, and the trident seems to be a symbol of authority and power, as

Fig. 20
Representation of a Sumerian king from Bismaya having a trident upon his head.

is also found upon the head of Āṇ,[2] and later in a hand of Śiva.[3] There is a portrait of a Sumerian king in an inlaid vase of Bismaya who bears a trident upon his head.[4] The connection between the trident and royalty still continues in Sumer.

Another inscription of Mohenjo–Daro reveals one of the main dogmas of their religion and offers a very interesting subject for study. It runs as follows:–

Fig. 21
Impression of a seal of Mohenjo-Daro which mentions the three great *kaḍavuḷs* living one life.

[5]

It reads: *uḍa mūn per kaḍavuḷ aḍu kalak uir* (Fig. 21), which means: "The united life of the joined three great *kaḍavuḷs*". Several problems may be studied in connection with this epigraph. For our purpose only

[1] Cf. "Some Inscriptions of the Later Pandyas," *Travancore Archaeological Series*, I, pp. 105-106.

[2] Cf. below, p. 170.

[3] Cf. Heras, "The Plastic Representation of God amongst the Proto-Indians", pp. 225-226.

[4] Banks, *Bismaya*, p. 268.

[5] Marshall, M.D., No. 209.

the question—who were these three great *kaḍavuḷs*?—is of surpassing interest. A close study of all the inscriptions shows that these three gods (properly "supernatural beings") were: *Āṉ*, literally, "the Lord", the Supreme Being who apparently was supposed to be the Father in this divine Triad. (Frontispiece). He is the god of generation and destruction, called *iruvan*, "the one who exists", viz. self-subisisting, and *viḍukaṇ*, "the one whose eyes are open", who sees everything.[1] The historical Tamiḷas call God *Āṇḍivanan*, or they name him using the plural of majesty when they say *Āṇḍavar*. The second god is *Āṇil*, literally "the Son of *Āṉ*". The third is *Ama*, "the mother". They are represented in the inscriptions in the following form :–

Āṉ *Āṇil* *Ama*[2]

Fig. 22
A terracotta image of *Ama* from Mohenjo-Daro.

The same three gods appear in the pantheon of Sumer: An, Enlil and Amaa. The name of the second god was slightly changed, for Āṇil meant nothing in the Sumerian tongue, while Enlil meant "Lord of the Wind" or "of the Atmosphere". Yet though these three gods were known in Sumer as the supreme gods, An was not actually worshipped, but considered a prehistoric god. Enlil had eventually taken An's seat and was worshipped as the Supreme Being in this world. An was supposed to be the god of the sky.[3] This seems to suggest, first, that the Mohenjo-Daro people and the people of Sumer

[1] Cf. Heras, "The Religion of the Mohenjo Daro People", pp. 2-11.

[2] Cf. *Ibid.*, pp. 15-17.

[3] Radau, *Sumerian Hymns and Prayers to God Nin-ib*, pp. 14-38; Jean, *La Religion Sumerienne*, pp. 32-41.

belonged to the same nation, as they worshipped the same gods. Second, that the prehistoric period of Sumer corresponds to the historic period of Mohenjo-Daro, where Āṇ is actually being worshipped as the Supreme Being.

Fig. 23
Impression of a seal of Mohenjo-Daro displaying a seated figure of Āṇ crowned with a flowery trident.

During the prehistoric epoch of An, in Sumer, this God was supposed to be the "Mother-Father" (*abu ummu*),[1] an idea which was often expressed in Indian literature, in which God is often being described as our Father and our Mother.[2] This is a practical way to express the dogma of the creation of the world by God and to disclose his love towards man, as the mother is the natural symbol of love. This conception has its counterpart in the iconography of India, wherein it crystallizes in a bysexual image styled *Ardhanārīśvara*. The Mohenjo-Daro inscriptions supply the first link in this chain of tradition in the shape of a bysexual sign which reads *Amān*.[3]

Fig. 24
Impression of another Mohenjo-Daro seal having a seated figure of Āṇ adorned with a trident and a lock of hair.

[1] *Ibid.*, pp. 15-16.

[2] *Rg.* I, 160, 2; *Bhagavad Gītā*, IX, 11; *Bāṣkala Upaniṣad*, 13; *Anguttara Nikāya*, III, IV, 31; Parekh, *Śrī Vallabhachārya*, p. 237; Mānikkawasagar, *Tiruwasagam*, V, 186; XXVII, 33; Fraser-Edwards, *The Life and Teaching of Tukaram*, p. 148; Karmarkar-Kalandani, *The Mystic Teachings of the Haridasas of Karnāṭaka*, p. 46; Srinivasachari, *Studies in Vedanta*, p. 157.

[3] Marshall, M.D., No. 209. Cf. above, p. 136.

The images of Āṇ in India, at least those we possess in their complete state, have a huge trident upon their head, an emblem which has migrated to one of the hands of the god in the images of Śiva of the historical period.[1] (Frontispiece and Figs 23-25). Prof. M.G. Moraes suggests that when the legend of Gaṅgā flowing from the hair of Śiva grew, the trident was placed in one of his numerous hands.[2] (Fig. 26). The fact is that when he, under the name of Śambhu, springs from Hari's head in the epic, he is already styled "the holder of the trident".[3] Yet we know of a South Indian god called Ayanar, who is supposed to be a son of Śiva, whose images are depicted with a trident upon his head, whose middle point develops into a flower, just as in the case of two Indus Valley images. (Fig. 27).

Fig. 25
Amulet from Mohenjo-Daro showing the figure of Āṇ adorned with a trident, within the branches of a tree.

Fig. 26
Image of Śiva displaying the head of Gaṅgā in his hair and the trident in one of his right hands. (18th cent.)

The images of Āṇ are besides always nude.[4] (Figs 23-25, 28). Very often they have a lock of hair that falls down upon one of the shoulders of the god.[5] (Fig. 24). A copper image of the Sumerian An was discovered at Khafaje by the Expedition of the Oriental Institute of the University of Chicago,

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[1] Cf. Heras, "The Plastic Representation of God amongst the Proto-Indians", pp. 225-226.

[2] Moraes, "A Mohenjo Daro Figure", *The New Review*, X, p. 443.

[3] *Mahābhārata*, Āraṇyaka Parva, ch. XII, v. 38-39.

[4] This nudity of Āṇ has traditionally been kept in the images of Bhairava, Bikṣaṇamūrti, many Bengali images of Śiva (Cf. Bhattasali, *Iconography of Buddhist and Brahmanical Sculptures in the Dacca Museum*, pls. XLV, XLVI, XLX(a), L(1) and a few ancient images of this god, like the one attached to the *liṇga* of Gudimallam.

[5] Heras, *op. cit.*, pp. 227, 229-230.

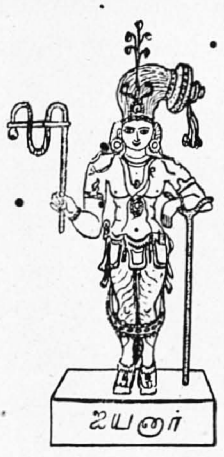

Fig. 27
Image of the South Indian god Ayanar crowned with a flowery trident.

during the season 1930-31.[1] (Figs 29, 30). He is nude, and has a trident upon his head. "This trident, however, is of a very peculiar nature. It has four points, evidently not to be seen all at the same time. The purpose of these four points seems to be that the trident should be seen not only when one faces the image, but also when the image is seen from the other sides".[2] It has also two locks of hair upon the shoulders, one on each side. And what is most extraordinary is that the whole hair of the head appears shaved excepting these two locks or tresses. (Fig. 31). Another image of An probably more archaic was discovered by the same Expedition in the season 1936-37 at the same spot. (Fig. 33). It was found together with two more images, one of a man, and the other of a woman, all nude. They are also made of copper, with inlaid eyes. The two men have locks of hair just like the image described above, but longer, as they cover the nipples of the chest. Both wear girdles round their waists, in the same way as the Indian figures of Āṇ. One of these three figures is several inches higher than the other two.[3] This difference in size shows the difference in dignity. The highest image seems to be a representation

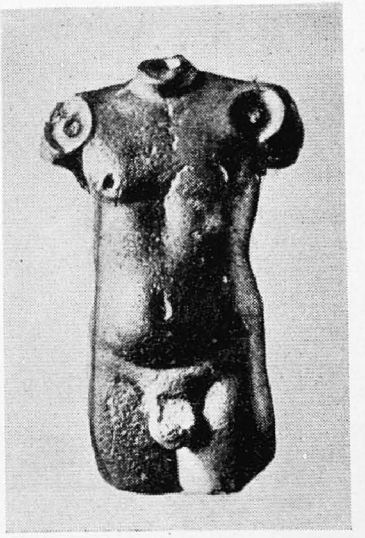

Fig. 28
Stone figure of a four-armed Āṇ from Harappā.

[1] Frankfort-Jacobsen-Preusser, *Tell Asmar and Khafage, The First Season Work in Eshunna*, 1930-31, p. 78.

[2] Heras, *op. cit.*, p. 228. Cf. Heras, "About a Wild Identification", p. 104.

[3] Frankfort, "Revelations of Early Mesopotamian Culture", *Illustrated London News*, CXCI, (Nov. 6th, 1937), pp. 792-793.

of An, the shorter figure of a man seems to be an icon of Enlil ; the figure of the woman represents Amaa.[1]

Fig. 29
The copper images of An and two lower gods discovered at Khafaje.

The philosophical aspect of the Sumerian religion will disclose the high metaphysical conception of the self-subsistence of God. An is self existent ; he is and exists by himself (*ina ramāni-śu*).[2] The inscriptions of Mohenjo Daro call God *Iruvan*,[3] "the one who exists", a name which is translated into Sanskrit in the Upaniṣadic period as *Svayambhū*, "the self-subsisting being".[4] The tenth *maṇḍala* of the *Ṛgveda* had already learned this high dogma from the *kalteri* sages of the Indus Valley when they wrote : *Ānit avātam svadhayā tad ekam*[5], "(There is) that one, breathless, breathing by his own nature".

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[1] Heras, *op. et. loc. cit.*

[2] Radau, *Sumerian Hymns and Prayers to God Nin-ib*, p 16.

[3] Marshall, M.D., No. 90. Cf. above, p. 91.

[4] *Bṛhadāraṇyaka Upaniṣad*, II, 6, 3 ; IV, 6, 1 ; VI, 54 ; *Kaṭha Upaniṣad*, VI, 1 ; *Īśa Upaniṣad*, 8.

[5] *Ṛg.*, X, 129, 3.

Fig. 30
The Khafage statuette of An showing the shape of the trident upon his head.

Another extraordinary philosophical idea referring to the nature of God is discovered in Sumer. The ancient texts mention the *enem* which is translated as "word". It is the voice of the god Enlil, the creative word, the most important primitive source of the New Testament conception of the *logos*,[1] who is the proto-type of the whole creation.[2]

Now, the Tamil word *eṇam* means "thought", which is precisely the internal "word". This naturally reminds us of the generation of the second person of the Ṛgvedic triad, who is otherwise called *manasā aśanāyā*[3] "the fruit of the mind", *manobhūta*[4] "generated in the mind", *purvam tapaso jātam*[5] "generated by thinking in old days". About him it is said: *Tapasaḥ tat mahinā ajāyata ekam*[6] "By the great power of his (the First Person's)

[1] Dürr, *Die Wertung des göttlichen Wortes im Alten Testament und im antiken Orient*, pp. 158-159.
[2] *Joann.*, I, 3.
[3] *Śatapatha Brāhmaṇa*, X, 6, 5, 4.
[4] *Mahābhārata*, Śanti Parva, 12905.
[5] *Kaṭha Upaniṣad*, II, 4, 5.
[6] *Ṛg.* X, 129, 3.

Fig. 31
Back view of the image of An showing his head shaved excepting for the tresses.

brooding one was generated". He is consequently called *Vāk*,[1] "the Word", and Hiraṇyagarbha,[2] "the Golden seed", for he is the seed of the whole universe by whose work all has come into existence. Such was very likely the original conception of Āṇil, among the Proto-Indians, from whom the Āryas learnt those lofty metaphysical conceptions. Even now the god Subrahmaṇya or Kārtikeya, who is the epic and purāṇic counterpart of the Āṇil of old, is supposed to be the guru or universal master of the world.[3]

The following inscription on one of the Indus Valley seals seems to confirm our deduction about the Indian counterpart of the Sumerian *enem*. The inscription runs as follows :–

[4]

Eṇāḷ ire mīn vēl eṭire ir adu

Fig. 32
Impression of a Mohenjo-Daro seal which refers to Eṇāḷ.

[1] Ṛg., X, 125.
[2] *Ibid.*, 121.
[3] Shivapadasundaram, *The Śaiva School of Hinduism*, p. 184.
[4] Marshall, M.D., No. 42.

which means: "Eṇāḷ is to the fish and to the acacia what eight is to two".[1] This equation may be mathematically expressed thus:–

$$\frac{x}{\text{fish}+\text{acacia}} = \frac{8}{2}$$

From which we realize that x, representing Eṇāl, must also be equivalent to 8. Now Āṇ is, as said above, supposed to have eight forms. Eṇāl may be therefore ānother name of Āṇ. (Āṇ's historical counterpart, Śiva, is till now called Eṇmai). If, nevertheless, Eṇāḷ refers to Āṇil, the latter being Āṇ's son, he must be totally equal to his father, according to this statement of the *Śatapatha Brāhmaṇa*: "God loved: 'That a second myself (*dvitīya ātmā*) should be generated. As the fruit of his understanding the unspoken word (*vācam*) appeared.'"[2] Consequently even the son may have the eight forms of the father. In point of fact in Sumer Enlil has already inherited the seven manifestations of An, which together with Enlil himself make eight. They are also connected with the Sun.[3]

Fig. 33
Copper images of An, Enlil and Amaa found at Khafaje.

By far the most striking revelation of the Mohenjo-Daro inscriptions concerns astronomical observations. When for the first time I announced this discovery, some scholars could not believe

[1] When I first published this inscription in 1936 (*Journal of the University Bombay*, V, p. 7), I read the first sign 'Enmai', owing to the modern name of Śiva. Yet afterwards I corrected my reading adopting the phonetic value Enāḷ as most probable.

[2] *Śatapatha Brāhmaṇa*, X, 6, 5, 4.

[3] Radau, *Sumerian Hymns and Prayers to God Nin-ib*, pp. 27-28.

that astronomical observations could be contained in such short inscriptions.[1] Their scepticism could be understood very well by the present writer, who was himself taken aback when he for the first time realized that several zodiacal constellations were referred to in the inscriptions. It was supposed hitherto that the Chaldaeans in general, viz. Sumerians and Babylonians, were the inventors of the Zodiac, but nothing was known about the early Indians and their knowledge of the Zodiac.[2] I remember that the first inscription which I found mentioning two constellations, was the following :–

Fig. 34
Impression of a Mohenjo-Daro seal which mentions the Ram and the Fish.

[3]

The inscription reads (first line from right to left, second line from left to right): *kāl tīrtu mīn ēḍu mīn aḍu ten parava*, which means: "The Paravas of the South of (the period) the Fish, the Ram (and) the Fish (which period) has finished a canal"; a poetical construction under which this fact is concealed, that the Southern Paravas finished one canal in the period of time from the Fish and the Ram to the Fish. Now since the Fish is the last zodiacal constellation of the year and the Ram is the first, this period covers one full year[4] (from the Ram to the Fish), plus the last month of the preceding year

[1] "It is extremely unlikely that astronomical data would be inscribed on short seal inscriptions". Letter of Prof. S. Langdon, Oxford, in *The Times*, London, March, 26, 1936.

[2] Sir William Jones had already defended that the Indian (Āryan) Zodiac was older than the Zodiac of the Arabs and of the Greeks. Cf. *The Works of Sir William Jones*, IV, pp. 71-92. In spite of that Diwan Bahadur L. D. Swamikannu Pillai maintains that the twelve signs of the Zodiac or *rāśis*, whose names are preserved in the Malayalam names of months, were borrowed by the Hindus from a western source, Chaldean or Greek". Swamikannu Pillai, *An Indian Ephemeris*, I, pt. I, p. 10. The controversy may now be ended for ever.

[3] Marshall, M.D., No. 237.

[4] That the Ram was the first constellation of the year is in the ancient Tamiḷ tradition. The *Paṭṭuppāṭṭu*, 7, 150-161 speaks of "the fast moving Sun going *from the horned Ram* (*āḍu*) *to the other houses*". In ancient proto-Dravidian language the Ram was called *ēḍu* (In Kannaḍa *ēḍu* means sheep"). Since *ēḍu* was the first constellation of the year, another year was "another *ēḍu*". Hence the year was also called *ēḍu*, a word which is reproduced in the Greek *'etos'*.

(the Fish). Therefore the epigraph discloses two of the signs of the Zodiac, the Ram and the Fish, used as units of a system of reckoning time. Evidently they were portions of the year which corresponded to the full Zodiac. Little by little several other constellations were found, the Scale, the Crab, the Water-Jar, the Mother (for the Virgin). But one day, in the course of my research, a new and greater surprise was in store for me. One of the seals bore this sign only :-

[1]

The small circle in the centre with the two lines above and below is the sign for the Sun ;[2] round the Sun, the whole space, perhaps the whole universe, looks divided into eight equal portions. Were they the "houses of the Sun", as the ancients called the zodiacal constellations ? And, if so, were there only eight constellations ? This naturally brought to my mind one of the inscriptions already examined, that which mentioned the eight forms of God,[3] two of which were the Fish and the Ram.[4] Moreover the examination of the lists of zodiacal constellations of the Tamiḷas and the Tuḷus showed that in those lists eight constellations are referred to with a Dravidian word, while the other four are mentioned in Sanskrit. Moreover the Dravidian months are solar and the Sanskrit lunar.[5] All this seems to be an evident proof that the constellations were originally only eight.

In the following chart the names included within a cartouche are the Sanskrit names of the constellations[6] :-

---

[1] Marshall, H., No. 367.

[2] Cf. above, p. 74.

[3] Cf. Heras, "The Religion of the Mohenjo Daro People", pp. 7-9.

[4] Marshall, *Mohenjo-Daro and the Indus Civilization*, I, Pl. XII, No. 18. These eight forms of God of the Mohenjo-Daro inscriptions are the origin of the eight forms of Śiva referred to in late Sanskrit literature (Cf. Kālidāsa, *Mālavikāgnimitra*, Preface), which forms were then interpreted according to the pantheistic ideas of the Vedāntic period.

[5] Mousset-Dupuy, *Dictionaire Tamoul-Francais*, word *'masam'*. According to this the original Dravidian months were of 45 days. Now, ayurvedic doctors in South India still order medicines to be taken for a period of 45 days. "The 12 hours of the day are divided into 8 periods of one and one half hours each. The Lord of the week day in question governs the first and last period". *Kālaprahāśikā*, translated by N. P. Subramania Iyer (Tanjore) (Quotation communicated by my friend Mr Robert de Luce).

[6] Cf. Richards, "The Ryots Calendar", *Q.J.M.S.*, IV, pp. 172-175.

Zodiacal Constellations	Tamiḷ Constellations[1]	Tuḷu Constellations[2]
Aries	Cittirai	Paggu
Taurus	Vaikāśi	Beśā
Gemini	Āni	Kārtelu
Cancer	Āḍi	Āṭi
Leo	Āvaṇi	Sōṇa
Virgo	Puraṭṭśasi	Nirnāla
Libra	Aippaśi	Bontelu
Scorpio	Kārttikai	Jārte
Sagittarius	Mārgaḷi	Perārte
Capricornus	Tai	Puntelu
Aquarius	Maci	Māyi
Pisces	Paṅkuṇi	Suggi

In Sumer the constellations of the Zodiac, as far as we know now, were already twelve. Evidently, therefore, the idea of the Zodiac was taken from Mohenjo-Daro to Sumer, not from Sumer to Mohenjo-Daro.[3]

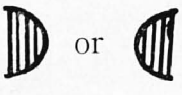
[1] Swamikannu Pillai, *An Indian Ephemeris*, I, pt. I, p. 48.

[2] Burnell, *Elements of South-Indian Palaeography*, p. 76, note 2. According to this author this seems to be the oldest list of months in the Dravidian languages of South India.

[3] This shows that the original year of the Dravidians was solar and not lunar, and fully explains the existence of the lunar year in the religious calendar, (year which is evidently inherited from the Vedas), and the solar year of the civil calendar. "The civil calendar is solar", says Slater, "truly and completely solar, and is not, like ours, an originally lunar calendar modified to fit the solar year. It is so uncompromisingly solar that it does not even concern itself to make a month consist of so many days. The ecliptic is divided into twelve divisions, and at whatever moment in the morning, noon or night, the sun enters a new division, at that moment the new month begins. Days began at sunrise, not the local time of sunrise for any place in India, but at the calculated moment of sunrise at the spot on the equator which is also on the meridian of the site of the ancient Tamiḷ observatory. I do not know whether anyone has ever assigned a date to the adoption of this unique calendar. That it is unique, and that it aims at a degree of astronomical accuracy and consistency beyond that of any other calendar in use, even at the sacrifice of some practical convenience, is very significant. It proves the independence and continuous activity of Dravidian science in the part of India least exposed to non-Dravidian influence". Slater, *The Dravidian Element in Indian Culture*, pp. 71-72. Cf. Richards, "Side Lights on the Dravidian Problem", *Q.J.M.S.*, VI, p. 175.

Which were these eight constellations of the Proto-Indian Zodiac? Even while studying these individual constellations, one cannot but realize the precedence of Mohenjo-Daro over Sumer. For the eight constellations of which we are speaking are the following: the Ram,[1] the Harp,[2] the Crab,[3] the Mother,[4] the Scale,[5] the Arrow,[6] the Water-Jar,[7] and the Fish.[8] Now the four constellations of our Zodiac which are missing in this list are *Gemini*, *Leo*, *Scorpio* and *Capricornus*. Two are slightly changed: instead of *Sagittarius* and *Aquarius* we have the Arrow[9] and the Water-Jar. One is totally changed; the Harp takes the place of the present *Taurus*. The Harp in our script is represented in this way :-

Fig. 35
Impression of a Mohenjo-Daro seal displaying a *yāḷ*.



or [10]

This sign is an evident pictograph. The harp (*yāḷ*) used by the Mohenjo-Darians, about which there is only a vague tradition among the modern Tamiḷas,[11] was beyond doubt of this very shape. It has still the same shape in the sculptures of Sāñchi and Nāgārjunikoṇḍā.[12] Emperor Samudra Gupta played a similar harp, as represented in his

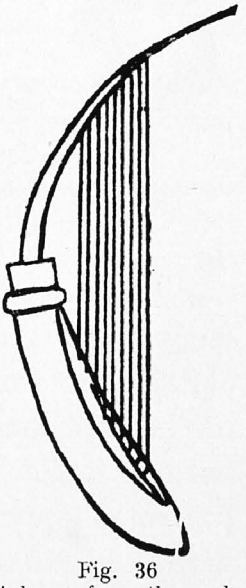


Fig. 36
A harp, from the sculptures of Sāñchi.

[1] Marshall, M.D., Nos. 49, 67, 87, 100, 101, 115, 179, 194, etc.
[2] *Ibid.*, No. 46; H., No. 335.
[3] *Ibid.*, M.D., No. 110.
[4] *Ibid.*, No. 182.
[5] *Ibid.*, Nos. 436, 475, 557b, etc.
[6] *Ibid.*, No. 46.
[7] *Ibid.*, No. 342.
[8] *Ibid.*, Nos. 87, 114, 120, 342, etc. The constellation had the sign of the Fish, ***mīn***. Now the zodiacal sign for this constellation has two fishes. The *Vāmana Purāṇa*, V, 59, already speaks of the "twin *mīnas*". But in many Indian vernaculars it is still called *mīn*. According to the ancient Coptic people, descendants of the old Egyptians, the whole world is divided into eight sections, the Sun and the Moon being in the centre. Roscher, *Ausfuhrliches Lexicon der griechischen und romischen Mythologie*, word, '*Sterne*'.
[9] Cf. below, pp. 239-240.
[10] Marshall, H., No. 335; M.D., No. 46.
[11] Cf. *Śilappadikāram*, pp. 100, 156 and 349.
[12] Naik, "Studies in Nāgārjunikoṇḍā Sculptures", *B.D.C.R.I.*, II, p. 295, fig. 7. For other sculptural representations of the harp in ancient India, cf. Coomaraswamy "The Parts of a Vina", *J.O.A.S.*, L, figs 1-6, facing p. 244; Patil, "The Carved Lintel from Pawaya in Gwalior State", *J.K.H.R.S.*, II pl. facing p. 163; Garde, *Padmavati*, pl. IX.

gold coins. According to ancient Tamiḷ tradition "this was the only instrument that could imitate the human voice to perfection".[1] In some of the early seals discovered in Sumer musical instruments of the same shape are seen in the hands of some musicians,[2] (Figs 39-43), while *al* in the Sumerian language stands for sound,[3] and at times also for the harp itself.[4] Later on the harp is given a sounding box in front of which the head of a bull has been placed.[5] Some harps of this kind were discovered at Ur.[6] (Fig. 44). At times instead of a bull's head, the whole image of a bull is placed in front of the harp.[7] An ancient Sumerian hymn entitled *"A meditation concerning the al"* says that the voice of the harp with the deep tones of its strings sounded like that of a horned bull.[8] King Gudea once presented one of these harps adorned with the head of a bull to a temple; the inscription in which he mentions his gift describes the instrument, and especially the bull's golden head in front of the box, and states that the sound of the instrument resembles the

Fig. 37
A harp-player from Nāgārjuni-koṇḍā.

Fig. 38
Emperor Samudra Gupta playing the harp; after one of his coins.

[1] Maheswari Devi, *Veena Tutor*, p. 6.

[2] Woolley, *The Development of Sumerian Art*, pl. 68, j; pl. 69, e; Legrain, *op. cit.*, p. 8, No. 169; pl. 18, No. 369; pl. 19, No. 373; pl. 20, No. 384. Cf. Engel, *The Music of most Ancient Nations*, pp. 28-33.

[3] Gadd, *A Sumerian Reading Book*, p. 178.

[4] Galpin, *The Music of the Sumerians*, pp. 26-27.

[5] Cf. Engel, *op. cit.*, pl. 70, b.

[6] *Ibid.*, pl. 40, a and b; Woolley, *Ur of the Chaldees*, pl. V, a.

[7] Jeremias, *Hanbuch der altorientalischen Geisteskultur*, p. 183.

[8] Galpin, *op. et. loc. cit.*, The Tamiḷas say even today that the first note of the *yāḷ* was *sā*, which is the human voice, but the second note was *ṛi*, which is supposed to be the bellowing of the bull.

bellowing of that animal.[1] This shows that the harp was identified with the bull. It was therefore not strange at that time to find the Harp replaced by the Bull as the second constellation of the Sumerian Zodiac.[2]

II

PROBABLE AFFINITIES BETWEEN THE TWO NATIONS

All these parallelisms and similarities make one think seriously about the probable affinities between the Mohenjo-Darians and the Sumerians. The latter seemed to have been the early settlers of Mesopotamia in the al-'Ubaid period,[3] thus being the first immigrants after the drying up of the valley of the Euphrates.[4] In 1923-24, just two years after the first discovery of the Mohenjo-Daro ruins, Sir John Marshall wrote the following lines: "If, therefore, those scholars are right who consider the Sumerians to have been an intrusive element in Mesopotamia, then the possibility is clearly suggested of India proving ultimately to be the cradle of their civilization, which in its turn lay at the root of Babylonian, Assyrian and Western Asiatic culture generally".[5] After studying some similarities between Elam and Sumer, Langdon concluded

Fig. 39
Archaic figure of a horse playing the harp, from a seal of Ur.

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[1] Woolley, *Ur of the Chaldees*, pp. 66-67.

[2] In the modern pictures or signs representing the constellations of the Zodiac, the Tamilas represent the second zodiacal constellation, *Gemini*, as two female twins holding one a club, and the other a lyre, i.e. a *yāḻ*. The constellation besides is called *yāḻ*. (Cf. Beschi, *A Grammar of the Common Dialect of the Tamil Language*, p. 139). Since their old second constellation was *yāḻ*, they also call their present second constellation *yāḻ*, being practically unacquainted with the change of *Taurus* instead of *yāḻ* made by the Sumerians. Even in northern India, the twins were represented as "a damsel playing on a *vīnā* and a youth wielding a mace" *The Works of Sir William Jones*, IV, p. 76. About the appearance of the harp in the grouping of stars of this constellation, cf. below, p.240.

[3] Frankfort, *Archaeology and the Sumerian Problem*, p. 21.

[4] *Ibid.*, p. 18.

[5] Marshall, *Archaeological Survey of India, Annual Report*, 1923-24, p. 50.

Fig. 40
A harp-player before a king in early Sumer.

that "the Sumerian civilization entered the Mesopotamian Valley from Elam" in the area of Jemdet Nasr, "and then spread southward to the shore of the Persian Gulf".[1] Frankfort readily admits that the Sumerians came from the east;[2] and though he accepts the view that they came from Elam,[3] yet he thinks that the parent stock of the al-'Ubaid culture was not Elamite.[4] Finally he maintains that they were a mixed stock[5] and even speaks of an Anatolian migration into Sumer.[6] Crawford

Fig. 41
A harp-player of Sumer, from a plaque of Khafaje.

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[1] Langdon, *The Inscriptions of Jemdet Nasr*, p. VI.
[2] Frankfort, *op. cit.*, p. 23.
[3] *Ibid.*, p. 19.
[4] *Ibid.*, p. 23.
[5] *Ibid.*, p. 30.
[6] *Ibid.*, p. 31. There is no foundation for such a migration, neither ethnographically nor archaeologically.

on the contrary is of opinion that Indian Culture must have been derived from Sumer.[1]

The similarities between India and Sumer were emphasized long ago by some Indian authors.[2] Frankfort himself finds such parallelisms very suggestive ;[3] but according to some authors there cannot be any migration from India to Sumer. Barton, for instance, is of opinion that the Sumerians were not Indians.[4] Frankfort, in order to explain the above similarities, suggests that as the Sumerians came from the plateau of Iran, so they most probably went likewise to the Indus Valley.[5] Kortleitner suggests that the Sumerian civilization propagated to India from Mesopotamia.[6] This view prevailed for some time among some authors who seem to have rejected the possibility of India being the cradle of civilization *a priori*. Thus Toynbee, considering the extraordinary affinity between Sumer and Mohenjo-Daro which "falls short of absolute identity", suggests that this affinity may be explained in two ways: either Mohenjo-Daro is an off-shoot of Sumer, or both cultures

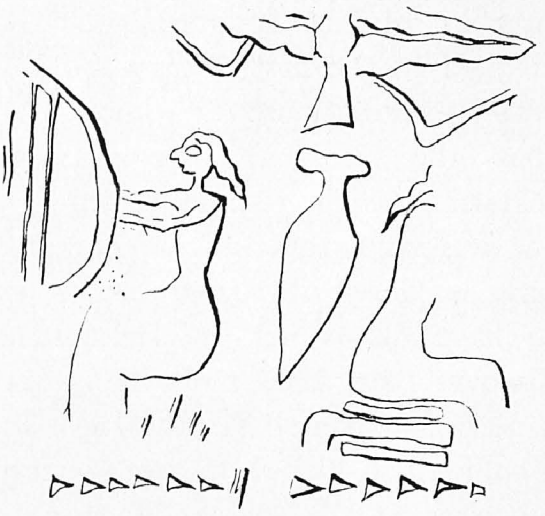

Fig. 42
Archaic harp-player of Sumer, from a seal of Ur.

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[1] Crawford, "The Birthplace of Civilization", *The Geographical Review*, XVI, 1926, p. 76.

[2] Apte, *Hindi-Sumeri-Sanskriti* (In Marathi) ; Vaidyanatha Ayyar, *Manu's Land and Trade Laws* ; Vaidyanatha Ayyar, *The Indo-Sumero-Semitic-Hittite Problems.*

[3] Frankfort, *Tell Asmar, Khafage and Khorsabad*, pp. 50-51.

[4] Barton, *Semitic and Hamitic Origins*, p. 38.

[5] Frankfort, *Archaeology and the Sumerian Problem*, pp. 223-226.

[6] Kortleitner, *op. cit.*, p.45. The fact that the Mohenjo-Daro discoveries took place after the excavations of Sumer, has unconsciously weighed upon some minds as to suppose that the Proto-Indian civilization cannot be prior to the civilization of Sumer. Thus, for instance, Frankfort, after mentioning the discoveries of the Indus Valley, adds : "How can the new facts be incorporated in the story of human development in the fourth and third millenia B.C. for which Babylonia and Egypt have hitherto provided the setting ?" Frankfort, *Tell Asmar, Khafage and Khorsabad*, p. 48. All this is still due to the influence of the Pan-Babylonist School, whose main exponent has been Jeremias. Cf. Jeremias, *Handbuch der altorientalishen Geisteskultur.*

"derived from a common parent unknown, which grew up simultaneously and independently."[1] The possibility of Sumer being an offshoot of Mohenjo-Daro is not even hinted at as possible. In point of fact Toynbee feels inclined to the first of his suggested explanations: "We know that the Sumerians were a seafaring people who navigated the waters of the Gulf. What more likely than that they should have explored it so far as its exit into the hidden ocean and so have discovered the Delta of the Indus? And, if they did discover that, what more likely again than that they should have ascended a river so like the Tigris and Euphrates and have colonized a country so like their own—creating there a new land of Sumer overseas."[2] We also know that the ancient Indians were experienced seafarers; we may therefore argue in the same way but in the opposite direction. The names of Sumer and Mohenjo-Daro could be exchanged in the above quotation and it would be equally possible and true.

Fig. 43
Another harp-player in Sumer, from a seal of Ur.

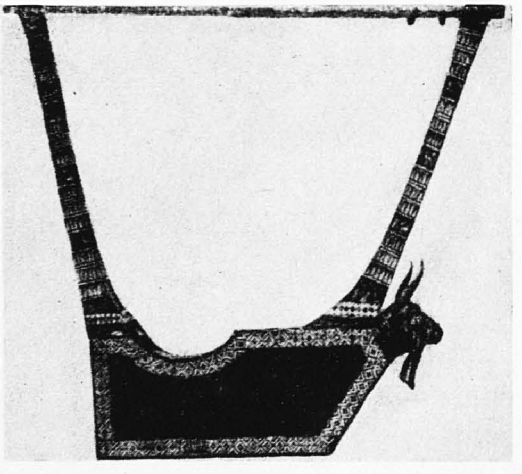

Fig. 44
Gold and mosaic harp from Ur, decorated with the head of a bull.

On the contrary Sir Arthur B. Keith traces "the ancient Sumerian face eastwards among the inhabitants of Afghanistan and Beluchistan, until the valley of the Indus is reached";[3] to which Sir C. L. Woolley seems to agree,[4] since he knows well the Sumerian tradition, stating that they

[1] Toynbee, *A Study of History*, I, pp. 107-108.
[2] *Ibid.*, p. 107.
[3] In Hall-Woolley, *Al-'Ubaid*, p. 216.
[4] Woolley, *The Sumerians*, pp. 6-9.

came from the east.[1] Dowson also believes that the Sumerians, coming from the highlands to the East of the Persian Gulf, might be related to the people of the Indus Valley.[2] Masson-Oursel, after studying the discoveries of Mohenjo-Daro and Harappā, calls this culture "pre-Indian", supposed to be "Sumero-Dravidian".[3] Finally Prof. Zacharias, of the Catholic University of Peiping, writes thus: "The affinity between Sumerian and Indus Civilization is beyond all possibility of doubt. Did Dravidians (of whom the Brāhui of modern Baluchistan would constitute a last trace) form the link between India on the one hand and of Turquestan and Mesopotamia on the other? Every thing suggests this spread of the original Peasants' Civilization from the South-East and its transformation . . . into what was to become the Archaic Civilization *par excellence* of Sumer and of Egypt".[4]

Now considering the archaeological data only, it was admitted in 1933 that the Indus Valley was in contact with Sumer[5] in the Akkadian period, i.e. before the middle of the third millennium.[6] But one of the seals discovered in one of the Ur graves by Sir C. L. Woolley "is clearly dated by external evidence to the time of (Queen) Shub-ad. The use of the ancient Indian script", rightly concludes Woolley, "and commercial relations between Mesopotamia and the Indus valley would accordingly go back to that early date".[7] (Figs 51, 52). Now, the predynastic cemetery of Ur where this grave was found is dated between 3,500 and 3,200 B.C.[8] Therefore the relations between the Proto-Indians and the Sumerians are now historically evident from the second half of the fourth millennium.[9]

Considering some of these data, Langdon, who was not much in favour of the Indian origin of the Sumerians, was forced to formulate

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[1] Woolley, *Ur of the Chaldees*, p. 117. Woolley influenced by the out-of-date general idea that anything great could not but be Indo-European, says that the Sumerians belonged to the Indo-European stock of human race.

[2] Dowson, *The Age of the Gods*, p. 82.

[3] Masson-Oursel, *Histoire de la Philosophie*, p. 46.

[4] Zacharias *Prolegomena to a History of the World*, pp. 61-62.

[5] Frankfort, *Tell Asmar, Khafage and Khorsabad*, p. 48.

[6] *Ibid.*, pp. 50-52.

[7] Woolley, *The Royal Cemetery*, p. 335.

[8] *Ibid.*, p. 266. Cf. Woolley, "A Fresh Link between Ur and Mohenjo-Daro", *Illustrated London News*, February 13, 1932, p. 240; Woolley, *The Development of Sumerian Art*, p. 85.

[9] Cf. Carleton, *Buried Empires*, pp. 145-146.

the problem as follows : "All this raises the question as to whether the Sumerians are not really the Indus Valley people themselves."[1]

Sir C. L. Woolley, in connection with the origin of the Sumerians, suggests the possibility that the Sumerians were invaders from the sea,[2] a view which is held by a number of modern authors. "The excavations of Mohenjo-Daro and Harappa", says Poisson, "have revealed extraordinary relations between the most ancient civilization of this region and that of the Sumerians. Hence it is a common view today that the latter have come from the South rather than from the north, without thus fixing their early cradle. Their arrival by sea explains the position of their cities to the south of Mesopotamia, while the Semites occupied the northern regions".[3] Finally, Hall openly suggests that the people of Sumer came from India.[4] With Hall agrees Haddon, according to whom, the Sumerians "probably came from the east, and possibly from the northwest India".[5] Barton also suggests that the Sumerians came from a warm country.[6] Very recently Dr Crowley has also declared himself in favour of the Indian migration of Sumer : "With the growing conviction", he says, "that some of the Indus seals are older than the establishment of the Sumerians on the Euphrates, the hypothesis advanced by Heras that the civilising movement was from the Indus to the Euphrates, and not *vice versa*, and that the Sumerian culture which met that of the Elamites took its origin from the Indus Valley, becomes more acceptable".[7]

III

THE SUMERIAN AND BIBLICAL TRADITIONS

The Sumerians themselves in their ancient traditions remembered that the civilization of their country and the art of writing

[1] Langdon, "A new Factor in the Problem of Sumerian Origins", *J. R. A. S.*, 1941, p. 593.

[2] Woolley, *The Sumerians*, p. 12.

[3] Poisson, *Le Peuplement de l'Europe*, p. 119. Cf. Chakravarti, "The Origins of Civilization in Mesopotamia," *Journal of the University of Bombay*, XI (1942), p. 12.

[4] Hall, *The Ancient History of the Near East*, pp. 173-174.

[5] Haddon, *The Races of Man and their Distribution*, p. 100.

[6] Barton, "Whence Came the Sumerians ?", *J. A. O. S.*, XLIX, p. 264.

[7] Crowley, "The Indus and the Pentateuch," *Blackfriars*, XXVII (1946), p. 267.

had come from the East. The Babylonian priest Berossus, while writing the history of Mesopotamia in the third century B.C., carefully collected all the ancient traditions of the land. According to these sources of information, he avers that in very early times there was no civilization in the land and that its people were like brutes. Some people came from the east by sea and taught them civilization and the art of writing. In the first century B.C. the nature of these "civilizers" had become mythical, and because of the fact that they had come by sea, a thing which was supposed to be very uncommon, especially in that early period, they were said to be half-men and half-fishes.[1] Yet while reading the account of Berossus it is evident that these beings, though described as fishes, are men who reason, speak, write, teach a high culture and sciences and even establish laws for the country. They are men called "fishes", and after centuries of mythical reputation they are even represented as such in the carvings of the Babylonian temples.[2] Does this perhaps mean that Oannes and Odakon and all the other leaders were members of the tribe of the Mīnas, in

Fig. 45
Assyrian sculpture of the 9th century B.C. depicting Oannes as half-man and half-fish.

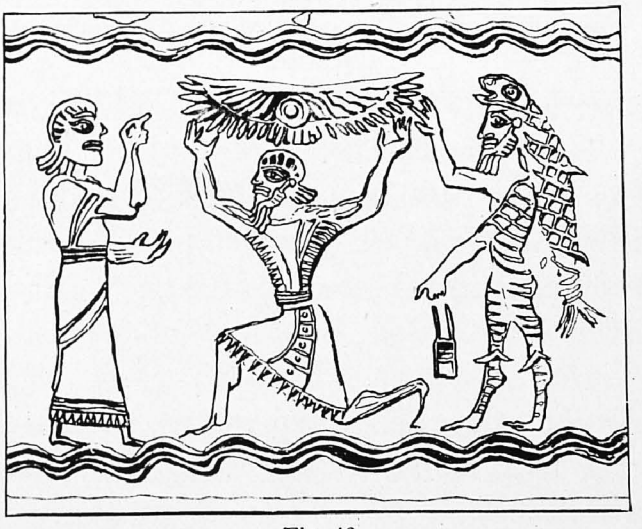

Fig. 46
A fish-man on an Assyrian seal of the 9th century B.C.

[1] Schnabel, *Berossus und die babylonisch-hellenistische Literatur*, pp. 172-175. The name of Berossus seems to be the Hellenized form of Bel-usur which means "may Bel protect him". He was actually a priest of the temple of Bel in Babylon.

[2] Cf. Maspero, *The Dawn of Civilization*, p. 547. On account of this double nature many modern authors call them "sea monsters". Gadd, *History and Monuments of Ur*, p. 8. Cf. Mackenzie, *Myths of Babylonia and Assyria*, pp. 27-34.

reality Mīnas or "Fishes", one of the most important tribes in the Mohenjo-Daro period? They were excellent seafarers, this being perhaps the reason why they were called Mīnas. Apparently, therefore, the very description of these people made by Berossus discloses to us their origin and race. Fortunately, the extant fragments of Berossus have kept two names of the personages who had arrived from the east: one of them is *Oannes*, a name clearly hellenized. Its termination *-es* is evidently Western. Originally it would end in *-a*. The initial *o* may be easily changed into *u*, thus becoming *Uanna* or *Uvanna*, which is purely a Dravidian name, very common still among the Tuḷu population of South Kanara: *ū* is the same as *pū*, "flower", while *anna* means "elder brother". This name, therefore, means, "the elder brother of the flower". Uruk, one of the oldest cities of Sumer, was called "*kur Eanna*", that is, "land of Eanna".[1] Was Eanna perhaps a corrupted form of the ancient name Uvanna? If that were so, this denomination of Uruk would be a recollection of the arrival of Uvanna in Sumer. The other name recorded by Berossus is *Odakon*,[2] which, as it stands, is, without need of any phonetic change, a Dravidian name highly appropriate to the occasion. It means "the master of the ship".[3] We could easily write this name using the Mohenjo-Daro script. It would be written thus :–

Fig. 47
Another Assyrian seal of the 9th century B.C. displaying a fish-man.

[1] Langdon-Fotheringham, *The Venus Tablet of Ammizzaduga*, p. 84, note 2.

[2] *Fragmenta Historica Graeca*, II, p. 500. Cf. Gadd, *op. cit.*, p. 9.

[3] Lagrange, *Etudes sur les Religions Semitiques*, p. 131, thought that Odakon, a fish-man, was the same as the god Dagon(!).

Odakon was the seventh and last of the chiefs leading expeditions of Proto-Indians to Sumer. Since among his predecessors we know Uvanna (Oannes) only, the names of five chiefs of the itinerant Sumerians are unknown to us. Yet the Babylonian tradition seems to have kept still another name. A quotation of an ancient Babylonian work found in the *Paschal Chronicle*, gives us this very important piece of news: "In the days of the construction of the tower of Arphaxad, a certain Indian shone as a great astronomer. He was called Andubarios. He was the first who compiled a Code of Astronomy for the Indians".[1] First of all, this Indian who went to Sumer was called Andubarios. Now removing the Greek termination *-ios*, Andubar remains, which is a purely Dravidian name meaning "the Lord" with the termination of plural of majesty. His journey to Sumer is said to have taken place at the time of the construction of the tower of Arphaxad. Now, Arphaxad is supposed to be one of the ancestors of the Assyrians.[2] So, to say "the time of the construction of the tower of Arphaxad" is the same as saying "in the earliest years of the nation"; and very likely this tower referred to in this text is the tower of Babel, of which we shall speak presently. Andubar was, so it seems, very proficient in astronomy, which is a science much cultivated by the Proto-Indians, as we have seen just now. Being himself such a learned astronomer, he was undoubtedly one of those who taught the people of Mesopotamia.

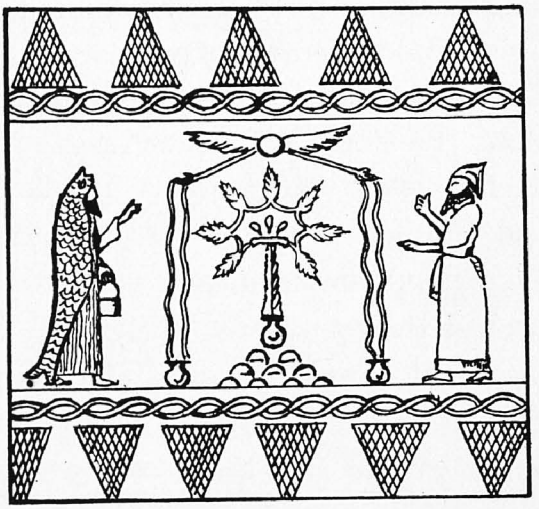

Fig. 48
A fish-man on an Assyrian seal of the end of the second millennium B.C.

[1] Rawlinson, "Notes on Capt. Durand's Report upon the Island of Bahrein", *J. R. A. S.*, XII, p. 208.

[2] Cf. *Gen.* X, 22. What we have said above shows how fanciful is the conversion of Andubar into Uzdubar and the supposition of his being a solar symbol, as some authors would make us believe.

We have, therefore, very likely in the person of Andubar another leader of the Sumerian migrations into Mesopotamia.

If the Babylonian tradition recorded by Berossus is true, the Sumerians certainly landed on the shores of the Persian gulf. What could their original land be, which they abandoned to settle in the Land of the Two Rivers? There is no doubt that the new-comers belonged to a very powerful nation whose state of civilization could not have many rivals either in the east or in the west. Such great nations and civilizations in ancient times always grew on the banks of rivers, and preferably of great rivers. The cities of Sumer and then the Empires of Babylon and Niniveh near the Euphrates and Tigris, Egypt along the Nile, Troy in the neighbourhood of the Scamander, Rome on the Tiber, the Iberians by the two rivers Ibar (modern Tinto and Ebro), are only a few instances of this almost universal rule. A single glance to a map will disclose to us the probable cradle land of the Sumerians. (Fig. 49). The nearest great river to the shores of lower Mesopotamia is the Indus river, just outside the Persian Gulf. Before the discoveries of the Indus Valley had taken place, we did not know of any ancient civilization, contemporary to the Sumerian, on the banks of that river. That was the reason why authors were much disconcerted as regards the fixing of the starting point of the Sumerian immigrants. Today the Indus Valley cities seem the most likely land of departure of the expeditions of Oannes and his followers.

The numerous colony of Proto-Indians settled in the island of Bahrein, in the Persian Gulf, as the characteristic *stūpa*-like tombs of the village of 'Ali clearly testify, only marks a stepping stone to the main land when coming from the East.[1] The temple to the

[1] Cf. Prideaux, "The Sepulchral Tumuli of Bahrain," *A. S. of I. Annual Report*, 1908-9, pp. 60-78. We cannot but criticise as unreasonable the attitude of Sir C. Leonard Woolley in discarding the possibility of the Indus Valley being the home of the Sumerian people. "The Sumerians believed that they came into the country with their civilisation already formed, bringing with them the knowledge of agriculture, of working in metal, of the art of writing—'since then', said they, 'no new inventions have been made'—and if, as our excavations seem to show, there is a good deal of truth in that tradition, then it was not in the Euphrates valley that the arts were born, and though it is not likely to have been the Indus valley either, later research may well discover some site between those two extremes where the ancestors of our Sumerians developed the first real civilisation of which we have any knowledge". Woolley, *Ur of the Chaldees*, p. 20.

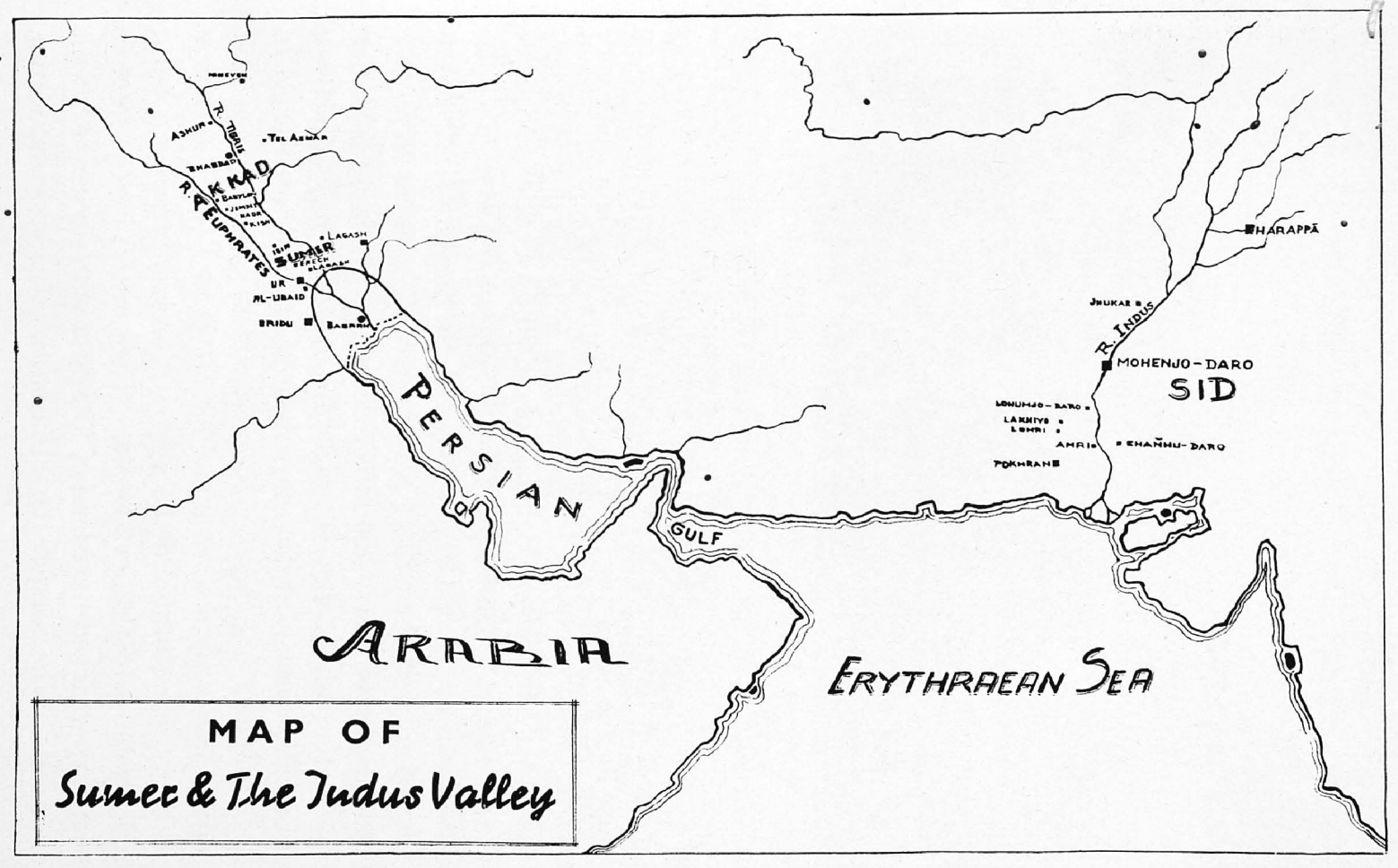

Fig. 49

Illustrating the relative neighbouring position of the Indus Valley and the Sumerian cities.

Fig. 50

View of the *stūpa*-like funeral mounds of the village of 'Ali in the island of Bahrein.

Mother Goddess, mentioned as having existed in this island,[1] may be another proof of its having been inhabited by the Proto-Indians on their way to the Land of the Two Rivers. This island may very probably be the island called Utsthala (high spot), which is mentioned in the *Kathā Sarit Sāgara* as being inhabited by a tribe of Niṣādas, that is Dravidians. The island, though somewhat far from India, was well known in the country. A young Brāhmaṇa named Śaktideva wanted to visit the city of Kanakapura (the golden city), as a pledge to be able to marry the king's daughter. Nobody gave him any information about the whereabouts of that city. Finally a very old ascetic named Dīrghatapas advised him to go to Utsthala to consult Satyavrata, the King of the Fishermen, who being a master in seafaring was supposed to know all the lands. On the voyage there arose a great storm and the ship was broken to pieces; but a great fish swallowed Śaktideva whole. Then driven by the force of fate the fish approached the island of Utsthala wherein it was caught by the servants of the King of the Fishermen. The latter wondering

1 Rawlinson, "Notes on Capt. Durand's Report", *J. R. A. S.*, XII, p. 210.

at the size of the fish, had it cut open and then Śaktideva came out unhurt. The youth, with the King's help, finally succeeded in reaching Kanakapura, and in marrying not only that Princess but her three sisters besides. Was Kanakapura perhaps one of the ancient Sumerian cities? The ancient kings of Ur possessed many precious objects wrought in gold, which have been found buried in their tombs. According to the story the people of Kanakapura were connected with the people of India.[1]

The island of Bahrein seems to be remembered in Sumerian traditions as a land of blessing and extraordinary happiness, just as a land that led them finally to their new happy home ought to have been. Bahrein seems in fact to have been the land of Dilmum, which together with Magan, was conquered by Sargon of Akkad "beyond the lower (southern) sea".[2] The mountain of Dilmum is said to be "the place where the sun rises",[3] their last memory of their Eastern lands; a paradise of happiness,[4] which is finally identified with the island of immortality, the abode of Ziusudra, the hero of the Flood,[5] the Babylonian Ut-napishtim, whom Gilgamesh had visited journeying to the island from the shores of Uruk.[6] Ninsikil is said to be the goddess of Dilmum,[7] whose temple very likely was that referred to above.

This conclusion seems all the more plausible after considering the fact that the Proto-Indians of a later period had commercial relations with Sumer and some of them even lived amongst them. The seals of Indian style discovered at Ur and Babylonia[8] seem to

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[1] In the midst of its mythical farrago the story of Śaktideva has some very precious geographical and ethnographical information which deserves all our attention. *Kathā Sarit Sāgara*, II, 29.

[2] Smith, *Early History of Assyria*, p. 89.

[3] Kramer, *Sumerian Mythology*, p. 98.

[4] *Ibid.*, p. 55.

[5] *Ibid.*, p. 98.

[6] Cf. below, Chapter IV, Appendix.

[7] Kramer, *op. cit.*, p. 55.

[8] Gadd, "Seals of Ancient Indian Style found at Ur.", *Proceedings of the British Academy*, XVIII, p. 4, mentions seven seals. Gordon Childe, "The Structure of the Past", *The Geographical Magazine*, XVI (1943), p. 176, refers to "no fewer than thirty seals, carved and glazed in the peculiar Indian style", all discovered at Ur.

suggest the cohabitation of Indians and Sumerians in the same

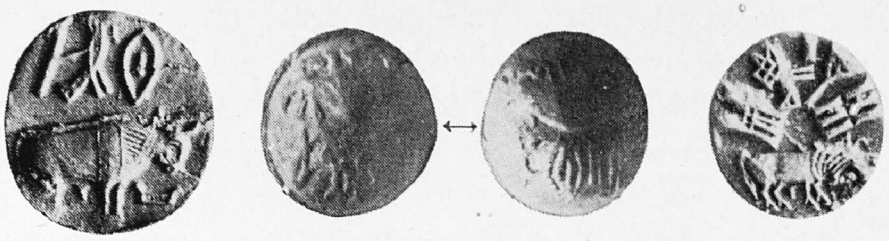

Fig. 51
Round seals found at Mohenjo-Daro.

cities ; and we do not know of any other people of the East (excepting, of course, the Semites who preceded the Sumerians in the Land of the Two Rivers, and continued living there) dwelling among the Sumerians in that remote age. (Figs 51, 52).

This cohabitation of Indians and Sumerians in the Mesopotamian cities is especially suggested by another seal—in this case a cylinder seal—of the Collection De Clercq. Its provenance seems to be Mesopotamia and it was first published long before the Indus Valley culture had been discovered. Mademoiselle Simone Corbiau, who has especially studied this seal, thinks that it is Indian ; yet she is also inclined to attribute Sumerian parentage to it from other points of view, and finally concludes : "These considerations may well suggest to us the possibility of the existence of a local Indian industry in Mesopotamia, or at least, in connection with Mesopotamia".[1]

Besides the representation of the Lion-Fighter, be he Bhīma or Gilgamesh, and other figures of animals in a pure Indian technique,

Fig. 52
Two seals of ancient Indian type found at Ur.

the most interesting figure is the central one. (Fig. 53). Āṇ is

[1] Corbiau, "An Indo-Sumerian Cylinder," *Iraq*, III, pp. 102-103.

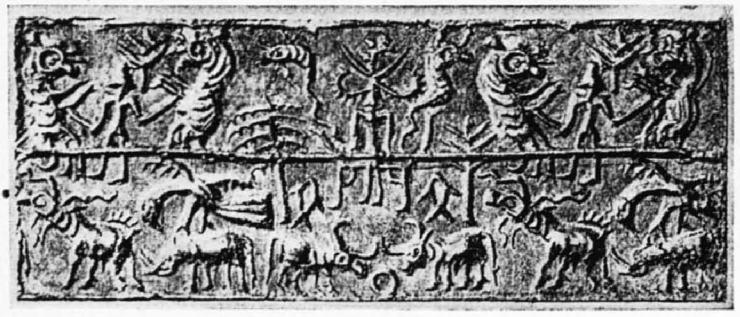

Fig. 53
An Indo-Sumerian seal from Sumer displaying the figure of a tridented An surrounded by serpents, fishes, palm-trees and buffaloes.

depicted, apparently standing in front of a throne. His head is surmounted by a colossal trident with a central flowery development totally similar to the trident of the seated image of Āṇ in Fig. 24. On each side of Āṇ there are one snake, one fish (absolutely equal to the sign of the Mohenjo-Daro script) and one palm-tree, and two buffaloes underneath. There is a small *faience* sealing discovered at Mohenjo-Daro which also shows Āṇ, in this case seated, flanked by two *nāgas*.[1] The representation of these four symbols, snake, *pav*; fish, *mīn*; palm-tree, *paṇa*; and buffalo, *mahiṣa* (which are four well known Proto-Indian tribes), round the figure of Āṇ, place this seal on the same level as the famous Proto-Indian seal which we have reproduced in the frontispiece, on which Āṇ is also surrounded by symbols of different tribes, a tiger, an elephant, a rhinoceros and a buffalo. (Fig. 54).

As regards Indian trade in Sumer, Prof. Gordon Childe says: "The most startling feature of prehistoric Indian trade is that manufactured goods, made in India, were exported to Mesopotamia... At Eshunna, near Baghdad, typically Indian shell inlays, and even pottery, probably of Indus manufacture, have been found as well as seals. These small durable articles must, of course, be regarded as indices of more extensive exportation of perishable materials (still doubtless mainly 'luxuries') such as

Fig. 54
Impression of a seal of Mohenjo-Daro showing Āṇ seated on a throne, crowned with a trident and surrounded by the emblems of four tribes.

[1] Marshall, *op. cit.*, I, p. 229; III, pl. CXVIII, No. 11.

textiles; textiles are known from literary sources to have been imported into Babylonia from India in the time of Nebuchadnezzar, some 2000 years later. So already in the third millennium B.C. we must imagine caravans crossing the mountains and deserts of Iran and argosies traversing the Arabian Sea from Peninsular ports to the Euphrates cities; śank-shell found in relatively considerable quantity in Sumerian ruins was presumably brought by the maritime route".[1]

The *Bāverū Jātaka*, which narrates a commercial expedition to the land of the city of Bāveru (Babylon), is a first class record of this early maritime contact between India and Mesopotamia. A merchantship from the western coast of India went once to Mesopotamia, and the attention of the inhabitants of this land was easily captivated by a crow perched on one of the masts of the ship. The Indian merchants readily made use of that admiration of the simple people whom they met in that land for their commercial purposes. They finally sold the crow to the Mesopotamians for a hundred pieces.[2] The simplicity of these people, so beautifully described in the *Jātaka*, tallies most perfectly with the character of the inhabitants of Mesopotamia at the time of the arrival of the Sumerians. The story of the *Jātaka* very likely narrates one of the early commercial expeditions of the Indians to Mesopotamia, perhaps the first one.[3] These early traders who visited Mesopotamia in those ancient days communicated their information to the people of India, and actually invited them to settle in the new land, when the population in India grew beyond check. The simple character of the inhabitants living along the Two Rivers was the best guarantee of success for the enterprise.

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[1] Gordon Childe, "The Structure of the Past", *The Geographical Magazine*, XVI, p. 168. The above impartial statements of Prof. Gordon Childe may be compared with the following false picture of the Indus Valley foreign characteristics written not very long ago: "The outside contacts of the Harappa civilization were too slight to allow of new ideas reaching the Indus or the Punjab from the west, and although some Harappa objects were reaching Iraq by the time of Sargon of Akkad (about 2300 B.C.) practically no Sumerian or other foreign influence filtered back, and Indian isolationism, was practically complete." Piggot, *Some Ancient Cities of India*, p. 17.

[2] *The Jātaka*, IV, 339.

[3] We are inclined to believe so by the mere fact of the existence of this record. The first time they saw Mesopotamia and its inhabitants, rather than the following ones, produced impressions worth future memory. Moreover the fact that the merchants had a crow with them seems to show that those seas were unknown to them, for it is an ancient Indian custom among seafaring people to take a crow to find the direction of the land, when travelling through unknown seas. Cf. Heras, "The Crow of Noe", *The Catholic Biblical Quarterly*, X, pp. 131-139.

These commercial relations between India and Mesopotamia continued after the Sumerians were settled in the latter.

Moreover we now know that these relations between India and Sumer were not unilateral.[1] The Sumerians and Akkadians knew India were in need of Indian goods and even tried to conquer the wealth of India. The kingdom of Magan, which the Akkadian kings boast of having conquered, wherefrom Gudea, *pateśi* of Lagash, imported large quantities of products and whereto Sumerian merchants used to go on business, is now most likely to be identified with India.[2]

The Bible itself has a passage which may rightly be called parallel to the fragments of Berossus. Both documents seem to have had the same tradition of the land as the source of their information. In Chapter XI of *Genesis*, after the account of the generations of the children of Noah, the writer goes on speaking of a section only of Noah's children — that which had the greatest interest for the future biblical history; from the midst of which section Abraham had to be called centuries afterwards.[3] "And when they removed from the east", (the Hebrew word corresponding to the word "from" leaves no doubt as regards the oriental origin of their migration), says the biblical account, "they found a plain in the land of Sennaar (Sumer)[4] and dwelt in it. And each one said to his neighbour : 'Come, let us make brick and bake them with fire'. And they had brick instead of stones and slime instead of mortar".[5]

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[1] That India was known in Mesopotamia from very early times is proved by the Babylonian lexicon. In Mesopotamia the word *sindhu* means "cotton" (though the phonetic reading of the sign is vegetable cloth). Now, *sindhu* is the original name of India (Cf. Gnana Prakasar, "A Study in Etymology, An Examination of the words 'Hindu' and 'Organ'" *The Hindu Organ*, (Jaffna, Ceylon) XLIX, 13 April, 1937, p. 3). Since cotton was coming from India, cotton cloth was named after the country of its origin (In the same way "damask", "cashmir" and "calico" are modern words to name the cloth hailing respectively from Damascus, Kashmir and Calicut) Cf. Sayce, *Lectures on the Origin and Growth of Religion*, pp. 137-138. The word passed to Sumer straight from India, not through the Iranians, for they soon changed the initial *s* into *h*, thus *sind* becoming *hind*. The word *sindhu* travelled all over the Mediterranean through the Phoenicians. In Rome soon cotton cloth was called *sindo, -nis*. Cf. Heras, "India y los Indios", *Eca*, III, pp. 399-401.

[2] Cf. Heras, "The Kingdom of Magan", *B. C. Law Volume*, I, pp. 545-558.

[3] "The passage, when truly translated, does not by any means refer to the whole of mankind." Kitto, *Scripture Lands*, p. 25.

[4] Sennaar is the Hebrew rendering of Sumer. Cf. Kortleitner, *De Sumeriis eorumque cum Vetere Testamento relationibus*, pp. 56-66.

[5] *Gen.* XI, 2-3.

Fig. 55
A section of the Mohenjo-Daro city with brick houses in view.

According to this text the people who settled in Sumer, the future Sumerians, had come from the east. Some think that the fact of having "found a plain" means that they came from a mountainous country.[1] But this is not meant at all by the passage. It only mentions what they found and not what they had left. Now coming from the east would mean either from Elam or from some other country *via* the Persian Gulf. In favour of Elam is its vicinity to Sumer. Adametz, years ago, was of opinion that the Sumerians came from Afghanistan, Balochistan, Iran and North-Western India.[2] But the Sumerian civilization is different from that of Elam.[3] In particular the Elamite language is not agglutinative,[4] and its script is very different from the Sumerian script.[5] In fact Barton thinks that the Sumerians dispossessed the Elamites in Sumer.[6]

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[1] Cf. Kortleitner, *op. cit.*, p. 58.

[2] Referred to by Kortleitner, *op. cit.*, p. 18.

[3] Barton, "Whence Came the Sumerians?", *J. A. O. S.*, XLIX, p. 263.

[4] *Ibid.*

[5] *Ibid.*, p. 264.

[6] *Ibid.*, p. 263.

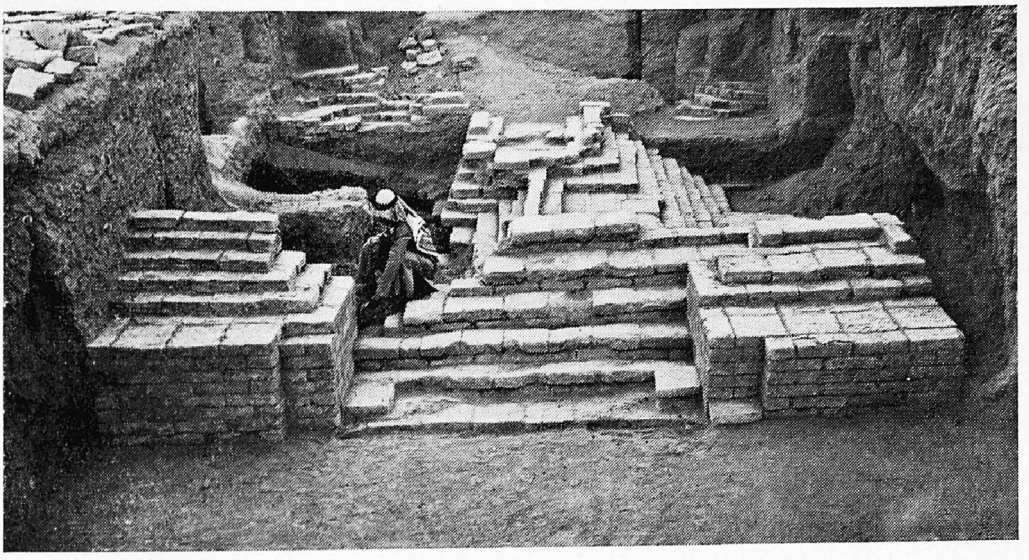

Fig. 56
Brick steps in the Kititum Temple of Ishchali, in Sumer.

The fact that the earliest Sumerian settlements are found in the south, seems to suggest that they entered from the south.[1] Barton is of opinion that the theory that puts the origin of the Sumerians in the mountains of Oman is not satisfactory ;[2] and yet he is finally inclined to consider as probable that they came from Oman or Eastern Arabia.[3] Nevertheless there is no trace in Eastern Arabia of any nation of high culture in ancient times. Barton rejects the opinion of the Indian origin of the Sumerians, because he cannot call Sumerian inscriptions the inscriptions found in Mohenjo-Daro.[4] It is evident that the inscriptions are not the same, but we find extraordinary similarities between both scripts and we may easily realize that the Sumerian script is in a more advanced state of development than the Mohenjo-Daro script. Precisely this relation between both scripts, and especially the account of Berossus, show that India was the cradle of the Sumerians. They came by sea, and the shores of India inhabited by Dravidian people seem to have been the starting point of Uvanna, Odakon and other leaders—the

[1] Barton, "Whence Came the Sumerians"?, *J. A. O. S.*, XLIX, p. 264; Speiser, *Mesopotamian Origins*, pp. 83-84 ; Barton, *Semitic and Hamitic Origins*, p. 36.

[2] Barton, "Whence Came the Sumerians ?", *J. A. O. S.*, XLIX, p. 266.

[3] *Ibid.*, p. 268 ; Barton, *Semitic and Hamitic Origins*, pp. 38 and 40.

[4] Barton, "Whence Came the Sumerians ?", *op. cit.*, p. 265.

ancestors of Mes-anni-padda, A-anni-padda, Mes-kalam-dug and others, whose names are not less Dravidian.[1] "It was in the Indian home (perhaps the Indus valley)", says Hall, "that we suppose for them (the Sumerians) that their culture developed. There their writing may have been invented and progressed from a purely pictorial to a simplified and abbreviated form, which afterwards in Babylonia took on its peculiar 'cuneiform' appearance owing to its being written with a square ended stilus on soft clay".[2] The ancient tradition of the land, connecting the harbours of lower Mesopotamia with India, still existed at the time of the Arab invasion—that the fort and city of Abillah, at the mouth of the Euphrates was a dependency of Hind or Indians, a fact which was not correct then, but which revealed an ancient truth of the time of the migrations.[3] And coming from India where they had beautiful houses built with bricks, as the Mohenjo-Daro excavations have revealed, they could naturally not stand the reed huts of the people of the Euphrates valley and said to each other: "Let us make bricks and build brick houses", as the Bible text rightly commemorates.[4]

Many modern interpreters of *Genesis* are of opinion that the words quoted by Moses, as having been said by the Sumerians when reaching their new homeland, were a sort of a *tetrastichon* or stanza, which was being singsonged by the workmen while they were making the bricks required for building their new houses :–

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[1] These names have been discovered in Ur during the excavations of Sir C. L. Woolley. *Mes-anni-padda* in Dravidian means "The shining elder brother begotten"; *A-anni-pada*, "The cow elder brother begotten"; *Mes-kalam-dug*, "The teacher of the shining country".

[2] Hall, *The Ancient History of the Near East*, p. 174. "I find that the view of Hall, who would connect the Sumerians with the Dravidian family (whose language also belongs to the agglutinative group) carries as much conviction or as little, as any other theory on the subject". Speiser, *Mesopotamian Origins*, p. 83, note 58.

[3] Rawlinson, "Notes on Capt. Durands' Report", *J. R. A. S.*, XII, p. 210.

[4] There is a Dravidian root which may disclose the etymological meaning of Sumer. In Tamil *suma* means "to rest", "to halt", and also "to increase"," to swell". If the Proto-Dravidian people of India were the first civilized colonizers of that country, would it be too presumptuous to suppose that they called the place where they settled Sumaru, or Sumar, "resting" or "halting place", which finally became the "place of increase"?. *Genesis* gives the old name of the land, Sennaar, which is the Semitic name of Sumer. This must have been the name given to lower Mesopotamia by the Semitic inhabitants of that land at the time of the arrival of the Sumerians. They were the ancestors of Abraham, whose traditions the Hebrews inherited. The newcomers were evidently the authors of the new name.

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"Come,
Let us make brick,
and bake them with fire ;
and they had brick instead of stones
and slime instead of mortar".[1]

These authors, when they suggested this, did not know that they were describing a purely Indian custom prevalent in India from very ancient times. All sorts of workmen in India seem to work more regularly and with more efficiency when they are rhythmically led by the notes of such singsongs. We still see them doing in our streets what they did when they reached Mesopotamia for the first time, about five thousand years ago.

This determination on the part of the immigrants to make bricks and to build brick houses explains a fact narrated by Berossus to prove their amphibious nature. He says that when they arrived, they were in the land during the day only. They went back to the sea every night.[2] It is evident that they went back to their ships till the new brick houses were habitable.

IV

THE ARCHAEOLOGY OF SUMER AND THE INDIAN ORIGIN OF THE SUMERIANS

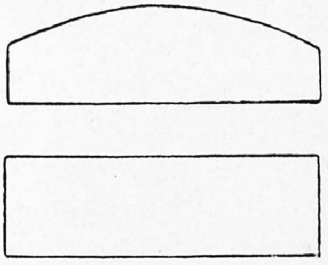

Fig. 57
Schematic cross-section of a flat brick and a plano-convex brick from Sumer.

The bricks made by the Sumerians propose a very difficult problem which archaeology has not been able to solve as yet. It is true that the earliest bricks discovered in Sumer were flat rectangular bricks,[3] just the same shape and manufacture as the bricks of the people of the Indus Valley. (Fig. 57). "In both Warka and Ur," says Delougaz, "the strata below the plano-convex bricks revealed buildings made of flat bricks".[4]

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[1] Cf. Hummelauer, *Commentarius in Genesim*, p. 33.

[2] Schnabel, *op. cit.*, 253 ; *Fragmenta Historica Graeca*, II, pp. 496-497.

[3] Langdon, "A New Factor in the Problem of Sumerian Origins", *J. R. A. S.*, 1931, pp. 594-596.

[4] Delougaz, *Plano-Convex Bricks and the Methods of their Employment*, p. 34, n. 41.

What do these plano-convex bricks mean? Were they done by the same people who made the flat bricks? Do they suppose the invasion of a new nation? Why were they made in that queer unpractical shape? Many explanations to these questions have been proposed. One thing is certain: "This peculiar form", admits Delougaz, "was not made purposely to meet a special architectural need".[1] This irregular shape naturally increased the difficulties during the process of building. We sincerely believe that they do not suppose the invasion of a new nation, for the simple reason that we do not know anything as regards such

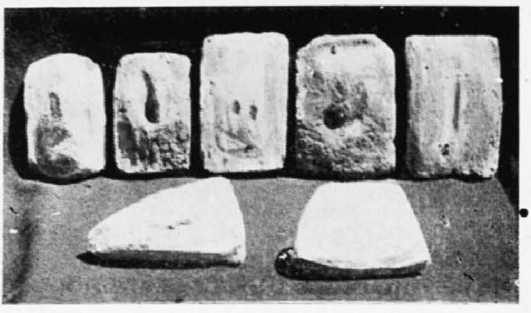

Fig. 58
Kish plano-convex bricks with two wedge-shaped bricks.

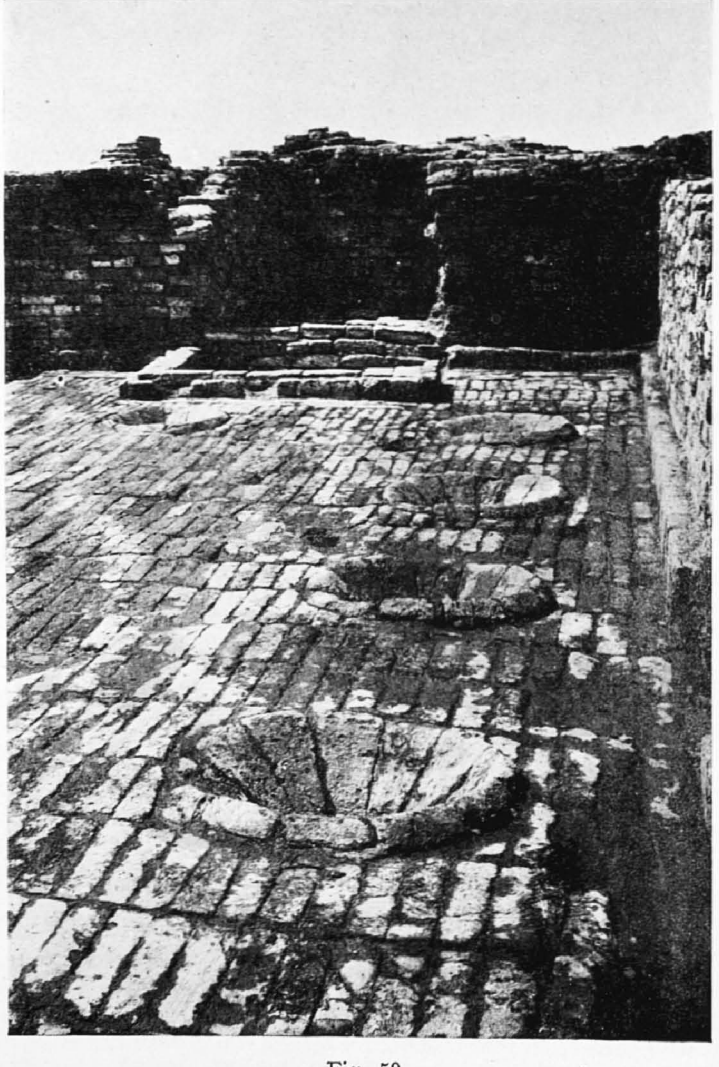

Fig. 59
Ablution flooring in Mohenjo-Daro.

[1] Delougaz, *op. cit.*, p. 8.

an invasion, nor do we see the appearance of a new culture in Sumer at that period. The queer shape of those bricks seems to be due to new hands employed in the making of bricks — probably the old Semitic rough people of the land, who in the meantime had learnt how to make bricks. It is evident from the biblical account, confirmed by the discoveries of archaeology, that the first bricks were made by the Sumerians themselves upon landing. "Let us make bricks," they said. Those were the bricks of Ur and Warka and other places prior to the appearance of the plano-convex bricks. The Semites inhabiting the land, who little by little imbibed the Sumerian culture, were naturally curious to learn the process of brick making. Once they learnt it, they offered themselves to work for the new-comers themselves; being people of an inferior culture, they became the servants and slaves of the Sumerians. Their brick manufacture was, so we think, characterized by this new shape. The plano-convex bricks are generally thinner than the flat bricks. Their convexity proceeds from the fact that the brick-makers after filling the wooden frame with damp clay did not pass a piece of wood or a wire to remove the super-

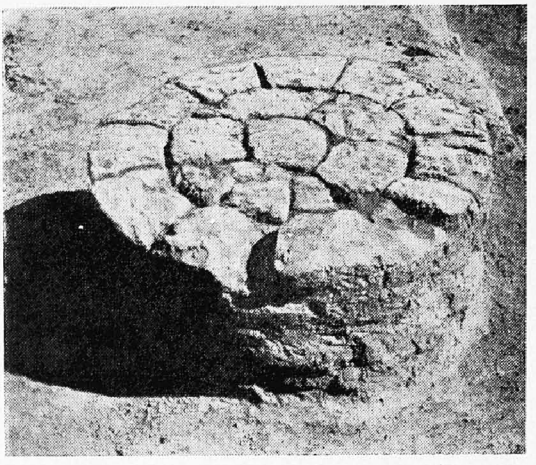

Fig. 60
Column of Kish built with especially made bricks.

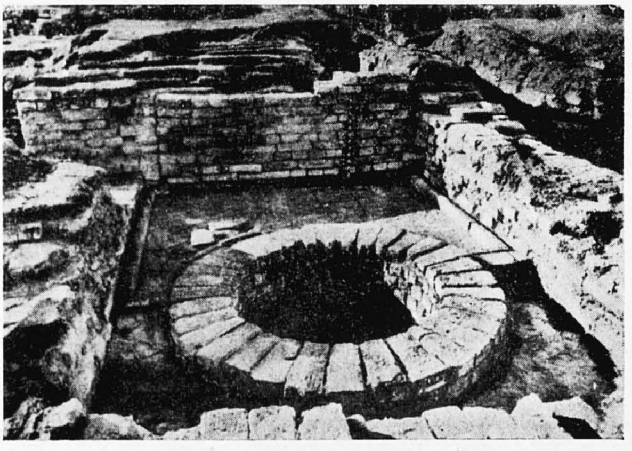

Fig. 61
A Mohenjo-Daro well built with wedge-shaped bricks.

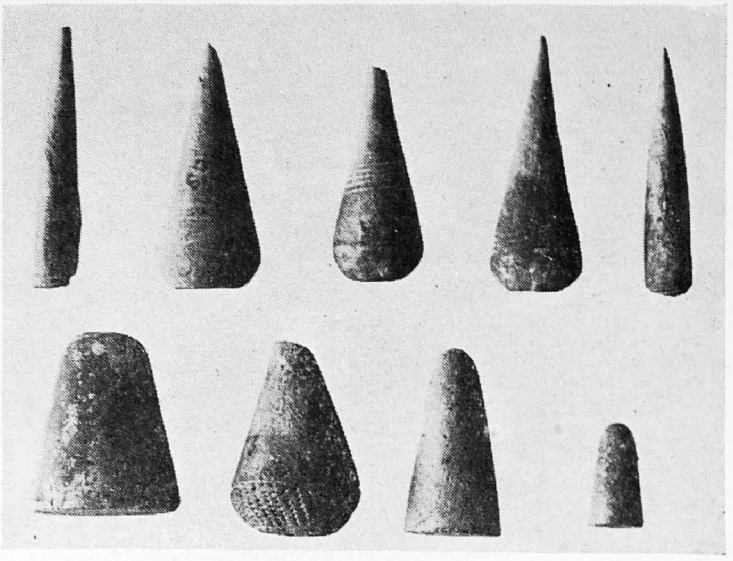

Fig. 62
Clay cones from Mohenjo-Daro.

fluous clay on top, but they did that very carelessly with their own hands only, actually impressing their finger prints on the clay, purposely leaving more clay in the centre of the brick to give it more strength and consistency. Yet the masons while actually building the houses could not be satisfied with the new shape of the bricks as the problem of bonding them was great, for it is impossible to make a flat surface agree with a convex one. All this shows that the plano-convex brick period (though extraordinarily long) was only an accidental interlude in the history of brick making in Mesopotamia. Prof. Delougaz says that flat bricks, "may have survived throughout this period".[1] Yet the number of plano-convex bricks gradually decreased; they actually became flatter and before the end of the first Sume-

Fig. 63
Specimen of a wall of Tell Asmar showing bricks laid on edge.

[1] Delougaz, *op. cit.*, p. 34.

rian period, before the rise of Sargon of Akkad, all bricks were flat once more.[1]

Besides this problem of the plano-convex bricks, the parallelism between the brick structures of Sumer and those of the proto-Indians is perfect. In Sumer there are especially moulded, wedge-shaped bricks for building columns (Figs 58, 60)[2]; in Mohenjo-Daro there are especially wedge-shaped bricks for building wells or floorings for ablutions.[3] (Figs 59, 61). In al-'Ubaid clay cones have been found to strengthen the plastering mud of the walls.[4] Such cones have also been found in Mohenjo-Daro[5] (Fig. 62); and in Sind by Dr Ghurye, of the University of Bombay.[6] The present writer has found some similar clay cones in a prehistoric

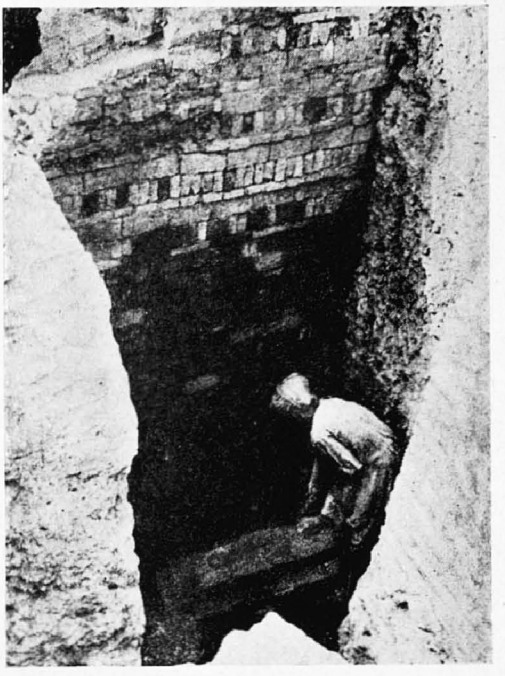

Fig. 64
Specimen of a wall of Mohenjo-Daro showing bricks laid on edge.

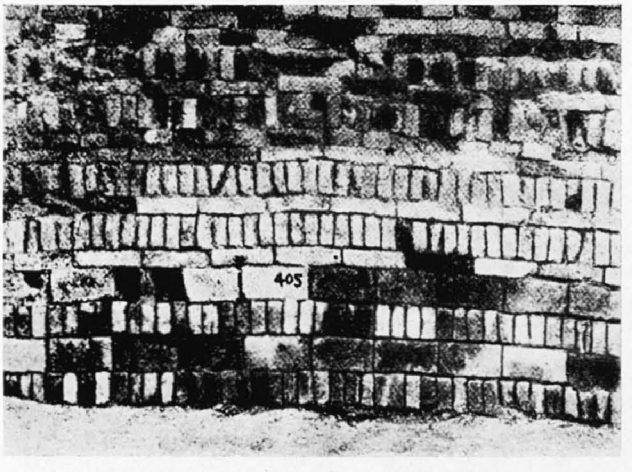

Fig. 65
Rows of bricks laid on edge intermingled with rows of flat bricks in a wall of Mohenjo-Daro.

[1] Delougaz, *op. cit.*, p. 34.

[2] Woolley, *The Development of Sumerian Art*, p. 105; Mackay, *A Sumerian Palace and the "A" Cemetery at Kish*, II, pl. XXXII, No. 3; Delougaz, *op. cit.*, pp. 14-15 and 29.

[3] Marshall, *op. cit.*, I, p. 269.

[4] Woolley, *op. cit.*, pp. 41-43.

[5] Marshall, *op. cit.*, III, pl. CXXXI, Nos. 47-51.

[6] Ghurye, "Account of an Exploratory Tour in Certain Parts of Sind in search of Prehistoric Culture", *J.U.B.*, IV, pt. 6, pl. XII, Nos. 34-35.

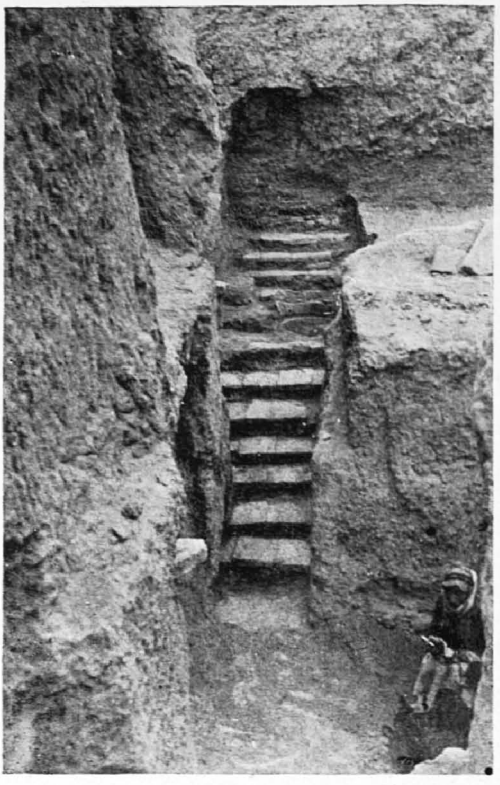

Fig. 66
A stairway of Tell Asmar in Sumer.

convex bricks slanting in the same direction have also been found.[2] This pattern therefore is ultimately caused by the technique of laying bricks on edge, instead of laying them flat in successive rows. Sumeriologists have studied this technique since it was dis-

or perhaps protohistoric site on the river Sone (Bihar).[1]

A special building technique system developed in Sumer in the plano-convex brick period the study of which must also find a place in this work. I refer to the so-called herringbone pattern produced by rows of bricks laid on edge and slanting in opposite directions. (Fig. 63). This latter circumstance, which is the main factor for the appearance of the herringbone pattern, is merely accidental, caused by the queer shape of the bricks, for occasionally two or more consecutive rows of plano-

Fig. 67
A stairway leading to an upper floor in a Mohenjo-Daro house.

[1] They may be seen in the Museum of the Indian Historical Research Institute, St. Xavier's College, Bombay.

[2] Delougaz, *op. cit.*, pp. 21 and 24.

covered. Mr Delougaz thinks that its explanation is habit; and tries to explain the latter by the stone buildings of Anti-Lebanon in northern Mesopotamia, thus perhaps suggesting that the Sumerian brick-layer came from those northern districts. Mohenjo-Daro also knows the technique of laying bricks on edge, intermingled with rows of flat bricks from time to time, in the same way as in Sumer. (Figs 64, 65). If this habit was the cause of the introduction of this building technique in Sumer — as it probably was — the Indus Valley brick-layer might have been the unconscious forerunner of the brick builder of Sumer.

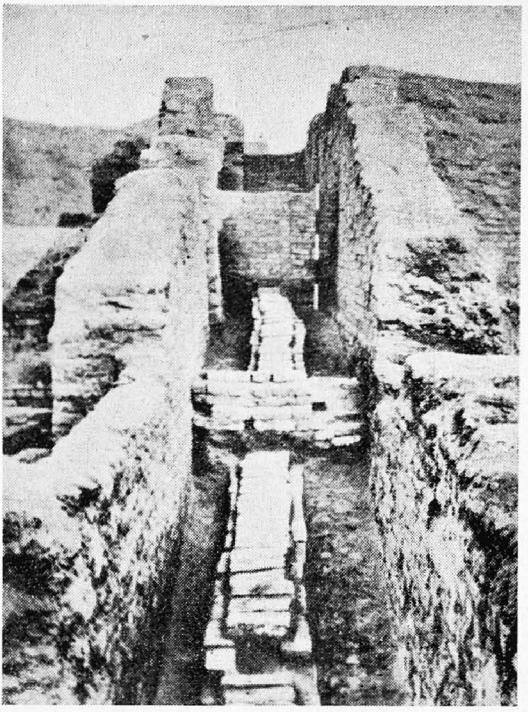

Fig. 68
A drainage canal in Mohenjo-Daro.

As regards the buildings themselves, many streets of the city were narrow lanes in Sumer, just as in Mohenjo-Daro. Hence the houses at the entrance of the street had their corners rounded, for the sake of vehicles, both in Mesopotamia[1] and in India.[2] The internal arrangement of the house seems to have been the same in both the countries.[3] There were stairs leading to the upper floors. (Figs 66, 67). The same system of drainage has been found in the old cities of the Euphrates and of the Indus. (Figs 68-70, 73). Toilets of the same kind have also been discovered in the houses of both the countries.[4] (Figs 74-76). In

[1] Woolley, *Ur of the Chaldees*, p. 165.

[2] Mackay, *The Indus Civilization*, pp. 25-26; Marshall, *op. cit.*, I, p. 284.

[3] Woolley, *Ur of the Chaldees*, pp. 164-170; Mackay, *op. cit.*, pp. 32-36.

[4] Frankfort, *op. cit.*, pp. 8 and 29; Frankfort, *Tell Asmar, Khafage and Khorsabad*, p. 36, fig. 23; Marshall, *op. cit.*, I, pp. 206-208. The system of privies and drainage seems to have travelled up to Syria. Cf. Mallowan, "The Syrian City of Til-Barsib", *Antiquity*, XI (1937), p. 331.

Mohenjo-Daro some window lattice grills, both of alabaster and

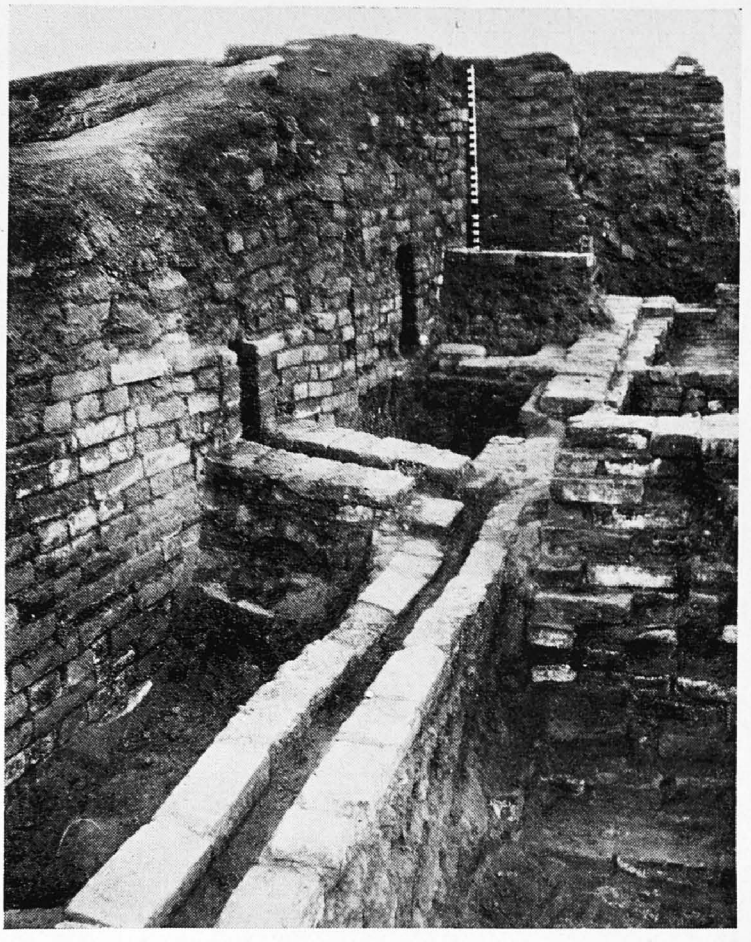

Fig. 69
Drain apertures leading out from a house of Mohenjo-Daro.

of terracotta, have been found.[1] Terracotta grills have also been found in Sumerian houses[2] (Figs 77, 78). In connection with these lattice-covered windows, it is of interest to notice that they are clearly remembered in Tamiḷ. In modern Tamiḷ the usual word for window is *janel*, which is derived from the Portuguese *janela* (a small *janua* or door). But the real ancient name for window in Tamiḷ is *pala-kaṇi*, which means "many-eyed (opening)". The space left free by the grills through which light and air could pass

[1] Marshall, *op. cit.*, I, pp. 218-219; III, pl. CXXXIII, Nos. 10 and 11; pl. CLVIII, No. 14.
[2] Frankfort, *Iraq Excavations of the Oriental Institute, 1932-33*, p. 14, fig. 9.

was apparently supposed to be "eyes". One of the inscriptions of

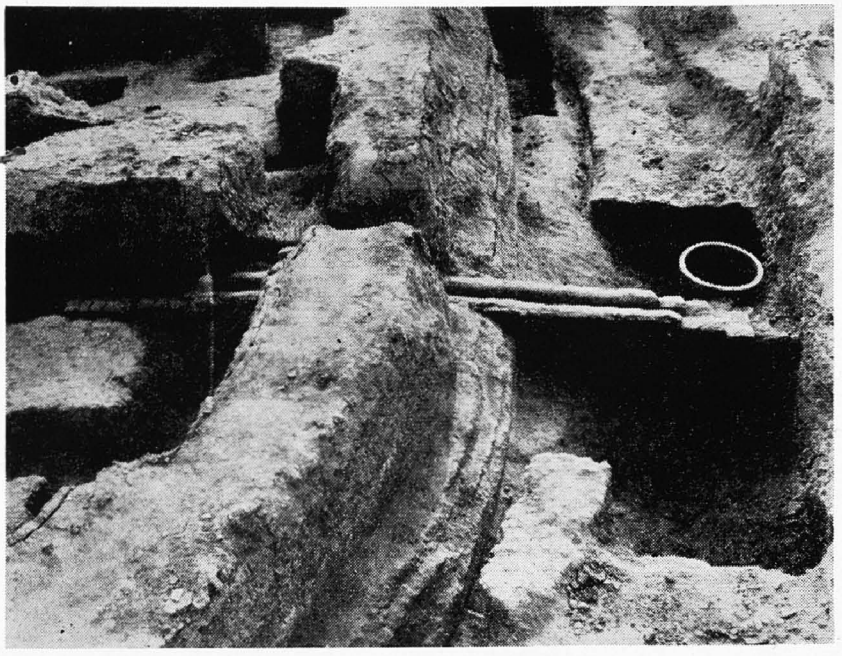

Fig. 70
A drain in the excavations of Khafaje in Sumer.

the Indus Valley which describes the house from which they could see the stars during the day, says that the house had "two eyes", i.e. two small openings.[1]

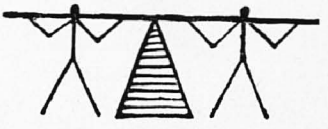

Fig. 71
A sign of the Indus Valley script showing two workmen carrying a heavy load.

Sumerian workmen carried heavy loads much in the same way as workmen do at present in India. The load hanging from a wooden pole was thus easily translated from place to place by two men who carried the pole upon their shoulders. An early Sumerian seal shows two labourers thus carrying a huge jar. (Fig. 72).[2] A unique sign

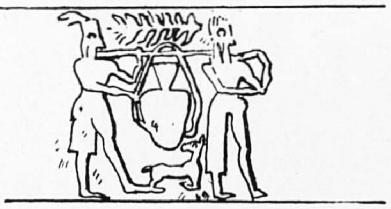

Fig. 72
Two Sumerian workmen carrying a heavy amphora, after a seal from Fara.

[1] The inscription reads: "*Ir taltalilil ir kaṇ ari mīn*". Vats, *Excavations at Harappā*, II, pl. LXXXVII, No. 46 (Catalogue of signs, No. 483).The inscription means: "The Fish (constellation) (is) known through the two eyes of the two very bright houses". Cf. above, p. 98. Having only two eyes these houses could not be very bright; yet they are called so, because from inside those houses they could always see the brightness of the stars.

[2] Cf. Delougaz, *op. cit.*, p. 36, fig. 32.

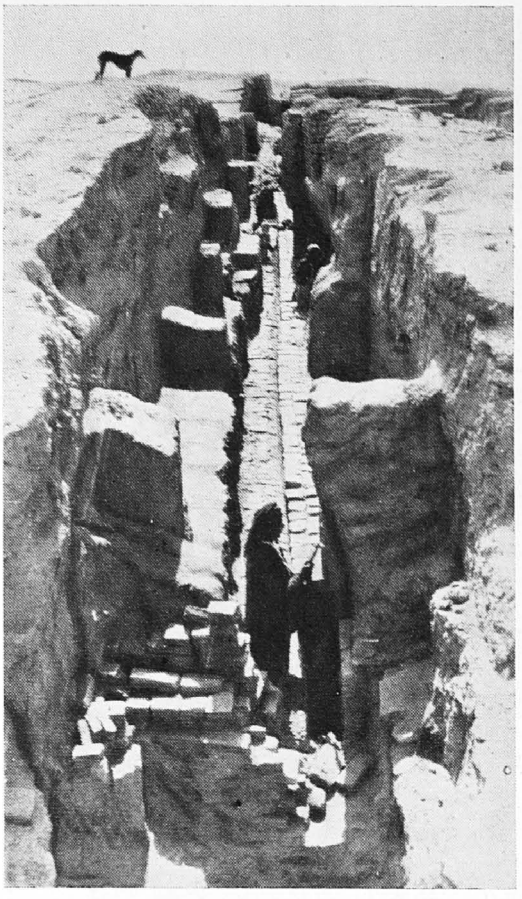

Fig. 73
A drainage canal of Tell Asmar, in Sumer.

of the Indus Valley script shows the same scene, though stylized, as befits the sign of a script, with the only difference that the object carried, instead of being a load, is another well known sign of the same script, which reads *kō* and means "domination".[1] (Consequently the sign reads *kōporutir*, "the carriers of domination")(Fig. 71). The system of carrying such loads was therefore known in the Indus Valley.

Something must be said in particular about the similarity between the temples of both lands. The ruins of the temple of Mohenjo-Daro have not been recovered as yet, but a small

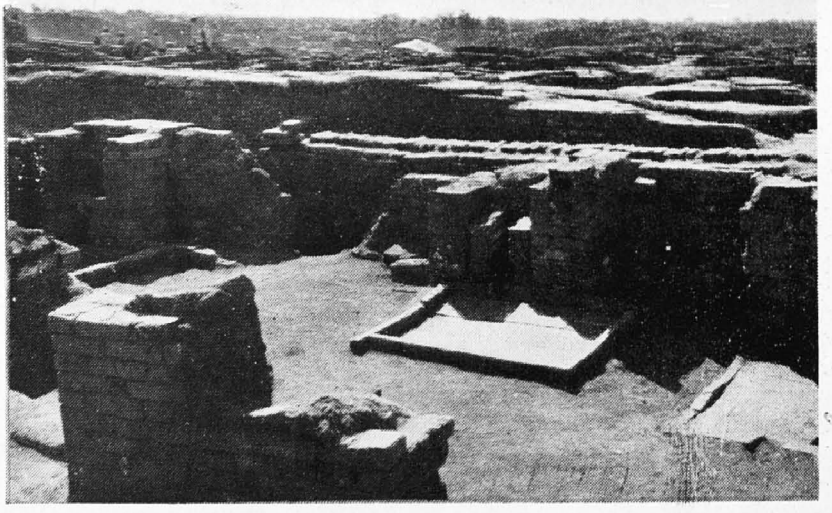

Fig. 74
A Mohenjo-Daro chamber having two privies.

[1] Mackay, *Further Excavations at Mohenjo-Daro*, pl. XCVI, No. 518.

sealing, found at Harappā, shows what the temples of the Proto-Indians were like. (Fig. 79). It is a small quadrangular room, the exterior walls of which are probably covered with cones applied to its soft plaster or clay. Finials decorate the corners. In front of the temple an awning, similarly decorated with a finial, makes a sort of porch under which there is a royal throne. On this throne there stands the disc of the Sun, while behind the temple three signs of the script tell us

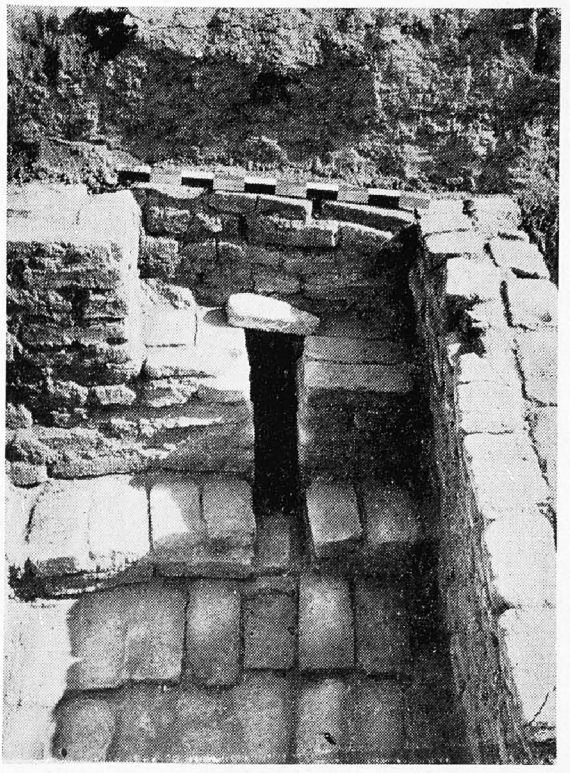

Fig. 75
A privy in a house of Sumer, unearthed at Tell Asmar.

Fig. 76
Another privy in a house of Tell Asmar, in Sumer.

that it is the temple of the Suns.[1] A similar temple is found represented in one of the rough archaic seals of Sumer. (Fig. 80). The god is standing, similarly under the porch in front of the shrine, while a nude priest performs a ritual libation in front. A tablet of one of the early Babylonian kings, Nabu-aplu-id-dina, now in

[1] Watts, *Excavations at Harappā*, II, pl. XCIII, No. 303. There existed a sect which worshipped three suns. Cf. Heras, "The Religion of the Mohenjo-Daro People," pp. 13-14. Bhandarkar, *Vaiṣṇavism, Śaivism, and Minor Religious Systems*, pp. 151 and 152.

the British Museum, shows the continuation of the same architectural tradition. (Fig. 81). The side wall of the shrine is shown, as if it were, transparent, and a huge statue of the solar god Shamash is seen seated within the temple. Under the porch in front of it there is similarly a throne upon which the disc of the Sun stands prominent, while a priest, the king himself and an attendant goddess stand in adoration before the Sun.

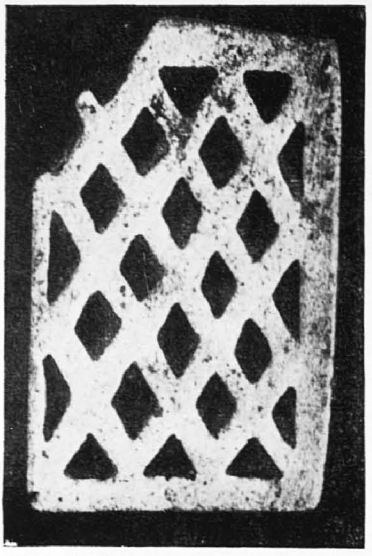

Fig. 77
A Mohenjo-Daro *pala-kaṇi*.

A scene represented before one of these shrines in an archaic seal of Ur reminds us of a very ancient Indian custom or religious rite, which undoubtedly has its origin in the Indus Valley period. Elsewhere I have noted that an epigraphical record mentions some "learned Mīnas who were living in caves".[1] These Mīnas living in such a secluded spot were doubtlessly ascetics. The practice of *yoga* started in India at a very early age. We do not know what the tapasic practices of those early *yogis* were. Very likely the penance of standing on one leg for a long time,

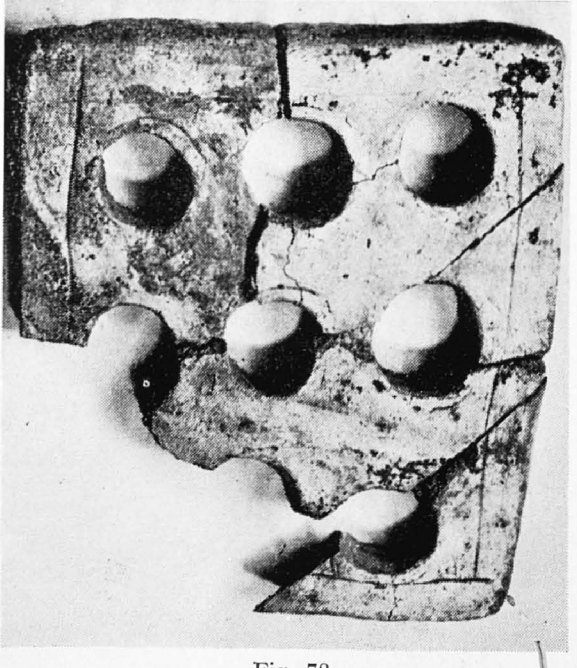

Fig. 78
A lattice grill from a house of Tell Asmar, in Sumer

[1] Heras, "Mohenjo-Daro, the People and the Land", p. 708.

spoken of as practised by Arjuna[1] and even by the very goddess Pārvatī,[2] was already customary in the Indus Valley; for the seal of Ur referred to above depicts a man standing on one leg, having one of his hands uplifted in a ritual pose. (Fig. 84). He undoubtedly is a *yogi* performing his difficult *tapas*. It is a scene characteristically Indian.

Fig. 79
A sealing of Harappā showing the side elevation of the temple of the Suns.

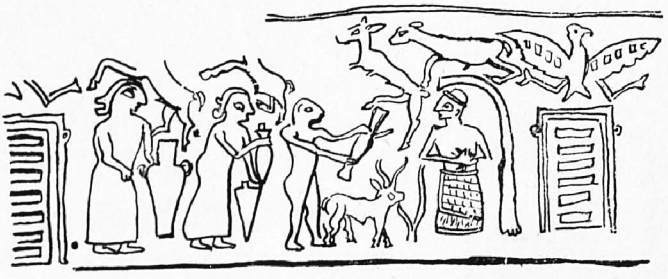

Fig. 80
A priest performing a libation before a temple of Sumer, on an archaic seal of Ur.

It is besides to be noted that the many temples of Sumer are generally built in the shape of *ziggurats*, huge artificial piles of bricks, mountain-like pyramids, on whose top platform a small shrine was erected. Sumeriologists, commenting upon this quaint structure, maintain that it was built as a mountain with the idea of having the temple on its apex. When doing so the Sumerians were only the continuators of the ancient tradition of their original country where there were numerous mountains crowned by shrines dedicated to divine worship. On landing on the shores of Sumer, they could not build their temples straight away on the top of mountains, for the simple reason that there are no mountains in the alluvial plain of the Two Rivers. Hence they resorted to erecting

Fig. 81
King Nabu-aplu-id-dina before a temple of Babylon.

[1] *Mahābhārata*, Vana Parva, 1650.
[2] Gopinatha Rao, *Elements of Hindu Iconography*, II, part 2, pp. 409-410.

artificial mountains, to place their chapels on their top.[1] The idea that Śiva was dwelling on the summit of a mountain, about the antiquity of which idea we shall speak below,[2] may have been the origin of this custom which was continued in India down to modern times. Fr Dubois, in the beginning of the 19th century, remarks that one of the most frequent spots where Hindu temples are built are "on the summits of steep rocks, mountains and hills", and adds: "This practice of constructing buildings consecrated to religious worship upon elevated sites must have struck all persons who have travelled in India. In fact there are few mountains, where a well or a spring is to be found, that are not surmounted by a building of this sort. The choice of sites like those does not appear to be a matter of caprice".[3] The customs of India have changed very little in the course of centuries.

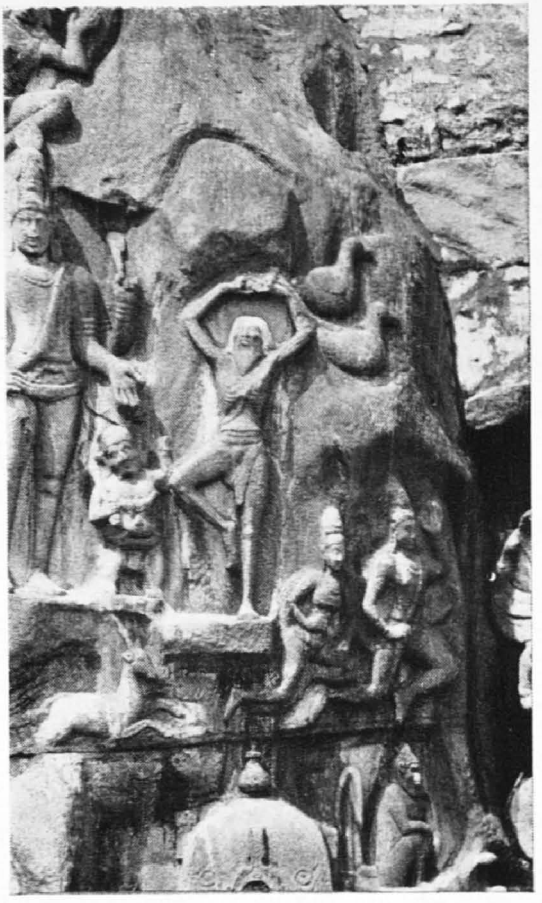

Fig. 82
Arjuna practising *tapas*, from Mahābalipuram.

One of the most characteristic features of the architecture of Mohenjo-Daro is the corbelled arch which is found both in the case of gates as well as in the case of a long roof.[4] (Figs 85, 86). This feature has also been found in Sumer; at Nippur there is a corbelled gate formed by hewn stones.[5] A long roof, a sort of a

[1] Woolley, *The Sumerians*, pp. 141-142.
[2] Cf. Appendix II to this Chapter, p. 281.
[3] Dubois, *Hindu Manners, Customs and Ceremonies*, p. 578 (O.U.P.ed.).
[4] Marshall, *op. cit.*, III, pls. LIV, b; LV, b; LXXV, c.
[5] Handcoch, *Mesopotamian Archaeology*, p. 173, fig. 17.

vault, built with brick, totally similar to the roof of the passage of Mohenjo-Daro, has likewise been found at Ur.[1] (Fig. 87).

As regards ceramics, Mr P. Joseph has recently made a magnificent comparative study of the potsherds of the Indus Valley, Elam and Sumer.[2] His conclusions are that Indian pottery very early travelled westwards as the similarities between it and the pottery of Susa II and of Jemdet Nasr pottery clearly show. The similarity between the knob pots of Mohenjo-Daro and those of Sumer has already been emphasized by Frankfort.[3] (Figs 88, 89).

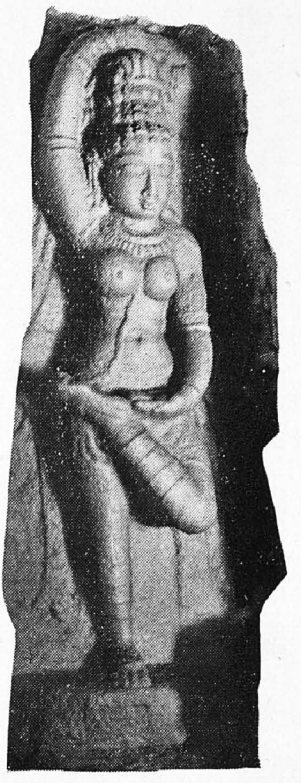

Fig. 83
Pārvatī undergoing a difficult penance, from Paṭṭīśvaram.

Finally, the kings of Sumer used to boast of having constructed many canals throughout the country to water their lands.[4] Gilgamesh and other kings are depicted as supplying water to the lands from a pot in their hands. The canals built in those ancient times had been such extraordinary constructions that they were still considered one of the wonders of the world in the days of Herodotus.[5] The

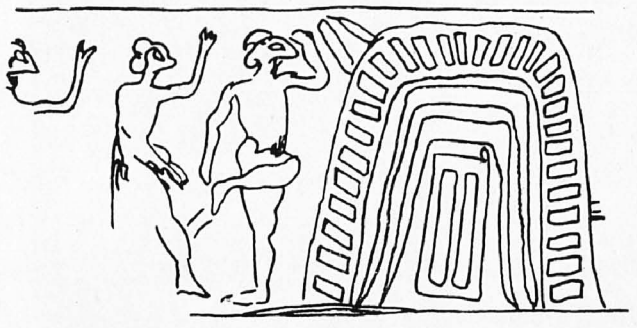

Fig. 84
A Sumerian in a tapasic attitude, after an archaic seal of Ur.

[1] von Muller, *Atlas zur Archäologie der Kunst*, pl. IIIa, No. 14; Hall, *A Season's Work at Ur*, p. 89, fig. 74.

[2] Joseph, "The Near East and the Indus Valley", *Journal of the University of Bombay*, XII (N.S.), (1944), part 4, pp. 7-17.

[3] Frankfort, "The Indian Civilization and the Near East" *Annual Bibliography of Indian Archaeology*, 1932, p. 4 and pl. I; Frankfort, *Tell Asmar, Khafage and Khorsabad*, pp. 48-51.

[4] Woolley, *The Development of Sumerian Art*, pp. 112-113.

[5] Dowson, *The Age of the Gods*, p. 122.

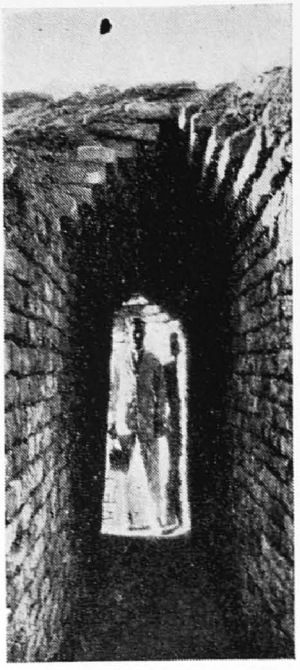

Fig. 85
A corbel-vaulted passage in Mohenjo-Daro.

canals of the Proto-Indians are very often mentioned in the inscriptions of Mohenjo-Daro.[1] Evidently such canals were constructed for fostering irrigation: both the harvest and the harvesters are mentioned very frequently. Coconut plantations are also a feature of this civilization. (Fig. 90).

We may now consider the evidence springing from the seals of both countries. It is but natural that the stamp or press seals are more ancient than the cylinder seals, whose making requires a more skilful hand and a highly developed technique. Moreover the wide distribution of the stamp seal from Crete to Northern India seems to suggest that "the stamp seal was the original form".[2] In the Indus Valley all the seals are flat seals, excepting two.[3] They are generally carved on square pieces of steatite stone having a small boss on the reverse through which a hole is pierced to allow a string to pass. Thus the seal may be carried hanging on the neck. This boss perhaps is also a device to press the seal while sealing any soft substance. (Fig. 91).

Fig. 86
A corbel-arched door in Mohenjo-Daro.

In Sumer, and later in Babylon and Assyria, the cylinder seal

[1] Heras, "Mohenjo-Daro, the People and the Land", pp. 709-710. Cf. above, pp. 73 and 76.

[2] Dowson, *The Age of the Gods*, p. 74. The view of Frankfort that the stamp seal is an essentially Syrian type cannot be maintained. Cf. *Ibid.*, p. 78.

[3] Mackay, *The Indus Civilization*, p. 165; Mackay, *Further Excavations at Mohenjo-Daro*, II, pl. LXXXIX, No. 376

reigns supreme. Yet a few stamp seals are known in a very early period of Sumer.[1] (Fig. 92). But the designs of these early seals lack in that beauty and marvellous technique of the Indus Valley pieces. Nevertheless soon the Sumerian seal carvers produced some very beautiful specimens even among the cylinder seals, the carving of which requires high greater skill than the carving of the stamp seals. The new seal carvers of Sumer were not in the beginning well trained as yet, but not long after, themselves being of the same stock as the seal carvers of the Indus Valley, they reached the same standard of perfection and beauty in their work, and even surpassed it. Good specimens of this efficiency are some of the seals of the Gilgamesh cycle: the figure of the hero with his muscles, hair and beard is a marvellous example of realistic sculpture in this difficult art of seal making. (Figs 95, 107).

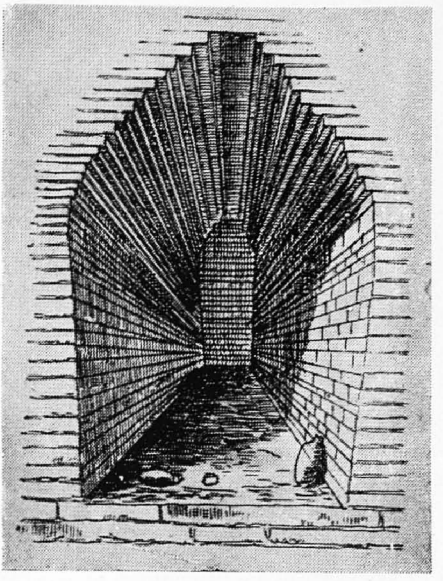

Fig. 87
A corbel-vaulted passage of Ur in Sumer.

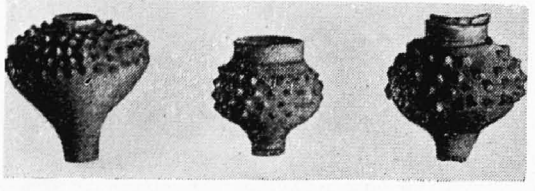

Fig. 88
Knob pots of Mohenjo-Daro.

Fig. 89
A knob pot from Tell Asmar, in Sumer.

What was the cause that originated the new cylindrical shape in Sumer? The cylinder seal was much more comfortable to carry hanging on the neck or attached to the girdle. Perhaps this shape was also due to the different kind of stones they got in Sumer from the mountains of Syria. Certainly this seems to be the cause why the early Sumerian

[1] Cf. Woolley, *The Development of Sumerian Art*, pl. 66, d, f, g, h, i, j and p. 122.

seals were so rough in comparison with those of the Indus Valley. The Proto-Indian workmen who were accustomed to work in the soft steatite seals, could not in the beginning be habituated, nor did they have perhaps proper tools, to work on the hard stones they obtained from the Syrian mountains, cornelian, crystal, agate, marble, etc.

Fig. 90
Impression of a seal from Mohenjo-Daro bearing an inscription which speaks of a cocoanut plantation.

There is no doubt that the glyptic carvers of Sumer improved much upon the somewhat monotonous seal of the Indus Valley. In India the majority of the seals bear the isolated figure of an animal. A Sumerian seal of the Jemdet Nasr period seems to have been carved by an Indus Valley sculptor. The famous unicorn that is so common in the Mohenjo-Daro and Harappā seals has been reproduced to perfection in that Sumerian seal, the only difference being that instead of one unicorn, the Sumerian artist has placed thirteen. (Fig. 97). Frankfort also emphasizes the similarity between the carvings of rhinoceroses, elephants and crocodiles in both the lands.[1] (Fig. 94). The four Indian seals that depict the fight of Bhīma with two rampant lions[2] (Figs 98-100) have their traditional sequence in Sumer in the numerous seals that show the heroic fight of Gilgamesh, down to the late Babylonian period. (Fig. 101). Here the fight of Gilgamesh is not only with lions but with all sorts of animals and even mythical monsters. There are, besides, in the Indus Valley a few seals on which some attempts at an

Fig. 91
Obverse and reverse of a seal of Mohenjo-Daro.

[1] Frankfort, "The Indian Civilization and the near East", *op. cit.*, p. 3 and pl. I.

[2] Cf. Heras, "The Age of the Mahābhārata War", *Journal of Indian History*, XXVI, pp. 7-18.

ingenuous composition reveal the budding artists. Yet such compositions are, we may say, standardized, in the same way as later in Sumer. The scene of a tiger withdrawing from the foot of a tree is repeatedly found in seals coming from Harappā and from Mohenjo-Daro.[1] The composition is substantially the same, even if a few new elements are introduced in some of the specimens. Such is also the case of the

Fig. 92
Two very early stamp Sumerian seals.

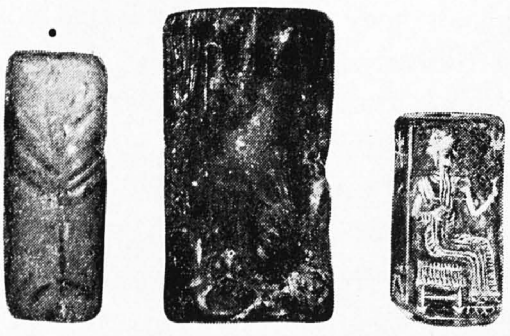

Fig. 93
Three later cylinder seals from Sumer and Assyria.

Mesopotamian glyptic compositions. Some fanciful decorative composition showing the same figure reproduced round a central imaginary pivot is also common in the Indus Valley and in Sumer. (Figs 106, 107).

Two seals from Mohenjo-Daro reproduce two images of demons in a frightful aspect. (Fig. 108). They are provided with long curved horns, scorpion-sting-like pig-tail, long tail, hoofs, and are shown in a war-like attitude. Yet their monstrous face is the most remarkable of their limbs. All the moral perversity of their rank is depicted

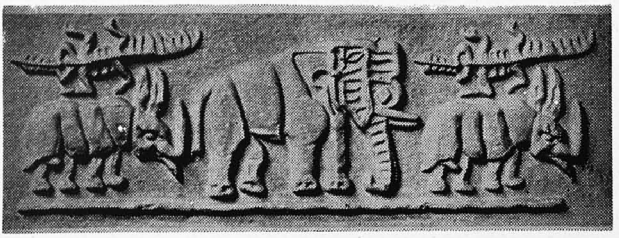

Fig. 94
Sumerian seal from Tell Asmar showing the Indian carving technique.

[1] Marshall, *op. cit.*, III, pl. CXI, Nos. 353, 355, 357; Mackay, *Further Excavations at Mohenjo-Daro*, pl. XC, No. 23b; pl. XCVI, No. 522; Vats, *op. cit.*, pl. XCI, No. 248; pl. XCIII, No. 308. This scene will be explained in a chapter of the second volume of this work. For the present cf. Heras, "El pecado del Paraiso en las naciones proto-indico-mediterráneas", *Estudios Biblicos*, I, pp. 57-66.

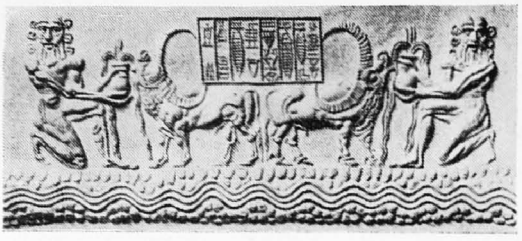

Fig. 95
Gilgamesh watering buffaloes, on a seal of Akkad.

in those bulging eyes, the flat nose, the brutish snout and their shapeless contour. When studying them one is unvoluntarily reminded of the horrible faces of the Babylonian demons, which are undoubtedly the continuators of the Indus Valley tradition.

As regards the script itself which we find in these seals, it has been said that it does not show any improvement or progress in spite of the hundreds of specimens we possess, coming from different sites and from different levels; and this lack of development has been brought forward to prove the stationary character of the Indus Valley Civilization.[1] What we have said in connection with the development of some signs[2] clearly shows how baseless are such statements. In

Fig. 96
The isolated unicorn of the Indus Valley seals, on one from Mohenjo-Daro.

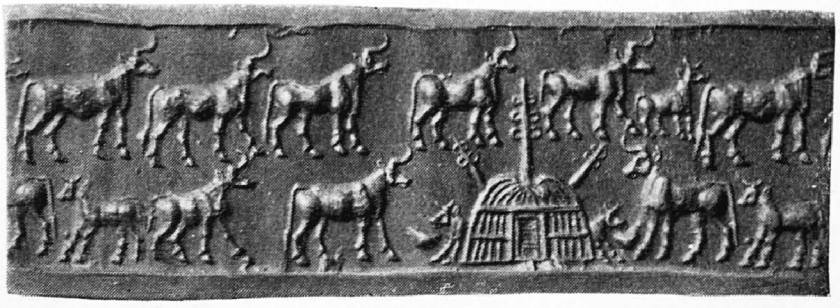

Fig. 97
A Sumerian seal from Jemdet Nasr bearing several unicorns in the Indian style.

Appendix I to this chapter much more will be said about the development of other signs and their tendency to simplification

[1] Piggot, *Some Ancient Cities of India*, pp. 16-17.
[2] Cf. above, pp. 72, 100-101, 164-165.

and stylisation. In many instances the development of some of the signs in the Sumerian script is only the continuation of the development which had begun in the Indus Valley.[1]

Fig. 98
Impression of a Mohenjo-Daro seal, partly damaged, depicting Bhīma between two rampant lions

But even the mere materiality of writing, or properly inscribing, the characters or signs evidently discloses some clearly different stages of improving the technique. There is a vast difference between the technique of the script shown in the broken seal whose impression is reproduced in Fig. 13 and that of the majority of the square seals. And even considering the latter only one cannot compare the magnificent regular writing of Figs 1, 4, 6, 14, and 35 with the somewhat careless way of carving the signs on the seals whose impressions are reproduced in Figs 5, 21, 24 and 99.

Fig. 99
Bhīma holding the two lions or tigers by the neck, on a seal from Mohenjo-Daro.

There is besides another kind of seals, practically all among those that bear an inscription only, which disclose a new tendency the study of which should not be neglected. I refer to a clear expansion of the end of some strokes which is almost never seen in the square seals. The attention of the readers is particularly drawn to the signs and in Fig. 110 and signs and (as well as to the determinatives of personality) in Fig. 109. (Cf. also Fig. 2 on p. 100) One wonders how this expansion was obtained at the time of carving the seal. Was it purposely

Fig. 100
The same scene of the Lion-Fighter on another seal from Mohenjo-Daro.

[1] Cf. in particular the development of the signs meaning "flag", "god", "offspring", "prince", etc.

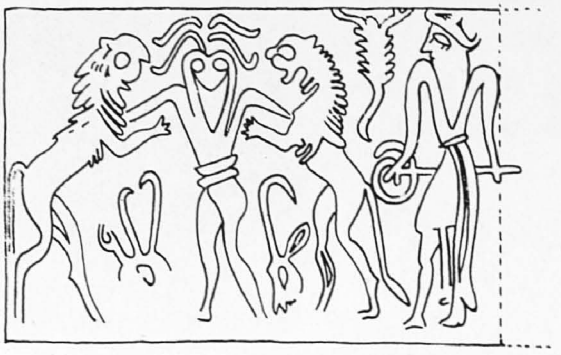

Fig. 101
Gilgamesh fighting with lions, on a seal from Fara.

done, or was it accidentally caused by flattening the implement used by the seal carver upon the surface of the seal? In any case it looks a new style of producing the same signs; a new school of writing, let us say, which owing to the final development of this script in Mesopotamia, when becoming cuneiform in the Babylo-Assyrian period, is of extraordinary significance. For these signs, with their clear wedge-shaped endings, should possibly be classified as the forerunners of the cuneiform script, in a very early stage of its development.

Fig. 102
A tiger under a tree on a seal from Mohenjo-Daro.

This is the proper place to compare the work of the Proto-Indian and Sumerian sculptors beside the field of glyptics. The Museum of our Indian Historical Research Institute possesses a very archaic Proto-Indian image of a King of, Naṇḍūr, whose origin may only be surmised.[1] The technique of the carving is very primitive though the features of the king are definitely marked with doubtless certainty. (Fig. 111). The attention of the readers should be drawn to two details which we see later reproduced in Sumerian statues. One is the position of the hands. That

Fig. 103
Impression of a seal from Mohenjo-Daro depicting the same scene.

[1] Before the actual discovery of Harappā and Mohenjo-Daro cities a number of objects belonging to this culture were known, owing to the brick searching parties of the villagers of the neighbourhood. While looking for bricks to build new houses, other objects were eventually found, which migrated to the hands of travellers. Thus a few seals of this culture were eventually published and some of them travelled to the British Museum before the actual discovery of Mohenjo-Daro and Harappā. They may be seen in Cunningham, *Report for the year 1872-73*, v, p. 108 and pl. XXXIII, Nos. 1 & 2; *Inscriptions of Aśoka, Corpus Inscriptionum, Indicarum*, I, (1877 ed.), pl. 38; *I.A.*, XV (1886), p. 1, fig. 1; *J.R.A.S.*, 1912, pl. facing p. 700. This icon must have had a similar origin. Cf. Heras, "A Proto-Indian Icon", pp. 472-474.

ancient sculptor found himself helpless when he was confronted with the problem of carving the hands. In fact the hands are the most difficult limb of the human body to be reproduced by artists of all ages. He solved that problem by joining both hands in front of the chest, a few parallel strokes suggesting the fingers of one of the hands; the other remaining hidden behind the former. This finally became the traditional way of carving the hands in the images of Sumer, in the early ones still in a rough shapeless way (Figs 112, 113); but later, as in the beautiful images of Gudea, the famous *pateśi* of Lagash, the hands and fingers have already their proper shapely contour. These images of Gudea are likewise enriched with precious inscriptions on the lower portion of the image as well as on the arms, in some cases. So it happens with the Proto-Indian icon we have been studying. Long inscriptions are inscribed in front and on the back of the icon, both enclosed within a cartouche, while the inscriptions found on each side are short and within a circle, in the same way as in Gudea's statues.

Fig. 104
Impression of a seal from Harappā depicting the same scene.

Fig. 105
Impression of a Sumerian seal bearing a scene round a tree.

Fig. 106
The animal wheel on a Proto-Indian seal from Mohenjo-Daro.

One thing is certain, the Sumerian sculptor as well as his Proto-Indian ancestor aimed at the reproduction of the human body, not in an idealistic or spiritual fashion, as the Gupta sculptor of a later age in India, but in the most remarkable realistic way that sculpture has ever known. The well modelled arms of Gudea's

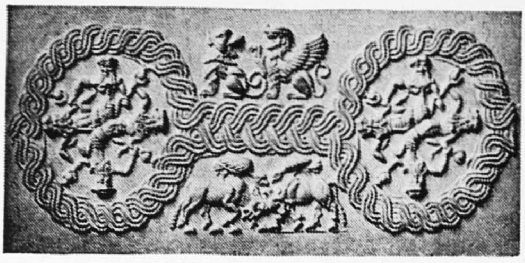

Fig. 107
The man wheel on a Sumerian seal from Akkad.

images, as well as the nude statue of Āṇ coming from Harappā (Fig. 28), are the supreme specimens of such realistic art in the reproduction of the human form, that the ancient East has ever produced.[1]

As regards the Sumerians themselves they have many points of contact with the people of Mohenjo-Daro. "The two portrait statues discovered in 1926 at Mohenjo-Daro in Sind", says Dawson, "undoubtedly represent the same type of low-browed oblique-eyed, broad-headed men as that in Sumerian art".[2] (Fig. 113). A very archaic figure of an Indian, discovered in the Zhob, the northeastern district of Balochistan, by Sir Aurel Stein, which is now in the Archaeological Store of the Peshawar Museum (Fig. 116), may appear as the portrait of a brother of some inhabitants of Kish portrayed in the sculptures unearthed by Mackay,[3] or of Kurlil (?) come to light at al-'Ubaid, and now in the British Museum.[4] (Fig. 119). D. H. and M. E. Gordon who are not inclined to acknowledge Indo-Sumerian con-

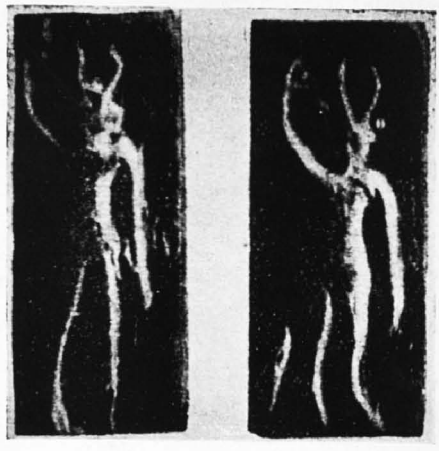

Fig. 108
Two Mohenjo-Daro seals displaying the figures of two demons.

Fig. 109
A Mohenjo-Daro seal which shows a new technique in the system of writing.

[1] Cf. Heras, "The Origin of the so-called Greco-Buddhist School of Sculpture of Gandhāra", *J.B.B.R.A.S.* (N.S.), XII, pp. 78-92.

[2] Dowson, *op. cit.*, p. 82.

[3] Cossio-Pijoán, *Summa Artis*, II, p. 26.

[4] Hall, *A Season's Work at Ur*, pp. 250-252.

nections, qualify the former as "by far the most Sumerian-looking object yet found in India".[1] (Fig. 116). From what we learn by studying the archaelogical monuments, the Sumerians dressed their hair in long locks in ordinary life; sometimes, nevertheless, we find some having a sort of a pig-tail.[2] Both ways of dressing their hair were also used in Mohenjo-Daro.[3] (Figs 119, 120).

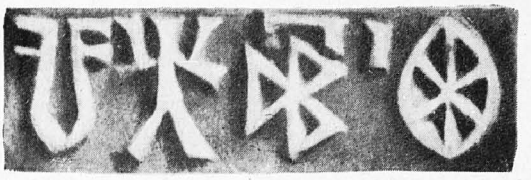

Fig. 110
A Mohenjo-Daro seal disclosing a cuneiform tendency in some of the signs.

Fig. 111
A very archaic figure of a King of Nandūr.

Some Sumerian Kings wore a fillet round their head. When Gilgamesh, King of Uruk, bathed after reaching the Island of Immortality, "the band round his head was made new".[4] This was also customary among the Proto-Indians.[5] The portrait of the Proto-Indian King, which has often been wrongly described as a *yogi*, wears this band (Fig. 121), which is otherwise known in Sanskrit literature as the *paṭabandha*. As regards their

[1] Gordon, "Mohenjo-Daro. Some Observations on Indian Prehistory", *Iraq*, VII, p. 11 and pl. 1.

[2] Frankfort, *Archaeology and the Sumerian Problem*, p. 14; Cossio-Pijoán, *op. cit.*, II, p. 46, fig. 59.

[3] Marshall, *op. cit.*, I, pl. XII, No. 18. Marshall thinks that the seven tailed figures shown in this seal are not men: "The seven figures in a line at the bottom I take to be female officiants or ministrants of the Goddess". *Ibid.*, I, p. 66. Mackay on the contrary is of opinion that they are "seven spirits or deities". Mackay, *The Indus Civilization*, p. 73. Elsewhere have I shown that they are seven victims of a human sacrifice. Cf. Heras, "Tree Worship in Mohenjo-Daro", p. 38. They are not the only ones. There is another party of seven in a fragment of a seal. Cf. Vats, *Excavations at Harappā*, II, No. 251. At a later period in Sumer two curls or tresses were allowed to fall on each side of the head. Cf. Frankfort, *Archaeology and the Sumerian Problem*, p. 14. The same thing occurs with the statues of An. Cf. Heras, "About a Wild Identification", p. 104.

[4] Leonard, *Gilgamesh*, p. 72.

[5] Marshall, *op. cit.*, III, pls. XCVIII and C.

Fig. 112
An archaic figure of a Sumerian from Tello.

attire the Sumerians wore the *kaunakes*, a woollen dress,[1] classified as the dress of a warm country, for it left the upper portion of the body bare.[2] (Figs 112, 125). We know from the *Ṛgveda* that one of the proto-Indian tribes, the *Paravatas* (most probably the Paravas[3]), who were inhabiting the banks of the Parusṇi (Rāvi), "clothed themselves in robes of wool".[4] Recently some images of the mother-goddess wearing a similar *kaunakes* were discovered at Rairh in Rājastān.[5] (Fig. 124).

A striking characteristic of Sumer as regards attire, was the perfect nudity of the priests when performing ritual ceremonies,[6] as has already been noted by Barton.[7] (Fig 126). Moreover, as we see from the carvings and seal impressions themselves, the priests were fully shaved both in head and face and as regards the whole body. (Figs 127, 128). The *Ṛgveda* also speaks of some *munis* "girdled with the wind", i.e. nude.[8] The Ājīvikas were also naked

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[1] Cf. Przyluski, "Une etoffe orientale, le kaunakes", *J.R.A.S.*, 1931, pp. 339-347.

[2] Crawford "The Birthplace of Civilization", *Geographical Review*, XVI (1926), pp. 74-75.

[3] Probably they were the Paravas called *Pagal Paravir*, "Sun Paravas". Cf. Heras, "The 'Mīnavan' in Mohenjo Daro", p. 284.

[4] *Ṛg.*, V, 52, 9.

[5] Puri, *Excavations at Rairh*, pl. XII. Cf. Heras, "Excavations at Rairh," *The New Review* XVI, p. 457.

[6] Woolley, *The Development of Sumerian Art*, pl. 18, a ; Woolley, *The Royal Cemetery* (*Ur Excavations*), pl. 11, b ; Gadd, *History and Monuments of Ur*, pl. XI ; Jeremias, *Handbuch der altorientalischen Geisteskultur*, p. 62 ; Cossio-Pijoán, *Summa Artis*, II, p. 50, fig. 66 ; p. 51, fig, 68 ; p. 52, fig 69 ; Instituto Gallach, *Historia Universal*, I, p. 130.

[7] Barton, "Whence Came the Sumerians ?", *J.A.O.S.*, XLIV, p. 264 ; Barton, *Semitic and Hamitic Origins*, pp. 36-37, where he says : "On solemn religious occasions, where Sumerians were officiating before the gods, they discarded all clothing and were entirely nude."

[8] *Ṛg.*, X, 136, 2.

ascetics.[1] So were also the Jaina Nirgranthas in the beginning,[2] a custom which has been kept by the sect of the Digambaras (clad with the sky). Accordingly, the Jaina *tīrthaṅkaras* are represented nude. (Fig. 114). As regards the shaving of the body, it is held in India as the symbol of the cleanliness of the mind.[3] "When the lamp or the oil or the wick is not free from dirt, the light that is given is not clear. In like manner when the mind is unclean, the truths necessary to be known cannot be discovered, and the rights of asceticism cannot be properly exercised; but when the body is clean, the mind partakes of the same purity; and as the lamp and wick, when free from dirt, give a clear light, so the mind that is pure can discern the truths and exercise the rites in a proper manner."[4] Some of the *samkskāras*, as the *Chaula*, *Upanāyana* and *Godāna* ceremonies "require the shaving of the body".[5] One of the ceremonies to be performed by the youth who is going to be married, among the Syrian Christians of Malabar, is the removing of the hair of his body on the eve of his wedding.[6] Frankfort maintains that there was no fixed rule for the disposal of the dead amongst the Sume-

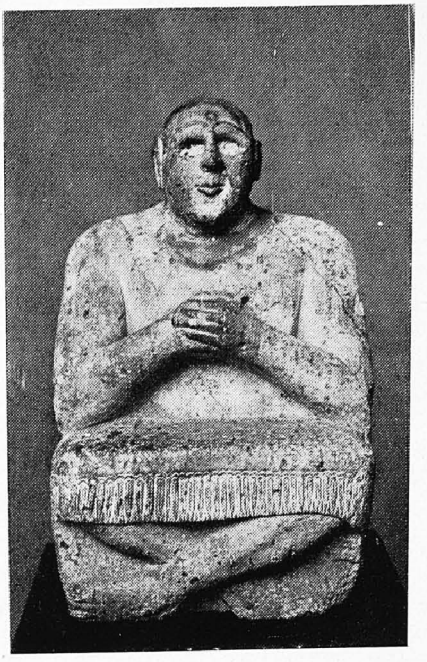

Fig. 113
Stone figure of a Sumerian, of unknown provenance.

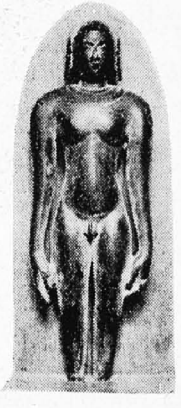

Fig. 114
A Digambara Jaina *tīrthaṅkara*, from Gersoppa.

[1] Barua, *The Ajīvikas*, p. 11.

[2] Especially the Jīnakalpikas, who tried to imitate Mahāvīra. Cf. Shah, *Jainism in North India*, pp. 25-26.

[3] Subramanyam, *The Tonsure of Hindu Widows*, p. 4.

[4] *Ibid.*, p. 9. Cf. *Milindapaṅho*, I, 23. (*S.B.E.*, XXXV, p. 19)

[5] *Ibid.*, p. 3

[6] Placidus a Sto. Joseph, *Fontes Juris Canonici Juris Malankarensium*, p. 185, n. 1.

Fig. 115
A seated figure of Gudea, *pateśi* of Lagash, from Tello.

rians.[1] There was no fixed rule among the Proto-Indians either, though it is true that a number of graves discovered at al-'Ubaid[2] are very similar to some graves unearthed at Harappā.[3] (Fig. 130). The corpses were generally placed lying on one side in the well known embryo position. Also in Sumer generally the body lay on its right side.[4]

As to the domestic animals of the Sumerians, Frankfort believes that they had the horse; but if one inspects carefully the figures of equine specimens of those days,[5] one soon realizes that they are asses. (Fig. 131). "The horse was not known in Mesopotamia until 2000 B.C. or later", says Woolley.[6] It was not strange; it was unknown to the Proto-Indians in a similar way.[7] On the contrary, it is quite evident that the Sumerians knew the humped bull, as is represented in several carvings.[8] (Fig. 132). The humped bull therefore existed amongst the Sumerians; it must have been

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[1] Frankfort, *Archaeology and the Sumerian Problem*, p. 27.

[2] Gadd, *History and Monuments of Ur*, p. 17.

[3] Marshall, *op. cit.*, I, p. 80, fig. 2.

[4] Woolley, *Ur of the Chaldees*, p. 75.

[5] Frankfort, *op. cit.*, fig. 7, No. 29; Woolley, *The Sumerians*, pl. 14.

[6] Woolley, *op. cit.*, p. 50.

[7] Marshall, *op. cit.*, I, p. 28.

[8] Frankfort, *Progress of the Work of the Oriental Institute in Iraq*, 1934-35, p. 95, fig. 73; Sanford, *The Mediterranean World in Ancient Times*, p. 34, pl. 2. Cf. Marshall, *op. cit.*, I, p. 28.

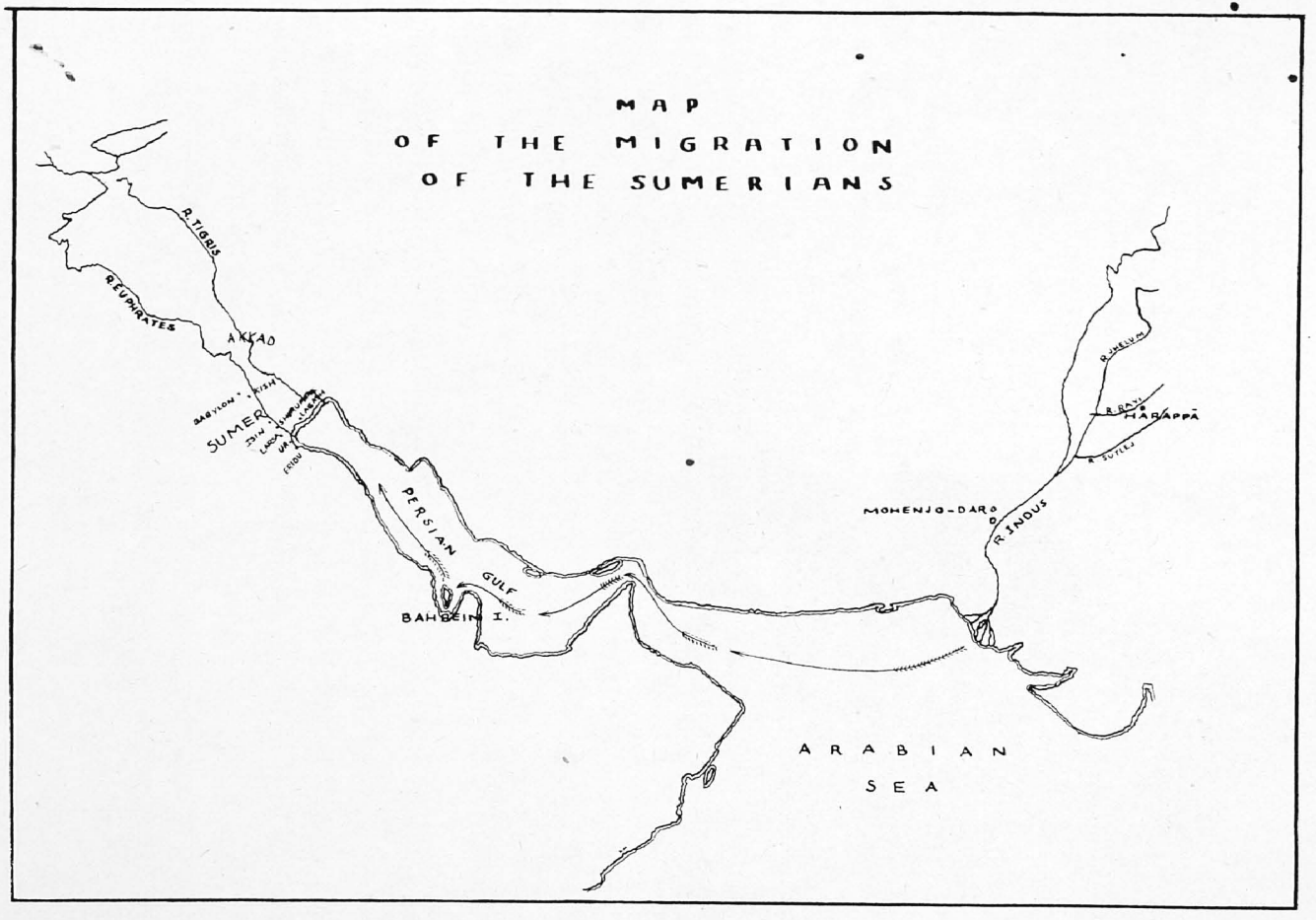


Fig. 116
Illustrating the actual migration of the Proto-Indians from the Indus Valley to Sumer.

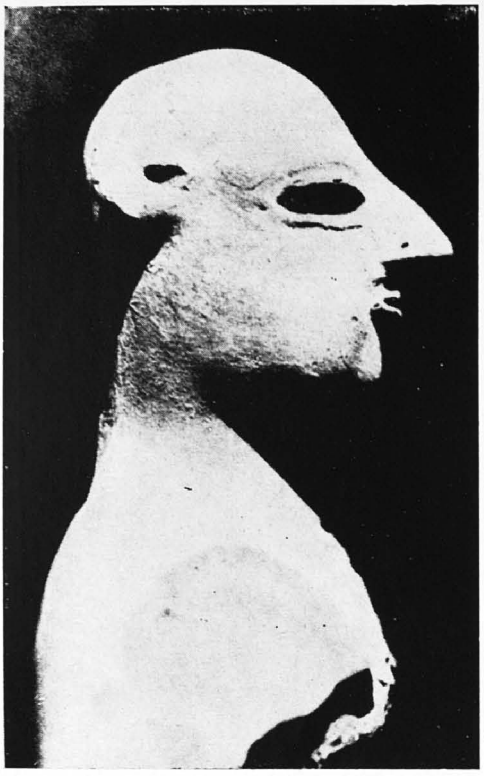


Fig. 117
Terracotta figure of an Indian from the Zhob, Balochistan, of a clear Sumerian cut.

brought by them from their homeland. The humped bull is a purely Indian animal.[1]

V

THE DATE OF THE CIVILIZATION OF THE INDUS VALLEY

What was, therefore, the date of the Mohenjo-Daro civilization, if it is to be placed before the beginning of Sumerian history? Sumerian history commences during the fourth millennium B.C. Mohenjo-Daro therefore must belong to the beginning of this millennium or to the fifth millennium B.C. Prof. Pirenne pointedly says in this connection: "The cities of the Indus seem more progressive, and consequently more ancient than those of the Mesopotamian delta. Perhaps the latter were born out of the contact with the former".[2] Some of the astronomical observations recorded in the inscriptions of the Indus Valley will help us to determine the date with a greater degree of certainty.

Fig. 118
Impression of a seal of Mohenjo-Daro which mentions the quick step of the Ram.

The most interesting inscription in this respect is the following :–

[3]

The inscription reads: *ēḍu ōḍu para*, i.e. "the Ram runs flying." (Fig. 118). In these words there is a tacit comparison between

[1] Cf. Joseph, "The near East and the Indus Valley", *J.U.B.*, XII (1944), pp. 10-11.
[2] Pirenne, *Las Grandes Corrientes de la Historia Universal*, I, p. 11.
[3] Marshall, M.D., No. 194.

the running of the Ram and, the running or speed of the other constellations; for while stating that the Ram runs flying, this document also states that the Ram runs faster than the other constellations. The statement that the Ram runs faster very likely refers to the length or duration of the day during the period when they saw the Sun in the house of the Ram. The inscription, therefore, meant that while the Sun was in the Ram, the days, i.e. the period of daylight, were shorter.[1] This naturally would happen in winter. Another inscription, which speaks of the constellation of the Mother, confirms the winter position of the Ram. This inscription says that "the Mother in the middle year walks ant-like", i.e. very slowly.[2] (Fig. 138). It is but natural; if the Mother is in the middle of the year, i.e. round the summer solstice, she must appear proceeding very slowly, as the days are very long in summer. That the Ram was in winter

Fig. 119
A Sumerian named Kur-lil from al-'Ubaid.

Fig. 120
Impression of a seal of Mohenjo-Daro showing seven victims for a human sacrice having long pig-tails.

[1] Frankfort, *Archaeology and the Sumerian Problem*, fig. 7. No. 29; Woolley, *The Sumerians*, p. 14.

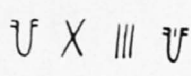
[2] Modern Hindus call four months of the year "fast months"; other four months are called "slow months"; the remaining four months are called "fast-slow". Even in this denomination one easily discovers the old octagonal division of the year. The "fast months" and the "slow months" must have been the old eight months. When four new months were added, they became "fast-slow".

Fig. 121
A Sumerian showing his pig-tail, in an inlaid plaque from Kish.

Ram, is of three garments"; viz. in the beginning of the year, during the month of the Ram, three garments are required. Such was the way of reckoning the intensity of cold among those early people.[2] This shows that the Sun passed over the Ram in winter. Could the Ram ever have been one of the winter constellations?

When the Greek astronomer Hipparchus, in the beginning of the second century B.C., studied the position of the stars, he found that the beginning of the constellation of the Ram coincided with the spring equinox. At the same time he dis-

time in the Mohenjo-Daro period, the following inscription settles beyond any doubt:

 [1]

It reads as follows: *ēdu kōdi ēḍu mūn uḍa adu*, which means: "The beginning year of the

Fig. 122
A king of the Indus Valley having his head adorned with a fillet.

[1] Marshall, *op cit.*, No. 179.

[2] The Gaudas, a Kannada speaking tribe of the mountains of South Kanara, still speak of the intensity of cold in winter time in the same way. Cf Heras, "Light on the Mohenjo-Daro Riddle, p.16, and above, p. 127.

covered the precession of the equinoxes by which the ecliptic almost imperceptibly moves towards the west, one degree in 72 years. Accordingly the constellations are being slightly displaced towards the east. Thus the constellation of the Ram is not in the beginning of the spring any longer. The Fishes have taken its place, and the Ram is now in the middle of the spring.

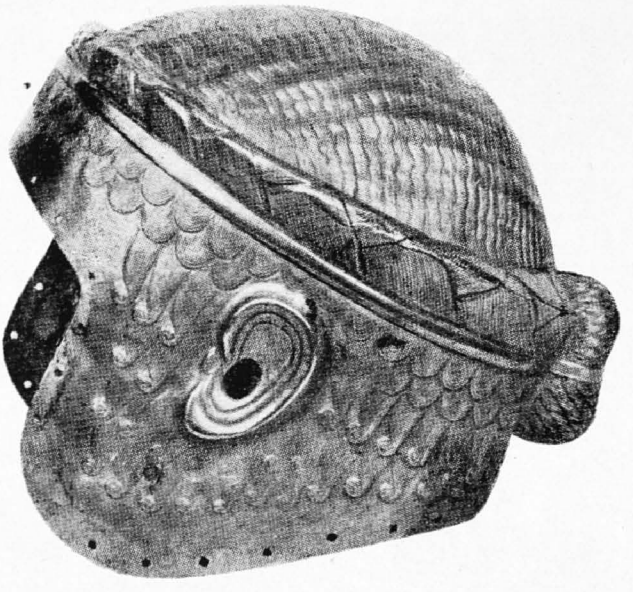


Fig. 123
Golden helmet of Mes-kalam-dug of Ur, showing the royal fillet round his head.

Fig. 124
Terracotta figure of the Mother goddess from Rairh, Rājastān, wearing a *kaunakes*.

Accordingly, in the time of the Chaldaeans — the hitherto supposed inventors of the Zodiac — the Ram was to be found towards the west of the spring equinox, between it and the winter solstice. Is it possible to suppose that when the Zodiac was imagined or invented, the Ram, which was the first constellation of the year, was found somewhere between the winter solstice and the spring equinox? This does not seem likely, because there is not a well fixed point where to commence the year between the winter solstice and the spring equinox. In the ecliptic there are four well determined points, the two solstices and the two equinoxes. Once the Ram has passed beyond the spring equinox, we

Fig. 125
A Sumerian figure from Khafaje wearing a *kaunakes*.

cannot find another well defined point for it, till we reach the winter solstice. In point of fact according to the astronomical system of the Chaldaeans, the year begins when the Sun enters the first point of the constellation of the Ram. And yet their astronomical tablets show that the spring equinox coincided with the Sun's entrance into the constellation of the Bull. Thus in the 26th century B.C. the Bull became the first constellation of the year. Accordingly this Bull was named "the directing Bull", i.e. the Bull that goes ahead in

Fig. 126
A Sumerian plaque from Ur showing two nude priests performing sacrificial libations.

the course of the year, and "the celestial Bull", and "the Bull of light", which was also identified with the Sun-god, Marduk.[1] This discrepancy between the astronomical system and the tablets, suggests that in ancient times, as the former shows, the year started with the Ram; but at a later period, when the tablets were being written, the beginning of the year was made to coincide with the constellation of the Bull. What may have been the reason of this change? In the Sumerian period the Ram was still the first constellation of the year.[2] The numerous figures and terracottas of Rams[3] show the importance of this animal in everyday life. God Enlil was supposed to have his residence in the house of the Ram, through which he was to reveal himself to men.[4] The Sun God, Stanu, of the Hittites is depicted, on the rocks of Iasily

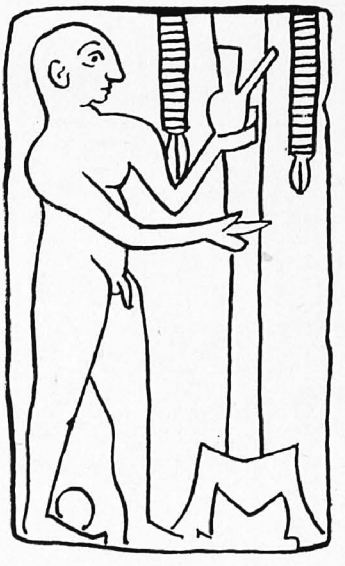


Fig. 127
A Sumerian priest ready for a sacrifice, on a shell plaque from Ur.

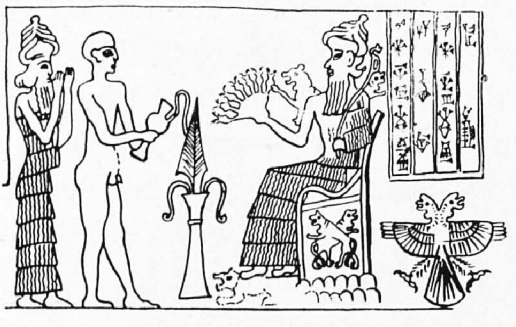


Fig. 128
A Sumerian priest performing a sacrifice, on a seal from Lagash.

[1] Sayce, *Lectures on the Origin and Growth of Religion*, pp. 291-293.

[2] "Sumerii multarum rerum ad astronomiam pertinentium periti erant". Kortleitner, *op. cit.*, p. 43. In modern times a controversy has been going on concerning the discoverer of the precession of the equinoxes. Was he really Hipparchus or was he the Babylonian astronomer Kidinnu, as Schnabel propounded in 1932? Prof. O. Neugebauer, of the Brown University, U.S.A., has very recently defended the claims of the former ("The alleged Babylonian Discovery of the Precession of the Equinoxes," *J.A.O.S.*, LXX, pp. 1-8). Yet the data mentioned in the text, that the astronomers of Sumer and Babylon had noted the discrepancy between the civil reckoning of the year and the astronomical tablets show that all the data concerning the precession of the equinoxes were well known to them, and it would have been astonishing that they should not have drawn the final conclusion. Whether the actual discoverer was Kidinnu or Naburianu or any other astronomer is immaterial. One cannot but acknowledge the reasonableness of the argumentation of Schnabel (*Berossos und die babylonische-hellenistische Literatur*. Leipzig-Berlin, 1923) consequently Meissner concludes: "The precession of the equinoxes seems to have been known to the great astronomer of Sippar, Kidennu (Kidenas) more than a century before the time of its reputed Greek discoverer Hipparchus", (*Babylonien und Assyrien*, II, pp. 416-418).

[3] C. Woolley, *The Development of Sumerian Art*, pl. 22, b; 36; 48, b; 68, *passim*.

[4] Radau, *Sumerian Hymns and Prayers to God Nin-ib*, pp. 34-35.

Fig. 129
A nude priest pouring out a libation before a godess, on a Sumerian plaque.

Kaya, accompanied by a Ram.[1] In Egypt the Ram was the animal sacred to Ammon, the first god of the triad of Thebes;[2] at Thebes the image of Jupiter (i. e. Ammon) had a face like that of a Ram;[3] the spirit of Ammon was supposed to dwell in the Ram-headed sphinx;[4] Khnemu, the god creator of man, is also represented Ram-headed.[5] In Libya they worshipped Ammon decorated with Ram's horns attached to his head.[6] Herodotus narrates that according to the Egyptians when Jupiter appeared to Herakles, he covered his face with the skin of a Ram.[7] In Rome Jupiter was also represented at times with the horns of a Ram and was called then Jupiter-Ammon owing to its resemblance to the Egyptian god.[8] The Iberians also adored a god crowned with the horns of a Ram.[9] A Druid sculpture from France shows the supreme god holding the head of a Ram in his left hand.[10] The last link in this chain of tradition concerning the Ram united with God comes from English literature. Gower speaking of the constellation of Aries says:

"The Creatór of alle kinde
Upon this Signé first began
The world, whan that he madé man,
And of this constellación
The verray operación

1 Garstang, *The Land of the Hittites*, pl. LXV.
2 Wallis Budge, *From Fetish to God.*
3 Herodotus, II, 77 and 181.
4 *Ibid.*
5 *Ibid.*, pp. 76 and 174.
6 Bates, *The Eastern Libyans*, pp. 189-190.
7 Herodotus, I, 42.
8 Cf. below, Ch. III, Appendix.
9 Cf. Heras, "Quienes eran los Druidas?", *Ampurias*, II, pl. 2, facing p. 25.
10 Reinach, *Guide Ilustrée du Musée de Saint-Germain*, p. 72, fig. 69.

Availeth, if a man therinne
The purpuse of his werk beginne,
For than he hath of propreté
Good spede and great felicité".[1]

Fig. 130
A tomb discovered at Mohenjo-Daro, the body lying on his right side.

Milton again describes the temptation of Paradise "while the Sun in Aries rose".[2]

During the Sumerian times the constellation of the Ram was more or less in the winter solstice or very near it. When, during the Babylonian period, it was found that the Ram was between the winter solstice and the spring equinox, i.e. not at any well defined point where the year could definitely be started, it was decided to commence the year in the constellation of the Bull the beginning of which then coincided with the spring equinox. An echo of this new role of the Bull is found in Virgil who commemorates the Bull as opening the new year: *Candidus auratis aperit cum cornibus annum Taurus.*[3] Now the following important question arises: When would the constellation of the Ram be in the winter solstice in its starting movement according to the movement of the ecliptic precession?

Fig. 131
A Sumerian chariot drawn by four asses. A toy discovered at Tell Agrab.

Since the ecliptic moves one degree every 72 years, it will move 30 degrees, i.e. the space of one of the constellations, every 72 years

[1] Gower, *Confessio Amantis*, VII, 994-1002.
[2] Milton, *Paradise Lost*, X, 329.
[3] Virgil, *Georgicorum*, Liber II, v. 217.

multiplied by 30, i.e. every 2,160 years (That is the reason why the constellation of the Ram is now displaced 30° degrees from the time of Hipparchus, 140 B.C.). Now since at this date the Ram was in the beginning of spring, we shall arrive at the exact date of the Ram in the winter solstice by summing 140 (remaining B.C.) years before the beginning of the Christian era, 2,160 (last constellation of winter), 2,160 (middle constellation of winter) and 2,160 (first constellation of winter), thus :

	140
	2,160
	2,160
	2,160
Total	6,620 years

This rough round calculation has carried us a little too far, owing to some small difference in the period of the precession movement of the ecliptic. In fact the beginning of the constellation of the Ram coincided with the winter solstice in the year 6,594 B.C. But is the present constellation of the Ram the same as the old constellation of the Mohenjo-Darians ? That is the crucial point in this very intricate and important question.

Fig. 132
A Sumerian humped bull from Ishchali, in Sumer.

There is no doubt that the present constellation of the Ram is substantially the same as that studied by Hipparchus. It is also evident that the constellation of Hipparchus must be the same constellation of the Chaldaeans, for Hipparchus' principles of astronomy are the principles of the Chaldaean astronomy. The real doubt occurs when proceeding to an earlier age, because the Chaldaeans had already twelve constellations in the Zodiac, while

the Mohenjo-Darians had eight only. Two of the constellations of the Mohenjo-Daro Zodiac may give us a starting point to locate all the others on the present Zodiac. These two constellations are the second, the Harp, and the sixth, the Arrow. Let us consider the latter first.

The constellation of the Arrow had to be found not far from the present constellation of the Slinger (*Sagittarius*). The *Scorpio* which is now next to the Slinger did not exist in the Proto-Dravidian Zodiac ; and yet the Scorpion is one of the most characteristic constellations of the present Zodiac. The so-called tail of the Scorpion is as characteristic as the arrow-like head of the constellation. This makes one suspect that the Arrow of the Mohenjo-Darians coincided with the present Scorpion.

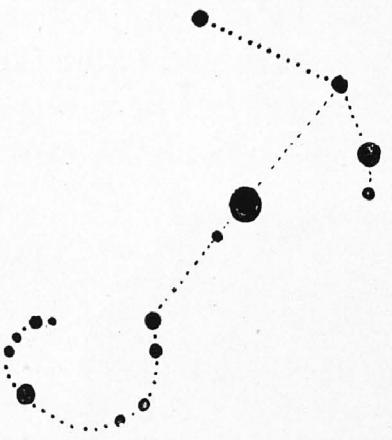


Fig. 133
Position of the stars that form the constellation of the Scorpion.

This suspicion was confirmed by one of the Mohenjo-Daro inscriptions which contains a description of the constellation of the Arrow :–

[1]

This inscription reads as follows : *Mūn ire perper mīn kaṇi karumukil tūkodu*, i.e. "the Arrow of the very great star which has three (stars) (is) with the rain-cloudy Scale". (Fig. 133). Let us notice first of all that the Arrow is next to the Scale in the Mohenjo-Daro Zodiac. It is the constellation that follows the Scale. The latter is called "rain-cloudy" or "of the rain clouds", for if the Ram is placed in the winter solstice, i.e. in December, the Scale will correspond to June and part of July, during which time the monsoon

[1] Vats, H., No. 10185(b).

begins on the Western Coast.[1] Now the Arrow is said to be a constellation "of a very large star". This star is in the present constellation of the Scorpion : it is Antares, a star of first magnitude, one of the brightest stars of the sky. Moreover the Arrow is said in the inscription to have three stars ; they are the three main stars that form the arrow-head of the present Scorpion.[2]

The very way that the constellation of the Arrow is represented in the Indus script still strengthens this identification. This sign is not ↑, as one might expect, but ↟, in which the central knob of the shaft seems to reproduce Antares, as seen in the imaginary shaft of the celestial Arrow.

Fig. 134
Impression of a Mohenjo-Daro seal which mentions the constellation of the *Yāḷ*.

The other constellation of the Mohenjo-Darians worthy of our attention is the Harp, *Yāḷ*. As we have seen before, the denomination of this constellation was changed in Sumer. Henceforth it was called *Taurus*, the Bull. In fact the stars which are supposed to mark the horns of the bull are so placed upon the sky that, looked at from another point of view, they take the shape of the *Yāḷ* as is represented in our inscriptions (Fig. 136).

Having identified these two constellations we shall be able to locate all the other constellations of the Mohenjo-Daro Zodiac. (Fig. 135). The constellation of *Yāḷ* took a good portion of the present constellation of the Ram, the whole of the Bull, and a small portion of the Twins. *Naṇḍ*, the Crab, had almost the whole of the Twins and a good portion of the Crab. *Ama*, the Mother or Virgin, had a small portion of the Crab, the whole of the Lion and nearly half of the Virgin. *Tūk*, the Scale, somewhat more than half the Virgin and nearly three-quarters of the Scale. *Kaṇi*, the Arrow,

[1] Cf. Heras, "The Longest Mohenjo-Daro Epigraph", p. 235.

[2] In connection with these three stars it is interesting to remember the Babylonian tradition that god Marduk "set up for the twelve months of the year three stars apiece". British Museum, *The Babylonian Legend of the Creation*, p. 24.

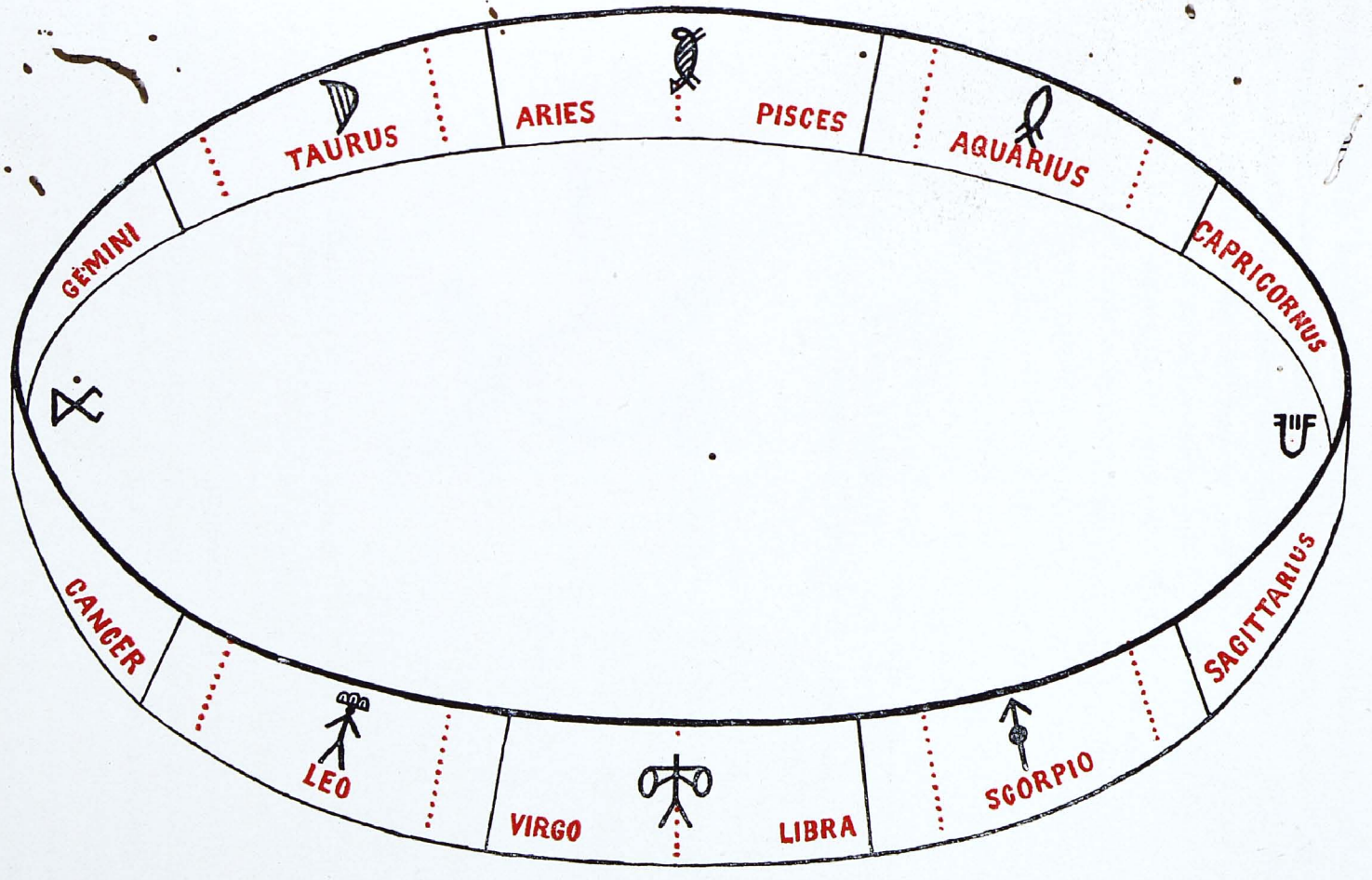


Fig. 135
Illustrating the Zodiacal signs of the Proto-Indians and the relative position of the modern Zodiacal constellations.

Fig. 136
Position of the stars forming the constellation of the Harp, *Yāḷ*.

something more than a quarter of the Scale, the whole of the Scorpion and about a quarter of the Slinger; *Kuḍa*, the Water-Jar, about three quarters of the Scale and something more than three quarters of Capricorn; *Mīn*, the Fish, a small portion of the Capricorn, the whole of Aquarius and something more than a quarter of the Fishes; and finally *Ēḍu*, the Ram, had nearly three quarters of the Fishes and somewhat more than three quarters of the present Ram. This constellation of the Ram of the Mohenjo-Darians was placed between the present constellations of the Ram and the Fishes.

Indeed, if we look at the sky on a dark starry night we shall discover between these two constellations and a small corner of the constellation of the Whale, a number of stars in such positions that they resemble the very shape of the Ram, always head downwards, of the Mohenjo-Daro signs. (Fig. 137).

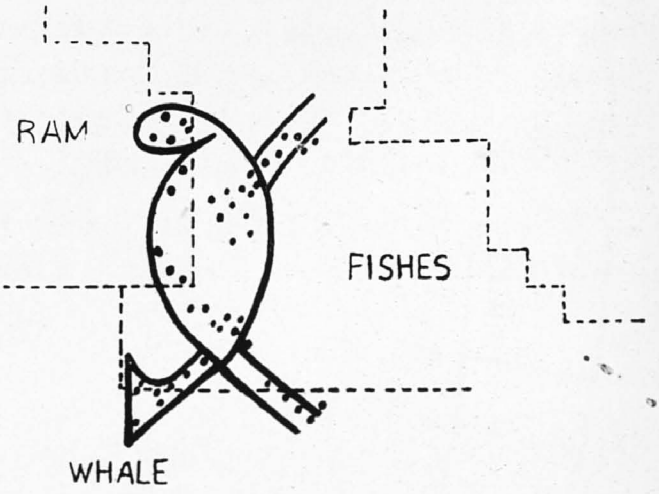


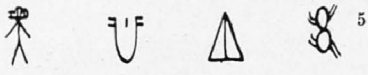
Fig. 137
The stars forming the constellation of the Ram give the shape of the sign that reads *Ēḍu*.

According to our reasoning, confirmed by the scrutiny of the stars themselves in the sky, the ancient constellation of the Ram had nearly three quarters of the present constellation of the Fishes. Therefore, the beginning of the Ram was about 21 degrees earlier than at present. I placed all these data in the hands of Rev. Fr A. Romañá, S.J., Director, Observatorio del Ebro, Tortosa, Spain. He studied the case thoroughly and after some time he wrote to me

that according to his calculation the beginning of the constellation of the Ram of the Mohenjo-Darians coincided with the winter solstice in the year 4,980 B.C., which we may take as the probable B.C. date when the beginning of the Ram was in the winter solstice, i.e. when the Zodiac was imagined as a system of time-reckoning by the Proto-Indian people.[1]

It must be quite clear that the seals with inscriptions which we have been studying, do not belong to such an early age; for precisely the inscription which has given foundation to our reasoning already shows that it belongs to a period when the script had developed away from its original stage. The middle sign of this inscription is . It represents a leg, the lower portion of which is highly conventionalized. Another inscription has kept the original shape , which is a clear pictograph.[2] And yet the inscription under discussion does not belong to the later period of Mohenjo-Daro, for this sign is found only once, in this inscription precisely; in all the other inscriptions the leg is represented stylized[4], and that represents the last stage of development of a pictographic sign.[3]

To this advanced period very likely belonged a seal the inscription on which is as follows:–

 [5]

The inscription reads (from right to left):
erubūru ari ēḍu amā

Fig. 138
Impression of a seal of Mohenjo-Daro which mentions the slow course of the Mother.

[1] The position of the stars in this and the preceding drawings as well as the division of the constellations on the drawing of Fig. 137 have been taken from the *Atlas Celeste*, par E. Delporte of the *International Astronomical Union*.

[2] Frankfort, *Archaeology and the Sumerian Problem*, p. 28, says that the Indus civilization is later than the al-'Ubaid culture. We readily admit that the things found up to the present in the Indus Valley may be later than the al-'Ubaid period. Yet these later things reveal to us the existence of a very high culture at a date earlier than al-'Ubaid. This early date of the astronomical observations of the Indus Valley people tallies with what is being said of the Sumerian invasion, that "the Sumerians were in Babylonya before the dawn of history". Barton, *op. cit.*, p. 263. "Soon after 4,000 B.C. the Sumerians arrived at the head of the Persian gulf with a fully developed civilization; they probably came from the east, and possibly from the north-west India". Haddon, *The Races of Man and their Distribution*, p. 100.

[3] Mackay, *op. cit.*, II, pl. XCV, No. 442.

[4] Marshall, M.D., Nos. 12, 13, 21, 87, 370, 549; H., 39, 47. Cf. above, p. 72.

[5] *Ibid.*, M.D., No. 182. Cf. above p. 231.

which means: "the Mother of half of the year walking like an ant". (Fig. 138). This inscription avers that the Mother (the Virgin) walks very slowly; in point of fact, if the inscription means anything, it means that the Mother walks more slowly than all the other constellations. Now if the constellation of the Mother goes more slowly than the others, i.e. if, when the Sun is in this constellation, the days are longer, the days will be shorter in the opposite constellation, and the opposite constellation is not the Ram, but the Fish. Evidently therefore when this remark about the Mother was inscribed on this seal, the Ram had already been displaced and the Fish was occupying the place of the Ram, next to the winter solstice. This does not prove that a period of two thousand years had elapsed between the two inscriptions, for the former epigraph may only be a proverb or a saying recording the ancient tradition of the fast running of the Ram.[1]

Before ending this question we must say that as we commence the astronomical year at the time of the passing of the Sun through the spring equinox, so the ancient authors of the Zodiac, the Proto-Indian people, began the year when the Sun passed through the winter solstice. Accordingly astrology always considers that point as the beginning of the year. After all it is more natural to begin the year when the Sun is at the winter solstice, for then the Sun is in the lowermost point of its career; it commences its rising then.

A number of inscriptions confirm the inscription which fixes the position of the Ram; for instance, that the Crab is the first constellation which appears in the north,[2] i.e. in the spring equinox; that the Scale ends the spring,[3] etc.

VI

CONCLUSION

This date arrived at by the study of the Mohenjo-Daro inscriptions is very suggestive. It was always being supposed, after

[1] Some similar statements found in Greek literature may be seen referred to by Mr. J. K. Fotheringham, Oxford, in a letter published in *The Times*, London, March 27, 1936.

[2] Marshall, M.D., No. 233.

[3] *Ibid.*, No. 436.

the post-war excavations conducted in Mesopotamia, that the Sumerian civilization was the earliest civilization in the ancient world. Now we have found one which is still earlier. Our civilization is therefore also older than the Egyptian civilization. Rightly had Prof. Pirenne guessed this some time ago: "The civilization of India may, owing to its amplitude and to the high level of its urban life, become the oldest civilization of those which we know up to now".[1] In fact when the Mohenjo-Darians, i.e. the Proto-Indians, after settling in Sumer for some time had already multiplied as Sumerians, "they said: 'Come let us make a city and a tower, the top whereof may reach heaven; and let us make our name famous before we be scattered abroad into all lands' ".[2] They decided to build a high tower to commemorate their name before going into new lands. Where to? Not precisely towards the east, whence they came, but further towards the north and the west, and one of the halts in their career of migration, after crossing the peninsula of Sinai, was Egypt.

Indeed the primitive religion of Egypt also derived from that of Mohenjo-Daro. In the Indus Valley cities Āṇ, the Supreme Being, was identified with the Sun,[3] while the most ancient god of Egypt seemed to be Rā,[4] the Sun, the main city of whose worship was Anu,[5] the city called Heliopolis by the Greeks. Anu was probably Aṇār in ancient times, which name simply means the city of Āṇ. In fact the hieroglyphs used for writing the name of this city seem to read "city of Āṇ". Rā had no special image at Anu. He was being worshipped under the shape of a fluted column,[6] which was evidently the phallic emblem worshipped at Mohenjo-Daro. Thus in the name of Anu the sign of the *phallus* takes the place of the sign of Āṇ. The Egyptian hieroglyphs read this way :–

[1] Pirenne, *Las Grandes Corrientes de la Historia Universal*, I, p. 15.

[2] *Gen.*, XI, 4. Cf. below, Chapter III, IV.

[3] Cf. Heras, "The Religion of the Mohenjo-Daro People", pp. 12-13.

[4] *Ra* is possibly an ancient Dravidian name for Sun; for *ira*—originally *ilra*—means 'night', i.e. no Sun, without Sun. *Ra*, indeed, is a constituent of a name of a famous Dravidian King, the rival of Rāma, of epic fame. Rāvana seems to mean "the elder brother of the Sun". At a later period, when the Tamiḷas found it difficult to pronounce the initial *r*, the name was simply forgotten. The same *Ra* was called An in more ancient times. Cf. below, Chapter III, II.

[5] Sayce, *The Religions of Ancient Egypt and Babylonia*, p. 82.

[6] *Ibid.*, p. 85.

(from left to right)

If we substitute the so-called column for Āṇ we could write this name in the Mohenjo-Daro writing as follows :–

(from right to left) [1]

which reads: *Āṇ adu pali*, i.e. "the city of Āṇ". The similarity between the corresponding signs of these two inscriptions is most remarkable.

Rā, in Egypt, was also accompanied by two gods, one male and one female,[2] and used to take eight forms, which were considered to be as many gods, in the Mohenjo-Daro fashion.[3] An individual god of Egypt in particular shows a clear influence from the Mohenjo-Daro mythology. This god is Min, which being an ithiphalic god, was also supposed to be a celestial deity and the god of fertility,[4] in the same way as Mīn, the Fish, the most popular form of God Āṇ, at Mohenjo-Daro.[5] It is also interesting to notice in connection with god Min that on its very ancient statues worshipped in upper Egypt there is the image of a fish-horn engraved, as in memory of the archaic meaning of Mīn in the Proto-Indian language.[6] (Fig. 139).

The migration of the Mediterranean race seems therefore not to have been from west to east, but from east to west, following the chain of *dolmens* and megaliths which commences in Ceylon,[7] continues in the mountains and plains of Southern India,[8] and

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[1] The similarity of these signs with the Egyptian hieroglyphs is easily detected.

[2] Sayce, *op. cit.*, pp. 83-84 and 89.

[3] *Ibid.*, p. 132.

[4] Cf. Wainwright, "Some Celestial Associations of Min", *The Journal of Egyptian Archaeology*, XXI, pp. 152-170.

[5] Cf. Heras, "Tree Worship at Mohenjo Daro", p. 36, and below, Chapter IV, IV.

[6] Cf. Capart, *Primitive Art in Egypt*, pp. 223-225. Cf. below, Chapter IV.

[7] Mendis, *A Ceylon and World History, up to 1500*, p. 6.

[8] Anglade-Newton, "Dolmens of the Pulney Hills" (*Memoirs of the A. S. of I.*, No. 36); Breeks, *An Account of the Primitive Tribes and Monuments of Nilagiris*, pls xliv-xlv; Garstin, "Dolmens in Coromandel Coast", *I.A.*, V, pp. 159-160; 255-256.

in the plains of the Karnāṭaka[1] and the plateau of Mahāraṣṭra[2] up to Kashmir,[3] passes to Syria,[4] Cyprus,[5] Malta,[6] and Egypt,[7] extends along the northern coast of Africa,[8] reaches southern Italy,[9] crosses to Spain,[10] jumps over the Pyrennees to south-western France and Brittany,[11] reaches Germany,[12] bridges the channel to enter England and Scotland[13] and finds its end in Ireland.[14] The Minoan civilization therefore seems to be only an offshoot of the original Mohenjo-Daro culture. Another branch of the same tree would be the Iberian civilization of Spain, some monuments of which also reveal a very high degree of culture. The paintings of the palace of Minos showing bull-fights,[15] are only a link between the same feats celebrated in ancient times at Mohenjo-Daro (and even

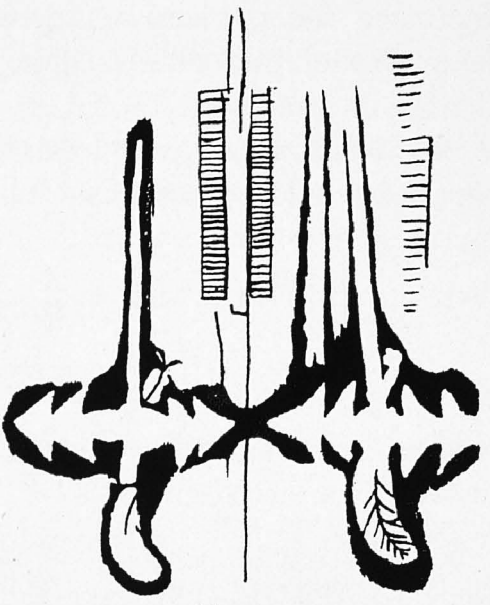

Fig. 139
Representation of the sword of the sword-fish on one of the images of Min from Coptos, in Egypt.

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[1] Bengeri, "The Dolmen at Motebennur," *Karnatak Historical Review*, I, No. 2, pp. 5-6; *Ibid.*, III, p. 306.

[2] Sankalia, "Megalithic Monuments near Poona", *Bulletin of the Deccan College Research Institute*, I (1940), pp. 178-184.

[3] Carter, "The Stone Age in Kashmir", *Memoirs of the Archaeological Survey of Kashmir*, No. 2.

[4] Barton, *Semitic and Hamitic Origins*, pp. 50-52.

[5] Palma di Cesnola, *Cyprus : Its Ancient Cities, Tombs and Temples*, p. 189.

[6] Bradley, *Malta and the Mediterranean Race*, pp. 41-43.

[7] Elliot Smith, "The Evolution of the Rock-cut Tomb and the Dolmen" in *Essays and Studies presented to William Ridgeway*, pp. 439-544.

[8] Bates, *The Eastern Libyans*, p. 160.

[9] Pigorini, "Monumenti Megalitici di Terra Otranto", *Bullettino di paleontologia italiana*, 1889, p. 178.

[10] Melida, *Arqueologia Espanola*, pp. 35-41.

[11] Hoernes-Behn, *Prehistoria*, I, pp. 124-126.

[12] *Ibid.*, p. 88.

[13] Higgins, *The Celtic Druids, passim.*

[14] Boelase, *The Dolmens of Ireland, passim.* Cf. Ripley, *The Races of Europe*, p. 489.

[15] Evans, *The Palace of Minos*, III, pp. 219-232.

now among the cowherds of South India) and the bull-fights of Spain. One of the carvings discovered at Mohenjo-Daro shows a bull with its head bent to the ground while a man stamps his left foot on one of the horns and drives his spear into the bull's neck.[1] Such a feat could be performed by a good Spanish "matador".

Appendix I

THE ORIGIN OF THE SUMERIAN SCRIPT

That the Sumerian script is a development of another sort of writing is a fact admitted by all Sumeriologists. When the Fara tablets were published,[3] all realized that those tablets show an earlier stage of development than those studied by Thureau-Dangin[4] and by Barton.[5] A few years later a set of newly discovered tablets at Jemdet Nasr were also published[6] — tablets which evidently disclose a much earlier period in the development of that writing, so early as to leave a gap between it and the period of the Fara tablets. (Fig. 140). The transition from Jemdet Nasr to Fara was finally found in the archaic texts discovered at Ur by the joint Expedition of the British Museum and the University Museum, University of Pennsylvania, Philadelphia, to Mesopotamia.[7] Earlier than all these the Kish Tablet of the Ashmolean Museum marks the initial state of the Sumerian script, with which we are now acquainted.[8] (Fig. 15).

Fig. 140
Pictographic tablet found at Jamdet Nasr, in Sumer. Obverse.

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[1] Mackay, *Further Excavations at Mohenjo-Daro*, II, pl. XCI, No. 4a and pl. XCII No. 11b.
[2] Cf. Heras, "Further Excavations at Mohenjo-Daro", *The New Review*, IX, pp. 70-72.
[3] Deimel, *Die Inschriften von Fara.*
[4] Thureau-Dangin, *Recherches sur l'Origine de l'Ecriture Cuneiforme.*
[5] Barton, *The Origin and Development of Babylonian Writing.*
[6] Langdon, *Pictographic Inscriptions from Jemdet Nasr.*
[7] Burrows, *Archaic Texts (of Ur).*
[8] Cf. Smith, *Early History of Assyria to* 1,000 *B.C.*, Pl. III, *b & c.*

While studying all these stages of development, one easily finds out that the pictographs of the Kish tablet have suffered a considerable change in the tablets of Jemdet Nasr and Ur, and much more in those of Fara. The signs become conventionalized and apparently phonetic. Their original pictographic nature disappears almost absolutely. Moreover round forms are little by little straightened, very little in Jemdet Nasr, much more in Fara. Thus the transition from these conventionalized straight shaped signs to the cuneiform sign is almost imperceptible.

This evidently shows that the original script was a pictographic script. The late Prof. S. Langdon speaking of the two styles of making signs in the Jemdet Nasr period says that both groups part "from the original and homogeneous pictographic stage".[1] Prof. Ball affirms the same: "It has long been recognized that Sumerian writing was originally of a pictorial or hieroglyphic nature".[2] Where and when was this pictographic writing used? This is indeed a crucial question in the history of early epigraphy. Since the signs of the Kish Tablet are all pictographs, could we suppose that this tablet marks the original pictographic stage?

First of all, since the document is one only, and the signs inscribed on it are not many, it would be too premature to make a statement concerning this tablet. Accordingly Prof. Langdon himself only affirms that the Kish Tablet "has the signs more near the original pictographs than the Jemdet Nasr script",[3] and indeed, if we are to believe late Babylonian tradition, the Sumerian script came from abroad, brought to the valley of the Euphrates by Oannes, Odakon and all those half-mythical heroes whose names are recorded in Berossus' fragments.[4]

Prof. Ball after studying the very suggestive similarities and even connections between Chinese and Sumerian finally concluded that both scripts might have come from a third original script of

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[1] Langdon, *op. cit.*, p. iv.
[2] Ball, *Chinese and Sumerian*, p. vii.
[3] Langdon, *op. cit.*, p. iii.
[4] Cf. Schnabel, *Berossos und die babylonisch-hellenistische Literatur*, pp. 172-175.

central Asia.[1] At the time of Ball's publication the script of Mohenjo-Daro was not yet fully known. Could Mohenjo-Daro be the reply to our query?

Sir C. L. Woolley boldly affirms that "the Indus Culture appears to have had no effect on the Sumerians".[2] No other was the opinion of Prof. Langdon when he contributed the sign list of the Mohenjo-Daro script to the work of Sir John Marshall.[3] Yet after the publication of the Jemdet Nasr tablets he was forced to change his views. In a P. S. he attached to the above mentioned sign list, he corrects his former views[4] and when he published the Jemdet Nasr tablets he acknowledged that "beyond all doubt, this race (viz. the Sumerians at least of Jemdet Nasr) is connected with the race whose press seals and painted pottery have been found in the Indus Valley at Mohenjo-Daro in the Sind and at Harappa in the Punjab"; and lest there be any doubt about the kind of connection the professor means, he adds: "The Sign No. 408 (of Jemdet Nasr) which was lost in the Sumerian script is characteristic of the Indus Valley script, and a large number of signs are identical in the two scripts".[5] Even the way of writing seems originally to have been the same in both the countries, according to the Oxford Professor, who speaking of the Jemdet Nasr tablets avers that "the writing originally ran from right to left, as does the script of the Indus Valley seals."[6]

After a careful study of the Mohenjo-Daro script, I boldly stated in a lecture delivered before the Bombay Branch of the Royal Asiatic Society on March 18th, 1935, that the Mohenjo-Daro signs were the original pictographs from which the Sumerian signs are derived. *The Times*, London, published a report of my lecture on March 24th. Two days after, in a letter published in the same paper, Prof. Langdon, apparently forgetting what he had written eight years before, said referring to the Mohenjo-Daro script: "It is

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[1] Ball, *op. cit.*, p. x, f, n.

[2] Woolley, *The Development of Sumerian Art*, p. 85. Cf. pp. 130-131.

[3] Marshall, *Mohenjo Daro and the Indus Civilization*, II, pp. 423-453.

[4] *Ibid.*, pp. 453-455.

[5] Langdon, *op. cit.*, p. vi.

[6] *Ibid.*, p. iii.

obvious that the script is not only later by at least 1,500 years than the early pictographic Sumerian script, which can be traced to about 4,000 B.C., but also that the two scripts have nothing whatsoever in common."

The opinion of the present writer was not after all so extravagant. Dr Hunter, following in the steps of Prof. Langdon himself acknowledges the similarities between the Sumerian and the Mohenjo-Daro scripts;[1] and Prof. Barton admits the probability of the Indus Valley origin of the Sumerians.[2] Now, after having deciphered above one thousand and eight hundred inscriptions of Mohenjo-Daro, I am reconfirmed in my views as regards the Indian origin of the Sumerian writing.

This is what I am going to develop in the following pages. I am, however, not going to publish a full list of signs nor their genealogical formation. A few signs have been picked up here and there and their genealogy is explained after the knowledge acquired while reading the Mohenjo-Daro script. Occasionally references will be found to the Proto-Chinese script. For convenience sake the signs have been placed according to the alphabetical order of their meanings.[3]

1. ACACIA

The sign is found twice in Ur, once in this position (145) and the other time in the opposite direction (183). They seem to be the same. It is found in seal impressions only. On account of the round shape of its lines, the sign seems to be very old and nearer the original pictographic origin than many signs of Ur. The same sign is very often found in MD in the ordinary position. It reads *vel*, "acacia" in the MD script.

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[1] Hunter, *The Script of Harappa and Mohenjodaro*, pp. 19-21.

[2] Barton, *Semitic and Hamitic Origins*, pp. 36-37.

[3] In the course of this appendix the following abbreviations will be used :-

Ki—Kish Tablet	Jn—Jemdet Nasr by Langdon
Ur—Archaic Texts of Ur by Burrows	Fa—Fara tablets by Deimel
Ba—More recent specimens of writing, in Barton's work	MD—Mohenjo Daro and Harappā seals
	PC—Proto-Chinese writing

Fr Burrows does not give any meaning to this sign. In point of fact it does not seem to have any correspondence in later Sumerian or cuneiform writing. Perhaps the acacia did not grow in Mesopotamia. This would be another argument in favour of the early age of this sealing, proving a sort of remembrance of the Mohenjo-Daro acacias.

2. ASS

Two pictographs of an ass are shown in Ba (211). One represents the whole animal with the hind portion extremely conventionalized . This is of Proto-Elamite origin. The other sign represents the head of the ass only . Out of this the later Sumerian linear representation and the cuneiform signs are derived. In Jn (130) the head of the ass is clearly seen, , a little turned upwards in an unnatural position. This seems to be the clear ancestor of the above Sumerian type. Both signs, the Proto-Elamite and the Sumerian, find their representation in MD. The sign corresponding to the former is given in connection with an "ass rider" , *kalude orvan*. (MD. Ph., M.D., 31-32 Sd, 3089). The other seems to be used when the mere mention of an ass is made . (MD. Ph., H., Neg. 4395, No. 3). This seems to be the same sign as Jn, turned to the opposite side and placed 90° to the left.

3. BIRD

This sign though much conventionalized in Ba (83), still keeps the original shape pretty well in the archaic period: . Later it is difficult to recognise it any more. As birds live in the air, it meant the god Enlil, "the lord of the air", at a later period. Why it ever stood for man, cannot be easily understood. In Fa (64) the bird's shape is still more easily recognisable. The figure Jn (191) is very roughly made. The sign of a sealing of Ur (199) seems to be another shape of the same sign. Another sealing of Ur (419) has a real pictograph of a bird: .

In MD several birds are represented: *koḷi*, a member of the Kōḷi tribe (Marshall, M.D., No. 207); *puṛa*, "pigeon", (the symbol of a tribe) (Marshall, H., No. 259); *maraṅkoti*, "woodpecker",

tārā, "duck" (*Ibid.*, M.D., No. 93) and , or , *parava*, bird in general (*Ibid.*, M.D., Nos. 8, 36, 338 etc.), which is always inscribed to mention the members of the tribe of the Paravas. The Ur sign mentioned in the last place seems to be derived from the Parava sign.[1] But the preceding signs seem to proceed from the sign that stands for *tārā*. The very archaic character of that Ur sign may confirm our view. Is it perhaps a reference to the Paravas of India? Yet, those signs that seem to have come from *tārā* mean bird in general at a later period.

4. BOAT

The sign of Ba (137) cannot be easily explained as coming from a pictograph. The explanation of Barton is not satisfactory. In MD this sign belongs to a phonetic family of signs that have all a similar shape and a similar phonetic value.[2]

oḍu, "leg", "to walk";
iḍi, "lightning";
aḍe, "royal land tax";
oḍa, "boat".

Apparently there was never a pictograph meaning "boat". If the latter sign is turned 90° to the left according to Sumerian custom, thus , one can, by an easy process, come to the sign of Ba.

5. CANAL

The sign of Fa (121) easily shows its pictographic origin. Two rivers (the horizontal lines) united by a canal (the vertical lines). The fact that the latter is marked by two lines, viz. the two banks of the canal, is intended to emphasize the canal over the two rivers in this sign. Jn (409) , which has apparently not been given any meaning, seems to be a pictograph of a canal, more in accordance with the MD sign , from which the above Fa sign seems to come.

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[1] Cf. Heras, "Sumerian Epigraphy", p. 262.

[2] Cf. above, p. 72.

6. CHARIOT

The sign of Ba (262) ⫫ seems to be correctly explained: "Perhaps the sign was a diagram of a chariot, when viewed from above, the single line representing the pole and the two lines at the left the projecting wheels".[1] Barton seems to have had the MD sign in view when describing this sign. The MD sign ⚲ beyond all doubt is the original pictograph of the above sign.

7. CITY

The determinative for cities used in Jn (238) ⛁ has its clear ancestor in MD where ⍜ reads *ūr*, "city". The sign is found in many combinations that stand for names of individual cities; ⚶ *Vēlūr*, ⚲ *Maramūr*, ⚳ *Ārirūr*, etc. Jn (16) ⊖, which is found in an early sealing seems to be the name of a city. In MD, there is a similar sign ⍜, which reads *Orūr*.

8. CLOUDS

In Ba (480) there is a very quaint sign ⧦ which means "storm cloud" or "thunder storm". No satisfactory explanation of this sign has been given. (Cf. Barton, *op. cit.*, II, p. 231). The same sign has been found in MD of course in the ordinary erected position ⧦. Perhaps the origin of this sign is the sign ⧦. (MD. Ph., H., Neg. 3006, No. 14), meaning "garden" (Cf. "garden" below). The four stems represented in this pictograph are shorn of their leaves and flowers in the former one. That may be the effect of a storm. Consequently, this would be the original meaning of the sign. "Storm-cloud" would then be the secondary meaning.

There are besides in MD other signs meaning clouds. One of them seems to appear also in Ur (31) ⌒. It appears on a sealing, and Fr Burrows does not seem to assign any meaning to it nor to point out any later sign as a development of it. In MD (Ph., M.D., 28-29, No. 7242) this sign is, as usual, found in an erected position with four additional strokes: ⌒. It reads *karumukil*, "rain

1 Barton, *op. cit.*, II, p. 137.

clouds". This is the only time this sign occurs. I do not know whether to call it a mistake or a later development (especially considering the above sign of Ur). The sign, otherwise, is many times found turned to the other side : . It is also very often found without the strokes, and then it reads *mukil*, "clouds". It is very interesting to follow the evolution of this sign. It has two elements, and . The former always reads *il*, but sometimes it means *not*, sometimes *in* and sometimes *house*. The latter seems to be the proper meaning here. If this element reads *il*, the other element must read *muk* which means "to draw, as water". *Mukil*, therefore, means "the house of drawn water", which is phonetically expressed in the sign itself.[1] Because this meaning was naturally not understood in PC they slightly changed the sign thus : or , *yūn*, "cloud". For no other reason this sign evidently used in Sumer in the beginning, as the sealing of Ur shows, was forgotten at a later period. They preferred to use the sign first mentioned in this article, which sign being in straight lines was more in accordance with the character the script was actually taking.

9. COUNTRY

This word is expressed in different ways in Ba (322) : , , and . In Fa (451) the signs are , or , meaning hill. In Ur (418) , once more meaning country. This dual meaning of the word *kur* evidently shows that *the* country, i.e. their country, originally was mountainous. In MD (Marshall, M.D., No. 215) the sign stands for "lands", which seems to be the original meaning of all the above signs. In our case anyhow it is interesting to notice that after passing through so many stages of development the sign reappears in the cuneiform script almost as it was in its original condition : .

The word *kur*, "country" was used amongst the Sumerians to mean their own country, while *kurkur* meant the foreign countries. *kur* also meant "other", "different". So *kurkur* properly meant "different" or "other countries." This phrase also seems to come

[1] Cf. Heras, "The Story of Two Mohenjo Daro Signs," pp. 1-3.

from the Proto-Dravidian people of MD. In Dravidian languages *kurukur* literally means : "countries across" or "opposite countries".

10. COWS

The sign meaning "cows" in Ur (177) is already angular and almost cuneiform : . In a sealing of Ur (178) there is a similar sign, , which seems to be its immediate ancestor. Yet Fr Burrows seems to compare the latter sign with Jn (179) , which is read by Prof. Langdon *sig*, "low". Yet, Prof. Langdon himself says that the sign is found at times in lists of sheep. The Jn sign apparently stands for cows, too. It is difficult to imagine how this sign can come from a pictograph of a cow. The MD (Marshall, M.D., No. 400) gives the link, , which reads *ā*, "cow". This sign is a much conventionalized development of the original pictograph as may be seen when placed in its natural position, thus : . The body and the four legs of the animal are easily seen. The upper line of the body becomes the tail at the back and the horn in front. Over the horn an ear may be seen. All these additional limbs were lost in course of time, the main lines of the pictograph remaining only, which later became angular.

11. CROSSWAY

The Jn (136) is a simplified way of marking the original MD (Marshall, M.D., No. 100) , *kaḍa*, which means "to cross", "end". (At the entrance of many courtyards in South India and Ceylon, they place a contrivance of this shape to prevent the cattle from entering. They call it *kaḍavu* at present). When this sign means *kaḍa*, "frontier", "boundary", "horizon", it takes always this shape : (MD. Marshall, M.D., No. 102). There is still another sign of the same family , which reads *kaḍikoḍe*, "the beginning and the end".

12. DEATH

In Ba (70) ← means "death, corpse" ; in Fa (17) the same sign stands for "corpse", "to kill" ; in Jn (271) it means "dead". Assyriologists and Sumeriologists give different explanations of this sign. Why does an arrow mean "death" ? Barton gives this ingenious but not fully satisfactory explanation : "Perhaps it is a

rude representation of a branching vein or artery. It would then naturally mean *artery* and *blood*. The importance of blood to life (cf. Deut., 12,23 *"the blood is the life"*) suggested *live, be*; then by an extension, *dwell*. Perhaps by contrast, or possibly because of a blending of the idea of *opening* with the thought of a *vein*, it came to signify *die, dead, corpse*, etc."[1] (Words in *italics* are different meanings of the same sign). The explanation is rather far-fetched.

The sign from which the above sign comes is very often found in MD. (Marshall, M.D., No. 14, and *passim*). reads *kā* and means "death", "dead", "to die". It is a pictograph representing the funeral monument (the *stūpa* of the Sanskrit period or properly the stone cist or chamber within the *stūpa*) and the corpse under it. What appears to be an arrow is not an arrow. The sign for "arrow" in MD (photo H. neg. 782, No. 1) is in PC . In MD (Marshall, M.D., No. 55) reads *or* and means 'one'. Adding the determinative of personality to this sign we have (Marshall, M.D., No. 32), which reads *orvan*, "one man". The sign, therefore, represents a person under the funeral monument. This sign is already simplified during the MD period. It has two stages of simplification: (Marshall, H., No. 23) and (Marshall, M.D., No. 536), which signs show the tendency to eliminate the whole monument. Finally in Jn the sign has already become .[2] That this arrow-like sign is not originally an arrow, but *orvan*, may be clearly seen in MD, No. 344.

13. DWELL (TO)

Ba (287) is explained as an irrigating wheel,[3] though it is difficult to explain many of the meanings of this sign, like "to dwell", "to take counsel", "to kill", "to strike down", "to divide" "to separate", as coming from the idea of "irrigation". In MD (Marshall, M.D., Pl. CXVII, No. 10) this sign is found in a three-sign compound : . The meaning of the compounding elements are , *kiḷavan*, "the headman"; *mūḍu*, "door" or "gate", and , which is unknown

[1] Barton, *op. cit.*, II, p. 37.

[2] Cf. Heras, "Mohenjo Daro, The most Important Archaeological Site in India", pp. 9-10.

[3] Barton, *op. cit.*, II, p. 149.

as a simple sign, but which seems to be part of the wall surrounding the village or town.[1] The whole sign therefore reads ; *mūḍukiḻavan*, "the headman of the gate". It is well known that in ancient times the town elders used to decide cases and judge at the gate of the town.[2] This is precisely the relation existing between the headman of the MD and the gate of the village. The Ba sign, therefore, originally represented the village gate only. The idea of "dwelling" within the village is easily represented by it. The meanings of "killing", "turning", "fighting of men", "wounding", "taking counsel", "strike down", "oppressing", "dividing", "separating", "seizing", "crushing" are associated with the idea of headman or judge. Even the personal pronoun "I" may very easily be explained, for the headman on deciding a case probably gave his view by saying : "I, so and so, decide, etc."

14. END

in Ba (269) means, "end" among other things. It is evidently a derived meaning from the MD (Marshall, M.D., No. 16) or which read *tīrpu*, "judgement", "decree". Indeed the judgement or decree is the real "end" of the case.

15. EYE

A very interesting phenomenon occurs with this sign. As a general rule, as said above, the round lines of the original pictographs which at times are still seen in Jn, little by little, disappear and become straight and angular lines. But in this case just the opposite happens. In Jn (182) we have the round and the angular forms and . In Ur (185) it becomes still rounder just as the physical organ represented by the sign. It once more becomes half straight in Ba (406) and it is not fully angular again till it becomes cuneiform. Barton says that four scholars "have all correctly explained the sign as the picture of an eye", and he adds: "The Egyptian (Cf. EAG 206, No. 10 and MHP 1, No. 82), and the Chinese

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[1] That such walls existed, at least at a later period, is known through the *Rgveda*. Cf. above, p. 4.

[2] Cf. *Gen.*, XXIII, 18.

(ECW No. 267) formed ideograms from the eye in analogous ways".[1] Nevertheless, the MD sign, from which the Sumerian sign evidently proceeds, does not seem to be a pictograph. It is always represented as a real arrow ↟. (Marshall, M.D., No. 19 and *passim*). It reads *kaṇ*, "eye", "to see", "vision". The word *kaṇ* in Dravidian languages etymologically means "to pierce", and in a derived way "to see". The sign, therefore, is a phonetic sign, for an arrow is proper for piercing: it graphically represents the meaning of the sound. It passed to Jn as an arrow just as it was in Sumer. But in Sumer the original meaning of *kaṇ* was long forgotten. *An angular eye* was after all not natural. They made it round, and then it became a pictograph, which was finally angularised once more when it become cuneiform.

Ba (407) has still another sign that means "to see" 𒀀 in which the sign for "eye" is compounded. This sign is also found in Ur (243) 𒀀. This sign, as some scholars rightly say, is a compound of 𒄀 and 𒁀.[2] One of the meanings of the latter sign is "powerful" in Ba. This is the original meaning of the sign in MD (Marshall, H., No. 84) 𒁀, which reads *vāl* and means "strong", "powerful". Therefore, this compound sign could read in MD *vālkaṇ*, i.e. "strong eye", or "strong", "powerful vision" or "to see with great perfection", a connotation which is perhaps partly expressed in the following two meanings of this sign in Ba, "to recognise" and "to remember", which suppose something more than simple "seeing".

16. FATHER

In Ba (59) 𒀭 reads *pap*, i.e. "father". This sign also means "leader", "prince". In Ur (126) the same sign also means "father". In PC "father" is expressed by the sign: 𒀭[3]. 𒀭 seems also to mean "chief" in Sumerian.[4] All these signs come from the MD (Marshall, M.D., No. 203) 𒀭, which reads *uḍa*, "to lead". Applying

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[1] Barton, *op. cit.*, p. 211.

[2] Cf. Barton, *op. cit.*, II, p. 212.

[3] Ball, *Chinese and Sumerian*, Sign List, No. 27.

[4] *Ibid.*

the determinative of personality to this sign we shall have or ,[1] which read *uḍayan*, "leader" or "chief". From the idea of chiefhood or leadership, the idea of fatherhood naturally arose.

17. FIELDS

In Ba (119) means "fields". In Ur (61) the sign meaning "fields" is similar to this, but has slight differences, , , , and . Some scholars explain the sign as an enclosure, others as irrigating ditches.[2] The MD sign (Marshall, M.D., No. 311) shows irrigating ditches only. It is interesting to notice that both in MD and in Ba there are five vertical strokes in the sign. The horizontal lines of the Ba and Ur signs seem to have come from a certain confusion with the sign that means "farmer", an occupation connected with fields. The Ur sign is very similar to the MD sign, (Marshall, M.D., No. 96) , which reads *uḷavan* and means "farmer", which is evidently the original sign from which Ba (127) proceeds. The latter besides meaning "farmer" means "luxuriant", "plantation", "irrigating instrument" which words directly refer to fields. It also means "prince", for the rulers both in Mohenjo-Daro and in Sumer received the title of *Farmer*.[3] Since the kings in those countries were besides priests, the sign also means "priest-king". In Jn (125) the sign for "plough" includes also the sign for fields or farmer.

There is still another sign meaning "field" amongst many other meanings. It is in Ba (291) . The sign is also found in Fa (283) , though developed in an extraordinary way. In Jn (387) looks more like the Fa sign. Barton, speculating about the origin of this sign, says: "The origin of the sign is difficult to discover. When we first come upon it in Dec. pl. 1bis it has passed into an adjectival meaning. Many of the above meanings are also abstract. It is clear that it is a very old and a much used sign. Probably it was a picture of a bit of brick wall."[4]

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[1] Codrington, *Ceylon Coins and Currency*, pl. I, No. 6; Heras, "Chanhu Daro and its Inscriptions, Another site of the Indus Valley Culture", p. 103.

[2] Cf. Barton, *op. cit.*, II, p. 66.

[3] Cf. above, pp. 165-166.

[4] Barton, *op. cit.*, II, p. 152.

The original sign is found in MD (Marshall, M.D., No. 161), phonetically reading *kalamalak* and meaning "field measure". It is a phonetic sign of the family of , *kāl*, "quarter".[1] From the idea of "field measuring", it passed to meaning "field" in general; and many other meanings which this sign has in Ba, like "as long as", "side", "cross over", "side of a field", "front", "high place", "deep", "boundary", "limit", "to surround", etc., proceed from the original meaning of "field measuring". Cf. NUMERALS, below.

18. FISH

The sign of Ba (525) besides meaning "fish" has several other meanings indirectly derived from it.[2] The sign is also found in Fa (347) with an extraordinary angular development. In Jn (199) is simpler and (200) scarcely has the shape of a fish. Also in Jn (198) there are two fishes . The fish sign is one of the most common signs in MD, though often it does not stand for "fish" as such. There are three fish signs: (Marshall, M.D., No. 458) *mīn*, the Fish (i.e. the Zodiacal constellation), *mīn*, a star or a proper name; or or , which read also *min*, but represent an adjective "shining", "bright", "glittering", "illustrious", "resplendent". Other fish signs are also found in MD connected with additional signs for instance, *mīnil*, "in the fish" or *mīnan*, a member of the tribe of the Mīnas or *mīnanir*, "the Minas". But when two fishes are to be mentioned two fishes are never marked in the sign as in Jn, but the fish sign is preceded by the numeral, for instance, , *ir mīn*, "two fishes" (Marshall, M.D., No. 468), or , *mīnir*, "fishes" (Marshall, H., No. 254) in general.

19. FLAG

In early Sumerian seals from Warka, of the date of the Jn, there is an object represented which probably is not shown as a writing sign, but as a sort of *lāncaṇa* or symbol or something alike. It is .[3] In MD (Marshall, M.D., Nos. 197, 493) the sign is or . It

[1] Cf. Heras, "Light on the Mohenjo Daro Riddle", p. 12. Cf. above, pp. 94-95.
[2] Cf. Barton, *op. cit.*, II, pp. 261-262.
[3] Cf. Woolley, *The Development of Sumerian Art*, pl. 7., *a*, *b*, *d*, *e* and *f*.

reads *kōḍi*, "flag" and is also found in the compound sign (Marshall, M.D., No. 556), which reads *kōḍikō*, meaning, "the hoisting of the flag".

20. GARDEN

In Fa (215) stands for "garden". It is a pictograph, viz. two plants growing along a watercourse. The sign is also found in Jn (25), . The priority of the latter sign is clearly seen, even putting aside the fact that Jn is prior to Fa. The plants are three in Jn, while in Fa there are two, which shows the ordinary simplification of the sign. In MD (Marshall, H. No. 20) the sign has four plants and four rivulets. In Dravidian languages *nāl* means "four" and also "many". The sign, therefore, means *many* rivulets and *many* plants, and therefore *tota*, a garden. In Sumer the second meaning of four being unknown, they naturally were not particular about keeping four plants and rivulets. The former were reduced to three and the latter to two. Further on in Fa there were only two plants.

21. GARMENT

The sign for garment is found both in Ur (385) and in Jn (390). It represents a spread piece of cloth, which was tied round the waist or over the left shoulder. In MD, the sign is the same, (Ph. M.D., 28-29, No. 7061), or (Marshall, M.D., No. 324).

22. GO (TO)

Jn (83) means "to go", "to walk". In MD (Marshall, H., No. 329§) means *viḍ*, "to leave". A person who leaves necessarily must "go" and "walk". Therefore, these two are secondary meanings. The reason of the meaning of the Jn sign is not easily found. In MD there is a phonetic reason. The signs or or , of which we shall speak later, respectively represent "four", "three" or "six houses". Therefore they will read: *nālvīḍ*, *munvīḍ*, or *ārvīḍ*, for *vīḍ* means "house". Therefore, the other sign turned to the opposite direction and so similar to these reads *viḍ*, "to leave". They are signs belonging to the same phonetic family; there are many similar phonetic families in the MD sign list.

23. GOD

Ba (13) gives as an archaic sign meaning probably god Anu, who was supposed to be a prehistoric god in the Sumerian period.[1] Other signs of Ba (13) are or cuneiform modifications of it. Yet the former sign of Ba is not the oldest form of this sign in Sumerian writing. In Fa (8) we find , in a sort of cuneiform shape, meaning "heaven", "high" and "god". With the meaning of "god" it is also found in Jn (33), but it is not used as a determinative of god.[2] In this sense it appears in Ur (6) for the first time. When the number of gods increased, it was found necessary to place this sign as a determinative before the names of gods in order to avoid confusion.

It is evident therefore that the sign originally meant "god" in general. Then it was used as a determinative keeping still its original meaning. Finally it was used only as a determinative. But what was the origin of this sign?

In MD the denomination of "god" in general is represented by this sign : (Marshall, M.D., No. 1), i.e. a being with four hands, more powerful than man, something beyond human nature, an idea expressed by the word *kaḍavuḷ*. The sign sometimes takes this shape : . In the tendency of the script to simplification, the legs of this sign were finally marked as parting from the lower angles in continuation of the upper pair of arms, thus : . Then turning the sign 90° to the left , we have the Ur sign.

A similar thing happened with the signs (Ph., M.D., 29-30, Dk, 8337) and , *Āṇ*, the Supreme Being of MD (Marshall, M.D. No. 72) : arms and legs were written in continuation as one stroke only, thus : , and this was the sign representing An in Jn (a) Later on half the sign was suppressed and An was represented by ,[3] In Chinese it kept the original form much longer : , , , and the present Chinese sign [4].

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[1] Cf. Radau, *Sumerian Hymns and Prayers to God Nin-ib*, p. 13.

[2] Cf. Langgon, *op. cit.*, p. vii.

[3] Ball, *op. cit.*, Sign List, No. 2.

[4] *Ibid.*

24. GREAT

The Ba (300) sign 𒃲 *gal*, "great", may be easily followed in Fa (164) 𒃲, Ur (107) 𒃲 (which sometimes has 5 and at times even 6 strokes) and Jn (84) 𒃲, down to MD 𒌓, *pēr*, "great". In MD the strokes are sometimes repeated twice, 𒌓 or 𒌓, *perper*, "very great".

25. HARVEST

In Jn (77) there is a sign without meaning 𒄩 which has its original in MD (Marshall, M.D., Nos. 69, 175). In MD 𒄩 or 𒄩 read *aṛup* and mean "harvest". Once this sign is compounded with two other signs, thus, 𒄩 (Marshall, M.D., No. 548), which reads *aṛupanir*, "harvesters". Accordingly, in MD the above sign of Jn would read *aṛupanor*, i.e. "harvesters". Could this perhaps be the meaning of this sign? This is one of the two cases in which the Proto-Indian determinative of personality appears in Sumerian script. (Cf. NUMERALS).

26. HEART

The Fa (255) sign 𒄑 means "heart". Further developments of this are 𒄑 and 𒄑 (*ibid*).[1] The former sign in MD means "in" or "within the house". From the idea of "being within", it naturally happened to mean "heart", when the system of grammatical determinatives of Mohenjo-Daro was not continued in Sumer.

27. HOUSE

This is a meaning expressed by a number of signs :-

(a) In Ba (147) the sign 𒂍 means "house". It shows the elevation or perhaps a section of a house. In MD the most common sign is 𒂍 (Marshall, M.D., No. 219); but 𒂍 is also found. The latter sign seems to be the immediate predecessor of the Ba sign.

(b) In Jn two other signs mean "house" 𒂍 (357) and 𒂍 (372). If they are placed in an upright position thus, 𒂍, 𒂍, one easily realizes that they proceed from the MD 𒂍.

[1] Cf. Thureau-Dangin, *op. cit.*, No. 255.

(c) The sign ◊ in Ba (353) means "totality" and also "the city of Eridu". In Ur the same sign (184) means "good" and 𒌦 stands for place. All these signs proceed from the MD sign ◇, which reads *il* and means "house". From this idea we may easily pass to the idea of a city, of totality (a self-contained unity) or of goodness, (for it is better to be in the house than outside).

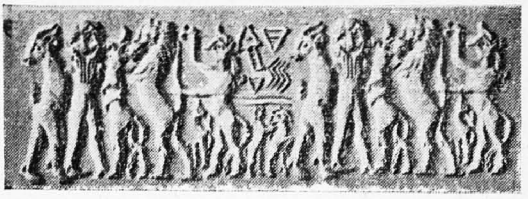

Fig. 141
Impression of a Sumerian seal displaying an inscription of the early dynastic period.

(d) In Jn (408) 𒐖 and 𒐗 occur very often in sheep lists, and are also found in Proto-Elamite script. This sign, as Prof. Langdon admits, "is characteristic of the Indus Valley Script".[1] In MD it means a number of houses, for instance, 𒐖 *nālil*, "four houses", or 𒐗 *āril*, "six houses". It may possibly have this meaning in Jn in connection with sheep, "houses of sheep", i.e. stables. This sign does not occur any more in other Sumerian documents.[2]

(e) In Ba (365) also means "house", but it also means "excavation", "hole", "pit", "cave". Very rightly does Mr Ball remark that these meanings of the above sign seem to suggest that the primitive dwellings of the Sumerians were *caves*. But they could certainly not live in caves in Mesopotamia for the country is flat and without rocks, but caves were not infrequently inhabited even in the heyday of Mohenjo-Daro, as is mentioned in the inscriptions.[3]

28. KID

In Ba (80) ⊣◇ stands for "kid", "lamb". More plain are the signs of Jn (2 and 3) —◇, —○ and —⊙, which mean "sheep". The

[1] Langdon, *op. cit.*, p. vi.
[2] *Ibid.*
[3] Cf. for instance, Marshall, *op. cit.*, M.D., 21, etc. Cf. above, p. 212.

first of the last three signs is also found in MD (Ph., M.D., 28-29, No. 7820) meaning "sheep", too. The other two read *uir*, "life". They are like the Egyptian ☥ .[1] In the early Ceylonese coins this sign is thus: ☥.[2] It is also found on a seal of MD once. (Mackay, *Further Excavations*, No. 86).

The material similarity of the three signs and the formal similarity of their meanings, finally had made them all to mean "sheep" in Jn.

29. KNOW (TO)

In Ba (6) ◁ reads *zu* or *idu*, meaning "to know". In Ur (224) ◁╫ means "to know", and according to Ball it means "to know specially sexually". (Cf. *Mother*, the Ur sign of which is almost the same). It is of interest to note that a totally similar sign in Ur (222), ◁╫ reads *ba*, i.e. "to divide". Indeed in MD (Marshall, M.D., No. 182) △ reads *ari*, meaning "to know" and "to divide". The original meaning of the word and of the sign seems to have been "to divide", an action which is graphically expressed by the perpendicular line dividing the triangle into two halves. A division brings distinction and knowledge. Hence in the original Proto-Dravidian language both meanings were expressed by the same word *ari*. Later the *r* of *ari*, "to know" was made guttural and the word is now written *aṛi*. These two meanings are found in Ur, but not in Ba, during which period nevertheless the sign keeps the original shape of MD.

30. LIFE

Ba (91) has 𓈖 meaning "life". In other cases, recorded *ibid.*, there are five zig-zagging lines to the right, instead of three. They seem to represent five rivulets 𓈖 . (Cf. FIELDS). In MD (Marshall, M.D., No. 37) there are instead five strokes 𓈖 which stand for *nāḍ*, fields, thus, 𓈖, which represents 𓈖 four (or many) 𓈖 canals in 𓈖 fields, which evidently are the sources of "life", *āvi*, The sign

[1] Naville, *L'Ecriture Egyptienne*, p. 72.

[2] Codrington, *Ceylon Coins and Currency*, pl. 1, No. 9, etc.

for four or many is lost in Sumer and naturally the right line of the angle is made as long as the left one.

31. LIGHT

In Jn (5) stands for "light". This is the straightened shape of the MD (Marshall, M.D., No. 55) , which means "sun", *el.* The Egyptian hieroglyph for sun ⊙ is also a simplification of the MD sign.

32. LYRE

In Ur (29) seems to be derived from (*ibid*) and is read *balag*, which is a lyre, or a similar musical instrument. It evidently comes from the MD (Marshall, H. No. 335) or (Marshall, M.D., No. 46). The Fa (525) sign or , which is probably given as bread, has very likely no other origin.

33. MAKE (TO)

is the sign of Ba (5) that means "to make", "to do" (*epeśu*). In Jn (309) or mean "to create", "to make" (*gar*). In MD (compounded with another sign in Marshall, M.D., No. 129) reads *kei*, "to make". In Chinese the sign standing for "making" or "doing" is .[1]

34. MAN

In Ba (214) , among other meanings, means "man", "male" and "penis", the sign originally representing a phallus. There is still another sign in Ba (49) meaning "man" in which the second element was "mountains" or country. (Cf. COUNTRY).[2] In Jn (42) means "male", "penis". In MD (Marshall, M.D., No. 49) we find the original pictograph of a phallus , viz. a solid pedestal with the phallus erected on top. This sign means only the phallus, *cuṇi*, "*liṅga*", as afterwards in Sanskrit; it never means the "penis" or "man" or "male". Such meanings were derived from the original one (The sign of MD is not to be confused with the above one. It reads *pati*, "village").

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[1] Cf. Ball, *op. cit.*, Sign List, No. 4.

[2] Cf. Barton, *op. cit.*, II, p. 23.

Ba (129) has still another sign meaning "man", . It evidently represents the head of a man. In Jn (164,165) the sign is found thus : . This sign has not its corresponding sign in MD. In MD the pictograph representing "man" is like the primitive way of depicting men on the rocks of the caves by prehistoric man : . The idea of drawing the close-up portrait-like picture of a man seems to be later. In Hittite script man is also represented this way.[1]

35. MIDDLE

Ur (62) has several signs which may be reduced to this :- -, the inner space being filled up with strokes or dots. It apparently means "to do", "to make", "to act" ; but I cannot explain these meanings, unless they immediately refer to an "intervener" or "go-between", for the MD (Marshall, M.D., No. 235) or mean "middle". The PC and the Chinese also mean "middle".

36. MOUNTAINS

In Ba (227) ▷ has 33 different meanings. Some scholars think that it represents a wedge. Barton maintains that it is the representation of a "peg", which is one of the meanings. From this idea, according to him, several other meanings have been derived. His surmise does not seem to be correct, after the study of the Mohenjo-Daro script. Putting this sign in an upright position, we shall have △. This sign, or the one similar to it (Marshall, M.D., No. 66), reads *kō* and means "mountain", "excellence", "greatness", "height". Similar to this sign is MD (Marshall, M.D., No. 54) , which reads *mala*, "mountains" and which has been found in seal 259, U, 11426 of Ur.[2] Later on this sign was marked with curved lines thus : or on the punch marked coins of India[3] and on the cast coins of India and Ceylon.[4] Down to the times

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[1] Hrozny, *Les Inscriptions Hittites Hieroglyphiques*, pp. 25, 28, 34, etc.

[2] Woolley, *Ur Cemetery*, I, p. 355 ; II, pl. 210.

[3] Cf. Prasad, *The Silver Punch-Marked Coins*, pls. I and II.

[4] Cf. Rapson, *Catalogue of Coins of the Andhra Dynasty*, pls. II, III, IV. etc.

of the Vallabhis of Saurāṣṭra this sign appeared on Indian coins.[1] It has also passed to European heraldry.[2]

Similar development took place in Jn (170) ⊂⊆ or simply in Ba (322) ▸ or ∴ , which all stand for caves and mountains. Ball pointedly remarks that "the character suggests that the Sumerian writing was not originally invented in Babylonia, which is not a hilly country, but in some mountainous region of the further East".[3] In the MD inscriptions indeed mountains are very often being mentioned. (Marshall, M.D., No. 20).

37. NUMERALS

1. In Ur (Num. A) ↗ means one. It is evident that the sign is the same as the MD (Marshall, M.D., No. 180) ↑ , *orvan*, "one person". The original meaning on account of the determinative of personality ∴ being forgotten, (Cf. DEATH), it means "one" only, in the early Ur period. In Jn the determinative of personality does not appear : — means "one"; but at the same time D also means "one". The latter remained the ordinary figure for numerals in Sumer. In MD (Marshall, M.D., No. 168) | is always "one", and also in PC.

2. In Jn (41) 𝌆 means "two". The same sign with the same meaning is found in Fa (90). In MD (Marshall, M.D., No. 174) || .

3. 𝌆 means "three" in Jn (57) and Fa (133). ||| is the corresponding sign in MD. (Marshall, M.D., No. 30).

4. In Fa (91) 𝌇 stands for this numeral. A similar || is found in MD (Marshall, M.D., No. 74) ; but sometimes also the sign |||| occurs. Yet this sign does not always mean "four'. Sometimes it has a phonetic meaning, for *nāl* means "four" and "good" in Dravidian languages.

½. Prof. Langdon has already noticed the similarity between the MD sign) (Marshall, M.D., No. 36) and the Sumerian sign (,

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[1] Codrington, *op. cit.*, pl. I.

[2] Cf. Heras *Los Origenes de la Heráldina India*, pp. 12 ff. Even the escutcheon of the present Pope Pius XII has three mountains represented in this fashion.

[3] Ball, *op. cit.*, pp. ix-x.

which finally becomes < and ⟨.[1] (in Sumerian reads *śuś* and means one-sixth. The same sign means one-fifth in Elam. These fractions do not exist in Dravidian languages. Hence) only means "one-fourth", "a quarter". In point of fact) is one quarter of the circle : ⊗. It reads *kāl* in MD, and phonetically it means, "foot", "wind", "forest", "pillar", etc. This seems to be the original meaning of this sign, according to its geometrical significance. The other meanings of Elam and Sumer were given to the sign as a secondary meaning in relation to the system of reckoning of those countries. (The opposite sign of MD (should not be confused with the Sumerian and Elamite sign (.[2] This sign in MD reads the opposite of *kāl*, i.e. *lak* and means to "rise"). With the sign) in MD sundry phonetic combinations are formed, many of which were afterwards lost in Sumerian, for they could not be made in their modified language.[3] Thus :–

- *kālak*, "union", "mixture", "united";
- *kalalak*, "stone weapon";
- *kalamalak*, "fieldmeasure";
- *alukalamalakula*, "the grazing ground of the troubled union".

5. In Fa (135) 𒐗 and in Jn (65) stands for five. This is also practically always the sign meaning "five" in MD 𒐗. (Marshall, M.D., No. 157). The sign 𒐐 only once or twice means five. (Marshall, M.D., No. 346). Otherwise they are the rivulets of cultivated lands, and therefore mean "fields", *nāḍ*.

6. 𒐘 in Fa (134) and 𒐘 in MD (Marshall, M.D., No. 249). Only once it has a phonetic value, meaning "side". (Cf. above, pp. 98-99). In Jn (65) it is marked thus :𒐘.

8. In MD (Marshall, M.D., No. 419) this numeral is expressed by)), *eṭṭ*, eight, which sometimes phonetically means "to reach". I have not come across this sign in Sumerian, but it is found in PC

[1] Thureau-Dangin, *Recherches sur l' origine de l' Ecriture Cuneiforme*, No. 257.
[2] Marshall, *op. cit.*, II, p. 443, Nos. 153 and 162.
[3] Cf. above, p. 94.

thus : . It reads *pa*. In Jn (75) we find , which is not used as a numeral, but with phonetic value only. In MD meaning eight occurs only once or twice. (Marshall, M.D., No. 71).

9. In Jn (64) and in MD (Marshall, M.D., No. 273) means nine.[1]

38. OFFSPRING

In Ur (248) means "mother". The same sign is also found with curved lines in Ur (413), . In Jn (346) the sign is also similar, or . They mean "offspring". In MD (Ph., M.D., 28-29, No. 6837) the sign is more significant or . It means "offspring", "to produce". This seems to be the real pictograph, in which one or two stems are seen protruding from the central depression of the figure.

Ba (169) "prince", "king" is a compound sign of the above sign. The two elements are "great" and "offspring" "progeny". Literally, therefore the sign reads "great progeny", and therefore in a derived sense it means "king".

39. PALISADE

In MD (Marshall, M.D., No. 333) means "palisade", "fence", *meṭu*. This sign is found placed between sheep in some early Sumerian seals : .[2]

40. PLANTATION

In Ba (467) means "a plantation". In Fa (365) means "a garden". A similar unidentified sign is found in Ur (267). In MD (Marshall, M.D., No. 183) reads *tota*, "garden", "plantation".

41. PRAYER

Among the early rare signs Ba (593) is of special interest. It reads *ga*, meaning "request" and "prayer". It also reads *sil*, or *sila*, meaning a measure of capacity. Jn (301) is the ancestor of the above sign. The corresponding sign in MD (Marshall, M.D.,

[1] Cf. Heras, "The Numerals in the Mohenjo Daro Script", pp. 136-146.

[2] Woolley, *The Development of Sumerian Art*, pl. 67, *c*.

No. 540) is which reads *kōn* "king", "lord". This idea naturally was the origin of the idea of "requesting" or "praying", an action which is done before the king. Moreover, requesting or praying is in order to obtain something. This something must therefore be possessed by the person prayed to. Hence the idea of "measure". It is therefore beyond all doubt that the meaning of the Jn and Ba signs is derived from the meaning of the MD sign. As regards the sign itself, the MD is a compound of *kō*, "mountain" and the determinative of personality, . reads *kōn*, king. Now this sign in Sumer still retains the additional determinative slightly changed in Jn, though the system of determinatives was not in vogue while the language itself was changed.

42. PRINCE

Ba (112) can scarcely be recognised as a chair or a throne, and as such it means "high", "lord" or "king". In fact Barton does not want to recognise a chair in it, and thinks that the sign is a compound of two pictures, , which he thinks to be a hand holding a sceptre (116), the other being a boat with sails.[1] As a matter of fact this blending of two signs does not seem to have taken place, according to the opinion of scholars. When comparing this sign with its predecessors, one sees clearly that the sign is a chair.[2] For though in Fa (530) the shape of the chair is not easily discoverable, yet, in Ur (296) the original chair or throne clearly appears, . It reads *en*, "lord", "noble", "lordship". In Jn (317) the chair is not so clear. It means the same. But in MD (Marshall, M.D., No. 544) the original pictograph doubtlessly appears. Sometimes it appears in an abbreviated form thus: (Marshall, M.D., Pl. CXVI, No. 22), *kōn*, "king", "prince" specially in compound signs like this: *koḷikōn*, "the king of the *Koḷis*". Ba (112) is evidently the combination of a chair and a fish. The man who sat on the chair was *min*, "shining", "illustrious", in the language, spoken at Mohenjo-Daro. Hence the fish. (Cf. above, figs 18 and 19). In these two

[1] Barton, *op. cit.*, p. 61.

[2] Barton, *op. cit.*, II, p. 176.

archaic seals from Ur, the king, actually seated on a throne, has a fish in front.

There is still another sign in Ur (194) which has the meaning of "authority", "superior" or "commanding". Cf. Ur (195), though the corresponding cuneiform sign is not given by Fr Burrows. This sign does not exist in MD, but its two components do exist in the MD script. In MD ▷ reads *kei* and means "to make" (Cf. To MAKE). If the perpendicular stroke of this sign is suppressed, we shall have >, the phonetic value of which will be obtained by eliminating the initial consonant of *kei*. The sign therefore will read *ei*, which means "arm", "weapon" and particularly "arrow". The opposite sign < has not a different meaning in MD. Now in Ba (336) > means "a cutting instrument" and consequently "cutting" (origin of sign is uncertain according to Barton[1]), while < means 'to raise arms", "to fight" in Jn (270). Both meanings are developments of the original MD meaning. Therefore, will be *ei*, plus the sign <, which always reads *il*. Hence this compound sign will read *eiil*, that is "armed house," i.e. "fortress". In MD (Marshall, M.D., No. 426) we have the sign which reads *eikeior* and means "people holding arms". Ur (196) is very similar. It means "to protect", "to take", "to capture" in Ba (332), which are all effects caused by those who hold arms. Similarly Ba (330) which in MD would mean "people of arms", means "to oppress", "to trouble", "to destroy", "to ruin", "oppression", "fetter", etc., all meanings derived from the first MD meaning. Even the MD sign for "farmer", *ulavan*, which is used as a title of the kings, seems to come from .

43. PUDENDA

In Ba (9) means "pudenda mulieris". Also in Ba (497) ▷ means "pudenda", in general, and derivately, "nakedness". In Fa (270) also means "pudendum" with a special reference to men and animals. In Ur (397) ▷ stands for "woman" and for anything that is "womanish". Also in Jn (302) ▷ means "pudendum", "female", "woman". The origin of this sign seems to be the sign △, which originally in MD means "half" and phonetically

[1] Barton, *op. cit.*, p. 176.

"to know"; this meaning was afterwards qualified as "to know sexually". (Cf. To KNOW). In MD there is no sign for *pudenda mulieris*. There is nevertheless a sign (Ph., M.D., 28-29, No. 6500), which reads *bayir*, i.e. "womb", "belly", "to be born". From this sign the Chinese sign *mu*, "mother" seems to come.[1]

44. QUEEN

In Ba (499) means "sister", "lady" and "princess". In Ur (401) stands for "a goddess". In Jn (305) means "queen". This is also the meaning of the MD (Ph., M.D., 30-31, No. 12621*) sign (Cf. WOMAN).

45. RAIN

In MD rain is expressed by the sign (Marshall, H., No. 76), which has its parallels in Chinese *yu* (modern Chinese 雨) and in Sumerian *e-ga*, "overflow", "flood". A similar sign in Sumerian *gig, ge*, means "dark", "black", "night". Also [2] Ba (380) means "dark", "darkness". All these signs are interrelated, and indeed darkness is always produced by a heavy rain. Therefore, the original sign was the sign for rain. In MD (Marshall, M.D., No. 1) there is a special sign for darkness, , which sign was originally the same and was slightly modified by adding the sign of the "high sun" attached to the sky, in order to show that the sign does not mean "to rain", but a phenomenon related to light, i.e. "darkness".

46. STAR

Ba (13) means "star". It is absolutely like the sign or determinative of god, though apparently in the beginning they were different. Elsewhere we have explained the origin of the determinative of god (Cf. GOD). In MD (Marshall, M.D., No. 79) star is expressed by the sign *mīn*, for in Dravidian languages both "fish" and "star" proceed from the root *min*, "to glitter". Perhaps later on the sign was marked thus, and afterwards the other two lines were added while the lines representing the fish were omitted as having no meaning at all in Sumerian.

[1] Ball, *op. cit.*, p. 30.

[2] Ball, *op. cit.*, p. 28 and Sign List, No. 69.

But besides, this Sumerian sign for star also means "ear of corn". Barton says that the reason of this meaning may be because the ear of corn "was the symbol of the god Nidaba"[1]. If that were so, symbols of other gods would also be meant by this sign. In point of fact the reason should also be looked for in MD, where the "ear of corn" also means "ray of light", "illustrious" (Marshall, M.D., No. 148), for both ideas are expressed by the word *kadir* in Dravidian languages. Since the star has rays of light and lustre, it also finally became to mean "ear of corn".

47. STATUE

In Ur (90) means "statue". In a sealing of Ur (*ibid.*) the sign is simpler and more primitive: . Sumeriologists cannot easily explain this sign. This sign does not exist in MD. Yet its two compounding elements exist there: means "to see" or "vision", and the sign ↑ means "a person". The sign therefore literally means: the vision (or appearance) of a person, i.e. a statue. The sign is doubled, for plural of majesty was always used for prominent persons and statues were certainly not made of ordinary people, but only of kings, governors, priests, etc.

48. STONE (Inscribed)

In Ba (71) - means stone. The same sign is used in Jn (6). In MD the sign is absolutely the same, but turned to the other side. This position does not seem to be the original one. For the natural position would be , being a pillar and the inscription erected on top of it. This sign, as well as others, shows that there was an earlier stage in MD writing.

49. STRAIGHT (To be)

In the Jn period (18) means "to be straight". In its vertical original position is found in MD (Marshall, M.D., No. 16).

50. STRONG

The Jn (144) reading *tui* has a number of meanings. "One who throws down or overthrows mountains, buildings, etc.", "man",

1 Barton, *op. cit.*, p. 13.

"male", "strong drink", etc. In MD (Marshall, M.D., No. 84), the sign reads *vāl*, i.e. "strong". Evidently all the above meanings are derived from this. This sign is found in some compound signs, for instance, *vālil*, "strong house", i.e. "fort"; *vālkei*, "to make strong", "to strengthen" and *vālāḷ* "strong man". Also in MD (Marshall, M.D., No. 404) this sign is found with the little addition which always reads *il* placed inside it, thus, , which reads *vālil*, i.e. "not strong", and therefore, "weak". In Sumer the sign is found in a simplified way: .[1] Also in Ba (527). This evident origin of the sign shows that the explanation of Barton,[2] that it originally represented the setting sun is not correct.

51. SUN

Ba (337) means "sun", "day", "bright". All Assyriologists agree that this sign originated in a picture of the rising sun.[3] The original picture removing the angles of the later script, should be . In Ur (197) also means "sun" and "light". But in Ur (178) we find already , which is a sign half angular and half round. The fully round form is found in Jn (171), though the angular form is also found. It means "sun", "light" and also "day". The sign in MD (Marshall, M.D., No. 145) means "the waning moon"; while the opposite stands for the "waxing moon". Since the period of the waning moon is the period during which light increases, the sign afterwards happened to mean "light" and consequently, "sun". It may be noticed that the original signs and are still used in some modern calendars with exactly the same meaning as in the MD period.

52. TEMPLE

In Ba (301) means "sanctuary", "something set apart". also has a religious significance. It stands for a "periodical festival". A similar sign means "the place of a festival" in Ur (298). In Jn (354) we have and . And in MD (Marshall, M.D., No. 227) *kōvil*, "temple", which evidently is a pictograph

[1] Ball, *op. cit.*, Sign List, No. 42.
[2] Barton, *op. cit.*, p. 263.
[3] Cf. *Ibid.*, p. 178.

of a house to which all the streets lead. Such a house could only be the temple which was usually built in the centre of the cities. All the other meanings are derived.

53. THINK (To)

Ba (77c) means "to think", "to remember", "to understand". The corresponding MD sign is , which means "to think", "to meditate", "to calculate", "to count". In Egyptian means "to calculate". But this sign in Ba (*ibid.*) also means "road", which meaning is not easily explained. Apparently, in the Ba sign two signs have been amalgamated : one is "to think" and other , which is also found in MD (Marshall, M.D., No. 418) and reads *adir*, i.e. "road", "path".

54. WAGON

In Jn (363) means "wagon". It is a house drawn by animals (Cf. HOUSE). In MD "waggon" is (Marshall, H., No. 94).

55. WOOD

In Ba (258) means a "piece of wood". Thus in Jn (405) or stand for wooden objects. In MD (Marshall, H., No. 105), are logs of wood.

The cases of script development explained in the preceding pages cannot be mere coincidences, for they are too many and too striking for being so. On many occasions the Sumeriologists cannot explain the reason of the meaning of some signs, and this may be explained perfectly well after knowing the MD list of signs. The explanation is occasionally phonetic, at times also pictographic. There cannot be any doubt at present that the greatest number of signs of the Sumerian script owe their origin to the Mohenjo-Daro signs.

Prof. Ball, after studying the Sumerian and Chinese affinities in the respective scripts of these two nations, suggests that perhaps the Chinese and Sumerians came from an original stock in Central Asia.[1] We have also referred to *en passant* to some Chinese similarities. From the premises exposed hitherto we do not dare to draw any ethnographical conclusion. But this certainly do we

[1] Ball, *op. cit.*, p. x, n. 1.

state that both the Sumerian and Chinese writing proceed at least in their greatest portion from the Mohenjo-Daro script of the Proto-Indian people.

Appendix II

THE CULT OF THE MOUNTAIN OF THE EAST IN SUMER

Though all temples in Sumer were usually built upon mountains or heights, either natural or artificial,[1] yet there was a mountain in Mesopotamian mythology surrounded by special splendour and venerated in a special way. This mountain was "the Mountain of the East", upon which the god Bel settled the destinies of the world. It was supposed that Bel,[2] accompanied by the goddess Nin-har-sag, was dwelling upon this mountain. This goddess was styled the mistress of the mountain.[3] This mountain in Sumerian language was called 'Kurgal', the great mountain, which finally became one of the names of the God Bel himself. Consequently the temple of Bel in Nippur was called 'E-kur' which means 'the house of the mountain'.[4]

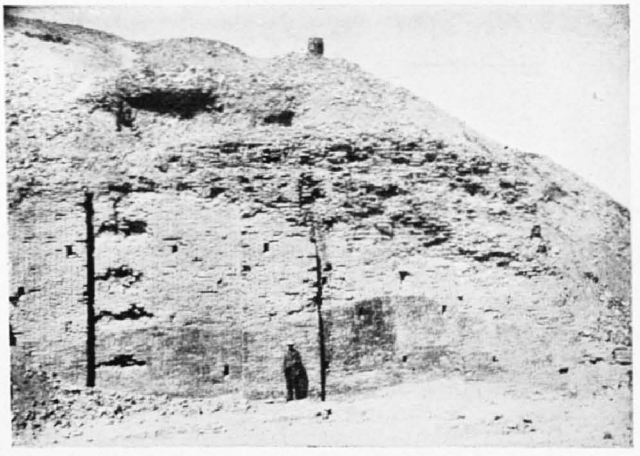

Fig. 142
Southeast side of the brick *ziggurat* of Ur.

In some old texts it is said that god Nin-gir-su had been procreated by 'the great mountain'.[5] In reality, Nin-gir-su, the god of Lagash, was but the same Bel, son of Enlil.

In Babylon it was a popular belief that Marduk was settling the des-

[1] These artificial mountains upon which the Sumerian temples were built were called *ziggurat* Cf. above, p.213.

[2] The mountain of the East inhabited by Bel is mentioned in the Stele of the Vultures of E-anna-tum, Obv., XVII, 9ff. In early Sumerian texts it is Enki who "decrees the fate" and who "keeps the one hundred divine decrees". Kramer, *Sumerian Mythology*, pp. 60 and 66. Enki is then supposed to be the son of Enlil. Also in the Indus Valley they mention the decree or judgment of Āṇil, the son of Āṇ. Marshall, *op. cit.*, No. 334.

[3] Dhorme, *La Religion Assyro-Babylonienne*, p. 73.

[4] *Ibid.*, p. 72.

[5] Cf. Thureau-Dangin, *Les Inscriptions de Sumer et d'Akkad*, p. 145.

tinies of Babylon in the 'Dul-Azag', which was the reproduction of the Mountain of the East wherein he dwelt, presiding over the destinies of all men.[1] The Assyrians believed the same concerning god Asur who was likewise called "the Great Mountain".[2] His principal temple bore the name of "E-hai-sag-kun-kurra", which means 'the mountain of the land'.[3]

What is the mysterious significance of this Mountain of the East, the memory of which continued alive in Mesopotamia, up to the last days of the Babylonian and Assyrian Empires? It is evident that the Sumerians and their successors, the Babylonians and the Assyrians, saw in this mountain the abode of God, who with his infinite providence regulates the destinies of men. According to them therefore God dwelt upon a great mountain. But the most interesting detail of this mountain is its situation. It was the Mountain of the East. This seems to suggest that the Sumerian nation came to Mesopotamia from the East ; and that at the time of their migration and even afterwards they remembered that there, in the East, they had left the mountain where God was dwelling; and they continued venerating the memory of that mountain, and they even fancied in their religious fervour that the temples of the god who regulated the destinies of the universe were reproductions, at least symbolical, of that holy mountain.

Was there, therefore, any nation in the East where God was supposed to dwell on a mountain? It is well known how in the Purānic and Epic literature of India Śiva is described as inhabiting Mount Kailāsa in the Himālayan range. Indian sculptors have reproduced the homely scene of Śiva and his consort Umā on the top of this mountain a thousand times. Round this mountain a real cycle of myths referring to Śiva has grown in the course of centuries. (Fig. 143). In particular, we may note that Umā receives the denomination of Pārvatī, 'the goddess of the mountain' (as she was

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[1] Dhorme, *op. cit.*, p. 98.

[2] *Prism of Sennacherib*, I. 11.

[3] Dhorme, *op. cit.*, p. 101.

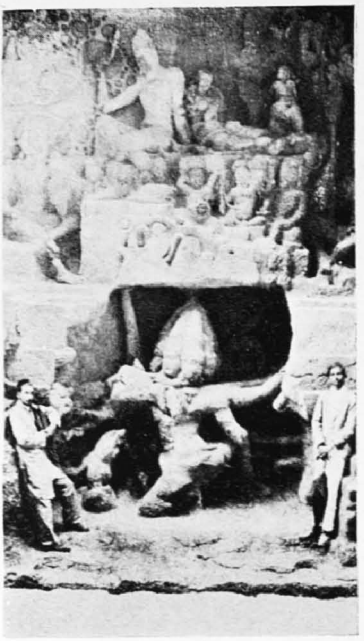

Fig. 143
Śiva and Pārvatī on Mount Kailāsa, while the mountain is being shaken by Rāvaṇa; from Ellora.

the daughter of Himālaya), a denomination totally parallel with the name of the goddess Nin-har-sag, the wife of god Bel, as seen above. The connection between Śiva and the mountain has continued unchanged throughout the long religious history of India. The *Śvetāśvatara Upaniṣad* calls him "dweller among the mountains" and "mountain protector".[1] The Tamiḷ work *Aruṇācala Purāṇam* narrates that on one occasion Śiva himself appeared as a mountain, "the Sacred Hill whose crown ascended above the loftiest height, whose base sunk under the lowest depth".[2] Consequently he is named "the gleaming golden Hill",[3] "sacred Hill of grace and good, from evil free"[4], "unsealed mount of ever blazing light"[5] and "mountain of bliss".[6] One of the ordinary names of God in the Tamiḷ land even at present is *Tirumalai*, which means "the holy mountain" Such is also the name by which all the *Konkani* temples of Malabar are denominated.[7] In a similar way the Urāons of Chota Nagpur, who speak a Dravidian language, call the Supreme Being *Marang-buru*, which means "the great mountain".[8] Again, in the tale of "The Lost Book" of the Khasis of Assam, God is described as dwelling on a mountain.[9] Even now the central mountain itself of the Eagle's Hill at Tiruparankunram, 9 miles S.E. of Chingleput,

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[1] *Śvetāśvatara Upaniṣad*, III, 6. Cf. above, pp. 213-214.

[2] *Aruṇācala Purāṇam*, ch. II.

[3] Mānikkavasagar, *Tiruvasagam*, XXVII, v. 1.

[4] *Ibid.*, XXII, v. 35.

[5] *Ibid.*, v. 17.

[6] *Ibid.*, XX, v. 8.

[7] Thurston, *Castes and Tribes of Southern India*, III, p. 423. The sacred mountain, Tirumalai, in Chitoor District, is now a Vaiṣṇava shrine, though originally Śaiva.

[8] Roy, *Urāon Religion and Customs*, pp. 41-45, 45-47.

[9] Narayan, "Khasi Folk-Lore", *The New Review*, XVI, pp. 454-455.

is supposed to be god Śiva himself.[1] Even Subrahmaṇya, Murugan, the genuine son of Śiva, whose temples are very often on hilltops receives the following titles in Tamiḷ: *Kurinji Āṇḍavar*, "the Lord of Hilltops"; *Kurinji Vendan*, "the King of Hilltops"; *Kurinji Iraivan*, "the God of Hilltops", and *Kurinjiman*, "the one of the Mountains".[2] "Murugan", says the late P.T. Srinivasa Iyengar, "has throughout the ages remained essentially a god enshrined on hill-tops, notwithstanding later affiliations with post-vedic mythology".[3] But is this conception of Śiva, or of his proto-type Āṇ, dwelling upon a mountain, as old as the Sumerian nation?

We have elsewhere published an inscription, discovered in Mohenjo-Daro,[4] which refers to Āṇ in the following words: '*Vēlanavan venkō*'.[5] As I have noted at the time of the publication of this inscription, Vēlan is the same as Āṇil[6] and Murugan,[7] a name phonetically read in one of the inscriptions, which is the ancient Dravidian name of Subrahmaṇya, Śiva's son. 'Vēlanavan', therefore, is 'he of Velan', viz. Āṇ. Now 'Vēlanavan' is predicated of 'venkō', for *venkō* seems to be the possession of 'Vēlanavan'; 'venkō' means 'the white mountain'; therefore the inscription clearly refers to 'the white mountain of Āṇ.'

This denomination of 'white mountain' obviously seems to refer to a mountain covered with snow. In the south-east of Afghanistan near the Indian frontier, there is similarly a mountain denominated 'Safet Koh', because it is covered with snow practically the whole year round. Even in recent times the dwelling of Śiva which is Mount Kailāsa, is denominated "the silver hill".[8]

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[1] Pope, *The Tiruvasagam*, p. 250.
[2] Cf. Somasundaram Pillai, *Palni The Sacred Hill of Muruga*, pp. 8-15.
[3] Srinivasa Iyengar, *Pre-Aryan Tamil Culture*, p. 23.
[4] Mackay, *Further Excavations at Mohenjo-Daro*, II, pl. XXXV, No. 119.
[5] Cf. Heras, "The Veḷāḷas in Mohenjo Daro", p. 52.
[6] Marshall, *Mohenjo-Daro and the Indus Civilization*, III, pl. XCI, No. 334.
[7] Mackay, *op. cit.*, II, pl. lxxxix, No. 364.
[8] Mānikkavasagar, *op. cit.*, XXIX, v. 40.

In India, there is one mountain covered with snow *par' excellence*, i.e. the Himālayas; hence the inscription seems to mention the Himālayas of Āṇ, which shows that the connection of Śiva=Āṇ with the Himālayas, is extremely ancient; and it would not therefore be astonishing that the Sumerians would still remember that God was dwelling in the mountain, long after they had settled in Mesopotamia.

Incidentally, this devotion of the Sumerians to the Mountain of the East seems to show that the Sumerians had actually come from the East, as *Genesis*, xi, 2, clearly states,[1] and Berossus[2] also suggests. We do not know of any other nation to the east of Mesopotamia where God was supposed to dwell on a mountain but India. Hence this peculiar Sumerian cult clearly points to India as the cradle of the Sumerians, and to the Proto-Indian Civilization as the original cultural tree, one of whose branches was the civilization of Sumer.

The fact that the island of Nidûkki—modern Bahrein—is associated in ancient Babylonian writings with "the Great Mountain" of Bel, with the mysterious Bull and generally with the East,[3] may, we repeat once more, mark the probable itinerary followed by the ancient Proto-Indian emigrants on their way to the land of the Two Rivers.[4]

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[1] Cf. above, pp. 197-201.

[2] Cf. above, pp. 186-193.

[3] Rawlinson, "Notes on Cap. Durand's Report", *J.R.A.S.*, XII (1880), p. 214.

[4] Cf. above, pp. 190-193.

Chapter III

THE HAMITIC MIGRATIONS INTO EGYPT

I

THE ANU IN INDIA

The word *Anu*, which we come across in the proto-history of India and Egypt, could not be properly explained before the discovery of the so-called Indus Civilization. Now we may try to study its origin and its meaning with much greater hope of success in our undertaking.

The *Anu* constitute one of the five Ṛgvedic tribes.[1] They are mentioned as having wrought a chariot for the use of Indra.[2]

Mr R. D. Banerji has already said that the Anu, undoubtedly being an Āryan tribe, bear a name which "appears to be of non-Āryan origin".[3] If so, what was the origin of their name? It is well known that very soon the Āryan tribes accepted a number of dogmas of their Dravidian predecessors into their own religion, first little by little and hesitatingly, but later openly and without fear, until finally the whole religion of the Dravidians was amalgamated with, and almost replaced, their own religion;[4] this amalgamation becoming the foundation of modern Hinduism.

That this process of amalgamation commenced in the Ṛgvedic period, though on a very small scale in the beginning, the very Ṛgvedic hymns bear evidence. That "*ekam sad viprā bahudhā vadanti*," of the first *maṇḍala*[1], is only a practical way of expressing the truth of the Dravidian dogma of monotheism, but shaped in such a manner as would suit the politheistic confusion of the early Āryan religion.

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[1] *Ṛg.*, I, 108, 8; VIII, 10, 5. They are also called Anavas, *Ibid.*, VII, 18, 14; VIII, 4, 7.

[2] *Ibid.*, V, 31, 4.

[3] Banerji, *Prehistoric, Ancient and Hindu India*, p. 19.

[4] *Ibid.*, pp. 31-39.

[5] *Ṛg.*, I, 164, 46.

But apparently this was not the only dogma accepted by the Āryas in those early days. If they had accepted the dogma of monotheism, it was but natural after all that very soon they had to accept the very name of this only God of their former opponents. Now it happened that the name of God amongst the proto-Dravidians was Āṇ, that means "the Lord".[1] Probably not all the Āryan tribes accepted the worship of Āṇ at the same time. Those who accepted it first were called by the rest *Āṇus* or simply *Anus*; for as a text of the *Niddesa* informs us, in ancient times people were named after the deity they worshipped.[2]

Thus the original Dravidian inhabitants of the country, who worshipped God Āṇ were also called Anu, for the Anu are said in the *Mahābhārata* to be Mlecchа tribes,[3] which denomination is always applied to the non-Āryas.[4] In the same way the non-Āryan peoples of ancient Iran, who are called *Anareoi* by Ptolomy,[5] seem

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[1] Heras, "The Religion of the Mohenjo Daro People according to the Inscriptions", pp. 1-5, where I have explained how I found out that this was the name of God in the Mohenjo-Daro period. Later, I came to know that this name is still included the among various names given to Śiva in the historic period. The *Brahmāṇḍa Purāṇa*, written in a period posterior to the identification of Śiva and Rudra, narrates that Brahma asked Rudra to create beings. He did so and those beings were known as Rudras and Rudrāṇis. Later on Brahma asked Rudra to create mortal beings, to which Rudra enjoined: "I shall not create being subject to death. Here am I, standing, oh Lord, createth Thou!" To which Brahma agreed. Hereafter therefore Rudra stopped creating, and remained standing nude with the *urdhva liṅga*. "Now since he had said to Brahma: "Here am I, standing", learned people call him *Sthāṇu*." *Brahmāṇḍa Purāṇa*, Pūrva Bhāga, Adhyāya 10, vv. 82-92. *Sthāṇu*, a compound word, elements of which are *Sthā* and *Anu* or *An*, evidently means "*Anu* who is standing." The Tamil speaking people call Śiva even at present *Āṇḍavar* or *Āṇḍivanan*, and the Malayalis name him *Tāmburan*. In the *Mahābhārata*, *Aṇu* is one of the names of Śiva (Sorensen, *An Index to the Names in the Mahābhārata*, word '*Aṇu*' p. 42). Similarly Rudra-Śiva is called *Iśāna* in the *Atharva Veda*, XV, 5, 1 and 7; 14,10. My student Dr A. P. Karmarkar informs me that the word Iśāna looks like a present participle. But nowhere is a present participle used as a gerund. The word Iśa (gerund of the root Iś=to rule) is already current as meaning "a ruler", "lord". What is therefore the meaning of the termination *-ana*? The word *Sopāna* (which has been suggested as another similar case) cannot be considered as a proper parallel, because it is not the present participle of any root. Hence the word seems to be derived from Iśa (lord in Sanskrit) + Āṇ (lord, in Dravidian), its parallels being *Kūdal-Saṅgama*, *Kanyā-Kumārī*, *Laka-Dvīpa*, well known geographical names formed by the Dravidian and Sanskrit words having the same meaning.

[2] "The deity of the lay followers of Ājīvakas is the Ājīvakas; of those of the Nighaṇṭas is the Nighaṇṭas; of those of the Jaṭilas is Jaṭilas," etc. The text belongs to the 4th century B.C. Cf. Bhandarkar, *Vaiṣṇavism Śaivism and Minor Religious Systems*, p. 3.

[3] *Mahābhārata*, Ādi Parva, 3533.

[4] This clearly shows that the Anu of the *Ṛgveda* were not the same Anu of the *Mahābhārata*. The latter received the appellation first, because they were the worshippers of Āṇ; when the first Āryan tribe accepted the cult of Āṇ that appelaltion was extended to them. Hewitt, "Notes on the Early History of Northern India", Part II, *Journal of the Royal Asiatic Society*, XXI (1889), p. 240, confused both families of Anu when he wrote: "There is no further evidence in the *Mahābhārata* or *Rigveda* to show directly to which race the Anu belonged."

[5] Ptolomy, *Geographica*, VI, 14, 13.

to belong to the same Dravidian race,[1] the name being also an indication of their religious belief rather than an ethnic denomination.

This custom the Āryas practised once more, but in a contrary way, when, later on, all finally accepted the cult of Āṇ. Their contact with one of the Dravidian tribes who were inhabiting the neighbourhood of the Indus,[2] called the tribe of the Śivas, was most likely the final reason for their accepting the old Dravidian god; and since this god was worshipped by the Śivas, he was named Śiva,[3] without further inquiry; he was in fact the same Āṇ after whom the Anu had been named. Thus it came to pass that Āṇ was generally called Śiva, though he still retained his original name in Sanskrit literature.[4] Śiva was furthermore styled Īśvara, "The Lord", the very translation of the name Āṇ. He was later indentified with Rudra.

II

THE ANU IN EGYPT

One of the feasts celebrated by the Egyptians of Pharaonic times was "the Feast of Striking down the Anu." The tradition of this feast, according to the studies of Egyptologists of great reputation, seems to be very ancient. Yet we do not know anything about "this Striking down the Anu." One fact nevertheless may be accepted without hesitation; since the tradition of this feast was so ancient, the event commemorated in the feast must be one of the earliest in the history of Egypt, one in fact which is lost in the dawn of human history in that land. In this chapter we shall try to elucidate this obscure historical event. First of all, whom does the tradition refer to? Or, in other words, who were the Anu?

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[1] Hall, *The Ancient History of the Near East*, p. 174, n. 1. In point of fact *Anar* means in Dravidian 'those of An' (for Āṇ), to which the Greek plural termination *-oi* was added by the Greek author.

[2] They were still found there by Alexander the Great. Cf. McCrindle, *The Invasion of India by Alexander the Great*, pp. 366-367.

[3] The Śivas were an ancient Dravidian tribe named after their *lāncana*, a partridge; (*śivai* in Tamil means, "partridge". Cf. Beschi, *Tamil Dictionary*). That Śiva was called after the Śivas seems evident from the fact that Śiva is also called *Kīkata* (*Linga Purāṇa*, Purva Bhāga, XXI, 68), as he was the god of the Kīkatas.

[4] *Harivaṁśa*, I, Adh. 23, 5.

The great Belgian Egyptologist Mons. Jean Capart speaks of the Anu, as "a great tribe", "which most have occupied Egypt in the same manner as the Hyksos did later"[1]; while Prof. Flinders Petrie avers that they "are known as an aboriginal people of India".[2] This apparent disagreement only shows the remote antiquity of this people in the valley of the Nile. The same Mons. Capart has also stated that the Anu most likely are the *Anumim*, mentioned in *Genesis*, X, 13, as being descendants of Cham or Ham through Misraim, who had settled in the valley of the Nile.[3] The word Anumim is only the plural Hebrew rendering of the word Anu. These Anumim have been acknowledged as a section at least of the primitive population of Egypt.[4] From this we may readily admit that they were Hamitic people, having therefore the same origin as the Proto-Dravidians settled in India from the time of the Indus Civilization.[5]

But why were they called *Anu* or *Anumim*? This is in fact the primitive name of this people, the origin of which we must investigate.

Mons. E. de Rougé has connected the Anu with several Egyptian cities, and in particular with the ancient city of Heliopolis, the original name of which was Ān or Anu.[6] The city of Heliopolis, a name given by the Greeks meaning "City of the Sun," was named by the Egyptians as Anu,[7] and very likely originally Anur, which name, according to the Egyptians themselves, meant "the City of the Sun".[8] Anu

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[1] Capart, *Primitive Art in Egypt*, p. 285.

[2] Flinders Petrie, *Abydos*, II, p. 25.

[3] Capart, "La Fête de frapper les Anou", *Revue de l'Histoire des Religions*, XLIII (1901), pp. 249-274; *Actes du Premier Congress International d'Histoire des Religions*, II, First fascicule, pp 1-26. Hall, *The Ancient History of the Near East*, p. 95, thinks that the Anu are the Semite-Libyans or proto-Semites of the North, whom the Hierakonpolite king Narmer strikes down in his monuments. Hall had not the proper point of view to appreciate the historical perspective of the two successive waves of Hamitic migration. In any case, the Anu can in no way be Semitic, as the name itself is of clear Hamitic type. The defeat inflicted on the Anu could not have been inflicted by the people of Horus from the south, as Hall imagines; for Horus was himself of the same nation as the Anu. *Genesis* itself shows that the Anumim were Hamitic.

[4] De Rouge, *Recherches sur les Monuments qu'on peut attribuer aux six premieres dynasties de Manethon*, p. 67.

[5] Cf. below, Chapter V, I

[6] De Rouge, *op. et. loc. cit.*

[7] The name given by the Bible to this city is On : *Gen.*, XLI, 45.

[8] Thus the Greek name was a mere rendering of the Egyptian name.

was famous all over Egypt, as the main seat of the cult of Rā, the Sun-god, who was supposed to be the most ancient god of Egypt. Yet Rā, being the most ancient god of the land of the Nile, was nevertheless said in the ancient Egyptian texts to have come out of the abyss of Nu.[1] Who was this Nu? In Egyptian mythology Nu is said to be "the primordial god of the celestial waters and the ethereal space."[2] This description of Nu referring to the ether and to the celestial waters seems to point to the times when there was no earth as yet in the world. Hence Nu seems to have been the most ancient God, in point of fact, the God supreme and omnipotent, self-subsistent, as described in the *Book of the Dead*.[3] In fact Atum or Adum, who is undoubtedly the first man, corresponding to the biblical Adam,[4] is said to have come out of Nu.[5]

Now this Nu, of whose abyss Rā came out, is identified with Rā himself by the ancient Egyptians.[6] How is this apparent contradiction to be explained? A careful study of this crucial point will finally make us understand who Rā was.

We have seen that Rā was the Sun, and that his city, called Anu=Anur, was also interpreted "the City of the Sun." Hence Rā and Āṇ seem to have the same meaning and consequently to refer to the same person. They are two names of one and the same god. Rā therefore is the same as Āṇ. In point of fact this Āṇ seems to be the same Ana who is mentioned by the *Texts of the Pyramids* as one of the archaic Egyptian gods.[7]

We know that the Proto-Indian people worshipped Āṇ,[8] who was identified with the Sun, named El.[9] The Egyptian name for the Sun, Rā, is of Dravidian origin. It means "light", and con-

[1] Wallis Budge, *The Gods of the Egyptians*, I, p. 40. Cf. above, pp. 245-246.

[2] Lefebure, *Les noms d'apparence sémitique ou indigène dans le Panthéon Egyptien*, p. 17.

[3] Wallis Budge, *The Gods of the Egyptians*, I, p. 134.

[4] Lefebure, "Le Cham et l'Adam Égyptiens", *Transactions of the Society of Biblical Archaeology*, pp. 174-181. Cf. Drioton, "Le monotheisme de l'ancienme Egypte", *Cahiers d'histoire égyptienne*, I, pp. 149 ff.

[5] Lefebure, *Le noms d'apparence sémitique*, *loc. cit.*.

[6] Wallis Budge, *op. cit.*, I, pp. 134-135.

[7] *Ibid.*, I, p. 97.

[8] Heras, "The Religion of the Mohenjo Daro People", *op. et. loc. cit.*

[9] *Ibid.*, pp. 13-14.

sequently "the Sun".[1] We have therefore a perfect equation of the Supreme God between India and Egypt in the proto-historic period.

As regards Nu, some scholars have already suggested that Nu and Nuit, the god and goddess of Heaven, according to the doctrines of Heliopolis, correspond to Anu and Anunit, god and goddess of heaven, of the Chaldaean pantheon.[2] Therefore Nu seems to be the same as Anu or Āṇ.[3] And since Āṇ is the same as Rā, Nu must be equated with Rā. It is therefore quite possible that Rā, being the most ancient god of the land of Egypt, came out of the abyss of another god, Nu. This only means that when the name Anu or Nu was practically forgotten, it was finally substituted by the name Rā. Connected with the name itself there was also perhaps a dogmatic belief, which in course of years was overlooked, and another tenet, which was little by little emphasized, till it finally took the place of the former. Thus the personal immaterial god Āṇ was substituted by the material symbolism of Rā. Thus it could be said that the name Rā "came out of the abyss" of Nu when the name Anu or Nu passed into oblivion.

Though the name Anu or Āṇ, as a name for Rā, was lost in the temple of Heliopolis, it remained as the name of the city Anu. It remained also in *The Texts of the Pyramids*, as Ana ; in the *Lamentations of Isis* for the death of Osiris, who is also called An ;[4] in the name Anhur, the feudal god of the Sabennitic *nome* mentioned in the Papyrus Harris ;[5] in the name Anuke of one of the goddesses

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[1] In Tamil the modern word *ira*, "night", is a contracted form of *il+ra*. *Il* is the negation "no." *Il-ra* therefore means "no light", i.e. "darkness" or "night." Contractions similar to this are very common in Tamil : *pāl + nanru = pānanru* "the milk is good"; *il + ninru = ininru* "standing from." The omission of *l* in front of *t* is not mentioned in the grammatical rules for these contractions, for the simple reason that in modern Tamil there are no words that start with *r*. Cf. de Zilva Wichremasinghe, *Tamil Grammar Self-Taught*, p. 18. In the old Proto-Dravidian language of the Mohenjo-Darians words starting with *r* doubtlessly existed, for there are still some of them in other Dravidian languages. That *rā* "light" and "the Sun" was one of these words the name of the ancient Dravidian kind Rāvaṇa seems to prove. Accordingly the name of this king would mean "the eldest brother of the Sun."

[2] Hommel, *Die babylonischen Ursprung der aegyptischen Kultur*, pp. 17, 39 ; Lefebure, *op. cit.*, 17-18.

[3] Wallis Budge, *op. cit.*, I, pp. 134-135.

[4] Harrack, "Les Lamentations d'Isis et de Nephthys," *Bibliothèque Egyptologique*, XVII, pp. 33-35 and 83-89.

[5] Chabhas, *Le Papyrus Harris*, pp. 147-148. The Etruscans of Italy, a nation of the same Hamitic Dravidian stock, worshipped God under the name Ansur, in Terracina. Ansur means "the lordly Lord" or "the one who is Lord twice," i.e. above the lords of this world.

of the Triad of Elephantina[1] and in the name Anupu of one of the two brothers in the ancient "*Story of the two Brothers*".[2]

It is, therefore, settled, that Āṇ=An was the most ancient god of the Egyptians worshipped in the city of Anu or Heliopolis. Therefore the people called Anu connected with the city of Heliopolis, were not the descendants of An, as the partisans of the totemic origins of Egypt would make us believe.[3] They were the early Egyptians who worshipped An as their God, in the same way as the Proto-Indians worshipped Āṇ in India.

Having learnt who the Anu were, an inquiry into the meaning of the expression "the Striking down of the Anu" in ancient Egyptian folk-lore may now be made.

"The striking down of some people" evidently means a punishment for those people; and in this case "the Striking down of the Anu" clearly suggests a defeat of the Anu, and consequently a victory for their opponents.[4] Have we any evidence in ancient Egyptian history about this victory and this defeat?

Mons. Loret is of opinion that the story of the murder and resurrection of god Osiris may contain some recollections of the war between the Anu and their enemies. According to ancient traditions, Osiris was a Pharaoh with a very successful career, both as regards his administration of the country and as regards his conquests abroad. His brother Set or Typhon treacherously murdered him and usurped his throne. But later on Horus, the son of Osiris, reappeared on the scene, defeated Set, and occupied the Egyptian throne as the rightful heir of his father.[5] Such is briefly narrated, the story of the death and resurrection of the Egyptian god of fertility, which after-

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[1] Virey, *La Religion de l'Ancienne Egypte*, p. 75.

[2] Maspero, *Les Contes Populaires de l'Egypte Ancienne*, pp. 1 ff.

[3] Totemic tribes used to worship their ancestors. Yet it has never been proved that the totemic society, as found among American Indians, existed also in Egypt. Moreover, the pure theological ideas of the Egyptians are totally opposite to the vague and confused dogmas of totemic peoples. Cf. Pierret, *Le Panthéon Égyptien*, pp. V-VI.

[4] The Kūrds of Iran also celebrate a feast called "Id-i-Kurdī" in commemoration of the death of Zohak. Fergusson, *Tree and Serpent Worship*, p. 3 (2nd ed., 1873).

[5] Plutarch, *De Iside et Osiride*, XIII-XIX.

wards became very important in connection with the Egyptian ritual and also in the famous *Book of the Dead*.

Loret thinks that this fabulous story is but a mythological crystallization of some early episodes of Egyptian history.[1] Three stages of history, quite different from each other, may be detected in this story :–

First Stage. The reign of Osiris marks a period during which the Anu or worshippers of An (Osiris was also named An and even is identified with Rā at a later period[2]) were in peaceful possession of the land of the Nile.[3] There is no possibility of ascertaining how long this period lasted. Apparently it lasted quite a long time; for during that period the cult of An=Rā was firmly established in the land, so firmly, that it was able to withstand the onslaught of an invasion of enemies who appeared during the second period.

Fig. 144
Painting of the Papyrus of Nebseni depicting Osiris on a throne as King of Egypt.

Second Stage. The assassination of Osiris opens a new period of history, which seems to be the result of an invasion of Northern Egypt from Syria. Loret thinks that the invader had the flag-sign of the Asian greyhound, because that seems to be the animal which is on Set's flagstaff. Set, in fact, was the leader of this invasion. The invaders apparently did not belong to the same race as the Anu. Yet Set is said to be Osiris's brother, perhaps because both the invasions, viz. of the first and the second periods, came from the Syrian side. If Set's army came from Syria, they, having come from a race different from that

Fig. 145
The greyhound symbol of Set and his hosts.

[1] Loret, *L'Egypte au Temps du Totemism*, pp. 37 ff.

[2] Grau, *The Goal of the Human Race*, p. 29.

[3] In fact Osiris is identified with Rā (Wallis Budge, *The Gods of the Egyptians*, I, p. 149). Accordingly, at times Rā takes the place of Osiris in scenes of the judgment of the soul. (Wallis Budge, *The Teaching of Amenem-Apt*, pp. 41-42 ; Naville, *Todtenbuch*, I, ch. CXXV). At times Osiris is called "the son of Rā" (Wallis Budge, *The Gods of the Egyptians*, I, p. 141).

of the Anu, were most likely Semites. This would be the first of the Semitic immigrations of Egypt across the Suez isthmus. We know of other Semitic invasions of a later period, viz. Abraham's,[1] of the Hicksos and, during the rule of the Hicksos, of Jacob and his sons.[2]

Set's army fought with the Anu and defeated them. This defeat is symbolised in the death of Osiris at the hands of Set. This is precisely what is meant by "the Striking down of the Anu." Loret opines that the conquerors killed a great number of Anu; yet apparently the latter were not exterminated, but finally fused with the race of the conquerors to form the later Egyptian population.

After this victory Set ruled the country, and it was then that the "Feast of Striking down the Anu" was instituted. It was most likely during the same period of Set's rule that the name of the god of Heliopolis was changed. An reminded them of the Anu. They could hardly tolerate An's worship when the defeat of the Anu was being celebrated with great rejoicing. The name An therefore was condemned to oblivion; in its stead the name Rā was selected, an indigenous name too (as seen above), but which reminded the Semites of the Sun, whom they themselves adored.[3]

How long did this second period last? It is not possible to fix its limits. Yet the fact that "the Feast of Striking down the Anu", instituted then, took deep roots in the country, so as to persevere even after the rule of the conquerors was over, seems to show that the Semite period was much longer than one man's rule. In the mythological story, Set's victory opens this second stage, which is likewise ended with Set's defeat. But Set is only a symbol of the race.

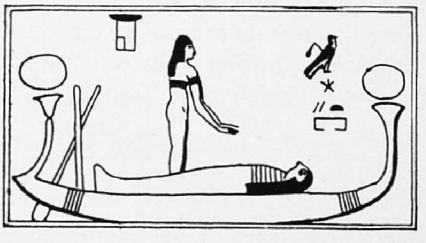

Fig. 146
An Egyptian painting showing Nephtys addressing the mummy of a kawk-headed Osiris.

[1] *Gen.*, XII, 10-20.
[2] *Gen.*, XLVI
[3] Cf. Hastings, *Encyclopaedia of Religion and Ethics*, II, p. 289.

In point of fact, according to the myth, Horus, the leader, who defeats Set, is described as Osiris' son, but he is said to have been conceived after his father's death. Osiris stronger than death engenders Horus after his own death.[1] Horus is the son of Osiris, because he is properly, according to the mystical ideas of the Egyptians, the same Osiris risen to a new life.[2] In point of fact though Horus is the first in being depicted with a hawk's head, as he waged war under the flag of the hawk, Osiris is also at times represented hawk-headed, to show that he belonged to the same family of Horus. (Fig. 146). So that the conquest of Egypt by Horus is like the resurrection of Osiris to a new life. In some of the Egyptian paintings Osiris is depicted rising at the command of Horus. (Fig. 147). This means that many generations may perhaps have elapsed since the death of Osiris up to the appearance of Horus. All this seems to point to a very long period of Semitic rule in this second stage.

Third Stage. Horus defeats Set and regains the throne of his father. This relationship between Horus and Osiris seems to show that the race of these new conquerors is the same as the race of the Anu striken by the Semites. In fact Horus, represented as a warrior, is given the very name Ān.[3] Loret supposes that this invasion, though of people of the same race as the Anu, was directed from the south, and thinks that their leader had the flag-sign of the hawk, which is Horus's animal.

Fig. 147
Egyptian painting showing Osiris in Lower Egypt rising at the command of a hawk-headed Horus.

The defeat of the Semites was so great that there is no further mention of them in later Egyptian history. One of the titles of Horus shows that though he entered Egypt from the south he overran the whole country up to the Delta. He is styled *Horsomtus*, which means "Horus who united the two countries", i.e.

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[1] Virey, *op. cit.*, pp. 96-97.

[2] Moret, *Rois et Dieux d'Egypte*, p. 95.

[3] Wallis Budge, *The Gods of the Egyptians*, II, p. 312.

Upper and Lower Egypt.[1] Though undoubtedly remnants of the Semites were mixed with the Egyptian population, especially in the north, yet their memory was identified with the evil spirit, which was supposed to be personified in Set, according to later mythological views.[2] One relic of their rule however remained in the Pharaonic Egypt of later centuries. That was "the Feast of Striking down the Anu". This is one of those sociological phenomena which apparently have no proper explanation. The feast commemorated the victory of the Semites over the Anu. When the Semites were themselves defeated by people of the same race as the Anu, the latter's former rout had to be forgotten. Yet it is still commemorated with a feast. In a similar way the feast instituted by Cyrus the Great, after he defeated the Scythians or Sacae was for centuries known as *Sakaia* or *Saccaea*.[3] Again the *Magofonia* was the national Persian festival commemorating the downfall of the Magi, during the reign of Darius in 521 B.C.[4] A similar phenomenon exists in Indian History. It has now been proven that the Śaka Saṁvat starts at the time of the defeat of the Śakas.[5] Naturally such era would have been named after those who defeated the Śakas, i.e. the Kuśāṇas; but it was not so. Those who were defeated are commemorated instead of those who had

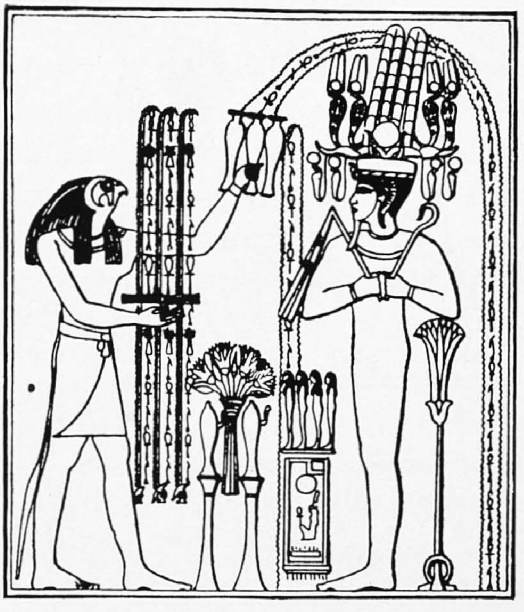

Fig. 148
Hawk-headed Horus pouring the water of life upon the mummy of Osiris calling him to a new life.

[1] Mercer, *Etudes sur les Origines de la Religion de l'Egypte*, p. 52.
[2] Moret, *op. cit.*, p. 85.
[3] Strabo, XI, 8, 5.
[4] Herodotus, III, 79.
[5] Banerji, *Prehistoric, Ancient and Hindu India*, pp. 127-128.

defeated them. (In a like manner, to refer to a relatively modern instance, the feast of Dingan in South Africa is the feast commemorating the rout and death of Dingan).

The very ingenious interpretation of the story of Osiris' assassination given by Mons. Loret, with which we fully agree, seems to have its confirmation in anthropological and archaeological sources. There are in fact indications that there had been two invasions of the people of the same race in early Egyptian history; one invasion coming from Syria, the other from the land of Punt, across the sea, through the southern country.[1]

Fig. 149
An Egyptian painting depicting a hawk-headed Horus helping Ptolemy VIII in defeating an enemy.

In particular it is noted that the inhabitants of Northern Egypt were not all of the same stock, two ethnical groups being quite distinct. One to the west, akin to the Lybians and probably also to the people of the south, the other to the east, hailing from Asia, and related in any case to the nations found beyond the isthmus of Suez. Finally the people of the south, who possessed a higher culture than the latter, conquered the northern regions and united both Egypts.[2]

III

THE WORSHIPPERS OF AN IN INDIA AND THE ANU OF EGYPT

We are not going to speak in this third section of this chapter about the Anu of the Ṛgvedic period, who constituted an Āryan tribe. We shall only refer to those people who worshipped Āṇ before the arrival of the Āryan tribes, i.e. the Proto-Indian people

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[1] Cf. Elliott Smith, *The Ancient Egyptians and their Influence upon the Civilization of Europe* p. 81-130; Ring, *Gods of the Gentiles*, pp. 191-102. Cf. below, section VIII of this Chapter.

[2] Jequier, *Histoire de la Civilisation Egyptienne*, p. 60.

of the Indus Civilization period. We have already said above that Āṇ was their supreme God, and that they were also called Āṇu.

There is no doubt that the same Āṇ was being worshipped in India and in Egypt. In both countries he was Āṇ identified with the Sun, being himself the first person of a divine triad : Āṇ, Āṇil and Ama in India ;[1] Rā(=An), Thoot and Maā in Egypt.[2] In both cases they, in spite of being three persons, are described as being one God.[3]

Now the existence of the same religion in India and in Egypt does not precisely imply the identity of both the nations, for the same religion in two nations may at times mean only the importation of religion as a cultural element from one nation to the other (as happened with Buddhism spreading in China and Japan), without necessarily supposing a racial migration. Yet in this case under study, we witness two invasions of worshippers of Āṇ, the earlier from the north, the later from the south. Were they actually proceeding from India ?

The Anu of the North. They apparently came from Syria. In Mesopotamia and Syria, there were nations worshipping the same God in a Triad. The Sumerians in lower Mesopotamia venerated An, Enlil and Amaa=Antum.[4] The Sun also was being worshipped.[5] The Hittites in Syria worshipped Istanu, Ma and Telepinu, the first person of the Triad being likewise identified with the Sun.[6]

That the early pre-dynastic people of Egypt came from lower Mesopotamia is now a general opinion among ethnologists and archaeologists. "Keith thinks that somatically the Sumerians and the pre-dynastic Egyptians had a common ancestry".[7] Elliot Smith frankly believes that the Sumerians were the congeners of

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[1] Heras, "The Religion of the Mohenjo Daro People"., pp. 16-18, 30.

[2] Wallis Budge, *The Gods of the Egyptians*, I, pp. 323, 418, 424.

[3] Cf. Heras, "Further Excavations in Mohenjo Daro," pp. 73-75 ; Maspero, *Histoire Ancienne des Peuples de l'Orient*, I, p. 150.

[4] Radau, *Sumerian Hymns and Prayers to God Nin-ib*, p. 37 ; Jean, *La Religion Sumerienne*, pp. 32-41.

[5] Jean, *op. cit.*, p. 59.

[6] Delaporte, *Les Hittites*, pp. 247-248; Garstang, *The Hittite Empire*, pp. 103-104.

[7] Barton, "Whence Came the Sumerians ?", *J. A. O. S.*, XLIX, p. 267.

the pre-Dynastic Egyptians.[1] In fact, skull measurements have shown that it would be difficult to choose between the primitive Indian or Egyptian series as the group to which the Sumerians are closer.[2]

It is acknowledged moreover that Egypt received the main elements of its civilization from the lands of Mesopotamia where an older civilization was already in existence.[3] "The first Pre-dynastic Culture forms the foundation of the later Egyptian development and was no doubt due in the main, to the native Hamitic population of North Africa carrying on the tradition of the higher type of culture that had been introduced into the Nile valley by the Badarian people (of Sumer). It underwent a still further development at a later period owing to the appearance in Egypt of the new type of civilization known as the second Pre-dynastic Culture," (which is described as Semitic from Palestine).[4] The tombs of this period in Egypt are those of the Mediterranean dolichocephals, with corpses in an embrionic position, and incission vases, absolutely similar to those of Ur and Mohenjo-Daro.[5] Poisson acknowledges that the cult of Osiris owes its origin to the Asiatic current, just as the cult of Set is due to another race ; the fight between these two gods personifies the fight of the two races.[6] There is evidence of specific contact between Egypt and the Sumerian culture during the period of the rise and establishment of the Egyptian kingdom. The art and culture of the Proto-dynastic age shows a striking number of points of similarity, such as do not occur either in earlier or later times, with Mesopotamian types.[7]

The Mesopotamian influence in Egyptian sculpture, earthenware, architecture and particularly in funeral monuments is rightly

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[1] Elliot Smith, *The Ancient Egyptians*, pp. 138-143.

[2] Stoessiger, "Comparison of Badarian and primitive Indian Races", *Biometrica*, XIX (1927), p. 131.

[3] Poisson, *Le peuplement de l'Europe*, p. 124.

[4] Dowson, *The Age of the Gods*, p. 144.

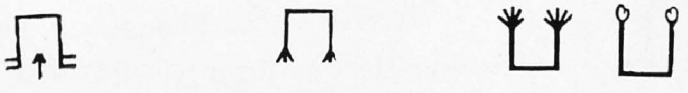
[5] Poisson, *op. cit.*, p. 123 ; Sergi, *The Mediterranean Race*, pp. 89-90. Cf. *Cambridge Ancient History*, Plates, I, pp. 22-23.

[6] Poisson, *op. cit.*, p. 124.

[7] Dowson, *op. cit.*, p. 78. Cf. *Cambridge Ancient History*, I, pp. 263-264 ; Frankfort, *Studies in the Early Pottery of the Near East*, II, pp. 119-120 ; Morgan, *La Préhistoire Orientale*, II, pp. 248-338 ; Ranke, "The Beginnings of Civilization in Egypt", in *The Beginnings of Civilization in the Orient*, Suppl. to the *J. A. O. S.*, 1939, pp. 14-15.

emphasized by Prof. Gordon Childe.[1] As regards the funeral monuments one who has studied them both in India and in Egypt, pointedly remarks : "The most striking point of all is the manner in which the burials of Tarkhan in Egypt resemble in their general arrangement those of such a place as Raigir (Hyderabad State). Careful scrutiny of selected photographs is needed to distinguish the remains of an early Indian surrounded by his pots, from those of an early Egyptian".[2] Pottery of both nations shows a remarkable similarity not only in its manufacture but also in its colouring and painting.[3] "The red pots of Raigir", continues Dr Hunt, "resemble in shape etc. those found in the early dynastic period of Egypt, while some of the first prehistoric Egyptian black and red pots bear a close resemblance to the Indian black and red pots".[4] (Fig. 150). The similarity is also to be noted in the case of the very marks found in these pots : "it does not seem wise to dismiss it as a coincidence". We may in particular draw the attention of our readers to these four marks which evidently refer to the dead in both countries :–

Fig. 150
A funeral urn from the dolmenic tombs in the neighbourhood of Pudukottai, Madras State.



Mohenjo-Daro Hyderabad Egypt

The Egyptian ones are the marks representing the *ka*, the supposed

[1] Gordon Childe, *New Light on the Most Ancient East*, pp. 124-126.
[2] Hunt, "Hyderabad Cairn Burials and their Significance", *J.R.A.I.*, LIV, p. 125.
[3] Hall, "The Discoveries at Tell el-'Obeid", *J.E.A.*, VIII, pp. 255-257.
[4] Hunt, *op. et loc. cit.*

"double" of the deceased person; they seem to originate from the Indian ones, the original one reading *kā*, "death".[1]

Very striking also are the similarities in the cylinder seals. In Egypt, as Gordon Childe explains "the cylinders that under the first dynasties were used as seals are, though inscribed in every case with Egyptian characters, a device indigenous to Mesopotamia that persisted there long after it had been abandoned on the Nile. And the hieroglyphic script itself, though its elements consist of purely Nilotic plants and animals, agrees so strikingly with the Babylonian in its curious combination of phonetic signs with ideographs and determinants that the two systems must be somehow interrelated".[2] We may also remark that some of the seated figures of the early cylinders of Egypt are much like those seated in the archaic seals of Sumer. The technique of depicting the seated figure is much the same.

Fig. 151
Seated figures in Egyptian cylinder seals of the first dynasties.

Fig. 152
Seated figures on archaic Sumerian seals of Ur.

The identity in form of the early Babylonian and Egyptian macehead is also most remarkable, nor may it be assigned to

[1] Cf. above, p. 71.

[2] Gordon Childe, *op. cit.*, p. 126.

mere coincidence. Hall thinks that it points "to direct connection" between both lands.[1]

This Sumerian influence is not only discovered in minute details but even in the very buildings. "The resemblance of the early Egyptian wall", writes Hall, "with its recessed panels, to the exactly similar walls of early Babylonia, cannot however be a coincidence, and here we must see proof of connexion, either direct or by sea, or through Syria".[2]

All these are not mere similarities between different cultural elements of both nations. The evidence is far more powerful than this : it consists in the temporary adoption on the part of the Proto-Dynastic Egyptians of devices and artistic motives that constituted permanent elements in Sumerian civilization.[3] Moreover, as Gordon Childe remarks, "none of the actual objects found can possibly be regarded as Babylonian products ; the Mesopotamian devices were elaborated in a thoroughly Egyptian way ; the Mesopotamian motives adorn purely Egyptian objects and the contacts are spread out over the whole of the Late Predynastic and Protodynastic age".[4]

But the final disappearance of such elements in later Egyptian history still strengthens their foreign provenance. This point is rightly emphasized by Hall : "An interesting point with regard to these similarities in early Egypt and Babylonia is that in Egypt it is precisely those archaic things that are most Babylonian in appearance that did not persist, but were abandoned either during the Old Kingdom or at least by the end of the Middle Kingdom ... If so, as in Babylonia the similar phenomena were

Fig. 153
A bird-man on an early Babylonian cylinder seal.

[1] Hall, "The Discoveries at Tell el-'Obeid", *J.E.A.*, VIII, p. 251.

[2] *Ibid.*, pp. 251-252.

[3] Cf. Frankfort, *Studies in the Early Pottery of the Near East*, I, pp. 118-119.

[4] Gordon Childe, *New Light on the most Ancient East*, p. 121.

natural and persisted, it would look as if they came from Babylonia to Egypt rather than *vice versa*".[1]

"The cumulative effect of all these comparisons", summarises Gordon Childe, "is conclusive. Sumer and Egypt at the time of the oldest kings were no longer mutually isolated but were in direct, or more probably indirect but regular, communication. As to the mechanism of these relations opinions differ. Petrie speaks of invasions by Elamites and with de Morgan invokes the intervention of a Sumerianized "dynastic race". The latter would have been responsible "for the introduction of writing, the intelligent use of metal, artistic sense, sculpture upon stone, carpentry on a large scale, the potters' wheel and the monumental tomb".[2] Morgan, fully convinced by the same thesis, devotes one long chapter to describing the Chaldaean origin of the Pharaonic culture in Egypt.[3] We cannot doubt any more today, in the present state of archaeological research, that the early dynastic culture of Egypt is Sumerian, and such that no moral or spiritual connection alone may explain. "The remote ancestral connection between Babylonia and Egypt is allowed", says Rev. Knight. "The early emigrants from Chaldaea carried with them the elements of Mesopotamian civilization in the form of a few domestic customs, some primitive names for common objects and a similarity of incipient religious beliefs".[4] Perhaps the comparative study of some archaeological specimens will lead us

Fig. 154
Bird-women from Ur, in Sumer.

[1] Hall, *op. cit.*, pp. 252-253.
[2] Gordon Childe, *op. cit.*, pp. 126-127.
[3] Morgan, *La Préhistoire Orientale*, II, pp. 248-338.
[4] Knight, *Nile and Jordan*, p. 34.

to guess who were those who brought this high culture to the land of the Nile. Among the precious objects that were found in the earliest (so-called pre-diluvian) layers of Ur in Sumer, there are some terra-cotta figures of women having an aviform face; they are bird-women.[1] (Figs 154, 155). Bird-men are not unknown in Sumerian glyptics either. (Fig. 153). Bronze plaques of bird-faced women coming from early Sumer are also found in the Oriental Institute, Chicago. (Fig. 156). We find therefore bird-people in Sumer at a very early age. Similarly, perched on the stern of a high-prowed boat, painted on a late Egyptian pot, just as those which will be described in the following section, we discover a bird, which seems to be the emblem of the owners of the boat;[2] such a custom prevailed in the Red Sea and the Mediterranean in those early days. Now among the Proto-Indians of the Indus Valley there was a very influential tribe denominated "of the Bird". The members of the tribe were called "Birds", *Paravas*.[3] We find therefore "Birds" both in Mesopotamia and in Egypt.[4] The boat crowned by the *lāncana* of the Bird is one of those boats used by the Sumerian invaders who landed on Lower Egypt at the end of the second prehistoric age. May we rightly conclude that some at least of those Sumerians who invaded Egypt were members of the old Parava tribe of the Proto-Indians?

Fig. 155
A bird-woman giving her breast to her bird child, from Ur in Sumer.

Now we know of the migration of the Sumerians from the east by sea, spoken of by Berossus[5] and confirmed by the Bible.[6]

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[1] Cf. Cossio-Pijoán, *Summa Artis*, II, p. 27 and 28.

[2] Gordon Childe, *New Light on the Most Ancient East*, p. 122.

[3] Cf. Heras, "The 'Minavan' in Mohenjo Daro", pp. 281-286.

[4] The existence of the Paravas in Sumer was already suspected by the present writer when studying the archaic Sumerian signs discovered at Ur. Cf. Heras, "Sumerian Epigraphy", p. 262.

[5] Schnabel, *Berossos und die babylonisch-hellenistische Literatur*, pp. 172-175, 253-254.

[6] *Gen.*, XI, 2-4.

The comparison between the Indus civilization and the Sumerian civilization substantiates the view that the Sumerians were but a section of the Proto-Indian people settled in a new land. Hence the Anu who invaded northern Egypt from Syria most likely were originally people from India.[1]

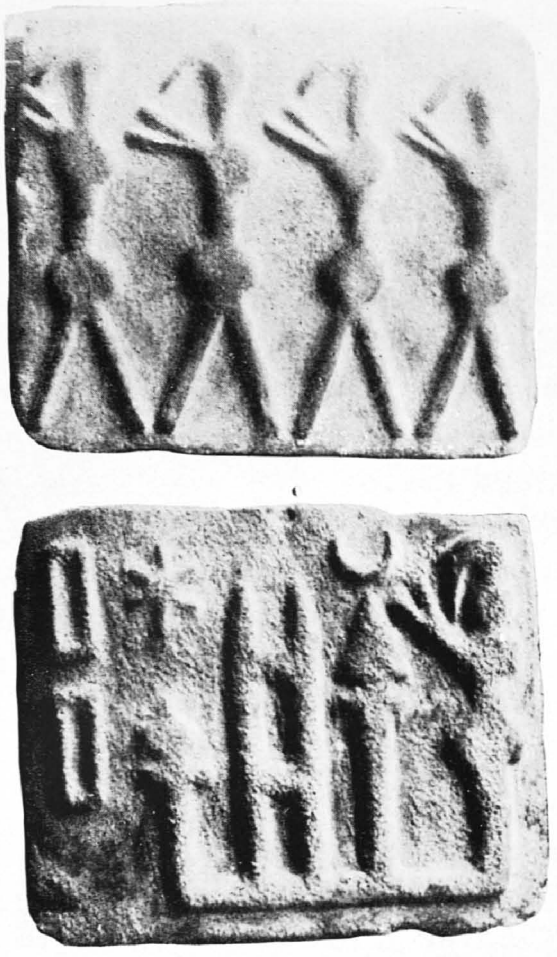

Fig. 156
Bronze plaques from Sumer displaying several bird-women.

The Anu of the South. The fact that they were, as seen above, of the same race as the Anu of the north, would settle the question of the origin of the former. Yet some facts connected with their migration will still strengthen the opinion about their Indian origin. It is the opinion of all Egyptologists and ethnologists that during the middle Predynastic period, *c.* 4.500 B.C., a new civilization appears in Egypt, well distinguished from the former in the fact that it is more developed, it fosters agriculture, it possesses domesticated animals, copper, painted pottery, etc.[2] "Moreover the appearance in Proto-dynastic art of a new type of ship with high stern and prow entirely

[1] We have seen in the preceding chapter how the Sumerians were originally Indian Mīnas, of the same clan as the ancestors of the later Mātsyas, both names meaning "fish". If the Anus of Egypt were ancient Sumerians, they were also of the same clan of the Fish. It has been affirmed long ago that among the Hamites "there were two fish-nations, the Anus and the Matsyas" (Viçwa-Mitra, *L'Aurore Indienne de la Genèse*, p. 51) The same author avers that the Anus wrote their name by depicting the figure of a fish (*Ibid.*)

[2] Poisson, *op. cit.*, pp. 123-124.

different from the native type of the Nile boat, also suggests some new contact with a maritime people".[1] This "new Culture of Proto-dynastic time had its centre in Upper Egypt near the mouth of the Wādi Hammāmāt, which has always been the main channel of communication between Egypt and the Red Sea".[2] "It is therefore not impossible that adventurers from Mesopotamia or more probably from Arabian lands of Sumerian Culture, such as Magan, may have reached upper Egypt by this route in late Pre-dynastic times".[3] Elliot Smith maintains that there was Pre-dynastic intercourse between Egypt and Arabia through the strait of Bab-el-Mandeb.[4] From this point of view the numerous ships painted on the rocks of the desert that unites Upper Egypt with the Red Sea are of extraordinary interest.[5] So are also the ships painted at Hierakonpolis. According to Gordon Childe the places where such paintings have been discovered are very significant, for they are near the end of the well known caravan route leading to the Red Sea.[6] We shall speak about these places once more in one of the following sections. Considering all the circumstances in connection with this migration Sir W. M. Flinders Petrie writes: "Its origin has been provisionally assigned to the Red Sea district, as it introduced hard-stone vases".[7]

There is therefore no possible doubt about the racial relationship between the worshippers of Āṇ of India and those who worshipped Anu in Egypt. All of them belonged to the Proto-Dravidian Hamitic race, mother of so many illustrious nations that spread the

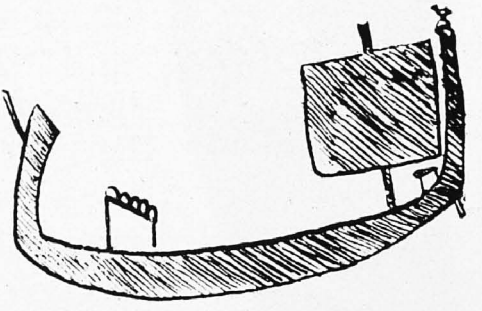

Fig. 157
"Foreign" ship having a bird on her prow, from an early Egyptian pot.

[1] Dowson, *op. cit.*, p. 79.
[2] *Ibid.*
[3] *Ibid.*, p. 152.
[4] Elliot Smith, *The Ancient Egyptians*, pp. 86-94.
[5] *Illustrated London News*, 1936, 26th December, p. 1173.
[6] Gordon Childe, *New Light on the Most Ancient East*, pp. 99-106.
[7] Flinders Petrie, 'Egypt and Mesopotamia', *A. E.*, 1917, p. 33.

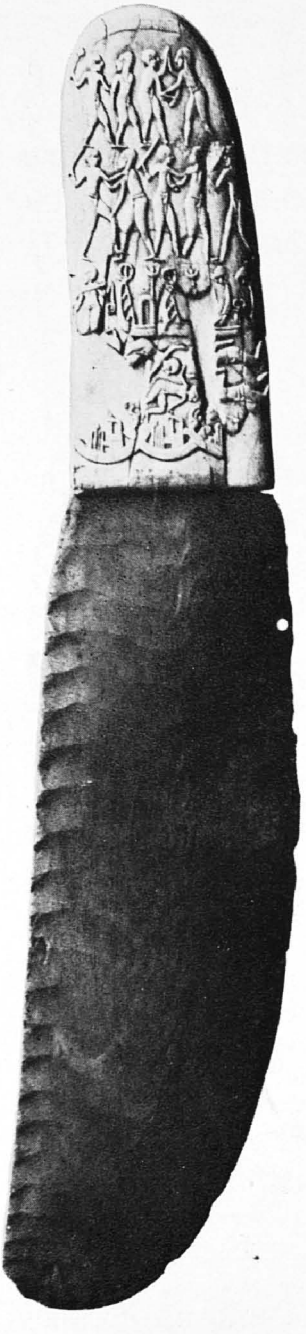

Fig. 158
Obverse of the knife of Jebl el-'Arak.

ancient civilization of India across the "seven seas"[1]. Even Barton, who is not inclined to favour the idea of Indian expansion, acknowledges nevertheless Indian influence in proto-historic Egypt.[2] That this influence is something deeper than cultural influence may be inferred from the fact that Elliot Smith cannot distinguish between a skull from Adichanallur and the skulls of the proto-dynastic tombs of Egypt.[3] It is not therefore strange that in front of such cumulative evidence Sir W. M. Flinders Petrie should acknowledge that the Indians and the Egyptians come from the same stock.[4]

Some important points of archaeological evidence will be studied in the following sections.

IV

THE KNIFE OF JEBL EL-'ARAK

One of the objects which elucidates these striking points of contact between Egypt and Mesopotamia in early times, which deserves a special study, is the very famous knife discovered at Jebl el-'Arak in Upper Egypt, which is now in the Louvre Museum. This knife is made of flint ground on the faces, but one face flaked over with the utmost care. "This is the finest style of flint work", says Sir W. M. Flinders Petrie,

[1] The "seven seas" are mentioned in the Indus Valley inscriptions. Cf. Heras, "The Tirayars in Mohenjo-Daro", p. 78; Heras, "The Seven Seas", p. XIX. They are also referred to in Purāṇic literature many centuries after.

[2] Barton, *Hamitic and Semitic Origins*, p. 38, n.

[3] Slater, *The Dravidian Element in Indian Culture*, p. 81 n. and pls. VI and VII.

[4] Flinders Petrie, "Osiris in the Tree and Pillar", *A.E.*, XIII, p. 41.

"belonging to about S.D. 60".[1] The ivory handle, which will be the object of our study seems to be fitted to the flint, somewhat later. The whole knife is 10′ 4 in. in length, the handle alone being 3′ 8 in. long and 1′ 7 in. wide. The fact that the knife is said to be found in Upper Egypt should not lead us to conclude that it was manufactured there, as there are clear indications that it proceeds from Lower Egypt. Speaking of the people who carved this handle Prof. Flinders Petrie says: "We must not conclude that the new people were actually living in Upper Egypt, because this knife was found there. The knife may very possibly have been a spoil won in war from the invaders".[2]

Fig. 159
Reverse of the knife of Jebl el-'Arak.

On one side of the handle and, occupying the upper portion of it there is a bearded man clothed in a large robe down to his calves. He also wears what looks like a fur cap. He is looking to the left. On each side of this figure there is a rampant lion, one of whose forepaws rests on each side of the hero's waist, while the latter holds them at bay by snatching the fur under their neck. Below this scene there is a hunting scene showing a number of wild animals, amongst them two ibexes. Two dogs also are represented which, owing to a collar round their necks, may be supposed to be already domesticated and even friendly to man.

The scene on the other side of the handle is totally different. It is a scene of a fight between individuals of two different nations, represented in two rows.

[1] Flinders Petrie, "Egypt and Mesopotamia", *Ancient Egypt*, 1917, p. 26.
[2] *Ibid.*, p. 33.

All the fighters are nude excepting for a narrow girdle and a sheath, but some of them have a short crop while the others keep a mass of hair falling down their shoulders. (Fig. 160). In the first row, one of the former, who has been described as a king or chief,[1] perhaps because he is brandishing a mace, catches the arm of a prisoner, one of the hairy ones, who pretends to escape; next to this, two are grappling with one another in a wrestlers' grip with undoubted hope of success; for the hairless combatant holds a curved flint knife by the middle against a weaponless opponent. In the lower row, one of the hairy ones has caught one of his rivals by the leg, but this is ready to strike the death blow on the daring enemy with a long *kherp*. The same weapon is used by a fourth cropped soldier when getting hold of his enemy by the left shoulder. The latter is trying to escape but is unexpectedly faced by another enemy from the other side, who comes to the rescue of the former. These vivid scenes are supplemented by two rows of ships which are seen underneath.

Fig. 160
A battle between the native Egyptians and the invading Sumerians as depicted on the handle of the knife of Jebl el-'Arak.

In the first row there are two vessels, high of prow and of stern (not very different from the modern Venetian gondolas), and displaying a sign which appears like a crescent or something similar. In the lower row the three ships in the scene are the characteristic low papyrus ships used from very ancient times in the delta of the Nile.[2] (Fig. 162). Between the two rows of ships four bodies are

[1] Cossio-Pijoán, *Summa Artis*, III, p. 33.

[2] Flinders Petrie, *op. cit.*, p. 34.

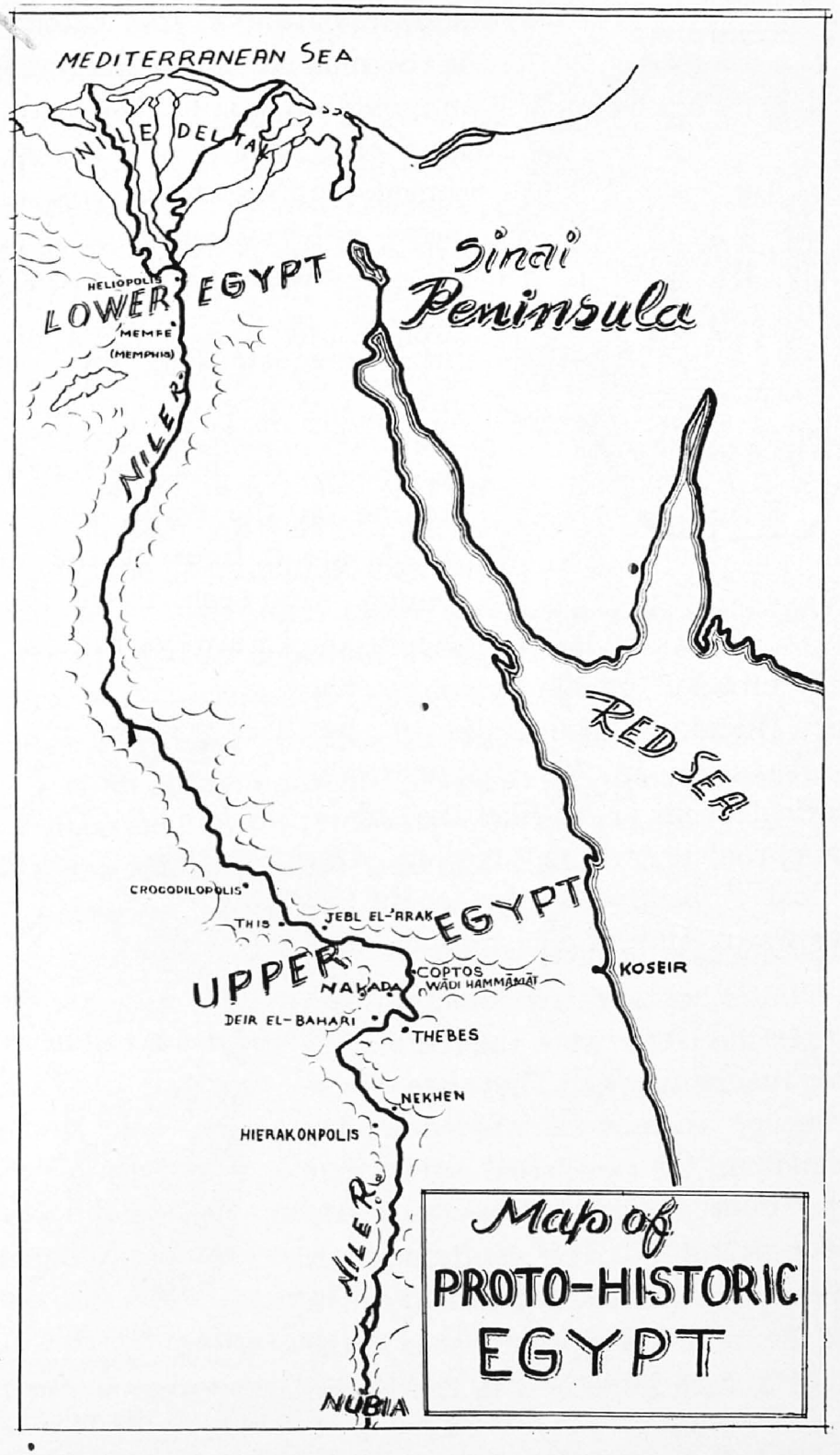

Fig. 161
Illustrating the growth of city life along the Nile in that early period.

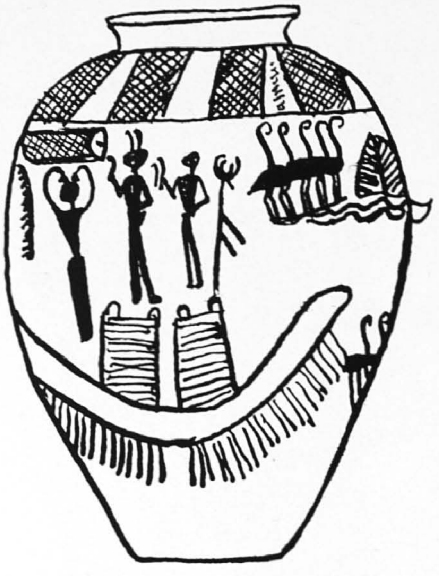

Fig. 162
A Nilotic papyrus boat, on a prehistoric vase.

shown floating on the waters. What is the meaning of this scene of war?

The double character of the fight, on sea and on land, evidently suggests an invasion from the sea. The invasion is described as successful, since the fight is now going on outside the ships which are only depicted as a memory of the preceding stages of the same. This makes us to conclude that the four corpses floating on the water between the vessels are natives of the invaded country, who seem to be the hairy people, shown always without arms; the tightly cropped people evidently had the upper hand. "The knife of Jebl el-'Arak", says Pijoán, "is an illustration of a historical event. It is like the miniature of a chronicle, whose text and data are now lost".[1] But who is who in this suggestive portraiture of a historical fact?

The Nilotic boats of the defeated seem to show that the latter were the indigenous people of the country. They are those wearing heavy masses of hair down to their shoulders. It has been said that "this type does not occur anywhere on the slate palettes".[2] This statement is correct as regards the slate palettes, but a warrior of the same description is seen in the fragment of a vase kept now in the Berlin

Fig. 163
A nude indigenous warrior on a fragment of an Egyptian vase.

[1] Cossio-Pijoán, *op. cit.*, III, p. 34.
[2] Flinders Petrie, *op. cit.*, p. 34.

Museum. (Fig. 163). This warrior who is armed with a hatchet is shown nude, though with the same belt and sheath like those of the knife, and bears his long hair reaching below the shoulder.[1] Therefore the crop-haired people are foreigners to the country. And yet being foreigners they appear to be the owners and inhabitants of the country of the Nile, at a later period. For they were those who carved the scene of victory on the ivory handle and who later used the knife as a trophy of their successful prowess. "That the crop-headed people were the ancestors of the Dynastic Egyptians seems sufficiently probable", remarks Flinders Petrie. "Narmer and his people were similarly cropped or shaven; and the three weapons here—the *kherp*, the mace and the curved knife—were all used by the dynastic people".[2]

Fig. 164
Impression of an early Sumerian seal showing Gilgamesh consulting Ut-Na-pishtim in a boat.

Fig. 165
Boating scene on an early cylinder seal from Khafaje.

Consequently the scenes depicted in this famous knife handle seem to describe the fight of the dynastic people of Egypt, when conquering the land from their former inhabitants, the pre-dynastic people. Prof. Flinders Petrie has suggested that the long-haired people were people of Central Syria.[3] Yet people of Central Syria in the proximity of snow covered mountains, would not wear that scanty dress. That climate would not allow them to go about unclothed.

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[1] Capart, *Primitive Art in Egypt*, p. 100, fig. 70.
[2] Flinders Petrie, *op. et loc. cit.*
[3] *Ibid.*

Their country must be such where the need of clothing was not felt. Such is the Egyptian Delta; so much so that Flinders Petrie himself, after showing the probability that this was a record of a Syrian war, adds: "Though the scene seems, perhaps more likely to have been in Egypt".[1] The struggle is therefore between the pre-dynastic people of Egypt and the first Hamitic invaders who will become the dynastic people. Yet this dynastic people are the very proto-dynastic people, because, as Mons. Bénédite remarks and Prof. Gordon Childe also accepts, in the scenes represented in this knife, as well as in other contemporary monuments, the 'hawk' (of which we shall speak at length later) is absent. Consequently this monument seems to be pre-Horian, for Horus is always accompanied by that sacred animal.[2] This seems therefore to be the Osirian invasion. But, who were these invaders?

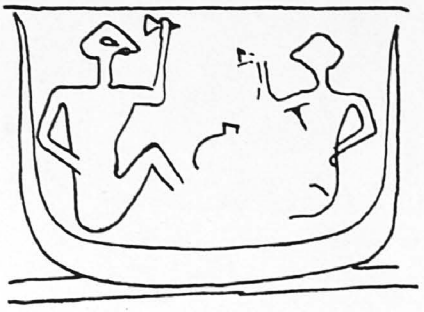

Fig. 166
A Sumerian boat from an archaic seal of Ur.

Fig. 167
Another Sumerian boat from an archaic seal of Ur.

The gondola-like boats will perhaps give us a clue as regards the country of their origin. These boats were then totally unknown in the country of the Nile. But they were not unknown in Mesopotamia. Prof. Gordon Childe says that "representations of boats very like ours are found on Sumerian vases in the third millennium".[3] In a very early Sumerian seal, which seems to represent the God Enki with two attendants within a boat, the latter has the same high

Fig. 168
A Sumerian leader travelling on a high-prowed and high-sterned boat, after a seal of Ur.

[1] Flinders Petrie, *op. et loc. cit.*

[2] Benediti, "Le Couteau de Gebel-el-Arak", *Fondation Piot, Monuments et Memoirs*, XXII, p. 1 ff.; Gordon Childe, *New Light on the Most Ancient East*, p. 103. Cf. *J.E.A.*, V, pp. 225 ff.

[3] Gordon Childe, *op. cit.* p. 122.

prow and stern as the boats of the Jebl el-'Arak knife.[1] The same kind of boat is that shown in another seal of the second dynastic period of Sumer, in which the interview of Gilgamesh with Ut-Napishtim has been depicted.[2] (Fig. 164). High prow and stern — though not as high as the prow and stern of the boats depicted in these works of art — has also the miniature silver boat which was discovered in the Royal Cemetery of Ur by Sir C. L. Woolley and may now be seen in the British Museum.[3] Such type of boats must have been very ancient among the Sumerians (Figs 165-169), probably coming from India, the country of their origin, for they lasted very long in Mesopotamia. Some reliefs of Sargon II in the Palace of Khorsabad show a number of transport ships of the same type in the Assyrian period of Mesopotamian history.[4] (Fig. 170).

Fig. 169
A Sumerian *pateśi* holding a sceptre, seated within a boat, after a seal of Ur.

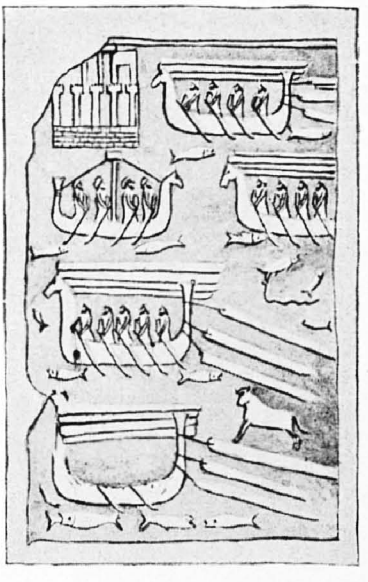

Fig. 170
Assyrian boats, after a relief in the Palace of Khorsabad.

Moreover, the scanty dress of the invaders is in agreement with what we know of the ancient customs of the Mediterraneans. Flinders Petrie states that the people of southern Greece in Mycenaean times fought naked.[5] The same has been observed down to late mediaeval times about the Indians. The Muhammadan historian Ferishta

[1] Jeremias, *Handbuch der altorientalischen Geisteskultur*, p. 157, fig. 5.

[2] Frankfort, *Cylinder Seals*, pl. XI, m. See another similar boat in Legrain, *Ur Excavations*, III, *Archaic Seal Impressions* pl. 16, No. 30.

[3] Woolley, *Ur Excavations*, II, *The Royal Cemetery*, pl. 169.

[4] Cf. Jeremias, *op. cit.*, p. 156, fig. 92.

[5] Flinders Petrie, *op. cit.*, p. 34.

Fig. 171
A pleasure boat of an Indian King from the Ajanta paintings.

narrates that the infantry of the Vijayanagara Empire, in India, used to go into battle "quite naked, and had their bodies anointed with oil, to prevent their being easily seized".[1] Some Muslim paintings reproducing a few scenes of the battle of Rakṣas-Tagdi show the slain Hindu soldiers, dressed only in a very narrow loin cloth.[2] (Fig. 172). A mediaeval sculpture of Śeṣa Bhagavān or Nārāyaṇa, kept now in the Museum of Indore, confirms this in a remarkable way. Above the lying image of the god there is the representation of a fight. The five warriors engaged in this affray wear the same narrow girdle and sheath as the warriors of the Jebl el-'Arak knife. (Fig. 173).

Fig. 172
A Muslim painting showing an episode of the battle of Rakṣas-Tagdi, in which some naked Hindu soldiers are seen.

Consequently the archaeological evidence of the Jebl el-'Arak knife shows that the invaders of Egypt in the predynastic period were Sumerians from Mesopotamia. It has been suggested that they came from the Persian Gulf rounding the coasts of Arabia,

[1] Ferishta, *History of the Rise of the Mahomedan Power in India*, III, p. 137.
[2] Cf. Heras, *The Aravidu Dynasty of Vijayanagara*, I, pl. VI.

landing finally on the shores of the Red Sea.[1] Yet this journey, besides being very long and perilous to sailors who perhaps did not know the Red Sea, does not explain how the new comers could meet the dwellers of the Delta when landing on the eastern shores of Egypt, which were not inhabited as the valley of the Nile was.[2] Moreover, when an enterprising nation as the Proto-Indian nation was, had successfully sent their migration waves towards the west, to settle in the new country, the invaders would not turn their sight backwards, but they would proceed forwards towards the west when in need of attempting a new migration. The opposite would be unnatural and contrary to all laws in the history of early migration. The Sumerians came from India through the Persian Gulf; they would never again pursue the same route through the Persian Gulf in quest of new homes.

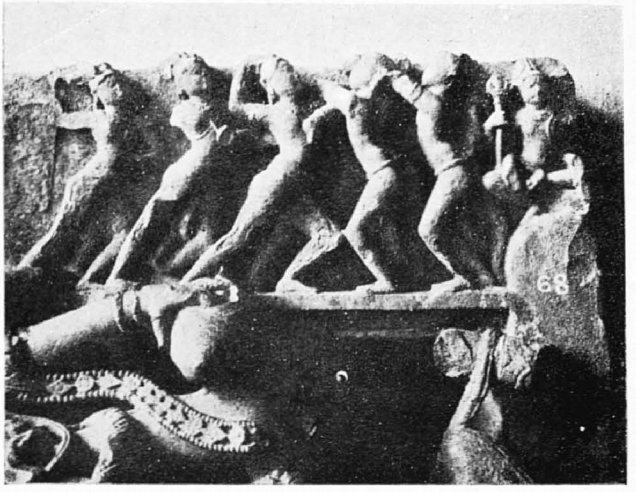

Fig. 173
Nude warriors on the top of a stone image of a sleeping Nārāyaṇa.

The migration of the Sumerians to new lands is a momentous affair in the history of ancient civilization. The biblical account briefly refers to it prior to the narrative of the rise of the Hebrew nation in the person of the patriarch Abraham. After the story of the settlement of the Sumerians in the land of Sennaar, which was narrated and commented upon in the preceding chapter, the biblical writer continues: "And they (the Sumerians) said: 'Come let us

[1] Cf. Flinders Petrie, *op. cit.*, p. 34; Hall, "The Discoveries of Tell el-'Obeid", *J.E.A.*, VIII, p. 252.

[2] The fact that Indian sailors bound for Egypt stopped at Eudaemon (Aden) before entering the Red Sea, as testified by the author of the *Periplus* (Cf. below, section VI of this Chapter), shows how careful those great seafarers were in entering unknown seas.

make a city and a tower, the top whereof may reach to heaven; and let us make our name famous before we may be scattered abroad into all lands' ".[1] In these words we may see already that the further migration of the Sumerians was already planned. They had already grown so much along the twin rivers that the 'plain of Sennaar' was getting too narrow for their crowded cities and the spreading of cultivation. This has always been the cause of ancient migrations, and it might also have been the cause of this. But there might also have been another cause in this particular case.

A Babylonian seal of a much later period, yet earlier than the seventh century B.C., bears an unfinished tower of five stages (in other seals it has seven stages) in which scholars have seen a representation of the famous 'tower of Babylon' or 'Babel'.[2] (Fig. 174). Such tower was called in Sumerian *ekur*, which means 'mountain-house'. This seems to be the tower spoken of by god Marduk himself when addressing the gods, in a passage of a Babylonian poem, parrallel to the biblical text quoted above. He says: "Create Babylon whose construction ye desire; let a city be built"; and later referring to the temple-tower: "Let this Babel be your dwelling place".[3] (*Bab-el*, in Semitic means "the Gate of God"). In front of this tower, which rises next to a stream, or a river, shown here as a rope, the *tarkullu* of Babylonian cosmology, there is a priest, standing and pouring out a libation. At the feet of this priest

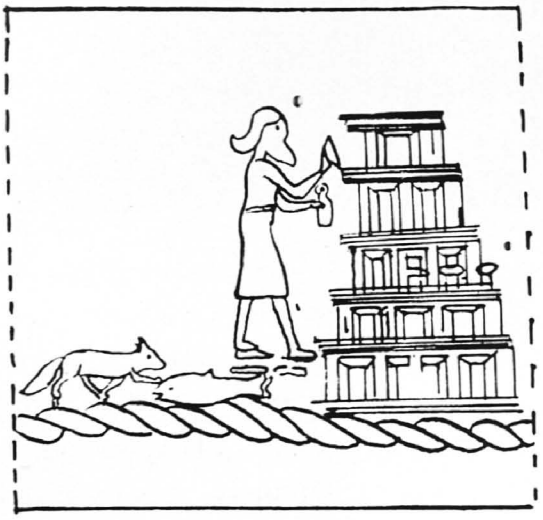

Fig. 174
The tower of Babel unfinished, while the tribe of the Greyhound defeats the tribe of the Fish; after a Babylonian seal.

[1] *Gen.*, XI, 4.
[2] Gressmann, *The Tower of Babel*, pl. III, fig. 8; Langdon, *Semitic Mythology*, p. 309, fig. 93.
[3] Cf. Gressmann, *op. cit.*, p. 6.

there is a fish to the left, in front of which a jackal or a greyhound places his right forepaw over the head of the fish. This is a strange representation having undoubtedly a very important meaning. The fish and even the tower itself have been given an astronomical interpretation, but they have not succeeded in explaining the presence of the other animal.[1] In the present state of our research we may give a sociological interpretation to this puzzling scene, which will explain one of the causes of this general migration of the Sumerians. We have already seen how some seals of the early Sumerian kings record the name of the original tribe to which they belonged by placing a fish in front of, or behind, their figure. (Figs 18, 19). Thus we know that they were *Mīnas*, which is in agreement with what Berossus narrates of the Sumerian invaders. The greyhound placing a paw upon the head of the fish is a symbol of the latter being defeated by the former. This symbolic representation of victories was usual in the east, from the Indus Valley period. When the tribe of the unicorn was defeated, the skin of this animal was shown spread to the four winds as a trophy of war. (Fig. 175).[2] At the time of the defeat of the Koḷis (Fowls), one Fowl was represented trampled to death by a compound quadruped half bull and half lion. (Fig. 176).[3] When at a much later period the same tribe of the Koḷis defeated the tribe of the Kaśas or Gajas (Elephants), the former founded a city named Koḷi on the spot of their victory.

Fig. 175
Impression of a Mohenjo-Daro seal displaying the skin of the Unicorn spread to the four winds as the trophy of a victory.

Fig. 176
The tribe of the *Koḷis* being defeated by the joint action of the *Ṛṣabhas* and the *Siṁhas*, after a Chanhu-Daro seal.

[1] Cf. Langdon, *op. cit.*, p. 310. This animal is also described as a fox.

[2] Cf. Heras, "Chanhu-Daro and its Inscriptions", pp. 106-107.

[3] Cf. *Ibid.*

A carving on a pillar in one of the temples of this place (now called Uraiyur, near Tirucherapalli) represents a cock attacking an elephant.[1] (Fig. 177). The same custom is to be found in Egypt.[2] In the same way the tribe of the Fish, the Mīnas, is shown in the seal under study as defeated by the people of the Greyhound. Who were the latter?

We have already seen how the Semitic people of Syria who, led by Set, invaded Egypt and defeated Osiris, were characterised by the figure of a greyhound.[3] They were the people of the Greyhound. This Semitic people therefore must have been the victorious tribe over the Sumerians symbolised in this seal, which suggests that such victory took place when the tower of Babel was being built. From very early days the Sumerians of the southern Mesopotamian cities maintained a constant struggle with the Semites of the north with indifferent success. Sumerian history knows well of a long Semitic interregnum, when Sargon, the Ancient, founded the Akkadian hegemony. Later Babylon and Assyria succeeded once more in treading upon the glory of Sumer for good. This Semitic victory alluded to in this Babylonian seal belongs to a much earlier period. Was it perhaps the victory of "... um-Shamash, king of Mari, great *pateśi-gal* of Enlil", the earliest king of Amurru who claims to have conquered Babylonia?[4] In any case, at the time of the building of Babel, and before it was finished, a Semitic invasion occurred, which put an end to the Sumerian supremacy at least for some time. Much confusion was caused in the land by such an event; and since such wars and consequent calamities were considered always by people of great faith as 'visi-

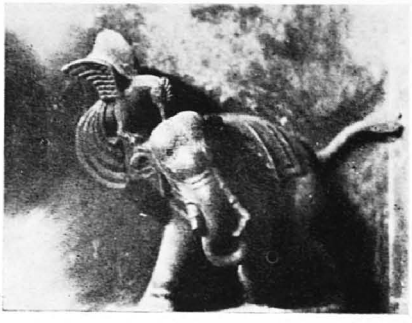

Fig. 177
A *koḷi* defeating a *kaśa*, on a carving of a temple of Uraiyur, Tirucherapalli.

[1] Cf. Heras, "The Story of a Battle in Stone", *Mārg*, II, No. 3, pp. 48-49.
[2] Cf. below, section VIII of this Chapter.
[3] Cf. above, p. 290.
[4] Clay, *The Empire of the Amorites*, pp. 89-90 and 104.

tations of the Lord', rightly could the biblical writer add, after narrating the Sumerian attempt at building the tower: "And so the Lord scattered them from that place into all lands, and they ceased to build the city. And therefore the name thereof was called Babel because there the language of the whole earth was confounded; and from thence the Lord scattered them abroad upon the face of all countries".[1]

The confusion produced by the war and by the introduction of a new Semitic tongue of the rulers was the final event that precipitated the migration of the old Hamitic stock of the land. Studying the origin of the Phoenicians, according to the accounts of Herodotus,[2] Strabo[3] and Pliny,[4] which agree with what Arab geographers say on the same subject, [5] we may follow the Phoenicians from the shores of the Persian Gulf up to the shores of the Mediterranean.[6] They might have been part of the peoples leaving the land of Sumer after the Semitic victory. Some of them, when reaching the Mediterranean shores, built ships of the same old type as those they had in the Persian Gulf — as they were such great seafarers — and undertook sea trade in their new quarters. A ship painted on a Phoenician vase from Cyprus, now in the Metropolitan Museum, New York, shows the same type of vessel as those depicted on the knife.[7] Eventually they found the Nile and its fertile lands, and a section of them finally decided to settle there.

This migration of the old Sumerians *via* Syria and Phoenicia explains the hesitation of some anthors in fixing the origin of the invaders of Egypt according to the carvings of the famous knife. "The natural line of route", says Hall, "between Mesopotamia and Egypt lay through Syria: it was by way of Syria that Babylonian

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1 *Gen.*, XI, 8-9.

2 Herodotus, I, 1; VII, 89.

3 Strabo, I, 2, 35; XVI, 4, 27.

4 Pliny, *Historia Naturalis*, IV, 36.

5 Cf. Maspero, *Histoire ancienne des peuples de l'Orient*, p. 126.

6 A study on this migration will appear in the second volume of this work.

7 Instituto Gallach, *Historia Universal*, I, p. 253.

conquerors and traders reached Palestine".[1] The same author points out that the Osirian legend seems to have some Syrian connections.[2] In point of fact Diodorus remarks that Osiris brought knowledge of corn and wine to Egypt,[3] which products seem Syrian rather than Mesopotamian.[4]

But there is still further evidence of their Sumerian origin in the carvings of the Jebl el-'Arak knife. "On the knife-handle again", says Prof. Gordon Childe, "we see a group representing a hero dompting two lions. The theme is strange in Egyptian art, but on the other hand was very popular in Babylonia. The impression of Mesopotamian inspiration becomes irresistible when we observe that the hero is wearing a full beard, while the cap on his head and the long robe that drapes him are no less typically Asiatic. The whole scene might be used to illustrate the Gilgamesh epic".[5] "Not only is the grouping typically Mesopotamian," remarks Prof. Jack Finegan, "but the man himself is pictured in Asiatic style with full beard and long robe".[6] Yet Flinders Petrie is rightly puzzled by the heavy attire of this lion-fighter. "The hero holding the lions", says he, "is more like a Tatar prince, such as Kadphises on the coins, than like the struggling naked Gilgamesh. He cannot

Fig. 178
The reverse of the ivory-carved handle of the knife of Jebl el-'Arak.

[1] Hall, "The Discoveries of Tell el-'Obeid", *J.E.A.*, VIII, p. 252.
[2] *Ibid.*, p. 251.
[3] Diodorus Siculus, I, 14 ff.
[4] Cf. Hall, *The Ancient History of the Near East*, p. 89.
[5] Gordon Childe, *New Light on the Most Ancient East*, p. 122.
[6] Finegan, *Light from Ancient Past*, p. 75.

have been idealized in a hot country. The lions having the thick matted hair of the mane extending underneath the whole body, were not seen crouching in burning sands but in snowdrifts, like the lion slain in a pit in a time of snow in Palestine[1], or the tigers of Japanese artists, wading in snow. All this cannot have been accreted between Elam and Egypt".[2] Again Hall remarks: "The hero looks more like a god of the desert between the Nile and the Red Sea than a Gilgamesh or an Elamite — a god conceived by his worshippers under a form strongly influenced by Mesopotamian and Elamite ideas brought to the coast (? of Majan) by sea and executed by a predynastic Egyptian artist".[3]

These doubts and hesitations nevertheless allow us to draw some conclusions :–

1st. This Lion-Fighter is certainly not an Egyptian. "As regards the man in the long gown", says Pijoán, "though he is not Gilgamesh, for he does not smother the lions within his powerful arms, yet he is not an Egyptian either: he is an Oriental by all accounts".[4]

Fig. 179
The Lion-Fighter in the knife of Jebl el-'Arak.

2nd. The subject of the scene is not Egyptian either, as it is never seen in Egypt before the crop-haired people landed there.

3rd. The subject of this fight was well known in Sumer, where it was reproduced in the early seals hundreds of times.

4th. Yet the Sumerian Gilgamesh is always — or almost always — shown nude. How to explain this attire of the hero of the Jebl el-'Arak knife? It suggests a cold country of origin. "The signs of a cold country in the art are difficult to localise".[5]

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[1] II Sam. (Kings), XXIII, 20.

[2] Flinders Petrie, "Egypt and Mesopotamia", *Ancient Egypt*, IV (1917), pp. 34-35.

[3] Hall, "The Discoveries at Tell el-'Obeid', *op. cit.*, p. 252.

[4] Cossío-Pijoán, *Summa Artis*, III, p. 34.

[5] Flinders Petrie, *op. cit.*, p. 34.

5th. In the original country of the Sumerians, India, this great hero is also shown nude in his struggle with the two lions in the four seals of the Indus Valley which reproduce the scene.[1] (Fig. 180). We have identified this hero as Bhīma, the great strong man of India, of epic fame.[2] Now, the epic narrates that in his great fights with lions, tigers, elephants and all the great beasts of the forest, Bhīma was "clad in deer skins and wearing golden armlets and equipped with weapons and with his sword girded on".[3] It was but natural, in the region of the Himālayas and actually on the slopes of Mount Kailāsa, that Bhīma could not be garmentless as the Lion-Fighter of the seals. The representation of the lion-fighter in the handle of the Jebl el-'Arak knife seems to be an atavistic artistic recollection of the original tradition, which was probably evoked and renewed in the cold climate of Syria.

Fig. 180
A seal from Mohenjo-Daro showing the Indian Lion-Fighter.

There is, in point of fact, another such recollection in the same handle and, indeed, very near the figure of the Lion-Fighter himself. The technique disclosed in the carving of the two domesticated dogs, mentioned above, shows the same artistic ideals and traditions as they are manifested in the carving of the seals of the Indus Valley. In

Fig. 181
Equal technique of carving the muscles of the shoulder in the Indus Valley and in Egypt.

[1] Mackay, *Further Excavations at Mohenjo-Daro*, II, pl. LXXXIV, Nos. 75, 86; pl. XXXV No. 122; pl. XVC, No. 454.

[2] It may at first sight appear incongruous that a Proto-Indian hero should be identified with a hero of the *Mahābhārata*. We may remind our readers of what we have said above, viz. that many works written in Sanskrit reproduce stories of the pre-Āryan period. Cf. pp. 9-11. We have given a course of lectures on the Proto-Indio-Mediterranean tradition on the Lion-Fighter in the University of Madras in 1945. The volume containing these lectures will be published somewhat later. Cf. Heras, "The Age of the Mahābhārata War", *J. I. H.*, XXVI, pp. 7-20.

[3] *Mahābhārata*, Vana Parva, 11362 (Calcutta ed.)

particular the two parallel lines deeply carved to represent the muscles of the shoulder of the dogs remind one of the same lines that appear in the majority of the animals shown on those seals, and specially in the unicorns.[1] As regards the species of this dog, Gordon Childe describes it as "very different from the older Egyptian greyhound type, but identical with the oldest Babylonian".[2]

Fig. 182
Entwined serpents on a prehistoric ivory handle from Egypt.

Belonging to the same period of the Jebl el-'Arak knife, a few more ivory handled knives have been found in Egypt, which confirm the above deductions. In some of them two intertwined serpents appeared, having rosettes within the circles formed by their waving bodies. (Fig. 182). This is a completely new artistic motive in the land of the Nile. Yet these intertwined serpents appear in a vase of Gudea, the famous Sumerian *pateśi* of Lagash (Fig. 184), wherefrom they seem to have been brought to Egypt. We must nevertheless confess that in the Sumerian specimen no rosettes appear between the two serpents. "Though the rosette seems not to have been found with snakes in Mesopotamia", says Flinders Petrie, "yet it is likely to occur there, as the rosette is from that region in later times".[3] "It seems, however clear", continues the same famous Egyptologist, "that the idea is oriental, rather than western,

Fig. 183
Two pairs of intertwined snakes, from an early Sumerian seal.

[1] The copy of the figure of the dog reproduced on the opposite page is taken from a photograph of the handle found in Cossio-Pijoán, *Summa Artis*, III, p. 32, fig. 46.

[2] Gordon Childe, *New Light on the Most Ancient East*, p. 122.

[3] Flinders Petrie, quoted by Hunt, "Hyderabad Cairn Burials and their significance", *J.R.A.S.*, LIV, p. 156.

Fig. 184
Entwined dragons, in the stone vase of Gudea of Sumer.

and this motive is therefore a further evidence of the oriental influence entering Egypt and introducing the carved ivory handles".[1]

This motif of the intertwined serpents may also perhaps be traced to India, wherein they appear in an exactly similar way though many centuries after. Yet the continuation of artistic traditions in India, and the appearance of these snakes in Sumer, make us suspect that though they are not found as yet among the objects of the Indus Valley, they must have existed there. Consequently, Flinders Petrie concludes, "the indication is of a common source down the Persian Gulf (as other things suggest) and to India".[2]

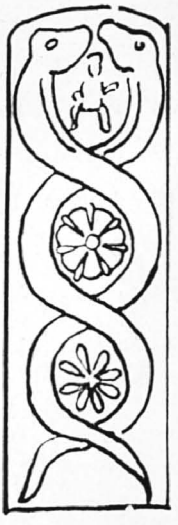

Fig. 185
Entwined serpents in India

Now considering the art itself which all these ivory handles display, critics have not the least doubt about its foreign origin. It has been proved beyond doubt that the carving of the knife of Jebl el-'Arak was produced in Egypt;[3] and yet Hall mentions "its apparent mixture of pre-dynastic and Babylonian, or as some have suggested, even Elamite forms";[4] for it mingles "pre-dynastic Egyptian motives with a technique that resembles the work of Narām-Sin's time".[5] Similarly the great Egyptologist Sir W. M. Flinders Petrie has no hesitation in passing these final remarks: "This Art is not Egyptian; it has no sort of parallel in any of the purely prehistoric work of Egypt. The general style of the fighting groups reminds us of more than one

[1] Flinders Petrie, "Egypt and Mesopotamia", A.E., 1917, p. 34. Cf. Morgan, *La Prehistoire Orientale*, p. 144.

[2] Flinders Petrie, according to Hunt, *op. et. loc. cit.*

[3] Benediti. "Le couteau de Gebel-el-Arak, *Fondation Piot, Monuments et Memoirs*, XXII, pp. 1-10. Cf. Contenau-Chapot, *L'Art Antique*, pp. 19-20.

[4] Hall, "The Discoveries at Tell el-'Obeid, p. 241.

[5] *Ibid.*, p. 252.

monument of early Mesopotamia. Above all the figure of the hero with lions is a purely Mesopotamian or Elamite type, familiar down to Persian times. Thus the affinities are of the Tigris rather than of the Nile.... They (the sculptures) are the product of an Oriental people inspired by Elam and the Tigris, and entering Egypt with their own traditions".[1] And again: "We have learned from the new handle that, by the middle of this second civilization, an entirely fresh art was coming into contact with Egypt".[2] As regards the knife of the intertwined snakes which is now kept in the University College, London, Pijoán says: "Its ivory handle, if it were found in the ruins of the Euphrates Delta, would be considered something strange, yet it could be accepted as a product of Sumerian art".[3]

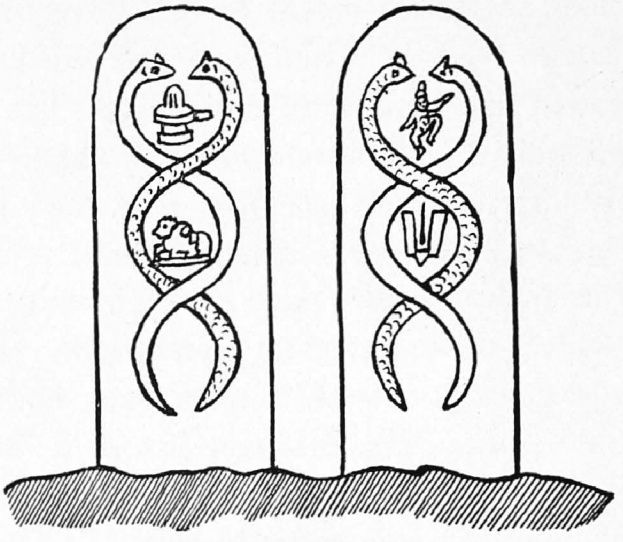

Fig. 186
Entwined serpents mixed with sundry religious symbols, from Southern India.

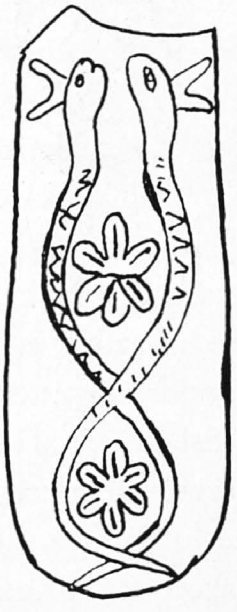

Fig. 187
Entwined serpents on the handle of a prehistoric knife, from Egypt.

After considering all these foreign elements that appear in the early proto-dynastic period of Egyptian history, the same great Egyptologist so often mentioned, readily accepts the priority of the Sumerian civilization: "The broad question", says he, "of the relative age of the civilizations of Egypt and Mesopotamia has often been canvassed. We now have a

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[1] Flinders Petrie, "Egypt and Mesopotamia," *op. cit.*, p. 30.

[2] *Ibid.*, p. 33.

[3] Cossio-Pijoán, *op. cit.*, p. 34.

strong suggestion before us that advance was earlier on the Tigris than on the Nile";[1] and in general he acknowledges that "the orient started fine work at an earlier stage than the Mediterranean".[2] He puts this Oriental Sumerian civilization "early in the second prehistoric civilization of Egypt".[3] And by the general natural law of the spread of cultures Sumer entered Egypt carrying its own culture. The Mediterranean owes its early culture to the expansion of the dwellers on the Euphrates and Tigris. There is clear evidence to prove that "there had been gradual infiltration of successive immigrations from the East into Egypt, at least since the highest period of the second prehistoric Age, and that these culminated in the final conquest of the dynastic peoples".[4]

These invaders must have given rise to the so-called Gerzean culture, which originated in the Delta, but which united the two lands at a later period.[5] Yet it was not finally the north which united the south, but the south which united the north, as we shall see in the following section. Of these people and of their descendants Herodotus remarked that "they are the most careful of all men to preserve the memory of their past actions and the best skilled in history of any men that I have ever met".[6] Accordingly, during these Proto-Dynastic times historical records were already inscribed on slabs of stone, fragments of which survive and constitute "the earliest of all known annals in the history of history."[7] The knife of Jebl el-'Arak is one of those historical records produced by the invaders, thanks to which we have been able to narrate the account of their successful landing on the Northern shores of Africa.

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[1] Flinders Petrie, *op. cit.*, p. 32.

[2] *Ibid.*

[3] *Ibid.*, p. 36.

[4] *Ibid.*, p. 32. Cf. Énel, *Les Origines de la Genèse et l'Enseignement des Temples de l'Ancienne Egypte*, p. 15.

[5] Moret, *The Nile and Egyptian Civilization*, pp. 101-113.

[6] Herodotus, II, 77.

[7] Shotwell, *The History of History*, I, p. 79. Cf. Breasted, *Ancient Records of Egypt*, I, Nos. 76-167.

V

THE WADI HAMMAMAT AND THE TOMB OF HIERAKONPOLIS

There are two places in Upper Egypt which fortunately keep precious archaeological materials confirming the historicity of an invasion of easterners—a seafaring nation—from the south; just as the knife of Jebl el-'Arak substantiated the invasion from the north. These two places are the Wādi Hammāmāt and the Tomb of Hierakonpolis.

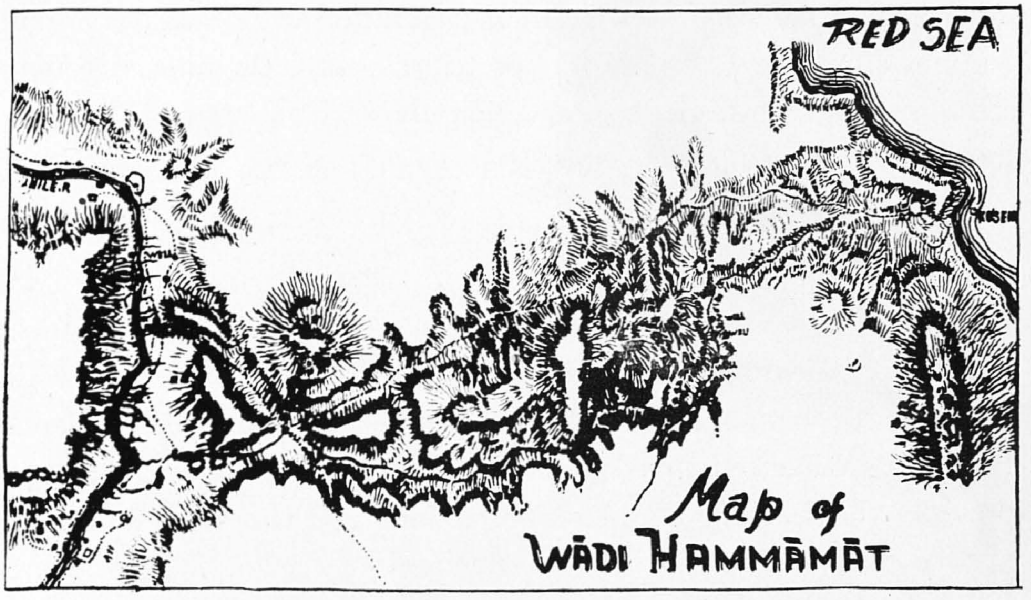

Fig. 188
Showing the path followed by the Proto-Indians from the Red Sea to the Nile.

The Wādi Hammāmāt is a valley that unites the shores of the Red Sea with the valley of the Nile itself. It spreads precisely in that spot of the Egyptian desert wherein the Nile bends its course most towards the east. Consequently the distance from the river to the Red Sea is here the shortest one all along the course of the former from north to south. At the entrance of this Wādi in the east there is now the town of Koseir, which invites the seafarer through the Red Sea with an excellent landing place. To the west, the ancient city of Coptos, now Kupft, on the banks of the Nile, offers a welcome shelter to the weary pilgrim after a five days' journey through the rocky Wādi.

Owing to numerous archaeological records found in it, this Wādi is already famous in Egyptian history. Very early, the inhabitants of the valley of the Nile discovered a rich deposit of haematite in this Wādi, a deposit which they exploited for enriching their works of art.[1] From records inscribed on the rocks of the Wādi, we know of the existence of some traffic along it as early as the Vth Dynasty.[2] During the reign of Pharaoh Assa, whose royal cartouche is seen on the rocks, the old quarries of the Wādi were reopened once more.[3] An expedition sent to the land of Punt by King Mentuhetep IV Sankhkara, of the XIth Dynasty, passed through the Wādi wherein they dug 14 wells and cisterns for the use of 3000 men who constituted the expedition, which involved the daily issue of 6000 jars of water.[4]

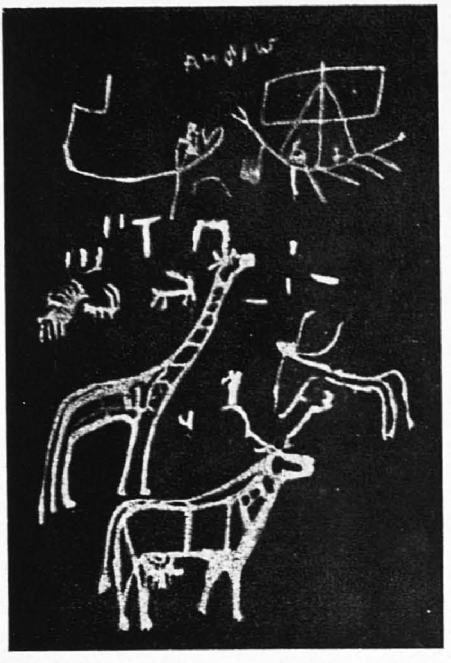

Fig. 189
Boats and animals depicted on the rock walls of the Wādi Hammāmāt.

Even down to the 20th century B.C., under Amenemhet I, of the XIIth Dynasty, an officer named Intef was sent for stone to Wādi Hammāmāt. In an inscription discovered there he relates that he sought vainly for the required stone during eight days. Then he prostrated himself before several gods of Upper Egypt, Min being the first mentioned, and "giving to them incense upon the fire". Then all his subordinates scattered in search of the coveted stone, which was finally found.[5] Next to these quarries there

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[1] Wilkinson, *Manners and Customs of the Ancient Egyptians*, III, p. 246.
[2] Elliot Smith, *The Ancient Egyptians*, p. 88.
[3] Knight, *Nile and Jordan*, p. 59.
[4] Breasted, *A History of Egypt*, p. 153; Breasted, *Ancient Records of Egypt*, I, Nos. 427-433.
[5] Breasted, *Ancient Records of Egypt*, I, p. 226, Nos. 467, 468.

is a stele erected in the time of Ramesses IV, which shows that the quarries were still being worked during the XXth Dynasty.[1] Not only stone but even gold was exploited under many Pharoahs in the mines of the Wādi Hammāmāt.[2] Even as late as the fifth century B.C. the Achemenian Monarch Artaxerxes I Longimanus had an epigraph inscribed on the rocks of this famous Wādi.[3]

Yet its importance for the historian of Egypt is not so much concerned with the materials derived from it for her buildings and artistic works as with the Wādi itself as a thoroughfare between the Nile and the Red Sea. "As the Nile at this point", says Breasted, "approaches most closely to the Red Sea in all its upper course, caravans leaving Coptos and passing by the Hammāmāt quarries, could reach the sea in five days. It was therefore the most convenient route to Punt".[4] "It is such an obvious means of access from the Nile to the sea", remarks Elliot Smith, "that we can be sure it must have been a trade route even in predynastic times, or at any rate a highway where the Arab and the Proto-Egyptian met and intermingled".[5] It is not therefore strange that the road through the Wādi Hammāmāt, as the most convenient exit to the sea, should have been looked after by the Egyptian monarchs. Thus in the time of Seti I the old road from Coptos to the Red Sea through the Wādi Hammāmāt was restored, and a papyrus chart has been discovered which

Fig. 190
Nilotic boats depicted on the rocks of the Wādi Hammāmāt.

[1] Lepsius, *Denkmaler aus Agypten und Äthiopien*, III, p. 219.
[2] Wilkinson, *op. cit.*, I, p. 232; III, p. 227.
[3] Knight, *op. cit.*, p. 356.
[4] Breasted, *A History of Egypt*, p. 128.
[5] Elliot Smith, *op. cit.*, p. 88.

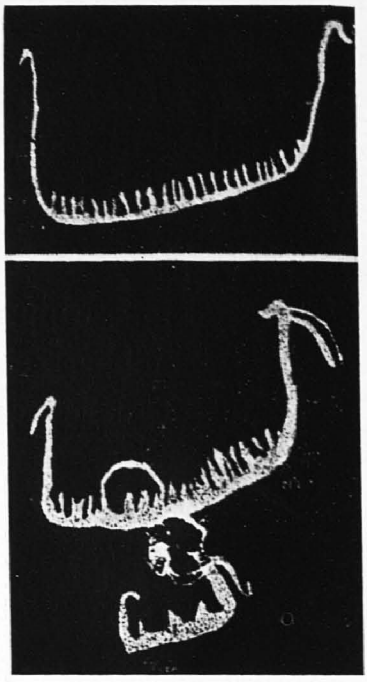

Fig. 191
High-prowed and high-sterned boats of the Wādi Hammāmāt, one of them having a snake head and two streamers.

reveals how the Pharaoh marked out the route through the Wādi.[1] Again Rameses IV re-built the road through the Wādi, wherein he constructed a temple to Isis.[2] Even modern comforts have been introduced in Wādi Hammāmāt; the present Egyptian Government has built a motorable road from Kupft to Koseir, following the old caravan route through the Wādi.

But was this old route ever used, apart from the expeditions of Egypt to the sea, in the opposite direction, viz. by the newcomers to the land of the Nile proceeding from the Red Sea? It is admitted that a dynastic race entered Egypt from the south.[3] Did they come through the famous Wādi? Elliot Smith seems to admit this without hesitation: "The widespread occurrence of marine shells presumably from the shores of the Red Sea in the Predynastic graves of Upper Egypt and Nubia is positive evidence of the reality of such intercourse".[4] Very fortunately, a few years ago, a series of drawings have been discovered by Prof. Winkler on the rocks of the Wādi Hammāmāt, which seem to be a pictorial record of this early expe-

Fig. 192
Sumerian seal of the Akkadian period displaying a boat in whose stern there is a snake head.

[1] Cf. Lepsius, *Answahl der wichtigsten Urkunden*, pl. XXII.
[2] Flinders Petrie, *Research in Sinai*, p. 91.
[3] Gordon Childe, *New Light on the Most Ancient East*, p. 103.
[4] Elliot Smith, *op. et loc. cit.*

dition. The first striking thing we notice in these drawings is an unusual type of boat with high prow and stern, "not at all Egyptian." The stern of at least one of these boats ends in the head of an animal (probably a snake) (Fig. 191), which recalls the device found on the stern of some of the boats shown in Sumerian seals[1] (Fig. 192); but under this head two streamers float to the wind in a way similar to the streamers which appear in the flagstaffs represented in Mohenjo-Daro objects[2] and in the Egyptian and Aegean ships depicted in proto-historic vases.[3] These two streamers also appear in the pictographic sign meaning "flag" in the Indus Valley script. These characteristics may be easily contrasted with the ordinary Nilotic craft which is also represented in the Wādi, though drawn very likely at a later period. (Fig. 190).

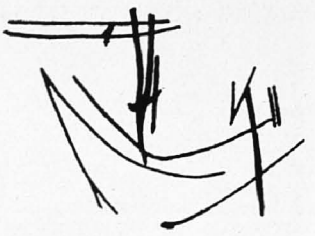

Fig. 193
A boat adorned with a flag, scratched on a Mohenjo-Daro potsherd.

Fig. 194
Early *lāncanas* on Mohenjo-Daro seal fragments.

These new boats evidently are reminiscent of the new boats depicted on the famous Jebl el-'Arak knife, described above. The invaders of the south used the same type of boat as the invaders of the north. "It is fairly certain", says Winkler, "that both show an eastern people and their boats, probably from Mesopotamia".[4] One of these paintings portrays some of these new invaders, who are

Fig. 195
Flagstaffs of early Egyptian craft.

[1] Cf. Frankfort, *Cylinder Seals*, pl. XIX e.

[2] Marshall, *Mohenjo Daro and the Indus Civilization*, III, pl. CXVI, Nos. 5 and 8.

[3] Cf. Mosso, *The Dawn of Mediterranean Civilization*, p. 14. Cf. Heras, "Further Excavations at Mohenjo-Daro", pp. 71-72.

[4] Winkler, "Egypt before the Pharaohs", *I.L.N.*, CLXXXIX, p.1173.

described by Prof. Winkler thus: "We find a group of drawings which are the most ancient of all. Their peculiarity is the style in which the human figure is drawn wedge-shaped, with high shoulders. This recalls the paintings at Owenat Oasis and the Sahara Hills. The women wear the bell-shaped skirts, quite like the 'Dame de Cogul' in Eastern Spain".[1] (Fig. 197). The invaders therefore are depicted in this way, as are also the inhabitants of North Africa and of Eastern Spain depicted, whom we may rightly call Libyans, Bereberians and Iberians, i.e. several nations belonging to the Mediterranean stock, acknowledged today as Hamitic. In particular the characteristic Iberian skirt of the women of the Cogul rock paintings is very suggestive of a racial affinity with the women of the Wādi Hammāmāt. (Fig. 198). So much for the technique of the paintings. As to the physical aspect of these people the paintings are so rough that we cannot derive much information about it. One trait, however, is certain. These Southern invaders, in the same way as the invaders of the Jebl el-'Arak knife, had their hair close cropped, which we may rightly infer from the comparison of their images with the figure of a hippopotamus hunter, of whom we shall speak presently. "Thus our rock-drawings", concludes Winkler, "afford information about earlier waves of these invaders, their manner of life, their dress and their shipping".[2] But who were these invaders?

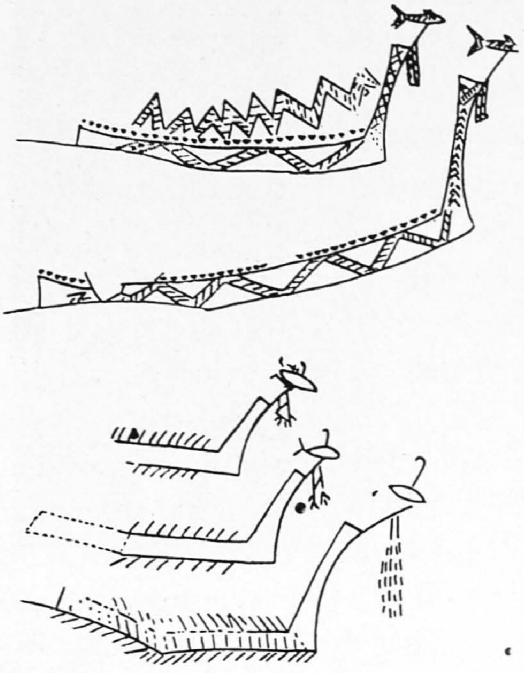

Fig. 196
Flagstaffs of the Fish on early Mediterranean boats.

[1] Winkler, "Egypt before the Pharaohs", *I.L.N.*, CLXXXIX, p.1173.
[2] *Ibid.*

The characteristic Mediterranean technique of the paintings, as noted above, seems to suggest that they were people from the Mediterranean stock, which is all the more remarkable if we pay attention to the fact that they had never been in the Mediterranean, as they were invading Egypt from the Red Sea. Were they perhaps coming from their country of origin, the cradle of all the Mediterraneans? The typical boats by which they came point to Mesopotamia, thus suggesting affinities with the early Sumerians. Yet we have explained above the improbability of their hailing from Mesopotamia considering the laws of early migrations of nations. They most probably seem to have come from India, either directly, or after a short stop in some harbour or other on their way to the country of the Nile. They were the Anu entering Egypt from the south. It is now acknowledged that before they actually entered Egypt with the idea of settling in the valley of the Nile, there existed some "interrelation between Egypt and certain centres of civilization in western Asia", at least during the period known as Nakāda I. The products of these Western Asiatics have been discovered in the district where the Wādi Hammāmāt joins the valley of the Nile. They were the very people who finally invaded Egypt during the Nakāda II period.[1] The pottery of Nakāda II gives further evidence as regards their origin, some of the patterns painted on that pottery are also found on the Mohenjo-Daro pottery.[2] (Figs 202, 203).

Fig. 197
Animals and persons depicted in the Wādi Hammāmāt.

Fig. 198
Two "prehistoric "Dames of Cogul" in Eastern Spain.

[1] Baumgartel, *The Cultures of Prehistoric Egypt*, pp. 44 and 119.

[2] Cf. *Ibid.*, pp. 56 and 57; Marshall, *op. cit.*, III, pls. LXXXVII, 1 and XCII, 6 and 18.

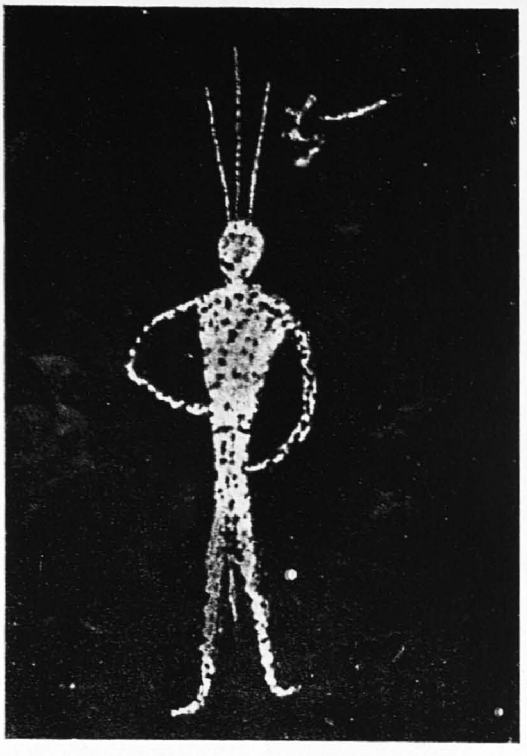

Fig. 199
Tridented figure of Āṇ depicted on the rock walls of the Wādi Hammāmāt.

Our last inference is confirmed by one of these paintings, the importance of which has not been properly emphasized. It is a painting representing the figure of a man, standing upright, his hands akimbo, "with a triple head ornament". Such is the brief description of his extraordinary headdress, as given by Winkler.[1] (Fig. 199). Needless to say that there has not been any attempt at identifying this figure, as far as we know. The figure representing God, the Supreme Being, Āṇ, among the Proto-Indians is practically always represented with a trident upon his head.[2] (See Figs 23-25, 53, 54). It may be said that in all these cases the trident has the two side points curved, as it occurs in the Indus Valley script also ; but in our case the three points are three straight lines. Yet the curvature of the side points of the trident does not seem to make any difference. For in a clay cylinder found at Mohenjo-Daro the figure of Āṇ is shown under an arch-like pippal tree, and the trident upon his

Fig. 200
Tridented figure of Āṇ on a cylinder seal of Mohenjo-Daro.

[1] Winkler, "Egypt before the Pharaohs", *I.L.N.*, CLXXXIX, p. 1173.

[2] Marshall, *Mohenjo-Daro and the Indus Civilization*, I, pl. XII, nos. 16, 17 ; III, M.D., M. 361 ; Mackay, *Further Excavations at Mohenjo-Daro*, II, nos. 222 and 235. Cf. Heras, "The Plastic Representation of God", pp. 224-227 ; Heras, "Further Excavations at Mohenjo-Daro", pp. 65-66.

head is shown in exactly the same guise as in this rock drawing.[1] (Fig. 200). The latter is therefore the figure of Āṇ, and this identification is of extraordinary importance to identify likewise the unknown artist who drew this figure, and the people of his nation who invaded Egypt shortly before, as worshippers of Āṇ, viz. the Anu of the south.

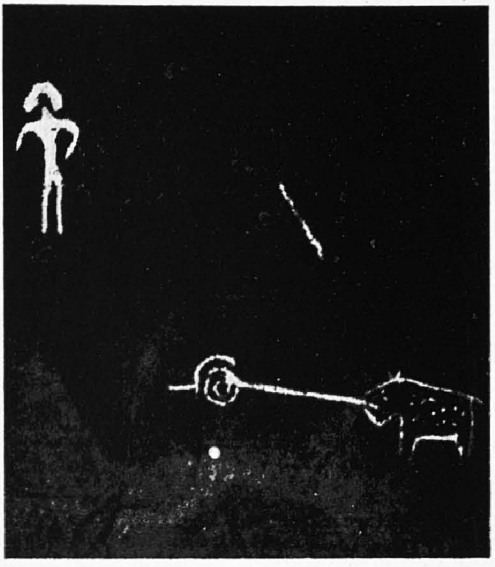

Fig. 201
One of the natives of the valley of the Nile harpooning a hippopotamus, on a rock of the Wādi Hammāmāt.

How long were these Anu in the neighbourhood of the Wādi Hammāmāt? The fact that among these drawings there is no representation of any fight, as is the case in the Jebl el-'Arak knife, seems to suggest that the Anu were able to land in the south-eastern coast of Egypt without any opposition on the part of the natives. Yet they could rightly fear opposition when approaching the valley of the Nile, where most of the population of Egypt were dwelling. Consequently, after settling temporarily in the Wādi they seem to have sent messengers to reconnoitre the vicinity of the Nile; for one of the drawings represents a scene which only in the vicinity of the Nile could have been enacted. A haired-hunter, similar to those Delta people depicted in the Jebl el-'Arak knife, is represented as throwing a spear at a hippopotamus in whose mouth is a harpoon with its rope coiled at the other end. (Fig. 201). This seems to be a design also found on prehistoric pottery of Upper Egypt.[2] In any case, hunting a hippopotamus must have been

[1] Marshall, *op. cit.*, I, pl. XII, no. 13. In Sumer also Anu was represented with a trident upon his head. Cf. Heras, *op. cit.*, pp. 227-229. The trident displayed upon his head by the Sumerian king mentioned above is also a straight-pointed trident, as the one of the Egyptian drawing. Cf. above p. 167, fig. 20.

[2] Winkler, *op. et loc. cit.*

a new sight to the invaders, one indeed worth recording among their graphic recollections; just as they also recorded the unusual spectacle of an ostrich laying an egg.[1] (Fig. 197). Where this hippopotamus could have been captured we do not know for certain. It might have been in the Nile or in its marshy lands; or perhaps in a lake. Precisely the famous palette of King Narmer, which cannot have been carved many years after, in a pictographic inscription shown next to the figure of the monarch, informs us that this Pharaoh of Egypt led captive the people of the Harpoon Lake in Lower Egypt.[2] Was this lake perchance the place where those messengers of the new invaders witnessed the harpooning of the hippo for the first time?

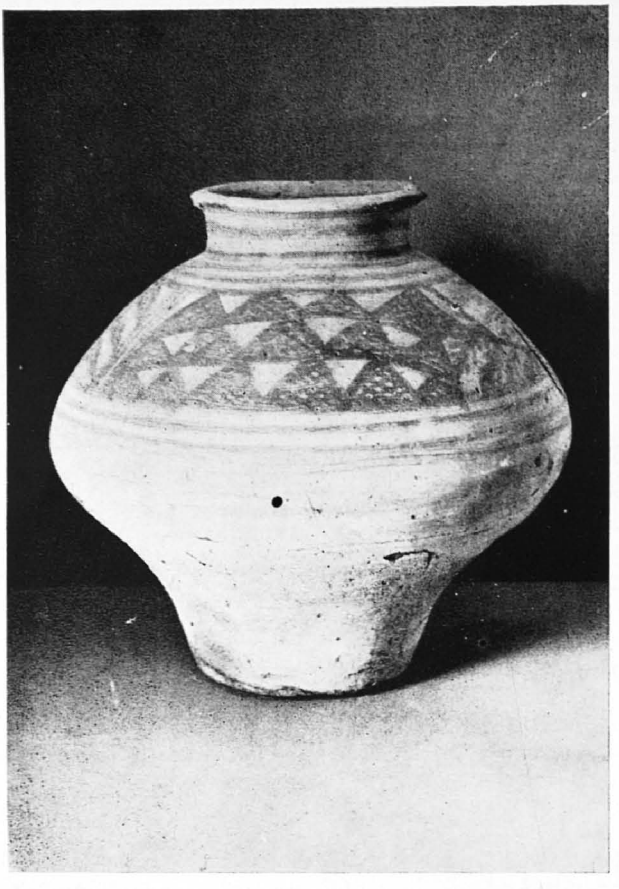

Fig. 202
The triangular decoration on a vase from Mohenjo-Daro.

All this would naturally require a longish stretch of time during which they encamped in the Wādi. And when finally they entered the valley of the Nile, they seemed to have met with some opposi-

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[1] That this drawing was done by the new comers and not at a later period is evident from the fact that the hunter is depicted *en face*, just as all other primitive figures; not in profile, as was customary in Eygpt in later years, and as was done in the case of these very drawings. The slab in which two women and a man and the ostrich are represented, fell on one of its sides, sometime later. Then a man seated, smelling a flower, was drawn. He now appears as lying on his back when the slab is looked at in its oirignal vertical position. This man is also shown in profile.

[2] Quibell, *Hierakonpolis*, I, p. 10.

tion, as they had forecast. This is the natural inference one is led to draw after the study of the paintings of the tomb of Hierakonpolis. This city, situated on the western bank of the Nile in Upper Egypt, somewhat to the south of Coptos, was originally known as Nekhen, and was for some time the royal residence of Upper Egypt ; though the real capital was just across the river at Nekheb, a site which was later styled as Eileithyaspolis by the Greeks.[1] Many graves of the Gerzean culture, though originated in Lower Egypt, have been unearthed in Hierakonpolis ; perhaps because the people of this culture finally spread to Upper Egypt, most probably because the culture brought by these Anu invaders of South Egypt is supposed to be the culture of the Anu of the north, all springing from the same original stock. The graves of the rich and of the chiefs were lined with mud bricks. One of the latter has been discovered, the walls of which were adorned with a mural painting,[2] which happens to be a new graphic record concerning the southern invasion of the Anu.

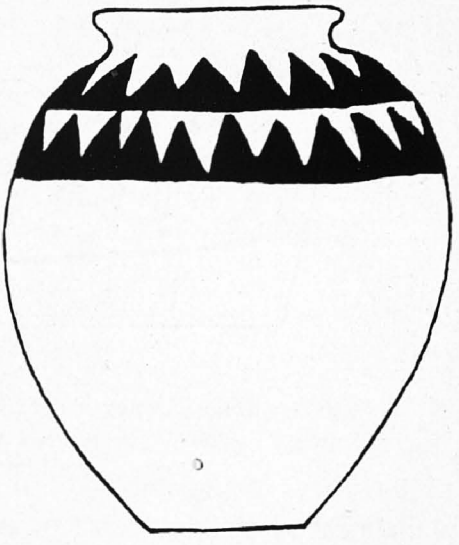

Fig. 203
Early Egyptian vase, from Nakāda, with a characteristic triangular decoration.

The walls of this tomb had been plastered over with a layer of mud mortar, in the same way as the Indians of much later times did on the walls of their caves and temples before painting their famous frescoes. This mud mortar layer was washed over with a coat of yellow ochre wherein the mural painting was finally executed. That unnamed artist painted there scenes of their daily life, occurrences of their beliefs and traditions, with that ingenuity in the style of the

[1] Moret, *The Nile and Egyptian Civilization*, pp. 104-113.

[2] Quibell, *op. cit.*, II, pp. 20-35.

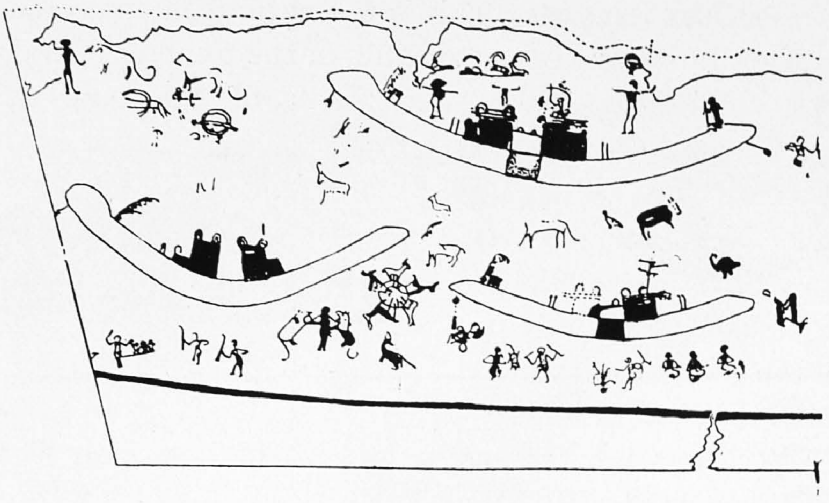

Fig. 204
Left side of the painting of the Hierakonpolis tomb showing the fight between the Nilotic people and the invaders, an animal-wheel and the Lion-Fighter.

early decorated pots. "The painting," says Gordon Childe, "crude though it be, is at once the ancestor of the later sepulchral frescoes, and the lineal descendant of the prehistoric vase paintings".[1]

The main subject of the whole painting seems to be a combat between people using the papyrus boats, which are numerous, and some black people, in the land.[2] The former, as explained in the case of the knife of Jebl el-'Arak are the ordinary craft of the Nile; their occupants therefore must be the original people of the land. They seem to have come in great numbers, perhaps the Semites of Lower Egypt, to defend their land against the invaders. The latter, the black-painted people, apparently are the same as the crop-haired people of the Jebl el-'Arak knife. "These crop-headed people", says Sir W. M. Flinders Petrie, "are — or are akin to — the black men on the Hierakonpolis tomb".[3] These black men, the invaders, won the day in that struggle, for they were able to record the event and even stamp an unmistakable symbol of their success in the same painting. On the lower portion of this primitive work of art, towards the left we once more see the representation of the

[1] Gordon Childe, *New Light on the Most Ancient East*, p. 99.
[2] Cf. Capart, *Primitive Art in Egypt*, p. 121, fig. 94.
[3] Flinders Petrie, "Egypt and Mesopotamia", *A.E.*, 1917, p. 36.

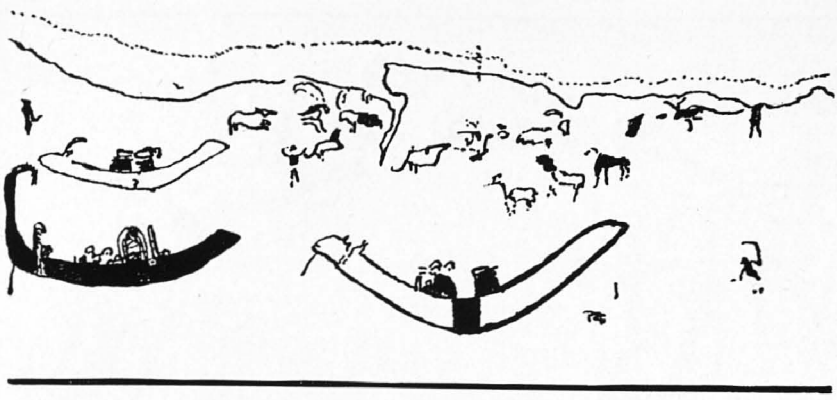

Fig. 205
Right side of the painting of the tomb of Hierakonpolis displaying some Nilotic ships and much cattle.

famous hero fighting with two rampant lions; the hero, painted black, as the enemies of the papyrus boats, evidently belongs to the same nation. The Lion-Fighter in this case has not any traits at all which might suggest his provenance from a cold country. He is the ordinary nude Lion-Fighter, as is also represented in the Indus Valley seals. (Fig. 206). His victory over the two brutes was perhaps for the Anu a symbol of their own success over their enemies. That was perhaps the real meaning of his being represented both in the knife of Jebl el-'Arak and in this tomb.

The victory obtained by the invading Anu changed the destinies of Egypt for good. The so-called Dynastic People of Egypt were thus settled in Upper Egypt, wherein the Pharoahs of the Ist and IInd Dynasties were established. The first capital of Menes, the founder of the Ist Dynasty according to Maneton, was the city of This, a little to the north of Coptos on the western bank of the Nile. Modern Egyptologists are now inclined to identify him with Narmer, the Pharoah of the famous palette mentioned above. In

Fig. 206
The Lion-Fighter on the wall of the tomb of Hierakonpolis.

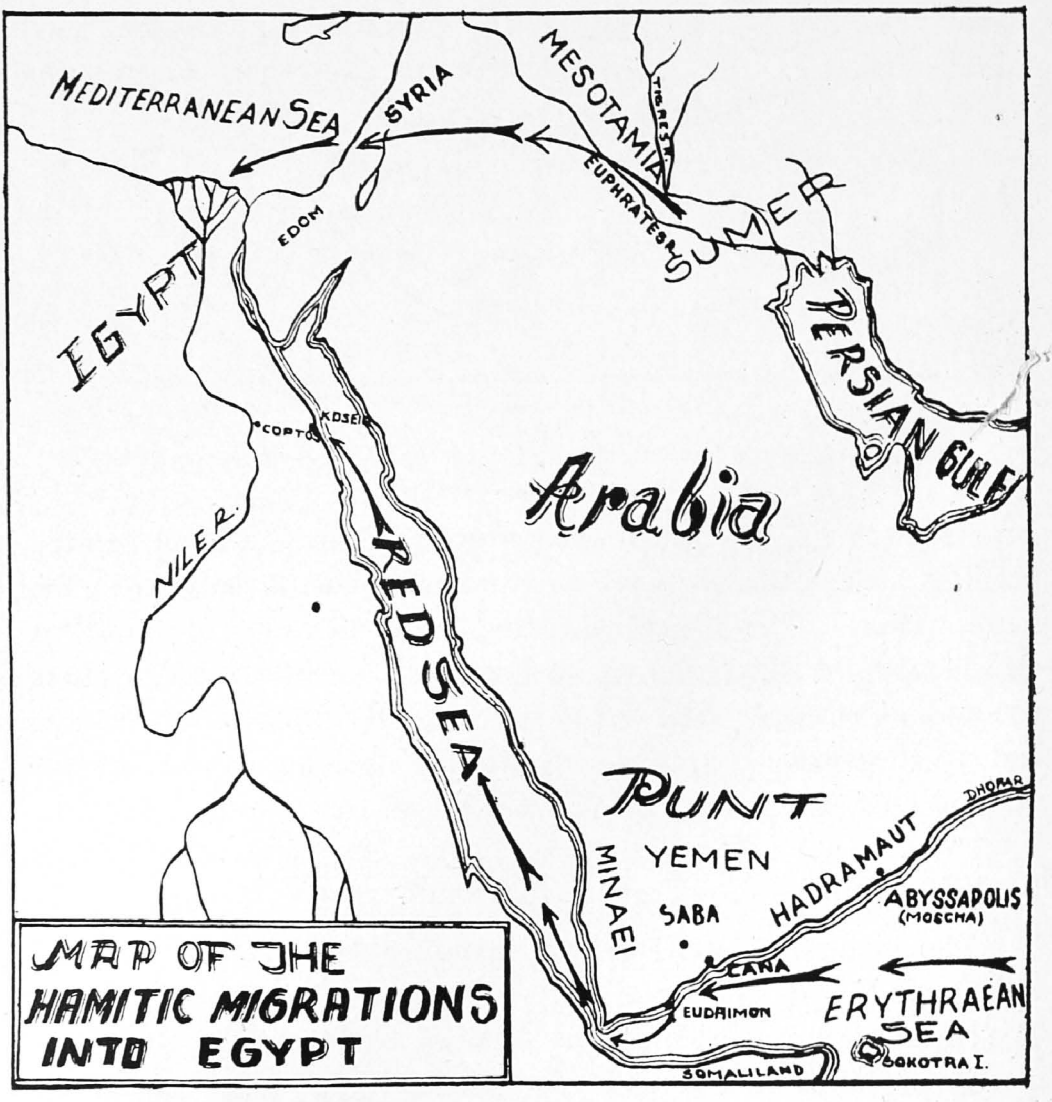

Fig. 207
Illustrating the two Indian migrations to the Land of the Nile.

the inscription of the same palette, also referred to, Narmer records his victory over the people of the north or at least a section of the same. It is a fact that Menes unified the whole of Egypt, also conquering the Lower lands. In fact he built a fortress 300 miles to the north at the entrance of the Delta, the site of which was recovered by building a dyke to divert the river.[1] This city was afterwards known as Men-refru-Mire or simply Menfe, out of which

[1] Herodotus, II, 99.

name the Greeks made Memphis.[1] Thus the Anu of the north were united with the Anu of the south. This union of the two sections of the same nation was always commemorated throughout Egyptian history, when the Pharoah received the title of "King of Upper Egypt and Lower Egypt", or "Lord of Both Lands", never "King of Kimit" (Egypt); and wore the double crown combining the tall conic helmet of Upper Egypt (very similar to the Indian *mukuta*) (Fig. 208), and the wickerwork diadem of Lower Egypt. (Fig. 209). Moses, accustomed to this Egyptian phraseology, always mentions Egypt using a word which means "the two Egypts".[2]

Fig. 208
The crown of Upper Egypt.

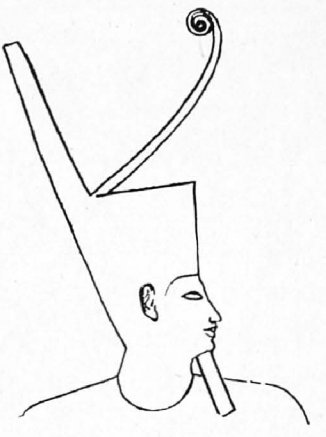

Fig. 209
The crown of Lower Egypt.

VI

THE LAND OF PUNT

It was a constant tradition among the Egyptians that they originally hailed from the Land of Punt. Much has been written about the situation of this land. The Egyptians themselves used to locate it across the Red Sea in the land of the frankincense.[3] But where was this land situated? Most Egyptologists, with Sir W. M. Flinders Petrie at their head, think that it is the East African coast, now called Somaliland. The publications of the 'Egyptian Exploration Fund' and Mons. Naville are of opinion that Arabia cannot be the Land of Punt in any case, since the types shown in the carvings of Deir el-Bahari as the natives of Punt are not Arabs,

[1] Breasted, *A History of Egypt*, p. 37.
[2] *Gen.*, XV, 18, etc.
[3] Moret, *Rois et Dieux d'Egypte*, p. 36.

i.e. not Semitic.[1] Yet "the testimony of Arabia would be at fault if they were";[2] because not all the inhabitants of Arabia were Semitic. In the south-western corner of Arabia, usually called Yemen, there was a well known nation of Hamitic origin which spread eastwards towards the Hadramaut; and it was precisely in their dominions that frankincense grew in plenty. Naville's objection, accordingly, is really in favour, of identifying Punt with Yemen and its neighbourhood. The inhabitants of this land "were the Pre-Semitic Cushite race, whose dominions centred at Dhofar, and who are represented there by the modern Gara tribe".[3]

Fig. 210
The Queen and King of the Land of Punt, as depicted in the carvings of Deir el-Bahari.

But there is still further evidence in favour of Arabia derived from the carvings of Deir el-Bahari; for the cattle shown in those reliefs are not the humped cattle peculiar to Somaliland, but the usual type of humpless cattle, which are bred in southern Arabia and also in Sokotra. Schoff quotes in this connexion a fragment of a letter from Mr R. E. Drake-Brockman, an African explorer, who says: "The cattle of these regions and in fact the whole of Gallaland and Southern Abyssinia are all humped variety. I have travelled fairly extensively in these regions and have never seen the non-humped breed, and very much doubt if they ever existed in these dried-up parts, as the hump is to these cattle what the camels

[1] Naville, *The Temple of Deir el-Bahari*, III, p. 31.

[2] Schoff, *The Periplus of the Erythrean Sea*, p. 142.

[3] *Ibid.*, p. 28. The name of this tribe seems to have been originally *Kara*, "black", in Dravidian, perhaps because of their darker complexion in relation to the sun-burnt complexion of the Semites.

hump is to the camel, a sort of storehouse".[1] "This is one more proof", here adds Schoff, "that the Punt expedition did not make its terminus on the Somali coast . . . but altogether the scene on the reliefs is more strongly suggestive of Dhofar (S. Arabia), the Sachalites of the *Periplus*".[2]

The evidence of the reliefs concerning the frankincense itself is still more valuable. The incense tree of Deir el-Bahari is always styled by Breasted "the tree of myrrh".[3] Now the tree of myrrh of Somaliland is bare thorny, trifoliate but almost leafless. Leafless also are the incense trees of Somaliland. But the incense trees represented in those sculptures are covered with luxuriant foliage,

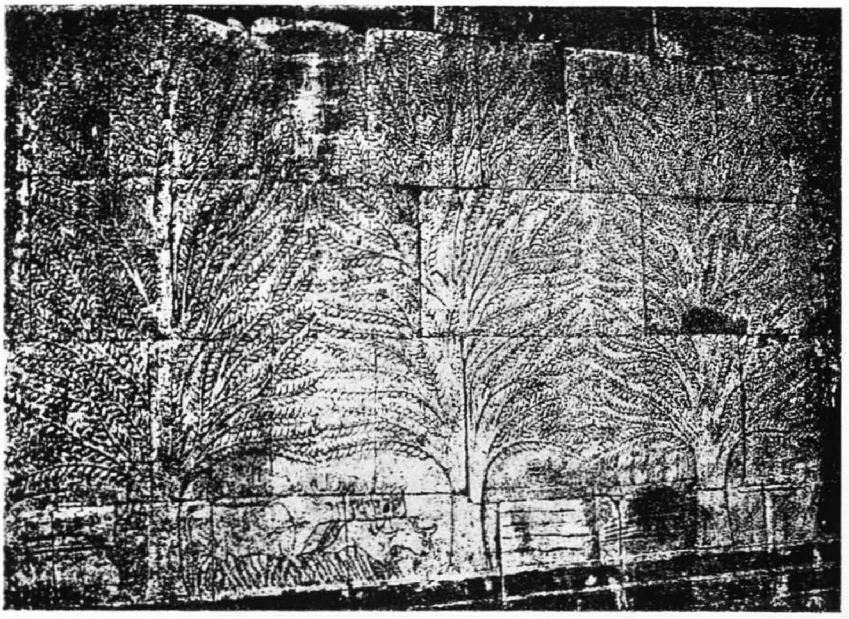

Fig. 211
Luxuriant frankincense trees of the Land of Punt, in the Deir el-Bahari carvings.

which only the Arabian trees can boast. (Fig. 211). "There can be no question," says Schoff, "that the trees in that relief are the frankincense in Arabia of Dhofar, the 'Sachalitic' frankincense of the

[1] Letter dated Bulhar, September 18, 1910 : Schoff, *op. cit.*, p. 271.

[2] Schoff, *op. cit.*, pp. 271-272.

[3] Breasted, *Ancient Records of Egypt*, II, pp. 263-265.

Periplus, the modern *Shehri luban*".[1] No sculptor could ever have intended to depict by the rich foliage of the trees of Deir el-Bahari the leafless trees of Somaliland. "This tree (of the Deir el-Bahari carvings)," Schoff assures us once more, "is clearly the *Boswellia Carteri*, the frankincense of the rich plain of Dhofar in Southern Arabia".[2] This frankincense is always called in the Deir el-Bahari inscriptions "*anti* incense",[3] which is an Arabic word *a-a-nete*, which means "three eyes".[4] The frankincense of Somaliland has never been called after that name. Hence for the Egyptians to say "*anti* incense" was tantamount to saying "Arabian incense," and to admit that the country wherefrom it came, i.e. the traditional Land of Punt, was Arabia.

Incidentally, *Genesis* informs us that trade in frankincense, balm and myrrh from Arabia to Egypt existed, and these products were carried out by Ismaelite merchants. When the brothers of Joseph, Jacob's son, were looking after their father's sheep in Dothain, "*viderunt Ismaelitas viatores venire de Galaad et camelos eorum, portantes aromata et resinam et stactem in Egyptum*".[5] These Ismaelite merchants must have been some of those referred to by the inscriptions of early Egypt, which mention the trade in incense brought overland to the Upper Nile by "the people of Punt and God's land" and not sought out by the Pharaohs.[6]

This frankincense of Egypt was so famous that practically no other frankincense was known in the Mediterranean. Virgil avers twice that incense comes only from the Sabaeans, who were some of the inhabitants of Yemen :–

India mittit ebur ; molles sua tura Sabaei[7]

"Ivory sends India; the soft Sabaeans their incense";

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[1] Schoff, *op. cit.*, p. 218.

[2] *Ibid.*

[3] Naville, *The Temple of Deir el-Bahari*, III, p. 17.

[4] Glaser, *Punt und die südarabischen Reiche*, p. 7.

[5] *Gen.*, XXXVII, 28.

[6] See Schoff, *op. cit.*, pp. 120-121.

[7] Virgil, *Georgica*, I, 57.

and still more dogmatically in another passage :–

> .....*Sola India nigrum*
> *Fert ebanum ; solis est turea virga Sabaeis*[1]
> "The ebony black is only possessed by India ;
> The incense twigs by the Sabaeans only."

The same is recorded by Pomponius Mela : "The country which spreads between the two seas is named Arabia, and styled Eudaemon (Eudaimon), a narrow strip, but very fertile bearing cinnamon, frankincense and other aromatic substances".[2]

Pliny also tells us that Arabia is the only frankincense producing country in the world and minutely describes its gathering and shipment to the country of the Nile. It will be useful to quote this passage here, as it is very important to our purpose :–

"There is no country in the world that produces frankincense except Arabia, and indeed not the whole of that. Almost in the very center of that region are the Atramitae, a community of the Sabaei, the capital of whose kingdom is Sabota, a place situated in a lofty mountain. At a distance of eight stations from this is the incense-bearing region, known by the name of Saba (*Abana*). This district is inaccessible because of rocks on every side, while it is bounded on the right by the sea, from which it is shut out by tremendously high cliffs.... The forests extend 20 schoeni in length and 10 schoeni in breadth (above 80 by 40 miles).

"Adjoining are the Minaei, a people of another community, through whose country is the sole transit for the frankincense, along a single narrow road. The Minaei were the first people who carried on any traffic in frankincense.... It is the Sabaei alone, and no other people among the Arabians, that behold the incense tree ; and not all of them, for not over 3,000 families have a right to that privilege by hereditary succession ; for this reason these persons are called sacred, and are not allowed, while pruning the trees or gathering the harvest, to be defiled, either by intercourse with women or coming

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[1] *Ibid*, II, 116–117.
[2] Pomponius Mela, *De situ orbis*, III, 8.

in contact with the dead ; by these religious observances it is that the price of the commodity is so enhanced.

"The natural vintage takes place about the rising of the Dog-star, a period when the heat is most intense ; on which occasion they make an incision on the tree where the bark appears to be the fullest of juice, and extremely thin, from being distended to the greatest extent. The incision thus made is gradually extended, but nothing is removed ; the consequence of which is, that an unctuous foam oozes forth, which gradually thickens and coagulates. When the nature of the locality requires it, this juice is received upon mats of palm leaves, though in some places the space around the tree is made hard by being well rammed down for the purpose. The frankincense that is gathered after the former method is in the purest state, though that which falls upon the ground is the heaviest in weight.

"The forest is allotted in certain portions, and such is the mutual probity of the owners, that it is quite safe from all depredation ; indeed, there is no one left to watch the tree after the incisions are made, and yet no one is ever known to plunder his neighbour. But, by Hercules ! at Alexandria, where the incense is dressed for sale, the workshops can never be guarded with sufficient care ; a seal is even placed upon the workmen's aprons and a mask put upon the head, or else a net with very close meshes, while the people are stripped naked before they are allowed to leave work. So true it is that punishments afford less security among us than is to be found by these Arabians amid their woods and forests !

"The incense which has accumulated during the summer is gathered in the autumn ; it is the purest of all, and is of a white color. The second gathering takes place in the spring, incisions being made in the bark for that purpose during the winter ; this, however, is of a red colour, and not to be compared with the other incense".[1]

This account about the production and industry of frankincense is of surpassing interest not only because of the details it gives about the country of its origin, which is affirmed to be Arabia only,

[1] Pliny, XII, 3a.

but also on account of the means of information which Pliny had, and which is suggested in the same account. The incense industry centre is said to be at Alexandria, where Roman ships often anchored and wherein the Roman merchants obtained that commodity for their temples and Patrician houses. The same must have been the source of information both of Pliny and Virgil about the country of origin of this coveted substance. Hence the Romans knew that Arabia, and indeed the southermost portion of Arabia alone, was the only frankincense growing country, through the Egyptian merchants. Therefore we may safely say that all the frankincense of Egypt came from southern Arabia, which accordingly is to be acknowledged as the Land of Punt.

There is still another product which seems to have been found in abundance in the country of Punt. That is cinnamon. The inscriptions of Queen Hatshepsut, which narrate the famous expedition graphically recorded at Deir el-Bahari, speak of cinnamon wood as one of the "marvels of the country of Punt", which were brought back to Egypt on that occasion.[1] What is the country of origin of this commodity ?

Strabo refers to the eastern coast of Africa, i.e. Somaliland, as the *regio cinnamomifera*, "the cinnamon bearing country".[2] Yet Schoff says that there is no sign of a cinnamon tree in that region at present, nor are there the requisite conditions of soil and climate for the cultivation of that tree.[3] Moreover Mr Drake-Brockman, already mentioned above, writes again from Somaliland about this subject : "I have never heard of the exportation of cinnamon from this part of Africa."[4] The classical authors themselves seem to agree as regards the lack of cinnamon trees in East Africa, for Strabo again avers that it came from the "far-interior", because nearer the coast only the 'false cassia' grew.[5]

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[1] Naville, *The Temple of Deir el-Bahari*, II, p. 15 and pl. LXXIV.

[2] Strabo, *Geographica*, XVI, 4, 14

[3] Schoff, *op. cit.*, p. 83.

[4] Letter dated March 3rd, 1910 : *Ibid.*, p. 87.

[5] Strabo, XVI, 4, 25.

Pliny indicates that it was merely trans-shipped there, it being brought "over vast tracts of sea" by the Troglodytes, who took five years in making the trip round.[1]

It is therefore evident that cinnamon was not a product of Somaliland and consequently this country could not be called the land of cinnamon. Schoff sees in this long voyage of the Troglodites bringing cinnamon to Africa, a possibility of their hailing from India;[2] and indeed Marco Polo mentions cinnamon as growing in Malabar and Ceylon.[3] From there it might have come to Somaliland, as well as to Southern Arabia, which had trade with India from very early days, as we shall see presently.

But contrary to what we know of Somaliland, Arabia was a cinnamon growing country. This is expressly said by Dioscorides,[4] and also by Herodotus, who indeed emphasized the unique production of this fruit from Arabia, in the same way as frankincense and myrrh. "Arabia . . . is the only country which produces frankincense, myrrh, cassia, cinnamon and laudanum".[5] This author, moreover, gives a fabulous story about the recovery of cinnamon in Arabia after it is brought there by some birds "from those countries in which Dionysius was nursed",[6] which seems to be India.

What we have said about frankincense and cinnamon we may also affirm about myrrh. This commodity, as the well known story of the phoenix bird doubtlessly evinces, also reached Egypt from Arabia. Herodotus narrates that the phoenix comes to Egypt from Arabia, wherefrom it brings a ball of myrrh to the temple of Rā at Heliopolis.[7] Pliny faithfully narrates the strange death of this bird (which he testifies to be originally of Arabia) according to the myth :–

"When old it builds a nest of cinnamon and sprigs of incense, which it fills with perfumes, and then lays its body upon them to die.

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1 Pliny, 42.
2 Schoff, *op. et. loc. cit.*
3 Franspton, *The Most Noble and Famous Travels of Marco Polo*, pp. 113 & 128.
4 Dioscorides, *Materia Medica*, II, 13.
5 Herodotus, III, 107.
6 *Ibid.*, 73.
7 *Ibid.*, II, 73.

From its bones and marrow there springs a small worm, which changes into a little bird ; the first thing that it does is to perform the obsequies of its predecessor, and to carry the nest entire to the City of the Sun near Panchaia, and there deposit it upon the altar of that divinity".[1]

This bird is called in Arabic *khol*, and Job, an Arab of the land of Hus, in the country of Edom, made a reference to it when he said: "I shall die in my nest, and I shall multiply my days as the *khol*".[2] In any case, its association with myrrh according to the Egyptians and with incense in Pliny's account, Arabia being the country of its origin, is of extraordinary significance.

Arabia was, therefore, the country of all those aromatic products which Egypt coveted from very ancient times nor is there any other country which may be declared its rival in this trade. Herodotus speaking of Arabia says: "The whole country is scented with them (spices), and exhales an odour marvellously sweet".[3] Similarly Aristotle calls Arabia *euodes*, "sweet-smelling",[4] while Theophrastus,[5] Atheneus[6] and Strabo[7] allude to its wealth in aromatic plants. Those who know Arabia and have explored her sources of wealth have no difficulty in acknowledging that "the plain of Dhofar, and the mountains behind it and for some distance beyond on either side, are the original, and perhaps always the most important, Incense-Land of Arabia".[8] "This is the only place producing frankincense where the trees can be cultivated on a fertile plain by the shore, in the midst of green fields and cattle".[9] The Bents who explored Southern Arabia during the second half of the last century, give a glowing description of the plains of Dhofar

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[1] Pliny, X, 2.

[2] *Job*, XXIX, 18. Cf. Heras, "Job's Standard of Immortality", *The Catholic Biblical Quarterly*, XI, pp. 270-277.

[3] Herodotus, III, 113.

[4] Aristotle, *Problemata*, XII, 4.

[5] Theophrastus, *Historia plantarum*, IX, 4.

[6] Atheneus, *The Deipnosophists*, XV, 38-39.

[7] Strabo, *op. cit.*, XVI, 4, 25.

[8] Schoff, *op. cit.*, p. 140.

[9] *Ibid.*, p. 218.

and of its production of frankincense. Their account runs as follows :–

"It was on the third day after leaving Al Hafa that we passed through one of the districts where frankincense is still collected, in a narrow valley running down from the mountains into the plain of Dhofar. The valley was covered for miles with this shrub, the trunk of which, when punctured, emits the odoriferous gum. We did not see any very large trees, such as we did in Sokotra. The Bedouin choose the hot season, when the gum flows most freely, to do this puncturing. During the rains of July and August, and during the cool season, the trees are left alone. The first step is to make an incision in the trunk, then they strip off a narrow bit of bark below the hole, so as to make a receptacle in which the milky juice, the *spuma pinguis* of Plŝny, can lodge and harden. Then the incision is deepened, and after seven days they return to collect what are, by that time, quite big tears of frankincense, larger than an egg.

"The shrub itself is a picturesque one, with a leaf not unlike an ash, only stiffer ; it has a tiny green flower, not red like the Sokotra flower, and a scaly bark. In all there are three districts in the Gara mountains where the tree still grows ; anciently, no doubt, it was found in much larger quantities, but the demand for frankincense is now so very limited that they take no care whatever of the tree. They only tap the most promising ones ; and those that grow farther west in the Mahri country, as they produce an inferior quality, are not tapped at all.

"The best is obtained at spots called Boye and Haski, about four days' journey inland from Merbat, where the Gara mountains slope down into the Nejd desert. The second in quality comes from near Cape Risout ; and also a little farther west, at a place called Chisen, near Rakhiout, frankincense of a marketable quality is obtained, but that farther west in the Mahri country is not collected now, being much inferior. The best quality they call *leban lakt*, and the second quality *leban resimi*, and about 9,000 cwt. are exported yearly and sent to Bombay. It is only collected in the hot

weather, before the rains begin and when the gum flows freely, in the months of March, April, and May, for during the rains the tracks on the Gara mountains are impassable. The trees belong to the various families of the Gara tribe; each tree is marked and known to its owner, and the product is sold wholesale to Banyan merchants, who come to Dhofar just before the monsoons to take it away.

"One must imagine that when this industry was at its height, in the days when frankincense was valued not only for temple ritual or for domestic use, the trade in these mountains must have been very active, and the cunning old Sabaean merchants who liked to keep the monopoly of this drug, told wonderful stories of the phoenix which guarded the trees, of the insalubrity of the climate and of the deadly vapours which came from them when punctured for the gum. Needless to say, these were all false commercial inventions which apparently succeeded admirably, for the old classical authors were exceedingly vague as to the localities whence frankincense came. Merchants came in their ships to the port of Moscha, which we shall presently visit, to get cargoes of the drug, but they probably knew as little as we did of the interior of the hills behind, and one of the reasons why Aelius Gallus was sent to Arabia by Augustus on his unsuccessful campaign was 'to discover where Arabian gold and frankincense came from'.

"Early Arabian authors are far more explicit, and we gather from Makrisi, Ibn Khaldun, and others, something more definite about Dhofar and the frankincense trade, and of the prince of this district who had the monopoly of the trade, and punished its infringement with death. These writers, when compared with the classical ones, assist us greatly in identifying localities.

"The Portuguese knew about Dhofar and its production, for Camoens, in his Tenth Lusiad, 716, writes:

'O'er Dhofar's plain the richest incense breathes.'

But not until Dr Carter coasted along here some fifty years ago

was it definitely known that this was the chief locality in Arabia which produced the drug.

"Myrrh, too, grows in large quantities in the Gara range, and we obtained specimens of it in close proximity to the frankincense-tree. The gum of the myrrh-tree is much redder than ordinary gum Arabic, whereas the frankincense gum is considerably whiter. The commerce of Dhofar must have been exceedingly rich in those ancient days, as is evidenced by the size and extent of the Sabaean ruins on the plain. They are the most easterly ruins which have been found in Arabia of the Sabaean period, and probably owe their origin entirely to the drug trade".[1]

This long quotation will, we trust, have helped the understanding of the importance of Dhofar for the frankincense industry in ancient times. The Bents searched for the harbour necessarily required for the exportation of this rich commodity and they finally found it not far from Dhofar.

"This somewhat puzzling question", they say, "was settled for us by finding the only thing wanted to identify the spot, namely, a commodious harbour. An hour's walk from our camp near Takha took us across a promontory where the estuary of a river forms quite a large lake, separated from the sea only by a narrow sand-belt over which the water flows at high tide. Around this lake are the ruins of several ancient buildings, and what is now a headland connected to the mainland by a neck of sand is surrounded by an ancient wall and fortification, and bears the appearance of once being an island protecting the entrance to a harbour. The similarity to some of the ancient Greek harbours is here very striking, and the lake, when connected with the sea by a proper channel, as it must have been under quite a recent date, must have formed a most spacious and commodious harbour.

"Here we had the one thing wanting to identify the site, namely, the harbour of which Yakut tells us, where the ships which came to Dhofar in the frankincense trade found anchorage. The Abyssapolis

[1] Bent, *Southern Arabia*, pp. 252-254.

of Ptolemy, like Manteion Artemidos, is evidently the Greek equivalent for some Sabaean name, or merely called from the existence near here of a remarkable abyss which we shall presently visit. The name given us by Ibn Khaldun of Mirbat is still attached to the village and anchorage 12 miles to the west, where the modern dhows go, and the term "Moscha" or "Mocha", which Arrian here introduces, is one frequently occurring on the Arabian coast, and apparently means, as Dr Glaser tells us, an inlet or harbour; and consequently we have no difficulty in deciding that the ruins and harbour near Takha are those of the ancient town and harbour known to the Greeks as Abyssapolis or Moscha, and to the natives as Mirbat".[1]

This spot described by the Bents seems to be that depicted by the author of the *Periplus*. According to him, to the east of Cana "there are mountains high and rocky and steep, inhabited by cave-dwellers to five hundred stadia more; and beyond this is a port established for receiving the Sachalitic frankincense; the harbour is called Moscha, and ships from Cana call here regularly".[2]

To this Southern Arabian country undoubtedly, most likely to this very harbour of Moscha, the Egyptian ships came in quest of those coveted products. Cana, the first harbour mentioned by the *Periplus* to the east of Eudaemon, on the coast of Hadramaut is said to be "a market town of the Frankincense Country",[3] "which is qualified as "mountainous and forbidding, wrapped in thick clouds and fog, and yielding frankincense from the trees".[4] This commodity "lies in heaps all over the Sachalitic country (the same coast) open and unguarded".[5] On a bay to the east of Cana there is a promontory "on which is a fort for the defence of the country, and a harbour and store house for the frankincense that is collected".[6]

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[1] Bent, 'Exploration of the Frankincense Country, Southern Arabia", *The Geographical Journal*, VI, pp. 124-125.

[2] *Periplus*, 32 : Schoff, *op. cit.*, pp. 34-35.

[3] *Ibid.*, 27 : *Ibid.*, p. 32.

[4] *Ibid.*, 29 : *Ibid.*, p. 33.

[5] *Ibid.*, 32 : *Ibid.*, p. 35.

[6] *Ibid.*, 30 : *Ibid.*, p. 33.

"All the frankincense produced in the country is brought by camels to that place (Sabhatha, the residence of the King of the Frankincense Country), to be stored, and to Cana on rafts held up by inflated skins, after the manner of the country, and in boats".[1]

The author of the *Periplus* therefore, openly calls this country the Frankincense Country. No other country round the Arabian Sea has ever disputed this denomination. Frankincense and other aromatic products were, it is true, being carried to Egypt by Arabian merchants by the overland route. But this was not enough for the enterprising Egyptians. We hear of several expeditions from Egypt to get the natural riches of the Land of Punt. The first of these we know of took place under the Pharaoh Sahure of the Vth Dynasty (28th century B.C.).[2] We have already mentioned another expedition undertaken by the last king of the XIth Dynasty Mentuhetep IV Sankhkara, under the leadership of his admiral Hannu. The fleet sailed from Koseir, at the entrance of the Wādi Hammāmāt, reached Punt and, laden with the gums, incense and aromatic spices produced there, returned in safety.[3] But the most important of all these expeditions is that which we have already mentioned several times,—namely, the one sent by the famous Queen Hatshepsut of the XVIIIth Dynasty. (*c.* 1503-1481 B.C.). This expedition was an extraordinary success. Its results are recorded and graphically illustrated on the walls of the rock and temple of Deir el-Bahari. We mentioned above the incense trees they brought back to Egypt from the Land of Punt. The inscription records that these trees, as well as other goods, were brought "to the majesty of this god Ammon Ra, the Lord of the throne of the two lands".[4] It is not strange, therefore, that, as Ptolemy testifies, the promontory next to Aden was called "Ammonian".[5] The people of Punt, as they are represented in those carvings, are not Semitic, as Arabs proper should be. Their

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[1] *Periplus*, 27 : Schoff, *op. cit.*, p. 32.

[2] Schoff, *op. cit.*, p. 120; Breasted, *Ancient Records of Egypt*, I, No. 161.

[3] Breasted, *A History of Egypt*, p. 153. Cf. Flinders Petrie, *History of Egypt*, I, p. 142.

[4] Naville, *The Temple of Deir el-Bahari*, III, p. 17.

[5] Ptolemy, *Geographia*, Map VI of Asia. Cf. Glaser, *Skizze der Geschichte und Geographie Arabiens*, p. 174.

type, as it should be from what we know of the history of Yemen, is Hamitic.[1]

For this country was inhabited from very ancient times by a nation called by Strabo the Minaean nation.[2] The fact that in 2500 B.C. the country was already well constituted shows that they were there long before. They had city-states very well organized, similar to the Sumerian cities, and totally different from the nomadic centres of the Arab tribes.[3] The Minaei were excellent merchants and their trade, especially in spices and incense, was very brisk.[4] The name Agur of one of the few kings of this nation known to us, is thoroughly Dravidian.[5] All these details seem to indicate the enterprising Indian traders of the Proto-Indian period. The labours of Von Bohlen,[6] confirmed by those of Lassen,[7] have definitely established the existence of maritime trade between India and Arabia from the very earliest period of history in the east. But the name of those settlers in Arabia is the most suggestive indication as to the country of their origin. This name is the same as that of the most important Proto-Dravidian tribe, the tribe of the Mīnas or "Fishes";[8] a tribe so nicknamed because they were always seafaring, like real fishes.[9] The Minaeans of Yemen had an independent writing, which is acknowledged as a development of the Proto-Indian script of the Indus Valley inscriptions.[10]

The fact that the Minaei carried on their trade with India[11] from very early days[12] is easily explained if they hailed from that

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[1] Cf. Naville, *op. cit.*, pp. 24-25 and pl. IX; Heras, "La primera expedición comercial por el Mar Rojo," *Ibérica*, II, pp. 366-367.

[2] Strabo, XVI, 4, 2.

[3] Dawson, *The Age of the Gods*, p. 116.

[4] *Encyclopaedia of Islam*, pp. 377-379; Hitti, *History of the Arabs*, p. 53.

[5] Hitti, *op. cit.*, p. 22.

[6] Bohlen, *Das alte Indien*, I, p. 42.

[7] Lassen, *Indische Alterthumskunde*, II, p. 580.

[8] Cf. Heras, "Mohenjo Daro, The People and the Land", pp. 708-717, and above, pp. 118-120.

[9] See other denominations of tribes, the Spiders, the Ants, etc. Cf. above pp. 114-121.

[10] Hunter, *The Script of Harappa and Mohenjodaro and its connection with other Scripts*, p. 22.

[11] Hitti, *op. cit.*, p. 84.

[12] Burton, *Semitic and Hamitic Origins*, p. 38.

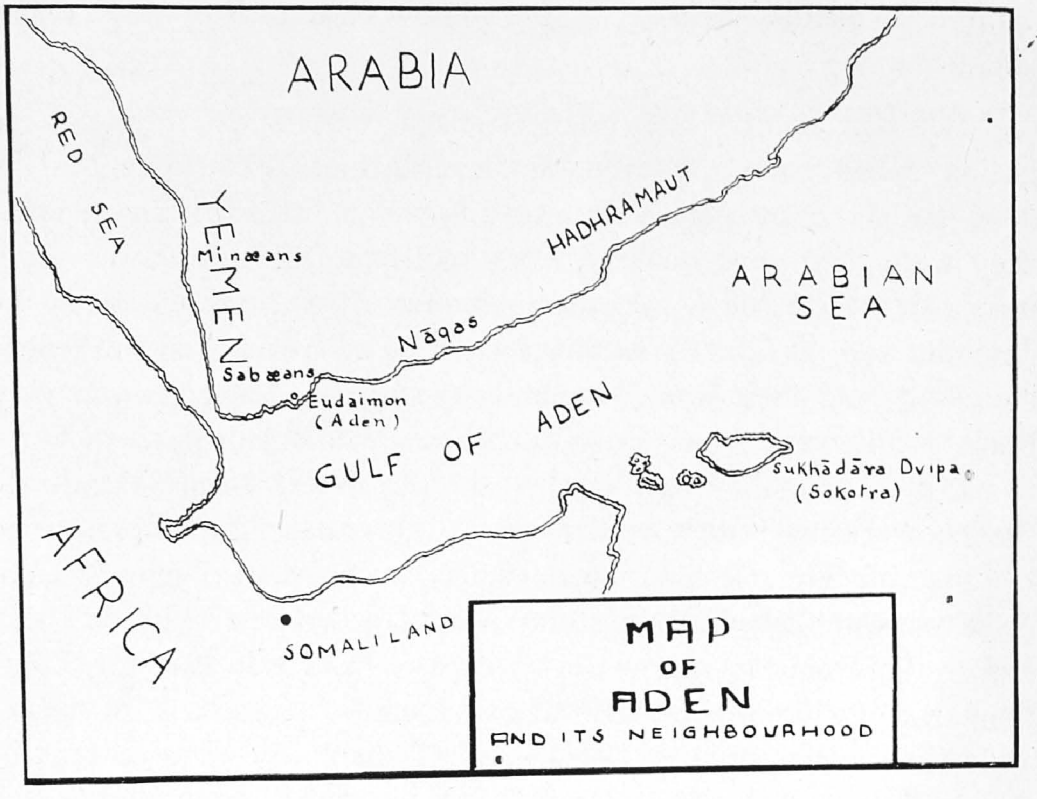

Fig. 212

Illustrating the habitat of the Indian settlers in the south-western corner of Arabia.

country; thus they continued their connections with the mother land. They took goods from India up to Mediterranean ports. Ezechiel testifies to the trade of Aden with Tyre.[1] This maritime trade between the people of the Yemen and India continued almost till the first century A.D.[2] Accordingly, Pliny avers that the Minaei of Arabia were the first who carried on any traffic in frankincense.[3] It is not therefore strange that scholarship should have admitted that the carriers of trade between Egypt and the East were descendants of the Dravidians who at the very dawn of history settled at the head of the Persian Gulf.[4] These Minaei, even during the Sabaean Empire in Yemen, when the Joktanites became the sacred and land-owning caste, continued influencing the political and eco-

[1] *Ezech.*, XXVII, 23. Cf. Glazer, *Skizze der Geschichte und Geographie Arabiens*, p. 171.

[2] Hitti, *op. cit.*, p. 58.

[3] Pliny, XII, 30.

[4] Schoff, *op. cit.*, pp. 175-176.

nomic life of the country. They were the people whose portraits appear in the carvings of Deir el-Bahari, as the power that dealt with the officers and messengers of Queen Hatshepsut.[1]

It is, therefore, very suggestive to find the Land of Punt, whence the early Egyptians came to the valley of the Nile, inhabited by people who, according to all evidence, had originally come from India. Since we know also that those early Egyptians belonged to the same race as the race of the Anu, it seems very likely that this was the real route followed by those enterprising Mīnas, whose first king in Egypt also bore the title of Mina, which was borne by the Proto-Indian kings.[2] It is not, therefore, strange that even the legends connected with the goods of the Minaean trade, as is evinced by the story of the phoenix bird, originally named *khol*, should preserve some Indian recollections: such is the reference to "the land in which Dionysius was brought up",[3] and the very name of the bird *khol*; for in Proto-Dravidian *koḷi* is a fowl.[4]

The foundation of this Proto-Dravidian colony in the south-western corner of Arabia, as a stepping stone to enter Egypt, is not a surmise; it is a fact founded on all these pieces of circumstantial evidence. It is still more powerful than all that, for the author of the *Periplus of the Erythraean Sea* mentions it as a historical event. The main city of this corner of Arabia was from very ancient times the city known to the Greeks as *Eudaemon*, the modern Aden, with an excellent harbour. About this city the author of the *Periplus* writes as follows: "It was called Eudaemon because in the early days of the city, when the voyage was not yet made from India to Egypt and when they did not dare to sail from Egypt to the ports

[1] Cf. *Ibid.*, p. 142.

[2] According to the Mohenjo-Daro inscriptions all the Proto-Indian kings are called "Mina". It is only a title. It means "the shining", "the illustrious." It is the title of the Cretan kings "Minos", though here already helenized. Cf. Pendlebury, *The Archaeology of Crete*, p. 126. Again the first king of the dynasties of Manethon in Egypt is named Menes or Mena, but the Egyptians themselves now-a-days call him "Mina". This apparently is only the title of the king, for we know his real name now. It was Aha (Cf. Petrie, *A History of Egypt*, I, pp. 13-16) or Narmer (Cf. above, p. 337). Cf. Autran, *Mithra, Zoroastre et la préhistoire aryenne du Christianisme*, pp. 96-97.

[3] Greek writers speak of the tradition that Dionysius was brought up in India.

[4] The introduction of the *-h-* in the word *khol* is due to Arabic influence over the original Dravidian word. The same has happened in many Brāhui words. For instance the original Dravidian words *kaṇ*, "eye" and *kal*, "stone" have now become in Brāhui *khan* and *khal*. Cf. Bray, *The Brāhuī Language*, II, Ethymological Vocabulary, pp. 180 and 178.

across the ocean, but all came together at this place, it received the cargoes from both countries, just as Alexandria now receives the things brought both from abroad and from Egypt".[1] According to this information the great Proto-Indian seafarers did not dare risk sailing on unknown seas in the proximity of the Red Sea. They first settled in that corner of Arabia and naturally grew and multiplied in those rich surroundings. The semantics of the noun Yemen, so it has been suggested, seems to show that the Arabs, Greeks or Egyptians while entering the Indian Ocean must have called that corner of Arabia, "the country of the right hand," for this is the meaning of the Arabic word *Yamin*, usually now Yemen.[2] Yet when coming from the Red Sea Yemen would be to the left hand of the seafarers and not to the right. This denomination, therefore, was evidently given to that land by some eastern seafarers approaching the Red Sea. We also know that the Dravidians of India were pioneers in seafaring in the Arabian Ocean and probably the first who settled in that land in their voyage westwards, and finding that spot very convenient for trading purposes and further migration to the lands surrounding those unknown seas, they evidently called that land "right hand", *valakei*.

Now, it is a common belief among all ancient nations that good fortune and happiness is attached to the right hand. But such a belief is nowhere stronger than in India. Nothing may ever be given to anybody with the left hand ; the left hand must never be used while eating. Consequently, settling in the country of the *valakei*, it would also be settling in the country of happiness, *vāl*. Hence the denomination of *Arabia Felix* given by classical writers. The extraordinary success they obtained in the cultivation of, and trade in frankincense, myrrh, and other aromatic commodities, in that unique situation, midway as it were between their old country and the coasts of Egypt and the Mediterranean, naturally made them believe that a good friendly spirit had led them to that blessed spot. That is why it is not unlikely that they should have christened their

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[1] *Periplus*, No. 26 : Schoff, *op. cit.*, p. 32 ; Nos. 56-57 : *Ibid.*, p. 45. Cf. p. 115.

[2] *Yamin* in Arabic means "right hand", "blessing" and "sight",

new settlements after that "good spirit" *nalpēy*, which was afterwards translated by the Greeks into *Eudaemon;* a denomination which is morally equivalent to the name "God's hand", given by the Egyptians to that privileged spot in Arabia.[1]

This Egyptian name was indeed very suitable to the Land of Punt, sacred in the memory of the Egyptians according to their ancient traditions, for it was probably identified with India, viz. the primitive land of their origin. Trade between both countries continued uninterrupted centuries after. Lucas admits that "so far as is known, there was not any material used in ancient Egypt until about the eighteenth Dynasty (*c.* middle of the 2nd millennium) that can be traced to India, though India and Ceylon posssessed among other commodities, precious and semi-precious stones and odoriferous resins and woods, materials that were in great demand in Egypt and that are of small bulked and easily transported." But he immediately admits the possibility of trade with India through the Land of Punt: "It is possible however that some of the fragrant woods mentioned in the records as having been received from Punt may have been of Indian origin".[2]

The good fortune found by the Indian Mīnas in *Nalpēyūr* (the city of the good spirit) and in *valakeināḍ* (the country of the right hand) caused them to spread to an island situated off their coast and even later to Somaliland.[3] The *Periplus* remarks that the inhabitants of Sokotra are "a mixture of Arabs and Indians and Greeks who have emigrated to carry on trade there".[4] This migration of the people of Yemen to Sokotra is recorded in a very ancient tradition from Iran.[5] That is the reason why according to the eminent Egyptologist Marriette Bey, this island, called by the Egyptians To Nuter, is included in the Land of Punt in the pictorial records of the temple of Deir el-Bahari. "He is probably correct",

[1] In records of the XVIII Dynasty. Cf. Naville, *op. cit.*, II, p. 15 and pl. LXXIV. Cf. Schoff, *op. cit.*, p. 61.

[2] Lucas, *Ancient Egyptian Materials & Industries*, p. 142.

[3] Cf. Schoff, *op. cit.*, p. 62.

[4] *Periplus*, 40, p. 34.

[5] Agatharchides, *De Mare Erythraeo*, 5.

say the Bents, "for it is pretty certain that no one given spot in reach of the ancients could produce at one and the same time so many of the coveted products of that day—the ruby coloured dragon's blood (*Draco Kinnabari* of Pliny), three distinct species of frankincense, several kinds of myrrh, besides many other valuable gum-producing trees, and aloes of super-excellent quality."[1]

Embodying the ideas of the new occupants of this island, with whom they were acquainted and had commercial intercourse, the ancient Indians called the island *Sukhādāra Dvipa*.[2] This is a Sanskrit denomination which means "Island abode of bliss." Says Schoff: "How ancient the Hindu name is unknown; the sense possibly antedates the language in which it is expressed".[3] Schoff's remark is very sensible indeed, for the Sanskrit speaking people—the newly arrived Āryae—were certainly not seafarers, and they would never have christened that island by themselves. The original name of the island must have been in Proto-Dravidian, which was the language of the Mīnas settled in Yemen, afterwards called Minaei by Strabo. The Sanskrit name is, therefore, most likely a translation of the meaning of the Proto-Dravidian name. Consequently re-translating the Sanskrit name into Proto-Dravidian once more we shall obtain *Nalilaka* (*nal-il-laka*), or *Vālilaka*, which is most likely the original name of the island of Sokotra.

The name has undergone several transformations while passing to different literatures or being mentioned by different authors. The Achemenian King Darius in an inscription at Nakht-i-Rustam, near Persepolis, calls it *Iskuduru*,[4] which seems to be a corrupt repetition of the sounds of Sukhādāra.

In an Egyptian tale of the XIIIth Dynasty (18th century B.C.) the island is spoken of as *Paa-enka*, which is translated "Island of the Genius", and happens to be the Home of the King of the Incense

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[1] Bent, *Southern Arabia*, pp. 343-344.

[2] Bohlen, *Das alte Indien*, II, p. 139.

[3] Schoff, *op. cit.*, p. 133.

[4] Bent, *op. cit.*, p. 345.

Land.[1] This Egyptian name seems to be akin to some of the names we have given above, *enka*, "island" = *laka*, by the addition of the nasal sound after the first *a*, as has happened in India also, the modern word being *lanka*. The suppression of the initial *l-* is quite in agreement with the character of some Dravidian languages (for instance Tamil) which cannot tolerate an initial *l-*. *Paa* seems to be the Egyptian rendering of th Proto-Dravidian *pēy*.[2] This name of the island of Sokotra used by the ancient Egyptians, while combining the original name of the island with the name of the city in the main land, Nalpeyūr, confirms the unity of inhabitants of both lands and shows how well the Nilotic people knew of the original name of both island and city, being themselves the descendants of those first seafarers who landed in the latter many centuries earlier.

Moreover this Egyptian name, *Paa-enka*, which is by others read *Paanch*,[3] helps us to identify the incense bearing country *Panchaia*, mentioned by Virgil, with Sokotra, which also confirms the idea that the latter had also incense industry, in ancient times:—

Totaque thuriferis Panchaia pinguis arenis.[4]

"The whole Panchaia rich in incense (impregnated) sands".

The Egyptian tale mentioned just now also conveys the same ideas, as the island is ruled by "The prince of the Land of Punt, who has the incense *Anti*."[5] "The tale itself," says Schoff, "indicates that

[1] Golenischeff, "Sur un ancien conte egyptien", *Abhandlugen und Vorträge des fünften internationalen Orientalisten-Congresses*, I, p. 103.

[2] This is only one case among many we could cite to prove how akin the ancient Egyptian language was with the Proto-Dravidian language of India. Other authors have already noticed this interesting relationship. Not very long ago an article on this subject appeared in an Indian daily (Raja Rao, "Tamil in Ancient Egypt", *The Hindu* (Madras), October 13, 1946). The study of a sentence found in an Egyptian medical papyrus of about 1500 B.C. leads the author to stress "the intimate cultural contact between Egypt and India even in those remote days", to infer that "the people who inhabited Crete and other Aegean Islands might have been the linguistic ancestors of the Tamilians of today"; and finally to state that the country of Punt might be "one of the overseas colonies to which the Mohenjo-Daro Indians migrated in the fifth millennium B.C." All these are plausible conclusions, from which, nevertheless, the bracketed press comment of the beginning wrongly concludes that "the Tamil language was spoken by the early Cretans and the nations of the Mediterranean littoral of Asia Minor". Those languages were not and could never be Tamil. Cf. above, pp. 132-133. They very likely were Hamito-Dravidian languages derived from the Proto-Dravidian, spoken in the Indus Valley and the rest of India.

[3] Cf. Schoff, *op. cit.*, p. 135.

[4] Virgil, *Georgica*, II, 139.

[5] Golenischeff, *op. cit.*, p. 105.

Sokotra was an important centre of international trade not far from the time of Abraham".[1]

Agatharchides calls the island *Dioscorida*, "the Island of Fortunate Light".[2] This denomination, which is also kept by the *Periplus*[3] and also by Cosmas Indicopleustes,[4] still conveys the same idea as the original Minaeic appellation. Consequently Diodorus Siculus could say that "in the neighbourhood of the Sabaeans there are the Happy Islands";[5] and accordingly describes some of the qualities of this happiness: "Their cities are not surrounded by walls. The animals are all white".[6]

The happy inhabitants of Punt, viz. of Yemen and Sokotra, whom we now trace to India as the country of their origin, were supposed by Glaser and Schoff to have come immediately from Sumer (perhaps owing to the similarity of their civilization with that of the Land of the Two Rivers). In the period from the 22nd to the 18th centuries B.C. they speak of "a migration overland to the Nile by the wandering Cushite-Elamite tribes who had left their home at the head of the Persian Gulf some 300 years previously and who after settling in the incense-producing regions of Southern Arabia and Somaliland, whence they had opened trade with Mesopotamia, had now traced the same trade to its other great market in Egypt".[7] The migration spoken of by these scholars was twofold, we may now confidently state: one overland from Sumer; the other straight from India though with a stop in South-Western Arabia. The latter became the "dynastic race from the south to whom the Horus clan must be assigned".[8]

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[1] Schoff, *op. cit.*, p. 135.

[2] Agatharchides, *De Mare Erythraeo*, 5. Cf. Bohlen, *Das alte Indien*, II, p. 139; Glaser, *Skizze der Geschichte und Geographie Arabiens*, p. 182.

[3] *Periplus*, 30-31.

[4] Cosmas Indicopleustes, *The Christian Topography*, III, 178: McCrindle's ed. p. 119.

[5] Diodorus Siculus, III, 46.

[6] *Ibid.*

[7] Schoff, *op. cit.*, p. 58.

[8] Gordon Childe, *New Light on the Most Ancient East*, p. 103.

VII

THE INDIAN TRADITION IN THE MAHABHARATA

Col. Francis Wilford, in the very early days of Sanskrit scholarship, after the study of Sanskrit texts, maintained that Egypt was fully known to the ancient Indians ;[1] and in particular he was of opinion that Horus (or Orus, as they wrote in those days) "was most probably Irshu", "surnamed Pingascha, the son of Ugra", who lived in Pali, south west of Kasi. (*sic*). His descendants, "the Pingaschas, appear to have been the Phoenician shepherds, who once established a government on the banks of the Nile".[2] The foresight of this early Sanskrit scholar is most extraordinary, considering his unsound critical method, which was nevertheless not infrequent in those days. The purāṇic traditions, which he examines and comments upon, do not seem to admit his interpretation.

Fig. 213
Temu or Atem, the setting Sun, hawk-headed.

Fig. 214
Khonsu, the third member of the triad of Thebes, hawk-headed, having the crescent and the full moon on his head.

The tradition which in reality seems to refer to Egypt was apparently unknown to him and hails from the *Mahābhārata*. We have seen in one of the preceding sections that the army of Horus, the second Hamitic army (originally Indian) that entered Egypt, hoisted the flag of the hawk. Now the hawk happens to be an Indian bird, the *Haliastur Indus*, which is known in Sanskrit as *Garuḍa pakṣi*.[3] There was in ancient India a Dravidian

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[1] In a paper read before a learned Society in Calcutta, towards the close of the 18th century, entitled "On Egypt and other Countries adjacent to the Cali River or Nile of Ethiopia from the Ancient Books of the Hindus", published in *Asiatic Researches*, III, pp. 295-468.

[2] *Ibid.*, pp. 316 and 321.

[3] Cf. Autran, "La Grèce et l'Orient ancien," *Babyloniaca*, VIII, p. 193.

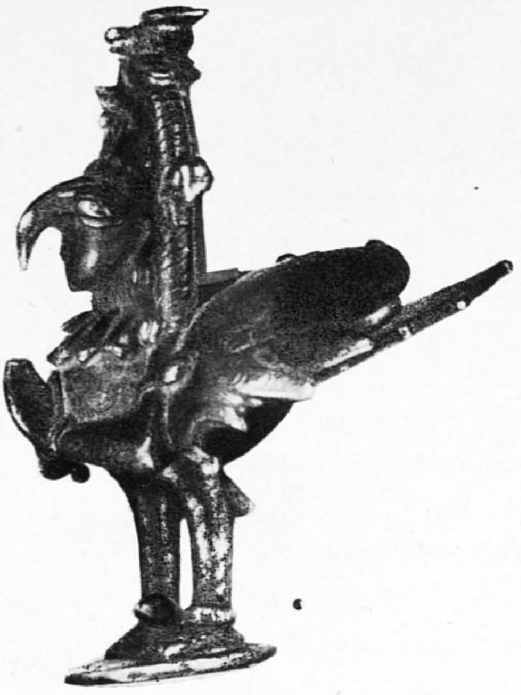

Fig. 215
A statuette of Garuḍa, the *vāhaṇa* of Viṣṇu, as a hawk with man's face and hands, but keeping the curved nose of a bird of prey.

tribe called 'the Garuḍas',[1] who were inhabiting the provinces of Pātāla, in modern Sind. They were called the Garuḍas very likely because they had a *Garuḍa pakṣi*, a hawk, as their *lāncana*. Were they the invaders under Horus, or perhaps the main bulk of them, or at least their leader belonging to the Garuḍa tribe? That would explain why Horus carried the flag of the hawk. The fact is that the hawk in Egypt became the main emblem of Horus, the Sun, while in India the Garuḍa, also the hawk, became the vehicle of the god Viṣṇu, identified with Sūrya, the Sun, from the early Ṛgvedic period. The original hawk, a bird of prey which is sometimes called eagle,[2] became anthropomorphized at a later period: a winged man, retaining nevertheless almost always the curved beak of the hawk instead of a human nose. Yet there are still images of Garuḍa represented as a bird. The Museum of the Indian Historical Research Institute possesses three of these images. (Fig. 215). But in all cases Garuḍa is always represented as connected with some serpents. (Fig. 217). In Egypt, on the contrary, the hawk remained always a hawk. It is represented as a protector of the Pharaohs, and its image appears in the temples and in the tombs. Horus himself is very frequently represented with the head of a hawk, and as such accompanies the soul on its journey to the underworld and presents it at the

[1] Cf. Oldham, *The Sun and the Serpent*, pp. 81-83.

[2] Some say that the Garuḍa is the same as the Malabar eagle. Cf. Vogel, *Indian Serpent Lore*, p. 55.

tribunal of his father Osiris. Osiris himself is often depicted hawk-headed. At times he is shown as a hawk with a human head. (Fig. 216).

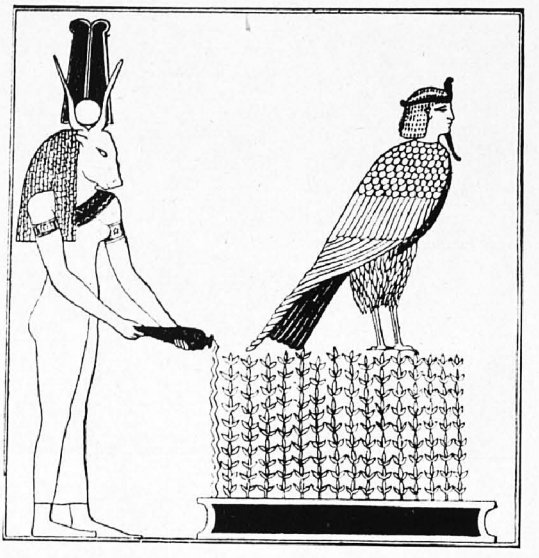

Fig. 216
The soul of Osiris in the shape of a man-headed hawk rising from a field, after a bas-relief at Philae.

Now the *Mahābhārata* tradition, to which we have made reference, seems to explain this attachment of the Egyptians to the hawk and at the same time confirms our deduction of the two waves of Indian immigrants entering Egypt in two different epochs. It is related that Kadrū, mother of the Nāgas, who was supposed to be a daughter of Dakṣa,[1] asked Garuḍa to convey her sons across the ocean to a beautiful country covered with trees, in a distant region. Kadrū is said to have had a thousand sons.[2] Some of her illustrious sons are well known in ancient Indian literature: Śeṣa or Ananta, Vāsuki, Takṣaka, Karkoṭaka, Kāśyapa, Airāvata and Kauravya[3] are only a few names. The country, to which she wanted her sons to be led, was also inhabited by Nāgas of

Fig. 217
Bhitari seal of Kumāra Gupta II bearing the image of a human-headed Garuda having a snake coiled round its neck.

[1] *Mahābhārata*, Ādi Parva, 2520.
[2] *Ibid.*, 1076-1080.
[3] *Ibid.*, 1964-2166.

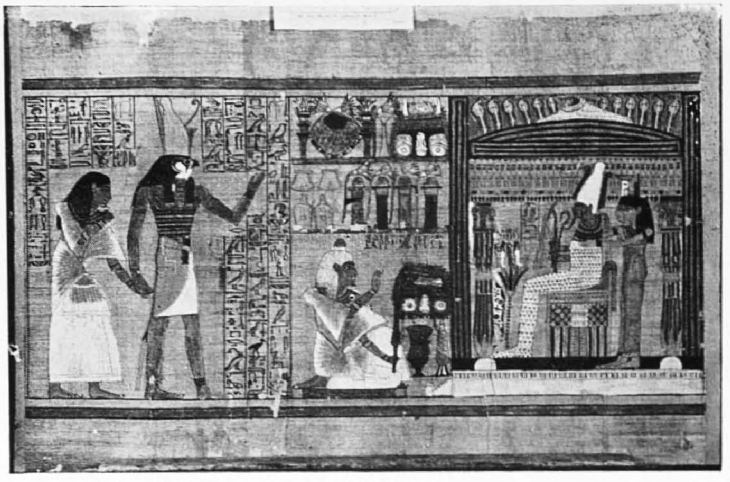

Fig. 218

A hawk-headed Horus, wearing the crown of Upper and Lower Egypt, introducing the soul of a dead man to the presence of his father Osiris; after a painting of the *Book of the Dead*.

the same race. After encountering a great scorching heat and a violent storm, with the rain of which they were reanimated, the children of Kadrū landed in the country of their destiny, which is called Rāmaṇīyaka. This country is said to have been made by Viśvakarman (the world architect, God) as the abode of the *makaras*. These territories had been previously occupied by another Asura (Dravidian) chief named Lavaṇa,[1] which proves that there had been an earlier colonization of the country by people of the same race.[2] This seems to be more than a mere coincidence, especially considering that this second Nāga migration was led by Garuḍa, (a hawk), just as the expedition of Horus was preceded by the hawk flagstaff. The story therefore deserves a careful study.

Fig. 219

An amulet from Harappā displaying the figure of Garuḍa flanked by two *nāgas*.

That this story of the epic is originally older than the period of Mohenjo-Daro-Harappā civilization an amulet discovered in the

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[1] This is a purely Dravidian name. It may mean the eldest brother of the atom or a small man, from the Tuḷu *lava*.

[2] *Mahābhārata*, Ādi Parva, 1235-1303.

latter site seems to prove. (Fig 219). On the obverse of this amulet a bird with spread wings is shown and on each side of it there is a snake of sinuous body.[1] Pandit Vats himself recognizes this amulet as a very early representation of Garuḍa.[2] Moreover the story was so old that when the epic was written it had already crystallized as a myth.

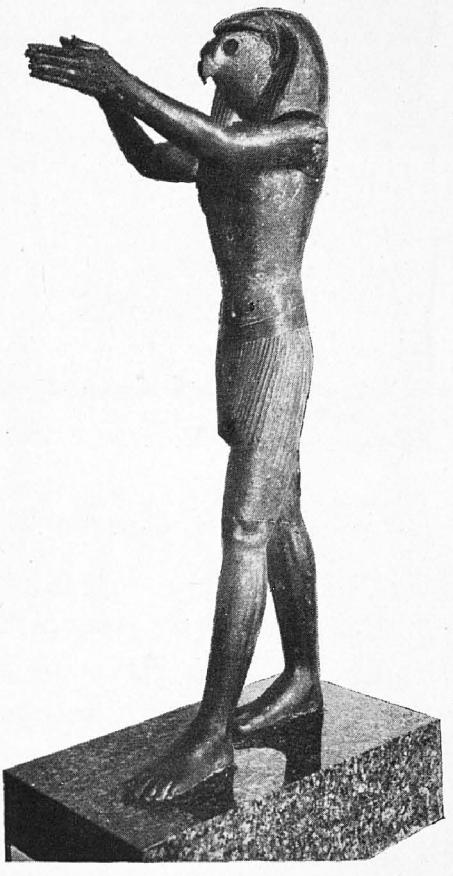

Fig. 220
Statue of Horus, hawk-headed, in a ritual pose.

First of all, is the country to which Garuḍa led the Nāgas really Egypt? It is named Rāmaṇīyaka in the epic. This appellation shows only that the country of reference was "beautiful" and "pleasing", a quality which may fit many other countries. Some have said that Rāmaṇīyaka was Malabar, probably on the assumption, that "it is adorned with many trees which grow only on the hills of Malaya".[3] Yet this may also apply to Egypt, where there is such an exuberant vegetation owing to the yearly inundation of the Nile. In point of fact, Rāmaṇīyaka is described as a remote place in the midst of the Ocean, i.e. a *dvipa*, an island.[4] Malabar is not so, nor could have been described as such, for South India was in communication with the people of the Indus Valley by land from very early times.[5] Now to reach Egypt they had always to cross the sea, as the land route, besides being much

[1] Vats, *Excavations at Harappā*, II, pl. XCI, No. 255.
[2] *Ibid.*, I, p. 324.
[3] *Mahābhārata*, Ādi Parva, 1309-1310.
[4] *Ibid.*, 1225-1235, 1279-1296.
[5] Cf. Heras, "Mohenjo Daro, the People and the Land", pp. 714-715,

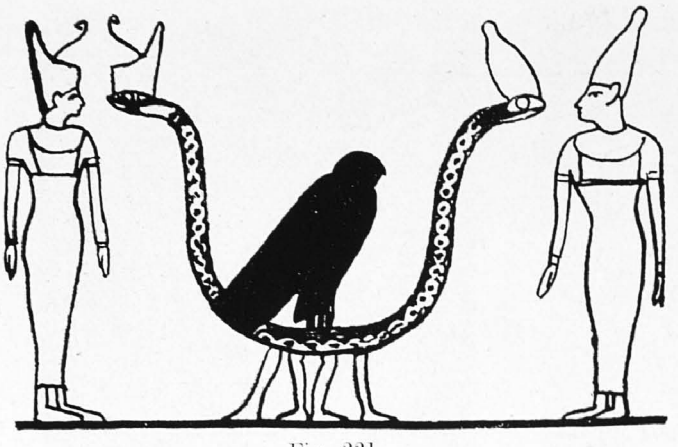

Fig. 221
The *nai* of Lower and Upper Egypt supporting the royal hawk, after an Egyptian painting.

longer, was very likely unknown. It was therefore for them just like an island. But why was the country called Rāmaṇīyaka? Ancient Indians must have found the countries bordering on the Red Sea known to them lovable and pleasing. We know that the country of Punt—in Arabia Felix, round modern Aden—abounded in trees, some of which were transplanted into Egypt, in the reign of Queen Hatshepsut.[1] Ptolemy speaks of a tribe called Ramnae inhabiting the shores of the Purali river,[2] in eastern Balochistan. Rāmaṇa means lovely, pleasing in Sanskrit, but Rāman in Dravidian means "illustrious man", "shining man". The prophet Ezechiel speaks of the merchants of Saba and Rāmah[3] two cities of Yemen, in the south-western corner of Arabia. And the country opposite, across the Red Sea appears now to be called Rāmaṇīyaka in Indian tradition. Perhaps the modern village of Northern Egypt called el-Rahmanīya[4] has

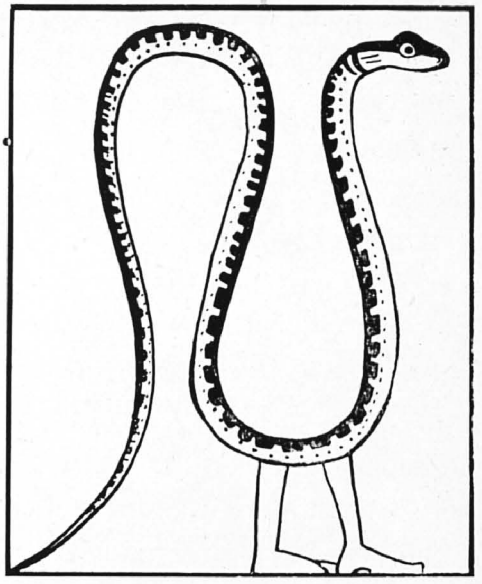

Fig. 222
The Egyptian representation of a man of the tribe of the *nāgas*, a *hefat*.

[1] Cf. Heras, "La Primera Expedición Comercial por el Mar Rojo", *Ibérica*, II, (1914), pp. 366-367.

[2] Ptolemy, *Geographia*, VI, 21, 4; VII, 1, 65.

[3] *Ezech.*, XXVII, 22.

[4] Ball, *Egypt in the Classical Geographers*, p. 129.

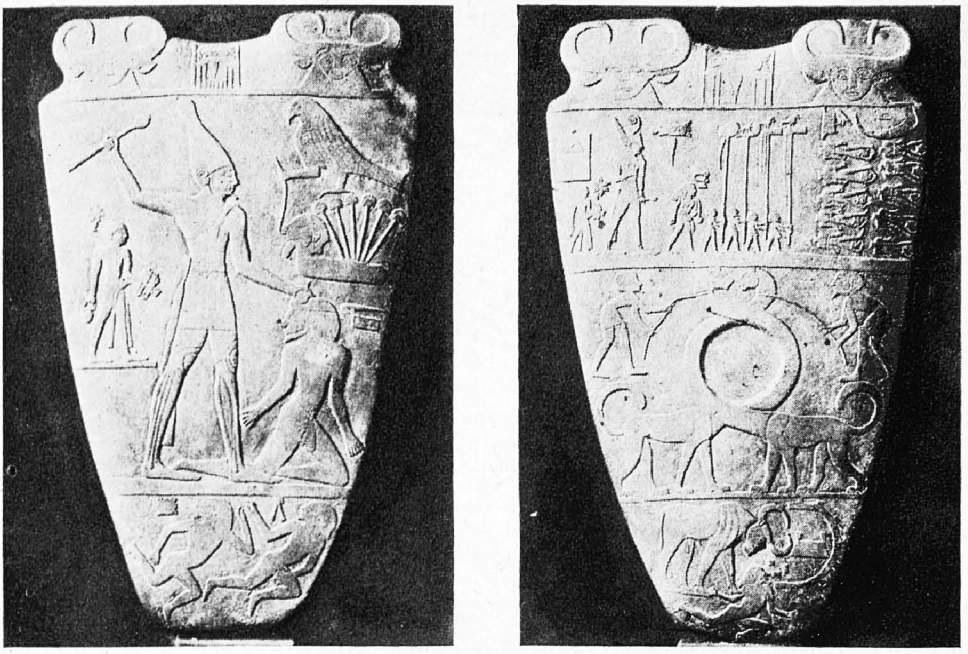

Fig. 223
The palette of King Narmer, the first pre-dynastic King of Egypt.

kept this old name which had been known to the ancient Indians. Do these three names mark perhaps the route of the Indian emigrants ?

The Indian tradition has shown to us that the Indian invaders of Egypt had belonged to the Nāga race and were led by a Garuḍa chief. A few details of the Egyptian language and archaeology seem to confirm this tradition.

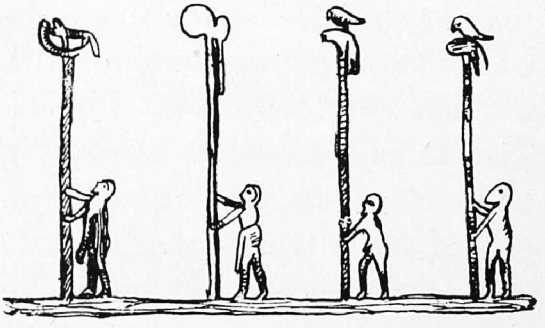

Fig. 224
Staff-bearers holding images of two hawks and a jackal, from the great mace-head of King Narmer.

The Egyptian name *hefat* means "snakes with legs" ; and the word *nai* signifies "a serpent with a pair of human legs",[1] which is to say, 'men called serpents', or 'serpents in

[1] Wallis Budge, *The Egyptian Hieroglyphic Dictionary*, words "*hefat*" and "*nai*". This seems to be the iconographical way of representing men of the tribe of the snake in Egypt.

human shape'. In India the members of the tribe of the *nāgas* were contrariwise represented in human shape, but with the serpents' hood rising upon their heads. The *lāncana* of the Garuḍa leader, a hawk, became traditionally sacred in Egypt during the whole history of the nation. In the paintings representing Osiris begetting Horus by Isis, Horus is already depicted as a hawk with spread wings over the body of his father.[1] In the palette of King Narmer, the first pre-dynastic king of Egypt, where a hawk holds an enemy tied through his nose in front of the King, there is another hawk on the reverse which seems to lead a ship, that has a third hawk on top, to the presence of the King. This seems to be an allusion to the sea voyage from India under the leadership of the Garuḍa chief. In front of the King four flagstaff-bearers are represented. The first two have a hawk on their staff; the third is a jackal. The same procession is seen in King Narmer's great mace-head. (Fig. 224). In the Hunters' Palette a warrior brandishes a double axe while he holds the flagstaff of the hawk with the other hand.[2] This shows that they were fighting under the flag of the hawk. The names and inscriptions of some of the first kings of Egypt also seem to remind us of the Indian

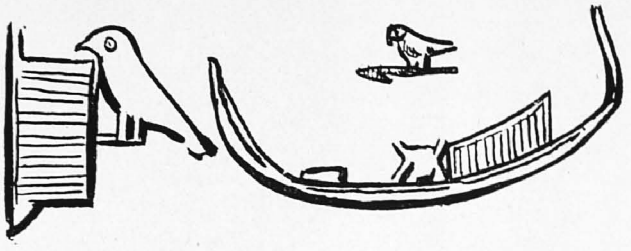

Fig. 225
A hawk leading a ship within which another hawk is seen, from the palette of King Narmer.

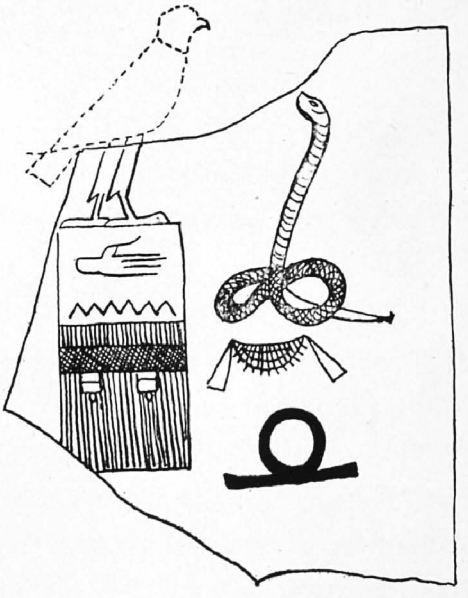

Fig. 226
Broken lid of King Ten-Setui's seal box displaying the hawk and the serpent.

[1] Wallis Budge, *Osiris and the Egyptian Resurrection*, I, p. 280; II, p. 42.

[2] Murray, *Egyptian Sculpture*, pl. V, 4.

tradition by representing the hawk and the serpent together. Thus King Aha-Mina[1] received the titles of volture and *uraeus* (serpent) lord.[2] His second successor Zet-Ath or Tchet-at is at times denominated "the Serpent King", for Tchet means serpent, and in his Horus name a serpent is inscribed under the usual hawk,[3] as is seen in a famous stele, now in the Louvre Museum.[4] (Fig. 227). On the lid of a seal box belonging to King Ten-Setui, we likewise see the usual hawk in front of a serpent.[5] (Fig. 226). Similarly these two animals are seen on seals of Perabsen, of the IInd Dynasty,[6] and of Khaba of the IIIrd.[7] Above the name of King Kha-Sekhemui, the crowned hawk and jackal appear. It is an allusion to the conquest of the territory of Set in the north by the followers of the hawk or Horus, coming from the south; for this Pharaoh united both Lower and Upper Egypt. He was consequently called Horus-Set-Kha-Sekhemui.[8] In the famous tomb of Tut-ānkh-Amen beautiful gold figures of the royal hawk and serpent were also discovered.[9] The very skull cap the mummy of the King wore is embroidered in minute gold faience beads representing serpents—the famous royal *uraei*.[10] The life and death of the Pharaohs was connected

Fig. 227
Stele of the 'Serpent King', Zet-Ath, of the Ist dynasty, bearing the hawk and the serpent.

[1] About the spelling of this name cf. above, p. 355, n. 2.
[2] Flinders Petrie, *op. cit.*, p. 14.
[3] *Ibid.*, pp.18-19.
[4] Contenau-Chapot, *L'Art Antique*, p. 17, fig. 4.
[5] Flinders Petrie, *op. cit.*, p. 20.
[6] *Ibid.*, p. 26.
[7] *Ibid.*, p. 36.
[8] Jequier, *op. cit.*, 118-119. Cf. fig. 94
[9] Carter, *The Tomb of Tut-ankh-Amen*, II, pl. LXXV.
[10] *Ibid.*, p. 113 and pl. XXXII.

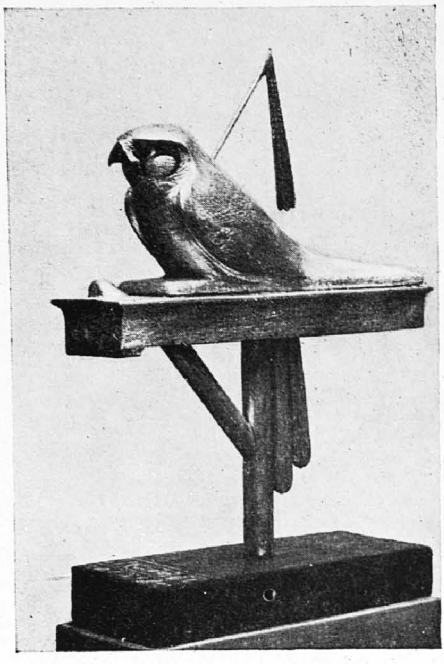

Fig. 228
The gold royal hawk of Tut-ānkh-Amen.

with the idea of the *nāgas*. The serpent (later two) was constantly connected with the Pharaoh. It was entwined with the diadem round his head and when this diadem developed into a crown, the serpent (the *uraeus*) was always lifting its head in front of the crown over the forehead of the Monarch. (Fig. 231).

In the same way the hawk was inseparable from the sovereign of Egypt. In some way or other a hawk or at least the head of a hawk was represented in his ornaments or jewels; while in the old paintings and carvings a hawk is shown over the Pharaoh's head with spread wings, protecting him from any enemy or evil influence. (Cf. Fig. 236). It means that the Pharaoh is a lawful heir of Horus.[1] Thus statues of the Royal Hawk are found in the great temples of Egypt, at times crowned with the crowns of Upper and Lower Egypt. (Fig. 234). The rulers of Egypt kept alive the tradition of their connection with Garuḍa and the Nāgas

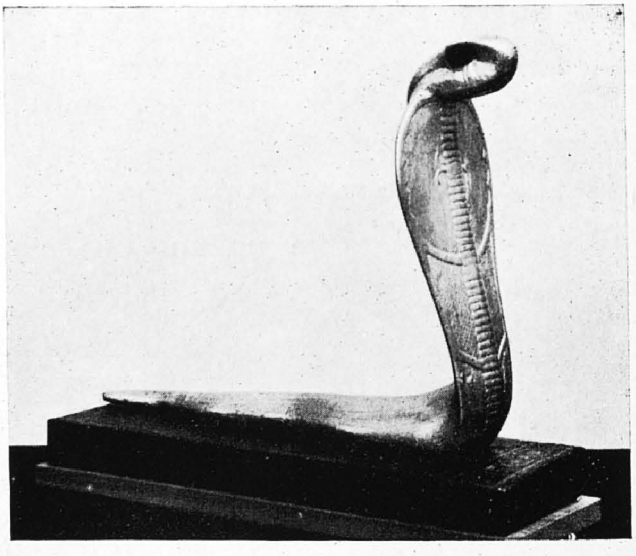

Fig. 229
The *uraeus* or royal serpent of Tut-ānkh-Amen.

[1] Jequier, *op. cit.*, p. 118. Cf. figs 146-148.

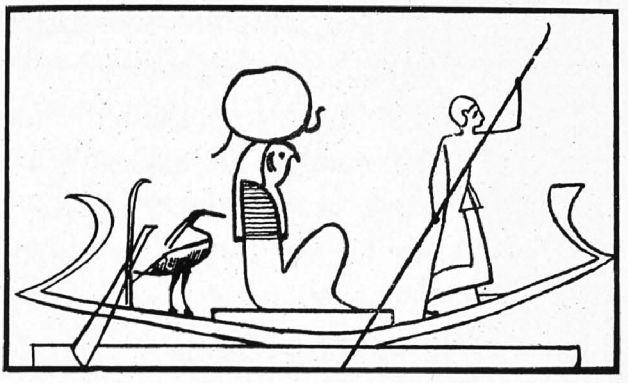

Fig. 230

Rā, the Sun, hawk-headed, in his boat travelling through the sky daily, after an Egyptian drawing.

till the later times of the modern Empire. Seti I caused his own portrait to be carved on a wall of a temple at Abydos, offering a libation and incense to god Seker, the Death-god of Memphis, who is represented as hawk-headed and holding the sacred *ānkh* in his right hand.[1] On a pylon of the great temple of Philae King Ptolemy XIII is represented as making offerings to the god Horus, hawk-headed and crowned with the double crown of Lower and Upper Egypt. Behind Horus is goddess Isis. Thus till the end of Egyptian history the prominent figure of Horus and his permanent association with the hawk reveal the importance of both in the foundation of that nation. The importance of the hawk developed in such a way in later times, that

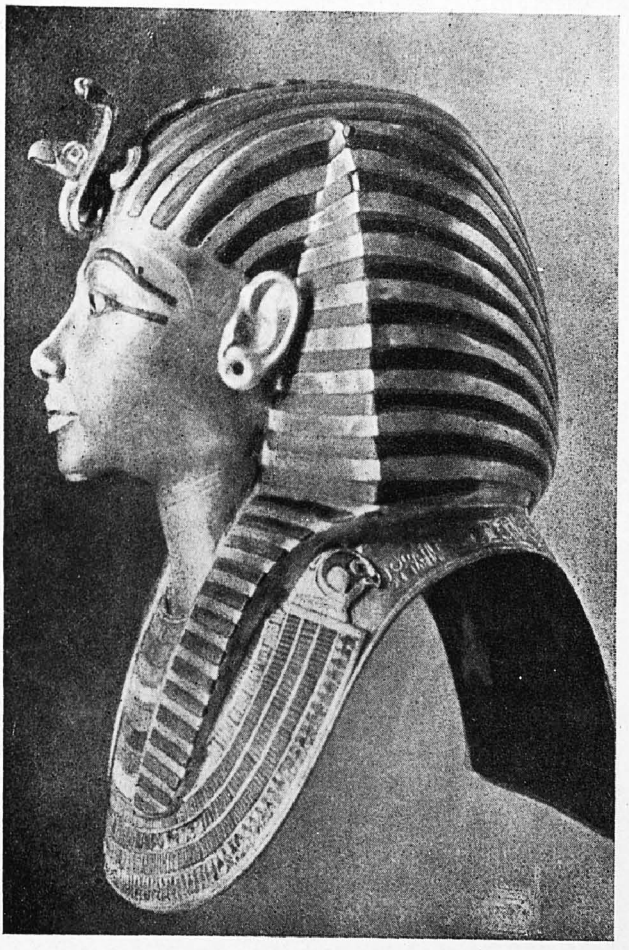

Fig. 231

The golden mask of Tut-ānkh-Amen which reproduces the portrait of the young Pharaoh. The royal hawk and serpent rise upon his forehead.

[1] Hammerton, *Wonders of the Past*, I, p. 255.

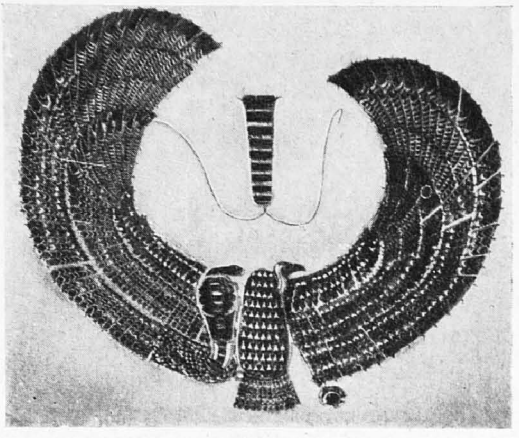

Fig. 232
The necklace of Tut-ānkh-Amen adorned with the hawk and the serpent.

it even entered the higher spheres of religion, and Rā himself was represented under the emblem of a head of a hawk, upon which there is the disk of the Sun surrounded by a serpent, as we see in the traditional celestial boat sailing over a heaven of stars.[1] (Fig. 235). On other occasions Rā is shown as a hawk-headed man seated in his boat having the disk of the Sun and the serpent on his head.[2] (Fig. 230). The influence of the hawk in Egypt was so great that the soul of man, even after death, was introduced to Osiris by a hawk-headed Horus.[3] (Fig. 218). Even the soul of Rā himself is represented as a hawk.[4] God Khensu is also depicted as hawk-headed.[5]

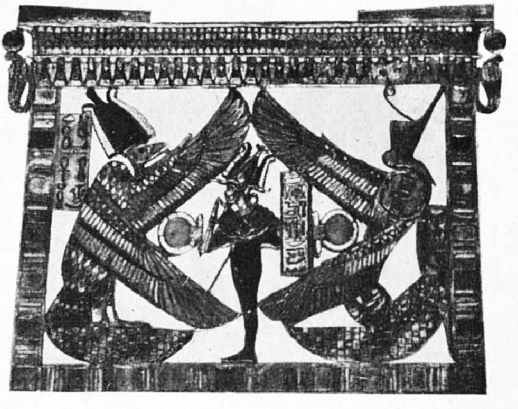

Fig. 233
The pectoral jewel of Tut-ānkh-Amen, displaying the hawk and the serpent.

This preponderance of the hawk in Egypt dates from the very early years of the Ist Dynasty, for some cylinder seals discovered in a tomb of Nakāda, which was undoubtedly a royal tomb of the Ist Dynasty,[6] a number of hawks appear in a very significant association, as in possession of a number of houses,

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[1] Wallis Budge, *The Book of the Dead*, III, p. 41.
[2] *Ibid.*, II, p. 23.
[3] Breasted, *The Dawn of Conscience*, Fig. 15.
[4] Wallis Budge, *The Book of the Dead*, II, p. 102.
[5] Wallis Budge, *From Fetish to God*, p. 162.
[6] Cf. Morgan, *La Prehistoire Orientale*, II, pp. 182-183.

perhaps in a city.[1] (Fig. 238). In a fragment of a slate palette, which is now in the Ashmolean Museum, Oxford, one sees two nude prisoners wearing only a belt and a heavy ring down their necks, whose arms are held at their back by a pair of arms that issue from a flagstaff crowned by a hawk. (Fig. 239). A most unusual, but very significant representation which may very likely be a reference to some early victory of these invaders under the flag of the hawk. The flagstaff is adorned with two streamers, as also the Indian flagstaffs are. The curly hair of the prisoners seems to suggest that the defeated were members of the negro race, perhaps some early Nubians or Sudanese who came to oppose the advance of the new-comers.[2]

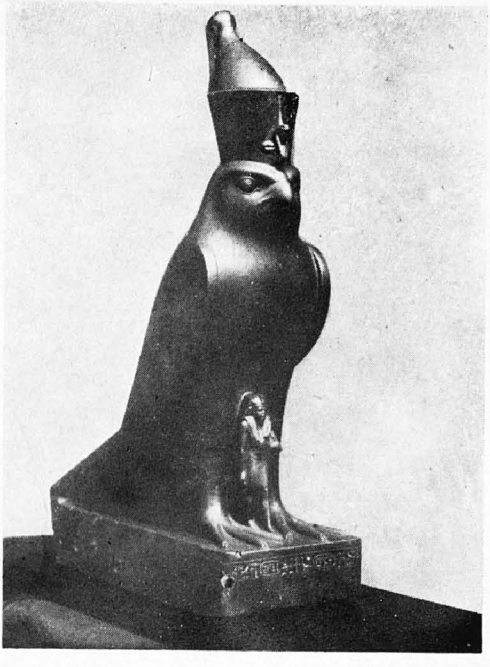

Fig. 234
Horus, in the shape of a hawk wearing the crown of Upper and Lower Egypt, protecting the Pharaoh Nectanebo I. (XXX Dyn.).

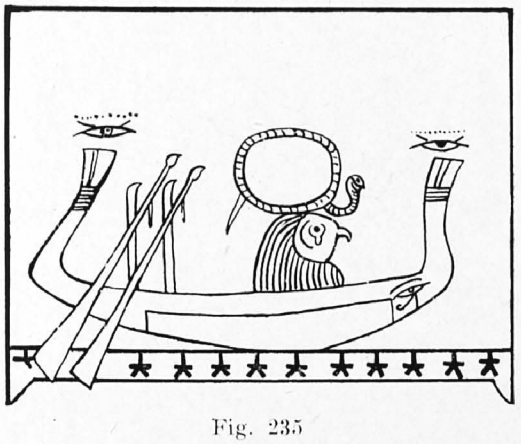

Fig. 235
Rā, symbolised by the hawk's head, in the boat journeying through the universe.

The account of this migration from India as narrated in the *Mahābhārata* gives furthermore precious details which, if examined critically, from the point of view of the genesis of the myth, disclose even the time of the year when the emigrants left the shores of

[1] *Ibid.*, p. 181, figs 220 and 221.

[2] Capart, *Primitive Art in Egypt*, p. 238, fig. 177.

Fig. 236

Seti I, protected by the royal hawk, giving collars of honour to his faithful servant Horkhem, from the stele of the latter.

India. Garuḍa having the *nāgas* on its back is said to have on his flight approached the vicinity of the Sun, by whose rays the *nāgas* were scorched; but the storm that soon burst, accompanied by heavy downpours, cooled them down returning new strength to them. These circumstances seem to describe the period preceding the monsoon and the breaking of the monsoon on the western coast marvellously well. The last days preceding the beginning of the rains are generally very sultry and exceedingly trying, during which one feels like being scorched, a feeling which vanishes at once when the rains begin. And since this always happens during the

Fig. 237

The human soul in heaven adoring Rā, hawk-headed, having a snake round the disk of the Sun; after an Egyptian painting.

second half of June, we may tentatively fix the beginning of this month as the period of their departure from the shores of India.

This episode of the *Mahābhārata* is likewise of extraordinary sociological interest, for it explains the attachment of the Egyptians to the serpent and the hawk down to the Ptolemaid period, an attachment which had never been explained satisfactorily up to the present.

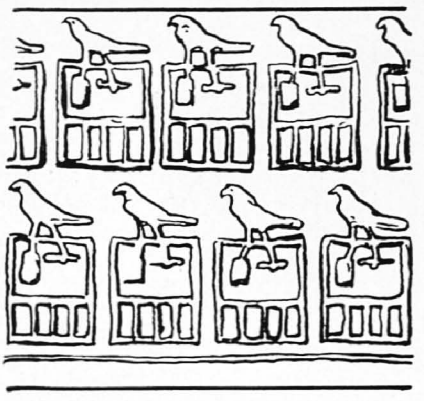

Fig. 238
Hawks in the possession of some houses, on a cylinder seal from Nakāda.

VIII

THE COUNTRY OF THE MAKARAS

There is still a further piece of evidence given by the *Mahābhārata*. Rāmaṇīyaka is said to have been made by Viśvakarman (God) as the abode of the *makaras*. Evidently this name does not refer to the crocodiles themselves, for though crocodiles exist in the Nile, yet the poet would not have considered this worth mentioning in such a solemn way. These *makaras* were an ancient Proto-Indian tribe, whose *lāncana* was undoubtedly a crocodile.[1] Among the Mohenjo-

Fig. 239
Prisoners held tight by hawk flagstaffs, on a fragment of an Egyptian slate palette.

[1] Kāma, the Indian god of Love, has a *makara* in his flag. He is called *makarakudyian* in Tamil, "he of the flag of the *makara*".

Daro and the Harappā seals there are a few that bear the figure of a *makara*.[1] (Figs 240, 241). These *makaras* were very likely a subtribe of the Nāgas.[2]

Fig. 240
A Mohenjo-Daro seal bearing a *makara*.

There is a very interesting detail in the representation of these *makaras* in the Indus Valley sealings. Of the eleven *makaras* I know, four have a fish in their mouth. They are *makaras* eating a *mīn*. (Figs 242, 243). What is the significance of this strange representation? Once the unicorn, which apparently is the *lāncana* of the Mīnas, has been shown killed and skinned, and its hide spread to the four winds,[3] very likely to disclose a victory over the Mīnas. On another occasion, a combined *lāncana*, half-bull and half-lion, is represented trampling over the body of a fowl; which figure evidently declares a victory of the combined forces of the Bulls (*Ṛṣabhas*) and Lions (*Siṁhas*) over the Fowls (*Koḷis*).[4] Therefore, according to the system shown in these artistic devices, a crocodile eating a fish will also mean a victory of the *Makaras* over the *Mīnas*. On the western side of the Mātsi Buruj of the Ahilyabai Ghat at Maheshwar, Madhya Bhārat, there is a representation of two small crocodiles carved on it. They are facing each other at a very short distance and between them there is a fish.[5] (Fig. 244). Is that a survival of the Proto-Indian representations?

Fig. 241
A seal from Harappā displaying a crocodile.

Fig. 242
A crocodile surrounded by fish, holding a fish in its mouth; after a Harappā seal.

[1] Marshall, *op. cit.*, III, pl. CXVI, No. 20; pl. CXVIII, No. 10, A and B; Mackay, *op. cit.*, II, pl. LXXXV, No. 133; Vats, *op. cit.*, II, pl. XCIV, Nos. 333-337.

[2] Such subtribes existed among the Proto-Indians. The Paravas were a subtribe of the Mīnas. The Paravas themselves were subdivided into Paravas of the Sun and Paravas of the Moon. Cf. Heras, "The 'Mīnavan' in Mohenjo Daro", p. 283-284; Cf. Heras, "Mohenjo Daro, The People and the Land", p. 716.

[3] Marshall, *op. cit.*, I, pl. XIII, No. 25. Cr. Heras, "The Religion of the Mohenjo-Daro People", pp. 5-6. Cf. above, p. 315.

[4] Heras, "Chanhu-Daro and its Inscriptions", p. 106. Cf. above, p. 315.

[5] In a second recent visit to Maheshwar I found two more similar representations, one in the centre of the *ghat* in front of Ahilyabai's palace and another on the eastern tower of the same place.

The *Mahābhārata* informs us that Rāmaṇīyaka had been made or prepared by God as an abode of the *Makaras*.[1] Now the Egyptian tradition informs us that the *Makaras* had actually reached Egypt, by recording a series of facts in a way totally similar to the Mohenjo-Daro practice of recording wars, victories and defeats. It is a fact contained in legends of ancient Egypt that King Mina[2] (the old king Menes of Manethon) while wrestling with a crocodile, was devoured by the monster.[3] Prof. Flinders Petrie already opined that the fact is "unlikely, considering his (Mina's) long reign and great age, for at over eighty he would not be wrestling".[4] But at this old age he could have been attacked by an army of *Makaras* (members of the tribe of the crocodile), and the old king lost his life on the battle field. Truly, therefore, according to the old Indian conception, King *Mīna* (Fish) was devoured by a *Makara*. The old event of India was once more being repeated in Egypt.

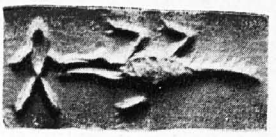

Fig. 243
A crocodile eating a fish on a seal from Mohenjo-Daro.

Fig. 244
Two crocodiles going to devour a fish, after a carving at Maheshwar, M.B.

But this is not the only case. King Ten-Setui, one of the successors of Mina, of the 1st Dynasty, is said to have been wrestling

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[1] This is an expression also found in the *Iśa Upaniṣad* as referring to the whole earth : *Iśavāyamidam sarvam yat kinca jagatyām jagat.* "All this, whatever is individual universe of movement in the universal motion, is for habitation (made) by the Lord". (I, 1).

[2] About the spelling of this name cf. below, pp. 406-407.

[3] Hall, *Ancient History of the Near East*, p. 140. "Menes, after a reign of 62 years, was carried off by a hyppopotamus and perished". *Manetho*, Waddell's trans., pp. 27-29. Mina is supposed to be the real founder of Egyptian kingship. Cf. Jequier, *Histoire de la Civilization Egyptienne*, p. 102.

[4] Flinders Petrie, *A History of Egypt*. p. 15. Petrie always translates crocodile as hyppopotamus. *Makara* in Sanskrit first means a kind of sea or water animal and consequently also means, crocodile, shark, dolphin, etc. The zodiacal sign of Capricorn is also called *makara*, both in Sanskrit and in Tamil. This ambiguity of the meaning of the original word is the cause of the different translations.

Fig. 245
King Ten-Setui fighting with a crocodile. Two episodes, after a cylinder seal of his reign.

with crocodiles (*hyppopotami*).[1] He therefore seems to have been fighting with *Makaras*. In a famous cylinder seal of this King, the latter in a boat is advancing to the right and harpooning an indescribable animal issuing from the water. (Fig. 245). In another representation of the King on the same seal, he is shown struggling at close quarters with a monster. "These are," says Mons. Capart, "very surprising pieces of work, and work of which the great sculptures in stone has preserved for us no example".[2] During the reign of Ten-Setui the frontiers of Egypt enlarged and his military power was firmly established.[3] Setui's reign was in fact the richest and most splendid reign of the whole Dynasty.[4] Evidently the secret of this success was his courage and valour in fighting against his enemies; not to have wasted his time wrestling with animals. An ivory tablet in the MacGregor Collection shows this King raising his club against a prisoner whom he holds by the hair. An inscription round the figure of the king says: "First occurrence of smiting the Easterners."

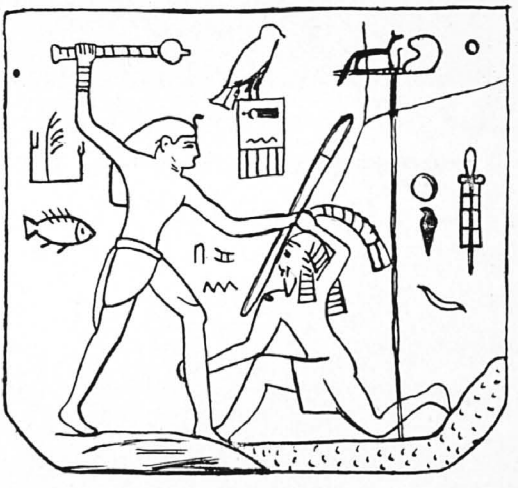

Fig. 246
King Ten-Setui of the Ist Dynasty smiting a Semite from the east.

[1] Flinders Petrie, *A History of Egypt*, p. 15.

[2] Capart, *Lectures on Egyptian Art*, p. 58.

[3] Morgan, *La Prehistoire Orientale*, II, p. 282; Capart, *Lectures on Egyptian Art*, pp. 56-57; Flinders Petrie, *op. cit.*, pp. 19-20.

[4] Flinders Petrie, *op. cit.*, p. 21. This King is sometimes called Usephais. It is the name given in the list of Manethon.

Behind the defeated king there rises a flagstaff crowned by the image of a jackal.[1] This jackal clearly shows that the smitten king is a Semite. This representation seems to be a plastic record of his war against the new comers from the east, probably a new Semitic invasion which was successfully checked.

Fig. 247
King Narmer's victory over his enemies is equated with the victory of the hawk, in his palette.

We still find another similar case in the IXth Dynasty. King Khati or Khety II is said by Manethon to have also been devoured by a crocodile.[2] The historical records of his reign tell us that he had been fighting with the southerners.[3] Perhaps these ended in a defeat and in his death.

These three cases of wars with the tribe of the crocodiles, and the two victories at least of the latter may explain the fact that crocodile and calamity seem to have been almost synonymous in Ancient Egypt. Thus :–

at	means	"crocodile"
aṭ	,,	"calamity"
āfāa	,,	"crocodile"
āfā	,,	"calamity"
ḥunt	,,	"crocodile" and "evil"
seshta	,,	"crocodile" and "secret powers of evil".[4]

[1] *Ibid.*
[2] Hall, *op. et. loc. cit.*
[3] Petrie, *op. cit.*, p. 116.
[4] Wallis Budge, *The Egyptian Hieroglyphic Dictionary*, words mentioned above.

Fig. 248
The Hawk destroying the walls of the city of the Owl, after an early Egyptian plaque.

It is also interesting to remember what Herodotus, speaking of the crocodiles in Egypt, says that "the crocodile is esteemed sacred by some of the Egyptians: by others he is treated as an enemy".[1] The same is to be said of the hippopotamus.[2] Naturally, those of the tribe of the crocodile will venerate it; but it will be considered as an enemy, by the enemies of the tribe.

The great palette of shist of King Narmer, discovered by Mons. Quibell at Hierakonpolis, strengthens the view that this was an usual way of representing victories and defeats in early Egypt. On this palette a hawk is shown having only one leg and one claw, but in lieu of the second leg it has an arm and a hand in which he holds a rope which is tied to the nose of the defeated enemies of the Pharaoh.[3] (Fig. 247). Similarly a plaque of slate of the Cairo Museum shows several cities, the walls of which are being sapped, by means of the implement used by the miners, by several animals which are evidently the *lāncanas* of as many tribes. In one case the Hawk is destroying the walls of a city inhabited by an Owl. (Fig. 248). In another case the *lāncana* character of these animals appears openly, for the two hawks

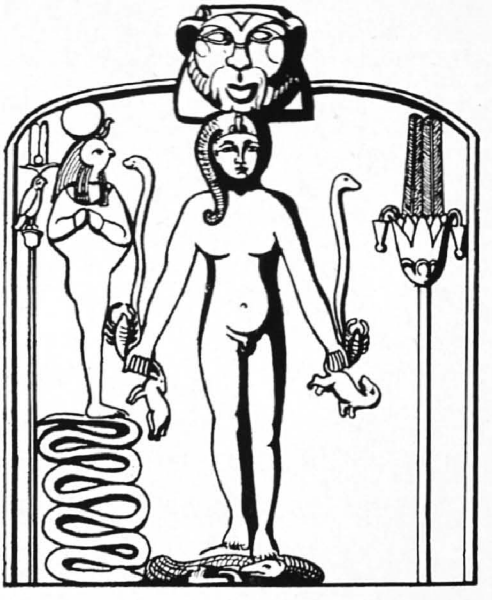

Fig. 249
The child Horus supported by a crocodile, in the Metternich Stele.

[1] Herodotus, II, 69.

[2] *Ibid.*, 71.

[3] Quibell, *Hieraconpolis*, I, p. 29. This monument is found in the Cairo Museum, No.14716.

are placed on a flag staff and it is the very flag staff that saps the walls of the city. Four of these representations are reproduced herewith.[1]

That these crocodiles came to Egypt under Horus is symbolically shown in numerous *cippi* of Horus, on which the young nude Horus is represented as supported by one or two crocodiles.[2] (Fig. 249). In the famous Metternich Stele Horus stands upon one crocodile; to his right Horus-Rā, hawk-headed, stands upon a serpent, while behind the latter a lotus flag rises upon which there is the royal hawk.[3] Wallis Budge, who has studied the myth of Osiris very deeply, avers that "in beliefs connected with the cult of Osiris the crocodile appears as a friend of this god and of his son Horus".[4] Yet this tribe of the *Makaras* soon rose against their brethren, the Garuḍas, or at least against their descendants the Egyptian Pharaohs of the Ist Dynasty, whose royal patron was always Horus, then already deified.[5]

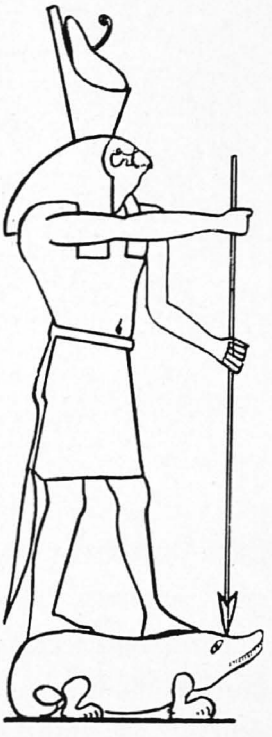

Fig. 250
Horus, wearing the crown of Upper and Lower Egypt being supported by a crocodile.

The city of Crocodilopolis, a denomination of the ancient city of Shedet, on the banks of the Lake Moeris,[6] may have some connection with the ancient traditions of the land concerning these early invaders of the tribe of the *Makara*. In any case it is commemorated in modern Egyptian folk-lore that in ancient times there lived human crocodiles on the banks of the Nile; they were supposed to live under the water,[7] and used to steal what they

[1] Morgan, *Recherches sur les origines de l'Egypte*, II, pl. III; Capart, *Primitive Art in Egypt*, p. 237, fig. 176; Cossio-Pijoán, *Summa Artis*, III, p. 44. This plaque has No. 14238 in the Cairo Museum. The representations described above refer to a conquest of several cities by the hawk. May this war be the war of invasion about which we are speaking?

[2] Murray, *Egyptian Sculpture*, pl. XLVIII, No. 2.

[3] Wallis Budge, *The Gods of the Egyptians*, II, p. 271.

[4] Wallis Budge, *Osiris and the Egyptian Resurrection*, II, p. 239.

[5] Mercer, *op. cit.*, pp. 56-61.

[6] Weigall, *A History of the Pharaohs*, II, p. 46.

[7] Cf. a similar statement of Berossus about the Mīnas of Sumer, above, p. 201.

could from the river banks. This crocodile in human shape was called *el-masḥūr*, "the bewitched one". About one of them the following story is related: "One of the villagers of Helwan, a generation ago, found that his cucumbers were disappearing; so he hid himself one night behind the dry durra stalks which protected them from the wind and caught a *masḥūr*, who had just come out of the water, in the act of taking one. He seized him, and in spite of prayers and outcries, began to beat him, until the *masḥūr* promised never to steal from his capturer again and to prevent any other *masḥūr* from doing so. He kept his promise faithfully from that time forward, and, in addition, brought fish which he laid in the garden every day".[1] This popular story undoubtedly reflects the ancient traditions of the land of the Nile embodying the memory of the predatory tactics of the *Crocodiles*, though translated to a much later period to make it more vivid and palpable.

Fig. 251
The Scorpion demolishing the fortifications of a city.

The numerous carvings representing a crocodile eating a fish among the Proto-Indians may perhaps disclose the importance of the victory won by the Makaras over the Mīnas. This importance and the numerous plastic representations of the victory may have contributed to the fact that at a later period these *Makaras* probably were dominated "*Mīn*-devourers", "Fish-eaters." This denomination prevailed for centuries. When the army of Alexander the Great invaded India, they were still being pointed out to the invaders as "Fish-eaters", and the Greeks, translating the word into their own language, called them *Ichthyophagi*, "Fish-eaters." This quaint denomination did not mean directly that they actually used to eat fish, because they undoubtedly were not the only people who ate fish in the country they were traversing. It was a tribal or genetic denomination by which they were distinguished from other

[1] Sayce, "Cairene Folklore", *Folk-lore*, XVII (1906), p. 198.

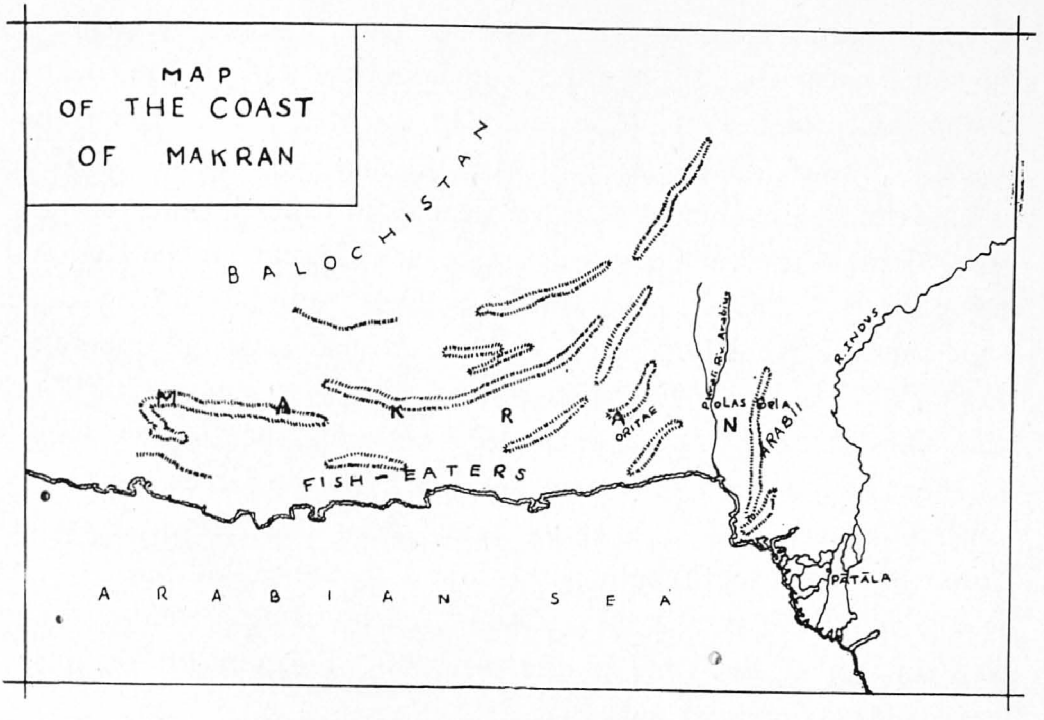

Fig. 252
Showing the situation of the Fish-eaters and other Dravidian tribes on the Coast of Makran.

tribes, for instance the Oritae or Oritians,[1] who are spoken of as being next to the "Fish-Eaters".

Now these "Fish-eaters" are located by all Greek historians and geographers in the neighbourhood of the Persian Gulf, all along the coast of Gedrosia, which corresponds to the maritime track of Balochistan west of the mouth of the river Purali, that is the coast now denominated Makran.[2] Centuries later they still seem to have been denominated by the same name; for apparently they were called *Mahikhoran*, i.e. "Fish-eaters" in Persian, a name which still survives in the modern geographical denomination "Makran".[3]

The *Periplus*, moreover, finds "Fish-eaters" on the Coast of Yemen, S. W. of Arabia, to the East and to the West of Eudaemon

[1] Arrian, *Anabasis of Alexander*, VI, 21-22; Arrian, *Indica*, XXI, XXIV, XXV.

[2] Strabo, XV, 2: McCrindle, *Ancient India*, p. 82; Arrian, *Anabasis of Alexander*, VI, 23: McCrindle, *The Invasion of India by Alexander*, p. 171; VI, 28: *Ibid.*, p. 180; Plutarch, *Life of Alexander*, 76: *Ibid.*, p. 316; Diodorus Siculus, *Bibliotheca Historica*, XVII, 104: *Ibid.*, p. 298.

[3] McCrindle, *The Invasion of India by Alexander*, p. 397, note 1. Cf. Schoff, *The Periplus*, p. 162.

(Aden), wherein some of them lived in cities.[1] Again, according to the same authority, "Fish-eaters" are found settled on the coast of Egypt, south of the city of Berenice in the Red Sea[2], where they practise trade.[3] Once more, therefore, the habitation of these "Fish-eaters", the ancient *Makaras*, lead us to the north-westernmost coast of India, to Yemen and to the coast of Egypt, in the Red Sea, in the same way as the geographical nomenclature has already done. That these "Fish-eaters" were good seafarers, and could therefore travel from India to Egypt is proved by the statement of Pliny who avers that cinnamon was carried from a distance to Somaliland by the Troglodytes,[4] who were identified by the Greeks with the Ichthyophagi.[5] They used ships 'larger' than usual for that trade.[6] Moreover, these Ichthyophagi are found in the valley itself of the Nile. Herodotus speaks of a tribe of Ichthyophagi dwelling round Elephantine, at the time of the conquest of Egypt by Cambises. They were acquainted with the Ethiopian tongue.[7]

The country denominated Makran, wherefrom the Ichthyophagi hail, is the southernmost tract of southern Balochistan. The name Makran is acknowledged as Dravidian.[8] But not only is the name a Dravidian relic. Makran is also very rich in Dravidian ethnological and archaeological relics, as Holdich says: "Makran is full of Turanian relics connecting it with the Dravidian races of the south".[9] Besides the Ichthyophagi, who very likely belonged to the tribe of the Makaras, two more clearly Dravidian tribes are mentioned in

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[1] Schoff, *op. cit.*, pp. 29, and p. 32.

[2] *Ibid.*, 2, p. 22.

[3] *Ibid.*, 4, p. 23. There were also three settlements of Fish-eaters in the island of Sarapis, towards the S. E. corner of Arabia before entering the Persian Gulf. *Ibid.*, 33, p. 35.

[4] Pliny, XII, 42.

[5] Cf. Schoff, *op. cit.*, p. 56.

[6] *Periplus*, 10.

[7] Herodotus, III, 19-23.

[8] Curzon, "Makran" *The Geographical Journal*, VII, p. 557. In its present morphology the name does not seem Dravidian for the combination of two consonants in one syllable (*-kran*) is against the character of Dravidian. This nevertheless might be a contracted form of *Makaran*. In that case it may be a relic of the tribe of the Makaras who lived there. The word, in fact, is found as *Makara* in the *Bṛhat Saṁhitā* of Varāha Mihira. Stephen of Byzantium has *Makarene*.

[9] Holdich, *The Gates of India*, p. 148.

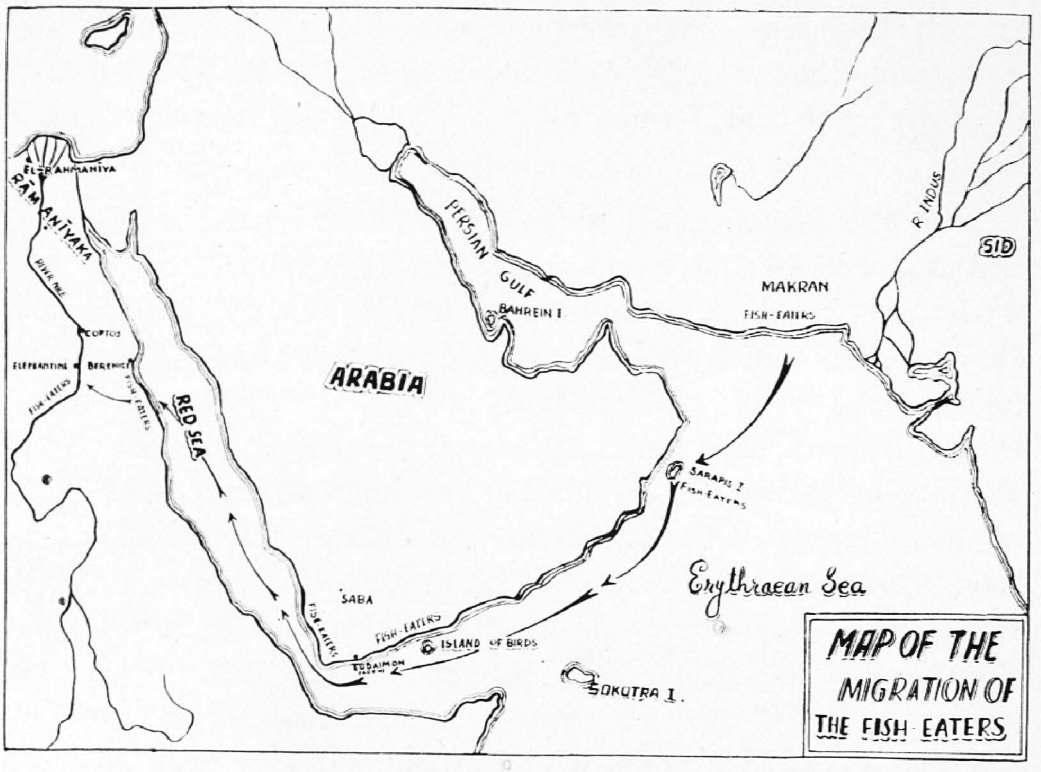

Fig. 253

Illustrating the probable itinerary the Ichthyophagi followed from the Coast of Makran to the neighbourhood of Berenice in Western Egypt.

ancient times as inhabiting this maritime zone: the Aravas and the Oritae.[1] The Arava, called by Arrian Arabitae,[2] dwelt on the western bank of the present Purali, which is called by the Latin writer Arabis.[3] The Arava are described as "an India nation",[4] i.e. of the same race as those inhabiting India from ancient times. Among the Tamiḷ speaking people at present Arava is synonymous with Nāga.[5] The existence of Nāgas in that zone of land seems to be presupposed by the *Mahābhārata* tradition. Pātāla is always described as the realm of the Nāgas[6], and Pātāla, probably the

[1] Beven, "Alexander the Great" in *Cambridge History of India*, I, p. 380.

[2] Some English authors call them Arabians.

[3] This name is a further proof of the Dravidian origin of the inhabitiants of the country. *Ar*, means "river" in Proto-Dravidian; *ab* means "river" in Arabic; *is* is the Latin termination.

[4] Arrian, *Anabasis of Alexander*, VI, 21-22.

[5] It is found in the Tamiḷ translation of the *Mahābhārata* instead of 'Nāga'.

[6] Cf. Sörensen, *An Index to the Names in the Mahābhārata*, word 'Pātāla'; Ragozin, *Vedic India*, p. 308.

modern Tatta, is on the coast of Sind. It is acknowledged that in very ancient times Egyptian vessels sailed to "Pattala, a port in the delta, or island, formed by the branches of the river Sind or Indus".[1]

On the eastern bank of the Arabis there lived the Oritae or Oritians, whose country was called Ora, though the *Periplus* calls it Oraea.[2] They are described as "dressed like the Indians and equipped with similar weapons, but their language and customs were different".[3] In the inscriptions of the Indus Valley the city of Orūr 𐃀 is mentioned.[4] Was this city in the country of the Oritae of Makran, or perhaps in another part of India where people of the same kind dwelt? D'Anville mentions an old town by the name Ora, then represented by the village of Haur on the Tomerus,[5] but their capital was Rhambakya, which is called Rhamnae by Ptolemy, the site of which is not far from the modern Las Bela.[6] We have already spoken of this city. Alexander the Great re-christened this city and called it Alexandria.[7] The Ichthyophagi seem to be a section of the Oritae who inhabited the sea-shore.[8] "Thus", concludes Holdich, "we can as clearly trace a Dravidian phase in the ethnographical history of Makran as we can in India, and, as in India, it has lasted in fragments until now."[9]

As regards its archaeological remains, the same Holdich acknowledges that "Makran is not an attractive country for the modern explorer. It is not yet a popular field for enterprise in research (though it well may become)".[10] Yet this patient observation on

[1] Macpherson, *Annals of Commerce, Manufactures, Fisheries and Navigation*, I, p. 139. Macpherson derives this imformation from Strabo.

[2] *Periplus*, 37.

[3] Arrian, *op. et loc. cit.* The conclusion arrived at by Schoff, *op. cit.*, p. 162, that the Oritae are the modern Brāhuis is simply incongruous. Brāhui may mean 'hill-folk' in Persian; but this is not the meaning of the original word Oritae, which is not Greek, but Dravidian.

[4] Cf. above, p. 254. Orūr seems to be connected with one of the most famous exploits of Bhīma, one of the Pāṇḍavas. Cf. Heras, "The Age of the Mahābhārata War", *J.I.N.*, XXVI, pp. 9-19.

[5] Cited by Goldsmid, "The Indus Delta-Review", *The Geographical Journal*, VI, p. 264.

[6] Holdich, *op. cit.*, pp. 150-151.

[7] Diodorus Siculus, XVI, 104.

[8] Schoff, *op. cit.*, p. 162.

[9] Holdich, "Notes on Ancient and Mediaeval Makran", *The Geographical Journal*, VII, p. 389 ff.

[10] Holdich, *op cit.*, p. 284.

the field was plentifully rewarded, as he himself confesses: "Every heavy shower of rain washes out fragments of new curiosities in glass and china. Here may be found large quantities of an antique form of glass, the secret of the manufacture of which has (according to Venetian experts) long passed away, only to be lately rediscovered. It takes the shape of bangles chiefly, and in this form may be dug up in almost any of the recognized sites of ancient coast towns along the Makran and Persian coasts. It is apparently of Egyptian origin and was brought to the coast in Arab ships. Here also is to be found much of the special class of pottery, of very fine texture and usually finished with a light sagegreen glaze, which appears to me to be peculiarly Arabic, but of which I have yet to learn the full history. It is well known in Afghanistan, where it is said to possess the property of detecting poison by cracking under it, but even there it is no modern importation".[1] Once more this archaeological explorer has found evidence of similarity of culture between Makran on one side and Arabia and Egypt on the other.

IX

AN EGYPTIAN SERPENT TALE

The invasion of Egypt by the Nāgas, who had first settled in South Arabia, is confirmed by the information given by Herodotus, which has not been satisfactorily explained up to now. Speaking about the frankincense of Arabia he says: "The trees which bear the frankincense are guarded by winged serpents, small in size, and of varied colours, whereof vast numbers hang about every tree. They are of the same kind as the serpents that invaded Egypt".[2] "The winged serpents of Herodotus," says Canon Rawlinson, "have puzzled many persons from the time of Pausanias to the present day".[3] There is evidently in this text a historical fundamental fact, and a later mythological embellishment. The former is the fact that the

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[1] *Ibid*, p. 300.

[2] Herodotus, III, 107.

[3] Herodotus, *The Text of Canon Rawlinson's Translation*, I, p. 175, n. 2.

frankincense trees were guarded by serpents, i.e. *Nāgas* ; the fact that they were winged and of a variegated description is doubtlessly a mythological growth of no importance for the historian.[1] The predominance of these serpents or Nāgas hailing from India, spreading throughout Southern Arabia and thence invading Egypt is still discovered in the words of the Arabians about them, which are quoted by Herodotus : "The Arabians say that the whole world would swarm with these serpents, if they were not kept in check".[2] That our interpretation of these serpents is the correct one, may be confirmed from the same account of Herodotus, who shortly before speaks of the ants of India that defend their gold from Indian robbers. "These animals are, they declare, so swift that there is nothing in the world like them".[3] These ants are now acknowleged as another Indian tribe of gold diggers, of whom we have already spoken.[4]

The invasion of Egypt by these serpents or Nāgas also seems to be strengthened by the same author when he narrates that "in the neighbourhood of Thebes there are some sacred serpents which are perfectly harmless. These snakes..., when they die, are buried in the temple of Zeus".[5] If these serpents of the neighbourhood of Thebes are not Nāgas themselves, they at least disclose the respect in which they were held as being living reproductions of the *lāncana* of the Nāga tribe.

New confirmation of this Nāga invasion comes once more from Egypt itself in the shape of a tale contained in a papyrus of the Middle

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[1] Herodotus even says that at "a certain place in Arabia", he saw "the back-bones and ribs of serpents in such numbers as it is impossible to describe ; of the ribs there were a multitude of heaps, some great, some small, some middle-sized. The place where the bones lie is at the entrance of a narrow gorge between steep mountains which there open upon a spacious plain communicating with the great plain of Egypt." (*Ibid.*, II, 75). This account seems rather doubtful and reminds one of the passage in the *Mahābhārata*, wherein the Pāṇḍavas saw "some white object of vast proportions, even like Meru, and stretching on allsides". Whereupon the *ṛṣi* Lomasa told them : "What you see before you of vast proportions like unto a mountain and beautiful as the Kailāsa cliff is a collection of the bones of the mighty Daitya Naraka". Āraṇyaka Parva, 10907-1091. Nevertheless the qualification "winged" applied to the serpents, may also mean that they are "flying", an epithet which means "successful", "glorious", "exultant", "victorious" in a seal of the Indus Valley. Cf. Heras, "The 'Koḷikon' in Mohenjo Daro", p. 277-278.

[2] Herodotus, III, 108. The way narrated by Herodotus, whereby their growth was checked, derived from the realm of mythology.

[3] *Ibid.*, 105.

[4] Cf. above, p. 115.

[5] Herodotus, II, 74.

Kingdom, which was discovered by Mr. W. Golenischeff, in the Hermitage Museum of St. Petersbourg in 1881. (We have already alluded to this tale in the preceding section when mentioning the Egyptian name of Sokotra). The narrative of the tale is put in the lips of an officer of one of the Pharaohs, who had been sent to the gold mines. He underwent shipwreck but was alone safe out of the whole crew. He succeeded in getting hold of a wooden plank and after a long stretch of time he landed on the shores of an island. Tired as he was he fell asleep in a small grove. On awakening he found some food next to him : figs, grapes, all sorts of plants of the family called Aaqt, some varieties of other fruits which he calls Kau and Nequ, melons of all kinds, fish and birds. "Nothing was wanting". After offering a sacrifice in thanksgiving to the gods, he suddenly heard a noise, which was produced by a serpent that was approaching. He was thirty cubits long and the length of its beard was about two cubits. His members were inlaid with gold and its colour was of lapis lazuli. The poor stranger, afrightened with this vision, prosterned himself as if demanding mercy, when the serpent opened his mouth and said : "Who has led you here, who has led you here, my little one, who has led you here ? If you don't tell me that soon, I shall make you realize how much you appreciate yourself ; either you will vanish as a flame or you will inform me of something which is unknown to me."[1] Moved by this invitation not lacking in threats, the marooned Egyptian narrated the tale of his misfortunes, after which the serpent replied : "Don't fear, don't fear, my little one, your face should not turn sad, for if thou hast reached (this place) it is because God has preserved thee. For it is He who has led thee to this island of the spirit (*Paa-enka*), where nothing is wanting and which abounds in all good things. Thou wilt spend month after month till they will make four in the interior of this island. Then a boat with her crew will come from thy country, and thou wilt be able to leave with them for your land. Thou wilt end thy life in thy own town." The Egyptian says that the serpent

[1] These words of the Nāga, who threatens the Egyptian with some mysterious power to make him 'vanish as a flame', remind one of the magic powers of the Nāgas, often mentioned in the *Mahābhārata*.

who spoke lived there in the company of 75 serpents, all members of his own family. When he spoke to the serpent about the glory of the court of the Pharaoh, the serpent said: "Thou art not rich in the perfume *anti* (frankincense), for what thou possessest is nothing else but ordinary incense (*nuter-sonter*). But, I who am the prince of the land of Punt, have the perfumes *anti*," etc. When finally the boat came, the princely serpent sent him with a number of presents which are individually mentioned: "perfumes Anti, Heken, Iuden, cassia (cinnamon), woods Thias and Saās, stimi, tails of animals Mamā, wood Mererīt, much ordinary incense, teeth of elephants (ivory), dogs Tesemu, monkeys Guf and monkeys Kiu, and all sorts of precious things".[1]

The tale is probably founded upon an ancient historical account of a shipwreck, and if not, it reveals at least the ancient tradition of Egypt, that the island of Sokotra, which is easily recognizable in the island of the spirit (*pēy*),[2] was inhabited by serpents (*Nāgas*). (The description of the length, beard decorations and colours of the serpent king are only later embellishments of the tale.) That the serpent king was a real man, and indeed very kind and provident, his conversation and liberality clearly prove. He declares himself to be the Prince of the Land of Punt, which shows that this Prince resided for some time in the island of Sokotra. His words mentioning the fact that the Pharaoh of Egypt did not possess frankincense *anti*, which he owned in great quantity, are not strange, for he must have known how the Egyptians had come

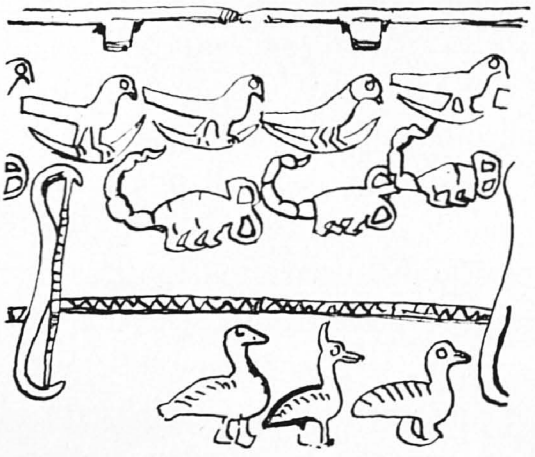

Fig. 254
Maritime migration of "Birds", from a vase of Hierakonpolis.

[1] Golenischeff, "Sur un ancien conte egyptien", *Abhandlugen und Vortrage des fünften internationalen Orientalisten-Congresses*, pp. 101-105.

[2] Cf. above, pp. 358-359.

to the land of Punt several times in quest of that commodity. The *Periplus* is in wonderful agreement with the substance of this tale when it avers that in Sokotra "there are crocodiles (*Makaras*)

Fig. 255
Mace-head of the so-called Scorpion King of Upper Egypt displaying a number of Birds executed hanging from poles.

and many snakes (*Nāgas*)",[1] and that the island is "subject to the king of the Frankincense Country".[2] Perhaps it is this island, or another one on the southern coast of Arabia, that island mentioned in the Buddhist *Jātaka* as traditionally inhabited by Garuḍas and Nāgas living together in amicable fraternity. The island was first

[1] *Periplus*, 30, p. 34.
[2] *Ibid.*, 31, p. 34.

called Serumadvipa, though it was afterwards christened Nāgadvipa, and is said to be located in the sea of the Man-fish, which is probably the sea of the Minaei of Arabia ; for the merchantship, whose story the *Jātaka* narrates had set sail from Bharukaccha (Broach) on the western coast of India, and this island and sea are mentioned before entering the Red Sea.[1]

Fig. 256
The "Bull" battering the walls of a town, from King Narmer's palette.

It is, besides, our opinion that these were not the only tribes who migrated from India to Egyptian lands, not necessarily all together; some of them perhaps straight away without stopping in the land of Yemen. We have already seen the probability of there being in Egypt people of the tribe of the Paravas (Birds) from the existence of figures of aviform women.[2] On a stone vase from Hierakonpolis, undoubtedly belonging to this early period there is a series of birds each of them placed in a boat. Under these seafaring birds there is a line of scorpions[3] (Fig. 254); "a very curious group", says Mons. Capart, "which I am tempted to consider as a pictographic representation without, however, being able to suggest any reading of it.".[4] It is, apparently, a pictographic representation of the

Fig. 257
The Bull charging some curly-haired people while the Lion is safely within a town, after an Egyptian palette.

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[1] "Sussondi Jātaka", *The Jātaka*, V, 360. Cf. Jayaswal, "The Statue of Ajataśatru and a Discussion on the Origin of Brahmi", *J.B.O.R.S.*, VI, p. 195.

[2] Cf. above, pp. 300-302.

[3] Quibell, *Hierakonpolis*, I, pls. XIX, XX and XXV.

[4] Capart, *Primitive Art in Egypt*, p. 100.

people of the tribe of the Birds (Paravas) on their way to the coasts of Egypt wherein once settled, they recorded their voyage in an unmistakable way. The scorpions are not placed in boats, but lurking, as it were, under the boats of the birds. They seem to symbolize the difficulties and perils encountered by the Birds on their way to the new land, or perhaps they symbolise another tribe, the tribe of the Scorpion opposing the landing of the Paravas.[1] The *Periplus* seems to point out the route of this party of birds travelling from India westwards. One of the islands it mentions off the southern coast of Arabia, somewhat to the east of Aden is an island called "of birds". Very probably they first settled there as the Minaei did in Eudaemon, before they finally proceeded to the land of the Nile. This island of birds is also mentioned in the *Jātaka*.[2] On a fragmentary sculptural macehead of the so-called Scorpion King, now in the Ashmolean Museum, Oxford, a number of birds suspended by the neck from high

Fig. 258
Verso of the same palette showing an alliance between the Horus and Set people and the tribe of the Bull.

Fig. 259
The Lion destroying an army of negroids, while a Syrian chief holds one of them prisoner, from another Egyptian palette.

[1] Cf. below, p. 394.
[2] "Dhammadhaja Jātaka" *The Jātaka*, VI, 384.

standards are represented as defeated enemies of the King. (Fig. 255). This is not the only time that such "Birds" as the enemies of the kings are shown in Egyptian sculpture.[1]

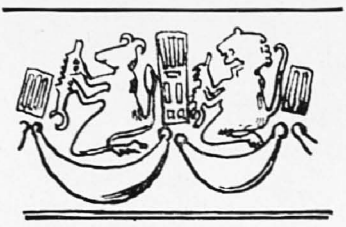

Fig. 260
Migration of the Lion and of another animal, after a cylinder from Elam.

Another tribe which also seems to have emigrated to Egypt is the tribe of the Bulls (called Ṛṣabhas at a later period) and that at a very early age, for on the reverse of King Narmer's palette, so often mentioned, there appears a bull battering the walls of a town (Fig. 256), which seems to mean that the Bulls captured some towns under, and for, that King. A fragment of a slate palette of the Louvre Museum suggests a victory of the tribe of the Bull over some people of curly hair (Nubians or Sudanese ?), as the Bull charges these people mercilessly (Fig. 257); on the lower register a city safely secured

Fig. 261
The Lion being attacked by heavily armed warriors, from an Egyptian palette.

by the tribe of the Lion, seems to be in alliance with the Bull. In point of fact, there seems to have been an alliance between the Horus people of the south and the Set people of the north (Hamites and Semites) to repel the invasion of the negroid

[1] Cf. Baumgartel, *The Cultures of Prehistoric Egypt*, p. 45. This Pharaoh is called "The Scorpion King", owing to a scorpion carved in front of his face. Was there a tribe of the Scorpion ? One of the seals of Indian style found at Ur displays a Scorpion with the sign for city. It seems to refer to the City of Scorpions, *Telūr*. Cf. Gadd, "Seals of Ancient Indian Style found at Ur", *Proceedings of the British Academy*, XVII, pl. II.

people. For on the verso of the same palette, while the Bull charges one of the enemies we see five flagstaffs, two crowned by a hawk, two more by a jackal and one by the symbol of Min, terminating in human hands which hold a rope that surrounds the negroid prisoners.[1] (Fig. 258). Possibly the tribe of the Lion, was a Semitic tribe originally from Syria, for on another fragmentary palette of the British Museum, while a Lion is routing an army of similar negroid people, we see the lower portion of a chief, clearly dressed in a Syrian gown, holding the arm of one of those negroids to his back as befits a prisoner.[2] (Fig. 259). A cylinder from Elam shows a lion and another animal in a boat.[3] Perhaps it is the same Egyptian lion in a migratory expedition. (Fig. 260). Another Egyptian palette shows the Lion successfully attacked by an army of heavily armed soldiers (Fig. 261); while the slate plaque of the Cairo Museum mentioned above also displays the Lion destroying the walls of another city. (Fig. 262).

Fig. 262
The Lion destroying the walls of a city, after an Egyptian plaque.

X

THE GREEK TRADITION

The Greek author Nonnus, who seems to have been born in Egypt, has an interesting tradition recorded in his *Dionysiaca*, which tradition apparently is a recollection of the Indian invasion as learnt very likely in Egypt itself. This tradition, faithfully translated from the Greek text, runs as follows:–

"Curl-haired Blemys, the leader of the ruddy Indians, held up a bloodless olive branch with the supplicating army, and bowed a servile knee to Dionysos who had slain his Indian subjects. The god beholding him bent to the ground, took him by the hand and raised

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[1] Capart, *op. cit.*, pp. 242 and 243, figs 181 and 192; Cossio-Pijoán, *Summa Artis*, III, p. 43.

[2] Capart, *op. cit.*, p. 240, fig. 179.

[3] Morgan, *La Prehistoire Orientale*, II, p. 267.

him; and, since he abhorred the government and manner of Deriadeus, the god conveyed him together with his many tongued people, far from the dark Erythraean region, near the contiguous ocean, and gave a name to the inhabitants of its towns. But that fast Blemys passed onward to the mouth of the Nile which has seven branches, destined to be the contemporary ruler over the people of Ethiopia. The low land of the Etherian city of Meroe received him as a lord, leaving his name to the noble family of the future Blemyses."[1]

From this account one thing seems certain, that an Indian chief, owing to his disagreeing with the king of the country and with the help of God, left the country accompanied by a numerous party. They first settled on the coast of Arabia Felix, bordering on the next ocean, that is the Red Sea, and finally proceeding to Egypt ruled there as a king and founded a dynasty. Who was this chief?

There is no doubt that Blemys must be a corrupted form of an ancient Indian name. After a detailed study of all the circumstances of this story, we humbly suggest that the original name must have been Balarāma. Balarāma, the older brother of Kṛṣṇa, had his head covered with many huge snakes,[2] which seem to be a canopy of distinguished Nāga Rājas.[3] He is acknowledged as a Nāga chief.[4] He is supposed to be an incarnation of the great serpent Śeṣa,[5] or at least a portion of Nāga Śeṣa,[6] which seems to mean that either he was a relative of Śeṣa Nāga or as powerful as that Nāga King.[7] In Tamil literature Balarāma is called "the white Nāga".[8] When he died, they say that a huge Nāga issued forth from his mouth.[9]

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[1] Nonnus, *Dionysiaca*, XVII, vv. 385-397. The denomination "ruddy Indians" refers always to the Indians of the Erythraean Sea, i.e. the Indians of Indostan.

[2] *Mahābhārata*, Anuśāsana Parva, XIII, 147; CCLI, 56 (Bombay ed.)

[3] Oldham, *The Sun and the Serpent*, p. 79.

[4] *Mahāvyutpatti*, pp. 48 f.

[5] Dowson, *A Classical Dictionary of Hindu Mythology*, p. 41.

[6] *Mahābhārata*, Ādi Parva, LXVIII, 152; Anuśāsana Parva, CCLI, 59 (Bombay ed.).

[7] Keny, "The Nāgas in Magadha", *J.B.O.R.S.*, XXVIII, p. 165.

[8] *Śilappadikāram*, IX, 10.

[9] Dowson, *op. et loc. cit.*

This mythological event is beautifully represented in a Mughal painting of the time of Emperor Akbar, which we reproduce herewith. (Fig. 263).

Fig. 263
The death of Balarāma, when a huge *Nāga* issued from his mouth, after a Mughal painting.

The tradition recorded by Nonnus adds that this leader abhorred the manners and rule of Deriadeus. In this latter name we very easily recognize the hellenized form of the name of Duryodhana. It is true that Balarāma did teach Duryodhana the use of the mace as a weapon on the battle field;[1] but the *Mahābhārata* also commemorates that Balarāma often wondered how the righteous Pāṇḍavas were so unhappy, while the wicked Duryodhana was ruling the earth.[2] In these feelings of the hero we discover his disgust at the rule of the tyrant. Finally before the great battle starts, Balarāma is said to have started a *tīrthayātrā*, a pilgrimage to the sacred pools,[3] in which we may perhaps discover a voyage to foreign lands.

[1] *Mahābhārata*, Udyoga Parva, 5342-5347.
[2] *Ibid.*, Āraṇyaka Parva, 10240.
[3] *Ibid.*, Śalya Parva, 1969-2030.

First of all the preparation of this pilgrimage before starting this journey is most elaborate and the amount and variety of apparel and furniture supposes a very long and unusual journey. Moreover Balarāma is said to start for a pilgrimage to the Sarasvatī, and the first *tīrtha* he visits is Prabhasa,[1] which is not and has never been on or near the Sarasvatī river. This seems to suggest that the Sarasvatī he wants to visit, is "the mother of rivers" (such is the title of goddess Sarasvatī), the Ocean, and that he went to Prabhasa to sail from there to foreign countries. The writer or writers of the *Mahābhārata* were already under the influence of the spirit of self-containment, which prevailed so much in India among the Brāhmaṇas at a later period. What was actually a voyage abroad, they seem to have converted into a sacred pilgrimage to the *tīrthas* of the Sarasvatī. Yet we may still discover the real voyage of Balarāma in the visit he made according to the epic to the Sapta-Sarasvata.[2] These Sapta-Sarasvata is the Sanskrit rendering of the Proto-Dravidian denomination *ēḷ-tira*, "the seven seas".[3]

According to the account of Nonnus the first port of call of the expedition was in Arabia Felix, "The dark Erythraean region, near the contiguous ocean", i.e. the Red Sea, in which he is in wonderful agreement with our first surmise and with the information we have studied previously. Nonnus adds the interesting piece of news that Balarāma gave his name to the inhabitants of this region. We may remember that in Yemen there was the ancient city of Rāmah and that prophet Ezechiel when speaking of the merchants of Yemen, calls them specifically "the merchants of Saba and Rāmah".[4] They seem therefore to have been known after the name of Balarāma.

Finally Nonnus records that Balarāma passed to the mouth of the Nile that divides into seven branches, and was received as a lord in the city of Meroe, in Sudan or Upper Egypt, which is equivalent to saying that he exercised overlordship over the whole of Egypt.

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[1] *Ibid.*, 2030-2069.

[2] *Ibid.*, 2179-2185.

[3] Cf. Heras, "The Tirayars in Mohenjo-Daro" p. 78; Heras, "The Seven Seas", *Bibliography of Indological Studies*, I, pp. XVIII-XXI.

[4] Ezech., XXVII, 22.

Once more in this Greek tradition, the origin of which seems to be Egyptian, the same route is suggested for the Indian emigrants. Their halt in Yemen seems to be beyond doubt.

XI

THE WESTERN MEDITERRANEAN TRADITION

Further confirmation of the Indian migration into Egypt unexpectedly comes from far off Spain, in a famous work composed in the beginning of the 7th century A.D. The author, St Isidore, was a Spanish monk who became Archbishop of Seville. Isidore "was no doubt the most famed man of his age and thus deserved the praises lavished on him by his contemporaries".[1] He was the first Christian writer to undertake the task of compiling a *summa* of universal knowledge. "His learning and eloquence are celebrated by his contemporaries, and his reputation was even greater in the succeeding ages".[2] His writings were very numerous and have "the merit of having served to keep alive, even in a form far from adequate, some remnants of the older culture and learning".[3]

The reference to the Indian migration into Egypt is found in the most important, best known and most elaborate of all his works his *Etymologies*, the real title of which is *Etymologiarum Libri XX*, which was written in his mature age, shortly before his death. It is "an encyclopaedic work, eclectic in character, and presenting in dry compendious form the sum of the knowledge of the age on all the branches of scientific research".[4] "It is the encyclopaedia of the 7th century, a repertory of whatever was then known in the spheres of science, arts and customs".[5] "So highly was it regarded

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[1] Dawson, *Mediaeval Religion*, p. 99.

[2] *British Encyclopaedia*, art. "Isidorus Hispalensis" (ed. 1880).

[3] *Ibid.*, The first edition of the works of Isidore was published by Michael Somnius in Paris in 1580. The second was published by Gómez-Perez-Grial in Madrid, in 1599. This edition has been used as a model for all subsequent editions : Paris, 1601 ; Colon, 1617 ; Rome, 1795-1803. This last edition edited by H. Arevalo, S.J., is the best one. It has 7 volumes in 4°, which have been reproduced in Migne, *P.L.*, vols. LXXXI-LXXXIV.

[4] *British Encyclopaedia*, *loc. cit.* There are actually one thousand codices of the *Etymologies* still extant, and it is calculated that ten thousand codices existed in the Mediaeval period. Garcia Villada, *Historia Eclesiástica de Espana*, II, part 2, p. 217. Cf. Canal, *San Isidoro. Exposición de sus obras e indicaciones acerca de la influencia que han ejercido en la Civilizacion Española*,

[5] Araujo Costa, *San Isidoro Arzobispo de Sevilla*, p. 109,

as a repository of classical learning that in great measure it superseded the use of the individual works of the classics themselves".[1] A critic who has studied deeply this work does not hesitate in qualifying it "a wonder of erudition in that age".[2]

Isidore derived his information from the authors of old, both Greek and Latin, whose works existed then, but many of which have now perished. He often quotes Lactantius, Pliny and Solinus. Among other sources of information for his *Etymologies* we may mention Pacuvius, Afranius, Ennius, Livius Andronicus, Servius, Festus and other early Roman poets and dramatists now lost. Isidore therefore, when writing this work, gathered all possible information from ancient classical authors, some of whom were born in Spain itself, thus communicating to his contemporaries the ancient learning and tradition of Rome and Spain. Isidore himself, in the dedication of his work to his friend Braulius, Archbishop of Saragossa, writes: "I am sending thee, O Braulius, as I promised, the work concerning the origin of a few things, composed after memories of past authors and occasionally annotated in the very style in which our forefathers had written it".[3] He could also have said in this case, what he plainly said concerning another work: "The reader will not read our own, but will reread what was said by the ancients".[4] The information relating the migration of the Indians into the land of the Nile discloses therefore the ancient tradition of the Western Mediterranean, Spain in particular, a tradition which must be considered all the more reliable, as it concerned the peoples themselves of Spain, as we shall see presently.

The passage containing this tradition is found in the book of the *Etymologies* which deals with languages, people, kingdoms, armies, citizens, and relationships.

The text itself refers to the Ethiopians about whose origin Isidore says: "They, proceeding from the river Indus in ancient

[1] *Catholic Encyclopaedia*, art. "Isidore of Seville".
[2] Menendez y Pelayo, *Estudios de Critica Literaria*, I, p. 154.
[3] *Etymologiarum Libri XX, Praef.*: Migne, *P.L.*, LXXXII, col. 74.
[4] *Quaestiones in Vetus Testamentum*, Praef. 5; *Ibid.*, LXXXIII, col. 209.

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times, settled in Egypt, between the Nile and the Sea, towards the South, near the equatorial regions (*sub ipsa solis vicinitate*). Three nations were derived from them : the Hesperians, the Garamantes, and the Indians : the Hesperians are in the west, the Garamantes in Tripoli, the Indians in the east".[1]

The author explains the historical origin of the Ethiopians, whose cradle is placed by him in the country of the Indus, one would almost say in the Indus Valley (*ab Indo flumine*). The migration started from the neighbourhood of this river, and finally they fixed their tents in the valley of another great river, the Nile, as was customary with the ancient peoples. Between the Nile and the Red Sea they found ample space for living and growing, in a land extremely fertile owing to the yearly inundation of the river. Isidore gives the region of that country where they landed : *in meridie*, in the south ; which evidently does not restrict their habitat, but only points out the gateway, so to say, by which they entered into the possession of their new home.

These details given by the great Spanish writer, which were undoubtedly culled from ancient books recording the local tradition, perfectly agree with what we know about the second Indian migration from Indian and Egyptian traditions. The immigrants seem to have started from the Indus or its neighbourhood, and entered Egypt from the south.

That this tradition should have been faithfully kept by the inhabitants of ancient Spain is easily explained if we realize that it was a sort of a family tradition about their own origins. For as St Isidore explains in the same passage the nucleus of the migrating Indians settled in Egypt, but later, owing undoubtedly to their natural growth, was split up into two groups : one, called of the Indians, remained in the East. These were the Ethiopians themselves, to explain whose origin he has given all this genesis of the whole nation. In ancient times all the inhabitants of the Oriental regions,

[1] *Etymologiarum*, IX, 2, 128 : Migne, *P.L.*, LXXXII, cols. 340-341.

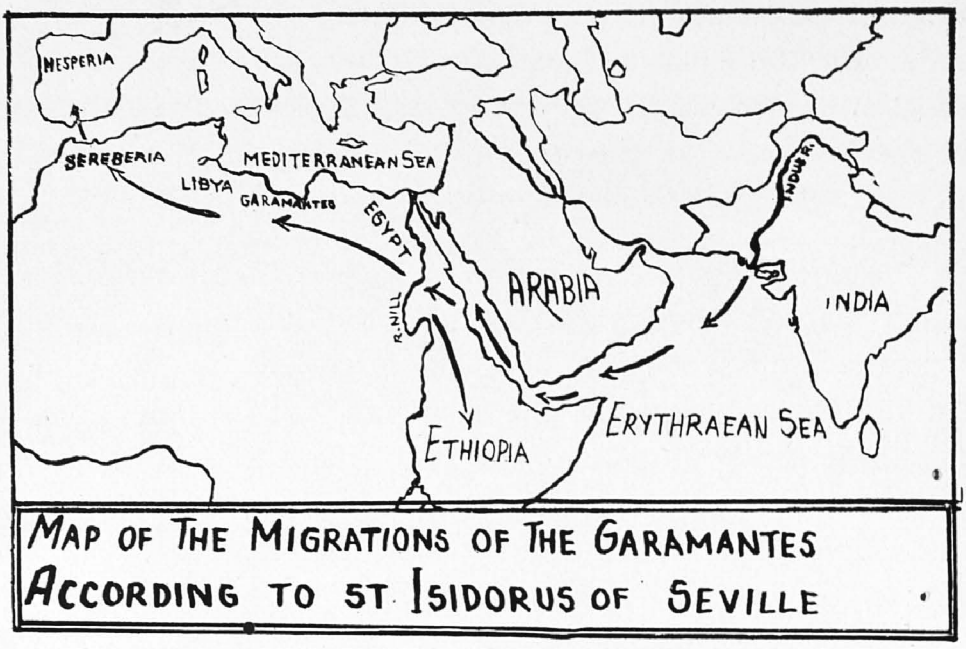

Fig. 264
Illustrating the Southern Mediterranean Migration of the Proto-Indians.

and especially the Ethiopians, used to be called Indians.[1] Another group migrated towards the west in northern Africa. They settled in Libya. Those of the interior, towards the boundaries of Cyrenaica, were known to the Latin classical authors as Garamantes.[2] St Isidore says that their capital was called Garama from which word they derived their name.[3] Now it happens that this name is of Dravidian origin, though usually given as Sanskrit.[4] *Karāma* (in Tamil *kirāma*) means "settlement", "town", the same meaning as *ūr*. For the first immigrants that was *their* settlement ; it should naturally be called *karāma*, which, afterwards being softened, became *garāma*.[5] From this latter nation of the Garamantes a further group detached itself in the course of time and, crossing

[1] "We always heard the country of Ethiopia to be called Indian". (Servius *In Virgilii Georgicam II*, v. 116. Cf. Perumalil, "The India of the Early Greeks and Romans", *J.B.O.R.S*, XXVIII, pp. 225-265, 341-383). The Nile was supposed to flow from India to Egypt. (Procopius, *De Aedificiis*, I, VII, p. 331).

[2] Virgil, *Eglogae*, VIII, 44.

[3] *Etymologiarum*, IX, 2, 125 ; XIV, 5, 13 : *loc. cit.*, cols 340 and 511.

[4] *Karama* or *krama* in Tamil, Malayalam and several other Dravidian languages means "to arrange", "to regulate", "to systimatize", "to reduce to order". Cf. Fabricius, *Dictionary Tamil and English*, word *'krama'*. This word is held as a Dravidian word. *Garāma* or *grāma* meaning "settlement", "town", village" is evidently derived from the first root. A town is a place regulated and reduced to order.

[5] The Sanskrit form now is *grāma*.

the straight between Africa and Europe, made Hesperia, *i.e.* the Iberian Peninsula, their final home. Thus those people of Spain who did not know of their ancient origins learnt about them through the work of Isidore. How much this information was appreciated and how strongly they believed in this tradition kept for them by this great scholar, some words of Archbishop Braulius, in a letter to Isidore himself, show. Repeating the words of Cicero to Varro[1] on a similar occasion, Braulius says : "We were like foreigners and guests in our own country ; and thy writings have led us to our own home, making us understand wherefrom we came and wherein we are. Thou has revealed to us the past of our nation and the story of our old ages . . . the names of our cities, regions, places and other things divine and human".[2]

Appendix

SOME POINTS OF CONTACT BETWEEN INDIA AND EGYPT

The first part of the preceding chapter was originally read as a paper contributed to the fifth session of the Indian History Congress.[3] Dr H. C. Ray Chaudhri, President of the Ancient India Section, objected to the identification of the ancient Egyptians and the Indians on the plea that the Egyptian Pharaohs used to marry their sisters, while this custom is totally unknown in ancient India : we know only of its condemnation in the *Ṛgveda*, viz. the well known episode of the conversation between Yama and Yamī.[4]

The Pharaohnic marriage custom is only the effect of the system of government. The real sovereign of Egypt was the daughter of the Pharaoh, not the son ; and in order that the son should also be the ruler, in fact on many occasions the only *de facto* ruler, the son of the Pharaoh used to marry his sister. In any case the Pharaoh did not reign in his own right, but in the right conferred on him by his wife. This was evidently a case of matriarchal rulership. It is well known how ancient is the matriarchal system among the Dravi-

[1] Cf. Cicero, *Academicae Quaestiones*, I.

[2] St Braulius, *Praenotatio librorum Divi Isidori ;* Migne, *P.L.*, LXXXIII, col. 17.

[3] Cf. *Transactions of the Indian History Congress*, Fifth (Hyderabad) Session, 1941, pp. 92-101.

[4] *Ṛg.*, X, 10.

dians of India. The inheritance laws in the States of Travancore and Cochin are only two isolated instances of it still existing in modern times.[1] The matriarchal system has here taken a totally different shape in the case of succession to the throne, but the prevailing idea is the same as in ancient Egypt.

Now as regards the custom of marriage between brothers and sisters, with all due respect to Dr Ray Chaudhri, cases of such marriage are numerous in ancient India. It was in fact, common among the Sākyas. The sons of King Okkaka, the founder of the Sākyas, according to Buddhist literature, married their own sisters; from them all the Sākyas proceed.[2] But this was not the only case. The late Mr V. R. Rajwade has collected a number of similar cases which may be seen in the *Quarterly Journal of the Rajwade Sanshodhaka Mandir*, Dhulia.[3] The most notable instance of a marriage between a brother and a sister is that of Dakṣa and his uterine sister Dakṣā, from whom he begot fifty daughters.[4] Again the epic tells us that in the country of the Madras, unions between brothers and sisters and for the matter of that between other close relatives, was an ordinary practice without any restriction.[5] In a famous passage of the Ādi Parva Paṇḍu explains to his wife Kuntī the foundation of all these loose practices: "They were not regarded sinful, for it was the custom of the age. That very usage of the olden time is up to date followed by birds and beasts, and they are free from anger and passions . . . The practice, being

Fig. 265
An Egyptian playing a harp similar to the Mohenjo-Daro *yāḷ*.

[1] The matriarchal customs of inheritance in India may be studied in Ehrenfels, *Mother-right in India*, pp. 3, 7, 40, 52, 112, etc.

[2] *Digha Nikāya*, Ambattha Sutta: Rhys Davids, *Dialogues of the Buddha*, I, pp. 114-115.

[3] Rajwade, "Bharatīya Vivaha Samsthecha Itihasa" (The History of the Institution of Marriage in Ancient India), *Samshodhak*, VI-VII, pp. 178-256.

[4] *Mahābhārata*, Ādi Parva, 2574-2575.

[5] *Ibid.*, Karna Parva, 1838-1841.

sanctioned by precedents, is praised by great *ṛṣis*; it is still regarded with respect by Northern Kurus". And, in continuation, he declares how the strict customs in this matter were introduced by Śvetaketu, the son of Uddālaka Āruṇi.[1] It has also been pointed out that the custom of burning Kāma and Madana in the month of Phalguna, which is spread all over India, refers to the antagonistic view with which the ancient marriage between brother and sister was regarded.[2]

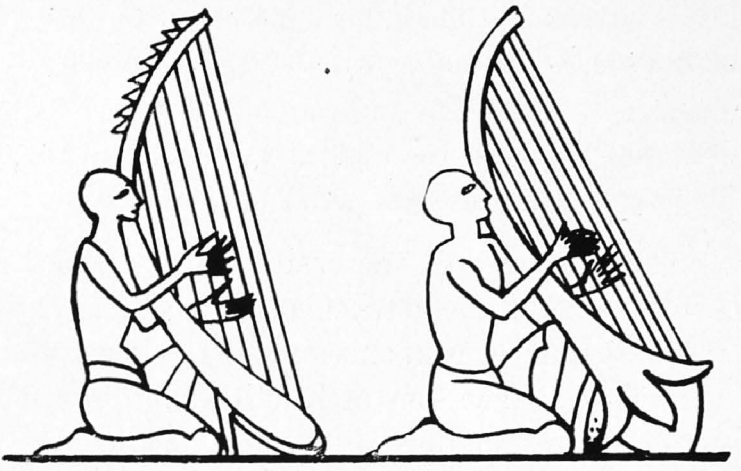

Fig. 266
Two Egyptian harps, one like the *yāḷ* of Mohenjo-Daro, the other with an ornamental sounding box.

Fig. 267
An Egyptian woman playing the harp not very dissimilar to the Indus Valley *yāḷ*.

This point of contact between the civilization of Egypt and the civilization of ancient India leads us to emphasize some other cases of parallelism which will show how similar those two ancient nations were. We have already spoken of the god Min in the second chapter and we shall speak again of him somewhat below. Flinders Petrie acknowledges that "he was introduced by a people coming across from the east".[3] This statement is equivalent to admitting its Indian origin, for India was the only country to the east of Egypt in which Mīn was being worshipped as a form of God.

[1] *Ibid.*, Ādi Parva, 4719-4724.
[2] Karandikar, *Dāsa Rātnya Yuddha*, pp. 64-65.
[3] Flinders Petrie, *The Religion of Ancient Egypt*, p. 59.

The god Min in Egypt is the original form of Ammon, the Lord of heaven, who was an itifallic god from the times of the first dy-

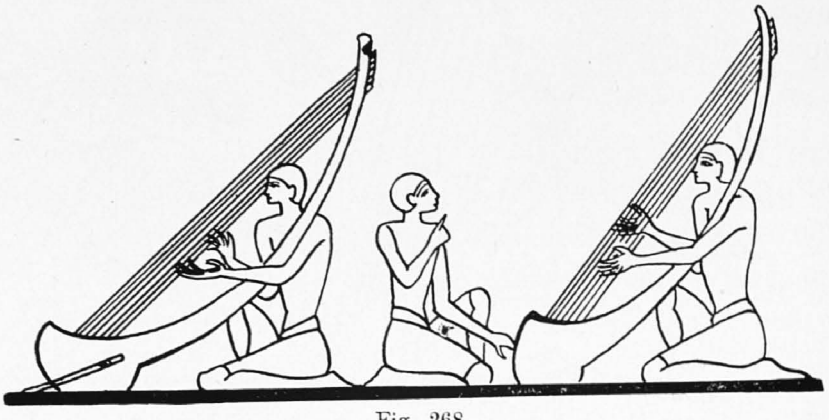

Fig. 268

The growth of the sounding box in two Egyptian harps.

nasty.[1] Mons. Autran has also stated that Min "is simply an Egyptian form of an Anatolo-Mediterranean God of the same general type of the male god of Crete or the great God of the littoral near East".[2]

We have already spoken of King Mina (the ancient Menes of the Greeks), at times now spelt as Mena by Flinders Petrie and other Egyptologists, but always pronounced Mina (Mīna) by modern Egyptians, as the author of the present lines had an occasion to hear during his visit to Egypt. This name is not properly a name but a title, the same title used by the kings of the Proto-Indians meaning "illustrious", "shining";[3] the same held by the kings of Crete,

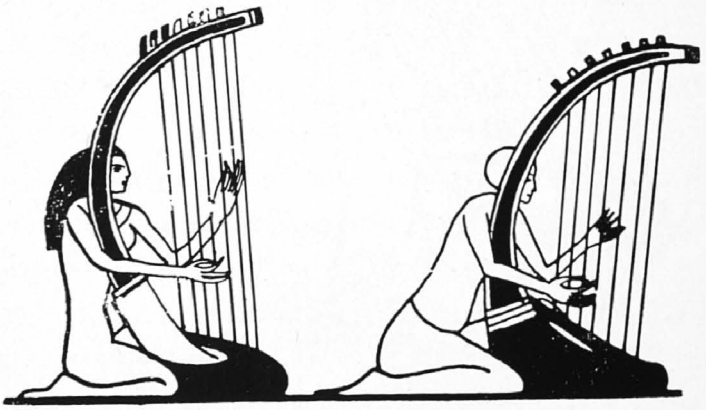

Fig. 269

The Egyptian harp stands straight on the ground supported by the sounding box.

[1] Herman, *Handbook of Egyptian Religion*, p. 10; Brestead, *Ancient Records*, IV, 557-591 Brestead, *Wen-Amon*, 6, 19.

[2] Autran, *La Flotte*, p. 48. Cf. Cook, *Zeus*, I, pp. 361-371.

[3] Cf. above, p. 355, n. 2.

as we have now in the hellenized name Minos.[1] Modern studies both in Egypt and in Crete have confirmed the view that both Mina and Minos are not names but titles only. As regards the former his real name has been found to be Aha.[2] Even his predecessor Narmer is also called Mina in one seal.[3] Again the second King of the Solomonian dynasty of Ethiopia and Abyssinia is called Mina.[4]

Fig. 270
The enlargement of the sounding box upwards in an Egyptian harp.

While studying the development of the Proto-Indian Culture in Sumer, we have seen how the Indian *yāḷ* underwent some development there, if we are to believe the archaeological monuments of that country. In Egypt the development was much greater, though it passed through the same stages of development as in India itself and in Sumer. The Buddhist carvings of Sāñchi and Nāgārjunikoṇḍā show the same *yāḷ* as in the Indus Valley though having a sensible enlargement of the lower portion which thus becomes a sounding box.[5] Such was also the first stage of development in Egypt. The lower part of the harp soon expanded as a sounding box.[6] It was then still being played while holding it in a standing position, or resting

Fig. 271
The Egyptian harp stands by itself unsupported by the player.

[1] Cf. above, p. 355, n. 2.

[2] Flinders Petrie, *A History of Egypt*, pp. 13-14.

[3] *Ibid.*, p. 14.

[4] Marcoff, *Los 7,000 anos de Ethiopia*, p. 123.

[5] Galpin, *The Music of the Sumerians*, pl. XII, No. 1; Naik, "Studies in Nāgārjunikoṇḍā Sculptures," *B.D.C.R.I.*, II (1941), p. 295, fig. 7. Cf. above, pp. 179-181.

[6] Cf. Pillet, *Thebes*, I, p. 43, fig. 35. The harp shown here is of the time of Queen Hatshepsut.

on the lap while being seated. When the instrument itself grew in size it was necessary to put it on the floor. Numerous devices were then imagined to make it stand. Some kept the harp in a straight position; others helped to keep it slanting. Finally the *yāḷ* became higher than man; the harpist played standing, and the sounding box developed also to a considerable size ending in a human head. The reproductions of Egyptian carvings which show all this development may be taken as proofs to corroborate our statements.[1]

Fig. 272
Final development of the Egyptian harp: the sounding box ends with the head of a crowned Pharaoh.

Among the Proto-Indians the *yāḷ* was one of the constellations of the Zodiac. It had already disappeared in Sumer. So it happened in Egypt; in point of fact the representations of the Egyptian Zodiac are late and supposed to have been borrowed from the Greeks.[2] Yet even in this case, supposing that the signs of the constellations have passed through an intermediary Greek stage, we find a few striking similarities. The Ram of the Zodiac of Dendera, which is reproduced herewith, appears as running but with his head turned backwards; the same is the position of the head of the Ram in the set of signs of the Zodiac reproduced by Sir E. A. Wallis Budge.[3] (Fig. 272). This constant position of the Ram is remarkable, for it reproduces the Ram of the Proto-Indian in-

[1] The migration of the Indian harp to Egypt has already been studied by Mons. Marcel Dubois, *Les Instruments de Musique de l'Inde Ancienne*, pp. 191-194.

[2] Brodrick-Morton, *A Concise Dictionary of Egyptian Archaeology*, word 'Zodiac'.

[3] Wallis Budge, *From Fetish to God*, p. 247.

scriptions most faithfully. Though stylized and always head downwards, the Proto-Indian sign of the Ram is the prototype of the Egyptian Ram, as it may be realized when placing the sign in its proper upward position. (Fig. 273).

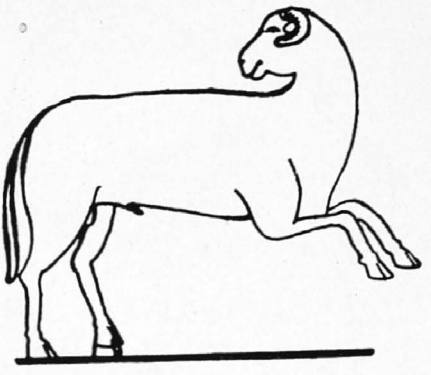

Fig. 273
The Ram of the Zodiac of Denderah, turning his head after the model of the Proto-Indian sign.

Amongst the signs reproduced by Wallis Budge there is still another one which reminds us of one of the Mohenjo-Daro signs, and that precisely the *yāḷ*. As seen above, the constellation of the Bull (*Taurus*) took the place of the harp.[1] Now the Bull in the Zodiac of Dendera shows nothing remarkable, but the Bull of Wallis Budge has a sort of disk on its back half enclosed within a double semicircle. The disk may be compared with the disk of the Sun, as is painted upon the head of many Egyptian gods and goddesses. But what is the meaning of the double semicircle within which the disk is enclosed? It resembles the representation of the Moon as is shown in some monuments;[2] yet the Moon cannot in any way be connected with the zodiacal signs, which are solar. The strange figure does not seem to be but a relic of the ancient *yāḷ*, which originally formed the horns of the Bull, and which was apparently transferred at a later period to be placed upon the back of the Bull, thus offering a magnificent frame to put the disk of the Sun within.

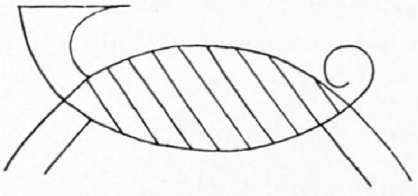

Fig. 274
The sign of the Ram in the Mohenjo-Daro script, much enlarged and turned upwards.

In this Egyptian Zodiac, which we know through archaeological remains, we find already twelve signs corresponding to the twelve traditional constellations. Here, in the same way as in Sumer, one

[1] Cf. above, p. 240.
[2] Cf. Brodrick-Morton, *op. cit.*, word 'Moon'.

god was supposed to preside over each of these constellations, which was undoubtedly a relic of the worship of the forms of An in each of the constellations by the Proto-Indians.[1] But the most striking piece of information is that supplied by Herodotus, that "seventeen thousand years before the reign of Amasis the twelve gods were, they affirm, produced from the eight".[2] This tradition which the Greek historian learnt from the Egyptian priests, as the sentence "they affirm" clearly shows, proves that the Egyptians remembered that in very ancient times there were only eight important gods, who corresponded to the eight forms of An of the Zodiac of the Proto-Indian period.[3]

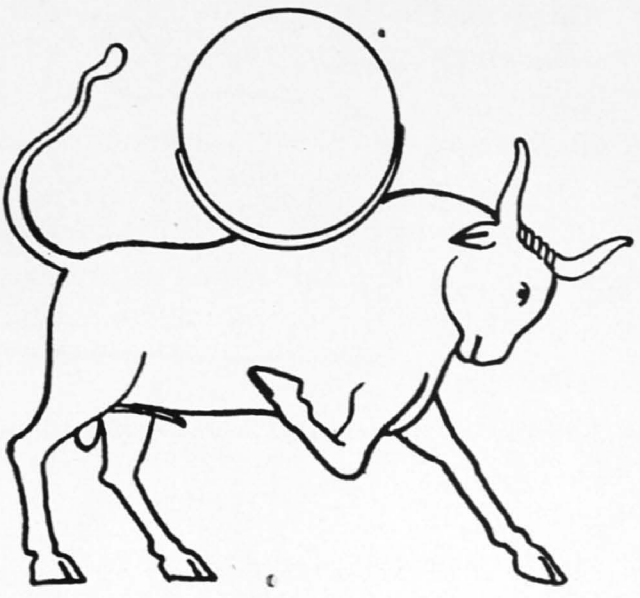

Fig. 275
The Bull of the Egyptian Zodiac, apparently carrying the old sign of the *yāḥ* on his back.

[1] Cf. Heras, "The Religion of the Mohenjo-Daro People", pp. 7-9.

[2] Herodotus, II, 43.

[3] Cf. above, pp. 174-175. These relics of the Proto-Indian signs of the Zodiac in Egypt make us suspect that these Zodiacs were perhaps not borrowed from Greece. Further studies may perhaps elucidate this point.

CHAPTER IV

THE GREAT FISH OF THE FLOOD

THAT the Indians of old knew of the Flood which is minutely described in *Genesis*[1] and in the Sumerian and Babylonian poems,[2] is a fact acknowledged by all scholars who have studied the ancient literature of India. But perhaps the different Indian accounts of the Flood have not been studied as yet with that critical spirit which modern archaeological discoveries have fully justified.

What is the origin of the Flood story? Is it Āryan or Dravidian?

I

THE ORIGIN OF THE INDIAN FLOOD STORY

First of all, the fact that all the Indian accounts of the Flood, which we possess at present are written in Sanskrit is not a sufficient reason to state that its origin is Āryan. Much Dravidian wisdom has come down to us through Sanskrit works only.[3]

Now, it is striking indeed that the *Ṛgveda*, which is the most ancient sacred book of the Indo-Āryans, nor, for the matter of that, the other *Saṁhitās*, have a single reference, not even the slightest one, to *the* Flood.[4] Floods are often mentioned in the *Ṛgveda*;[5] Sarasvatī seems to be connected with floods;[6] Agni is styled "child of floods," "son of floods," "offspring of floods"[7] and even "born in floods."[8] As floods caused by Indra are often spoken of to empha-

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[1] *Gen.*, VI-VIII.

[2] Cf. Langdon, *Sumerian Epic of Paradise, the Flood and the Fall of Man.*

[3] "It is now becoming more and more clear that the non-Aryan contributed by far the greater portion in the fabric of Indian civilization, and a great deal of Indian religious and cultural traditions, of ancient legend and history, is just non-Aryan translated in terms of the Aryan speech as it was the Aryan's speech that became the dominant factor, although non-Aryan element made very large inroads into its purity . . . A great deal of Puranic and Epic myth, legend and semy-history is pre-Aryan." Chatterji, *Indo-Aryan and Hindi*, pp. 31-32.

[4] The allusions to the Flood found in the *Atharva Veda* are not beyond doubt.

[5] *Ṛg.*, V, 14, 4; 45, 11; VI, 49, 14; VIII, 31, 10; 35, 3; X, 35, 1; 109.

[6] *Ibid.*, X, 17, 10; 44, 9.

[7] *Ibid.*, II, 31, 6; 35, 1-2; III, 1, 12; VII, 47, 2.

[8] *Ibid.*, VIII, 43, 28.

size his power,[1] in the same way the mention of *the* Flood in connection with Brahman and Viṣṇu (who are as a matter of fact connected with it, as we shall see later) would have been an excellent means to show the power of these gods. But *the* Flood is never referred to in that venerable book. Hence we may safely conclude that the Indo-Āryas did not know the story. In this connection J. Muir refers to the opinion of Burnouf, who thinks that "although, as related in the *Mahābhārata* and the *Purāṇas*, the legend of the Deluge has received in some respect an Indian character, it is not in its origin Indian".[2] While saying "Indian" Burnouf evidently meant "Āryan", as the books he was studying were according to him Āryan books.[3] Winternitz acknowledges that the story of the Flood "appears to belong to a different complex of myths and does not at all fit well in the *Mahābhārata* cycle".[4] To which view Dr Sukthankar fully subscribes.[5] Peake, who has studied all the accounts of the Flood, says : "The story can hardly be of Aryan origin, for it does not occur as we have seen, in the earliest religious books of this people, nor in those of the closely allied Persians. Also, if it had been Aryan, it is doubtful whether the Bible would have learned it. It seems to have been a myth of some pre-Aryan inhabitants of India".[6] Mons. Etienne Brosse, with an extraordinary insight, has affirmed towards the close of the last century that "there existed among the Indo-Chamites of India a tradition about the Deluge, a tradition which became afterwards that of Chaldaea".[7] In order to find accounts of the Flood we must consult later works than the *Saṁhitās*. The story was told for the first time in the *Śatapatha Brāhmaṇa*,[8] then

[1] *Ṛg.*, I, 21, 8 ; 52, 7 ; 54, 10 ; 61, 10 ; 80, 8 ; and *passim*.

[2] Muir, *Original Sanskrit Texts*, I, p. 216.

[3] Burnouf's view about the Flood is, as far as we know, the earliest doubt about the Āryan origin of the contents of Sanskrit literature.

[4] Winternitz, "Die Flutsagen des Altertums und der Naturvolker," *Mitteilungen der anthropologischen Gesellschaft* (Wien), XXXI (1901), pp. 321-322 ; 327-329.

[5] Sukthankar, "Epic Studies", *Annals of the Bhandarkar Oriental Research Institute*, XVIII (1936), p. 3.

[6] Peake, *The Flood, New Light on an Old Story*, p. 25.

[7] Viçwa-Mitra, *L'aurore indienne de la Genèse*, pp. 208-217. Many conclusions arrived at by this author appeared then premature and unscientific, but a number of them may now be well proved on scientific grounds, though his method is not always strictly scientific. About the 'Indo-Chamites', cf. below, Chapter V. Cf. also Periyanayagam, "Manu 's Flood", *The New Review*, XI, (1940), pp. 473-484.

[8] *Śatapatha Brāhmaṇa*, I, 8, 1, 1-10.

it reappeared in the *Mahābhārata*;[1] and much later it was repeated in the *Mātsya Purāṇa*,[2] in the *Bhāgavata Purāṇa*,[3] and in the *Agni Purāṇa*.[4] These sources will in future be referred to respectively thus: SB, MB, MP, BP and AP.[5]

II

THE ACCOUNT OF THE FLOOD

In this story, narrated with slight differences in these five works, we must distinguish four chapters or sections, as follows :–

A. *The Hero of the Flood.* According to the first three sources he was called Manu. The MB, the MP and the BP call him Rāja, and the second of these two sources and the AP state that he was the son of Vivasvat. The MB and BP call him a *ṛṣi*, for according to the MP he abdicated his kingdom in favour of his son and devoted his life to the practice of *yoga*. The *tapas* he practised is described as most difficult by the MB. He is said to have remained with head downwards and unwinking for several years, at Badiri. The BP tells us that he was subsisting on water. The MP states that after renouncing the throne, he retired to the slopes of Malaya. The BP introduces him as a faithful worshipper of Nārāyaṇa (Viṣṇu), styles him "king of Dravida" and calls him Satya Vrata.

Now the most general features of this personage in the above sources are his royal dignity and his life of asceticism. This is already a very interesting point, for, as discussed elsewhere,[6] Indian asceticism is of Dravidian origin; and it was the practice of many Dravidian kings to renounce the world towards the end of their life and to retire to the forests to perform penances. The fact that he was the king of Dravida seems to confirm our suspicions.

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[1] *Mahābhārata*, Āraṇyaka Parva, 12747-12804; Ādi Parva, 12747-12800.

[2] *Mātsya Purāṇa*, I, 12-36; II, 1-21.

[3] *Śrimad Bhāgavatam*, VIII, 24.

[4] *Agni Purāṇa*, I, 17.

[5] Cf. Macdonell, *A History of Sanskrit Literature*, p. 216.

[6] Cf. Heras, "The Origin of Indian Philosophy and Asceticism", in Karmarkar-Kalandani, *The Mystic Teachings of the Haridāsas of Karnātaka*, pp. XIV–XXIII.

The scene of his austerities is said to have been Badiri, a place which should be identified with Badrināth, in the Garhwāl District of Uttar Pradesh. The fact that according to another source he retired to the slopes of Malaya ('Mountain') is in agreement with our identification. Badrināth, indeed, is on the slopes of the Himālayas. Malaya may also be Malabar.[1]

As regards the religion of the hero of the flood, the statement of the BP does not seem fully reliable. The fact that his devotion to Viṣṇu is mentioned not accidentally, but in a special way, and apparently with a definite purpose, makes one very suspicious about it. After all, the BP is not a fully impartial document. It is always inclined to favour Vaiṣṇavism. Nevertheless, the fact that the Badrināth temple is dedicated to Viṣṇu seems to strengthen the opinion of our hero's Vaiṣṇavism. But was Badrināth always dedicated to Viṣṇu? The connections between Śiva and the Himālayas are well known and there is a tradition that the Badrināth temple was founded by Śankarācārya,[2] in which case it could hardly be a Vaiṣṇava temple. Apparently, therefore, Badrināth was originally connected with Śiva.

As regards the name of the Flood-hero, there is a welcome discrepancy among the sources; three of them call him Manu, the fourth one Satya Vrata. This name seems to have some connection with the Vrātyas, about whom we know a great deal through the *Pancaviṁśa Brāhmaṇa* and also through the *Atharvaveda*. Their cult seems to be non-Āryan. Their main god is called Eka Vrātya, and his priests are named *Māgadhas*.[3] The *Atharvaveda* mentions seven forms of Eka Vrātya amongst them Rudra, Mahādeva and Paśupati,[4] who are forms of Śiva. That the Vrātyas were Dravidians is now the general view among historians.[5] Even those Āryas

[1] Cf. Periyanayagam, *op. cit.*, p. 474.

[2] *Imperial Gazetteer*, VI, p. 179. It is of interest to notice that the Raval, or administrator of the temporalities of the temple, must always be a Brāhmaṇa of the Nambudiri caste of Malabar. *Ibid.*, p. 180.

[3] *Ath.*, XV, 2, 1-4; *Pancaviṁśa Brāhmaṇa*, XVII, 1, 16.

[4] *Ath.*, XV, 5.

[5] Yet some times they are described as "Āryas outside the sphere of Vedic culture". Brigs, *Gorakhnāth and the Kanphata Yogis*, p. 2-12. This strange definition of the Vrātyas is influenced by the erroneous opinion that all Northern Indians are Āryas.

who were living among the Dravidians or had adopted Dravidian customs were at times called Vrātyas.[1] Satya Vrata, therefore, seems to be the name of a Vrātya king of an ancient Dravidian Dynasty. The other name Manu is considered by many to be a Dravidian name also, coming from the root *maṇ*, "mud." Manu, therefore would mean "the one of mud," and stands for "man" in general.[2]

Fig. 276
Manu, as a Nāgarāja, seated on the Fish of the Flood, on Naurangi Darwaza, Raichur Fort.

Therefore, it seems evident, the hero of the Flood goes as an ancient Dravidian king, who according to Dravidian customs renounced the crown and became an ascetic at Badrināth on the slopes of the Himālayas, the mountains dedicated to the Dravidian god Śiva.

B. *The Scene of the Flood.* According to all sources, while Manu was performing ablutions or offering a libation of water he found a small fish in his hand. The BP calls it a *śapharī* fish. This fish grew to an extraordinary size and finally informed him of the coming Flood. The epiphany of the fish took place on the banks of the Chirini, according to the MB, or on the river Kritamali or Kṛtamālā, according to the BP and the AP. These two rivers have never been identified, as far as I know. The author of these lines cannot say anything about the Chirini, but has crossed the Kritamali several times. The Kritamali, or simply the Kritamal, is one of the two rivers that meet in Madurai, in South India. The other river is named Vaigai. Since the ancient city was built near the confluence of the two rivers its first name was *kūdal*, that means "union," "meeting".[3] The Vaigai is a much larger river than the Kritamal. Yet some present practices show that the Kritamal was very famous in

[1] Cf. Keny, "Who were the Vrātyas", *The Proceedings of the Indian History Congress*, Tenth session, Bombay, 1947, p. 126. Cf. pp. 122 and 125.

[2] Manu is frequently mentioned in the *Ṛgveda* as the founder of sacrifices; (I, 13, 4; 14, 11; 18, 16; 36, 19; 68, 4; 114, 2; II, 33, 13; III, 3, 6; V, 21, 1; 45, 6; VI, 16, 10; VII, 2, 3; VIII, 27, 7; 30, 3; 34, 8; 52, 1; X, 63, 7; 100, 5). It is probable that this Manu is different from the Manu of the Flood. Yet it may also be possible that the original Flood story might have taken this name from the *Ṛg.*, to include it in the works of Brahmanic literature. The Ṛgvedic Manu seems to be the first man, the father of all mankind; the name seems to have been adopted at a later period to designate the first man after the Flood.

[3] Cf. Heras, "A Proto-Indian Icon", p. 481, and above, p. 110.

Fig. 277
The River Kritamal in the vicinity of the city of Madurai.

ancient times. When the Bhairavis, ascetics of Northern India, visit the South they always go to Madurai and the first thing they do is to bathe in the Kritamal.[1] In the month of September there is a festival near the Kritamal. The goddess Minakṣi goes there and catches fish from the tank Valaivisuntepakkulam, which is by the side of the river and very near the Railway Station. This ceremony seems to be a vague souvenir of the catching of the fish by the hero of the Flood while making ablutions.[2]

A geographical objection may be raised against this identification. The Flood-hero was practising *sannyāsa* on the slopes of the Himālayas. How has this episode of his life been placed in South India? *Sannyāsis* are wandering mendicants, and their

[1] The Bhairavis are considered to be above the Nambudiri Brāhmaṇas in Malabar.

[2] Cf. below, pp. 427-429.

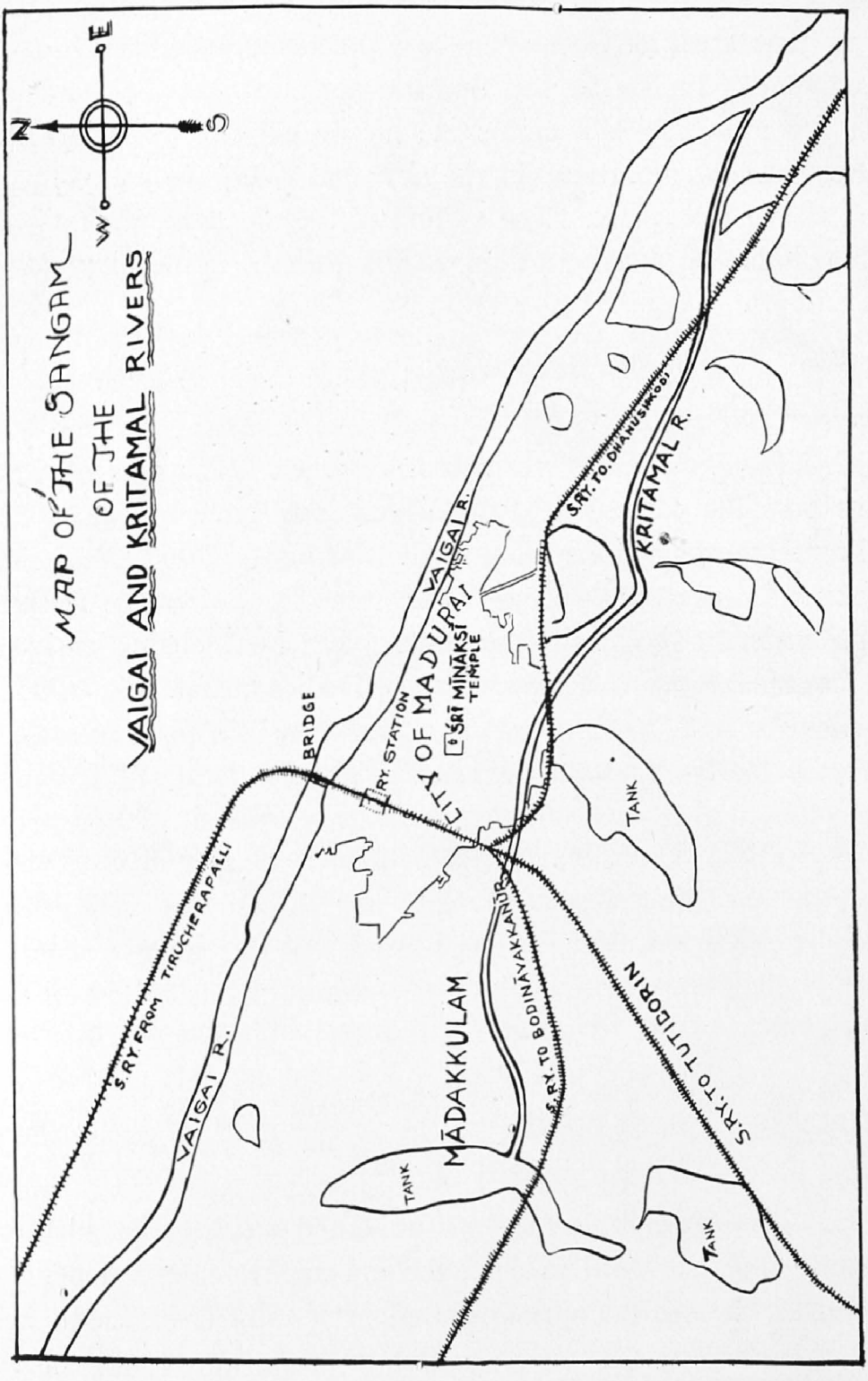


Fig. 278
Illustrating the situation of the Vaigai and Kritamal Rivers round the city of Madurai.

home is the whole of India even at present. They easily trot the whole of India, North and South alike.[1] Our sources of information tell us that the Flood hero had been practising austerities in that sacred spot of Badrināth, but that did not mean that he remained there for ever. In one of his mendicant expeditions he reached Madurai and while bathing in the Kritamal river, the episode narrated above took place. The custom of the northern Bhairavis in bathing there on arriving at Madurai is perhaps in memory of the famous bath of Manu=Satya Vrata.

The story of the Sumero-Babylonian Flood has also its beginning on the banks of a river.[2]

C. *The Prediction of the Flood.* The small fish protected by Manu from the voracity of other larger fishes grew by stages, according to the four stories, and finally announced the forthcoming Flood to Manu=Satya Vrata. When some time after the feast of *poṅgal* in Madurai the goddess Mīnākṣī is taken ceremoniously to the above mentioned tank, she is supposed to fish in the tank. Popular tales say that the fish tells her: "Take me to a place of safety, otherwise the big fishes will eat me." The fish is accordingly put in a vessel of water and taken to the temple, wherein it is kept till before the feast of the *Teppakulam*, when it is once more dropped into this tank; and when that feast is celebrated the same fish is supposed to tug the boat of the goddess. All this seems a modern staging of the story of the Flood, the origin of which is lost in the dawn of history.

As regards the means by which the fish could be saved from the Flood, there is a slight disagreement among the accounts. According to the SB and the MB, the fish orders our hero to build a ship. The MP says that the fish presented the ship, made by the company of all gods, to him. The BP and the AP state that the fish announced likewise the appearance of a ship. In any case it was

[1] The famous Agastia Swāmi, the ancient Northern India *ṛṣi* who taught the Vedas to the people of the South, is supposed to have come all the way from the north, for which he had to swallow the Ocean (*Mahābhārata*, III, 104, 12), perhaps for having crossed the sea-covered desert of Rājasthān.

[2] British Museum, *The Babylonian Story of the Deluge*, p. 31.

the will of the fish that Manu=Satya Vrata should be saved on a ship. Besides according to the MB the fish ordered him to get a rope. What the use of this rope was we shall see presently.

Owing to this relation between Manu and the Fish, Manu is always represented in Indian iconography as seated on a colossal fish. (Fig. 276). The fish has become his *vāhana*.

D. *The Flood itself.* When the Flood begins the fish reappears once more in order to lead our hero and his craft. According to the MB, the fish having a horn "as lofty as a mountain", rising above the waters in front of the ship, led the embarkation through that troubled sea. The BP says that the horn of the fish was "a million *yōjanas* long". Also according to the SB, the fish got a rope tied from the ship to his horn and thus tugged the ship to far off mountains; while the MP makes the fish order to Manu: "Fasten the ship to my horn." About the nature of this rope the MP, the BP and the AP state that the rope was the great serpent Ananta. "Tossed by the tempests," says the MB, "the ship whirled like a reeling and intoxicated woman." The SB informs us that by means of the rope, the ship passed over the northern mountain, which, according to the commentator is the Himālayas. The MB says that on reaching the mountains, the fish ordered Manu to tie the ship to the summit by means of the rope he had ordered him to acquire beforehand. Anyhow the horn of the fish was always of great importance, for even in this case this horn was like a preceding buoy that showed the route to the seafarer.

The *Atharvaveda* mentions the mountain *Nāvaprabhraṁsaṇa*, ("sinking of the ship"), which seems identical with the mountain *Naubhandaṇa*, ("binding of the ship"), mentioned in the MB and the *Manoravasarpaṇa* referred to in the SB, on which the ship of Manu is said to have stopped at the end of the Flood.[1] This mountain seems to be one of those mountains of Armenia, upon which Noah's ark rested in the seven month, according to *Genesis*.[2] These

[1] Cf. Macdonell, *A History of Sanskrit Literature*, p. 144.

[2] *Gen.*, VIII, 4.

mountains are denominated in the Hebrew original '*Ararat*', which corresponds to the cuneiform '*Urartu*', which is the name of Armenia in the language of Babylon.[1] It would nevertheless be preposterous to suppose that that denomination corresponds to the present geographical unit bearing that name. On the other hand the mountains of Armenia belong to the range of the Caucasus, which continue through Irān and Afghānistan with the denomination Hindu-Kush, and enter India as the Himālayas. On a mountain of this long range stood, at the end of the Flood, the ship of Manu=Noah.

III

THE IDENTIFICATION OF THE FISH

In the MB the fish declares itself to be Brahman. In the MP Janārdana is said to have appeared to Manu in the shape of a horn fish, and later Manu himself praises the fish as god Vāsudeva and the fish approves of this identification. According to the BP Satya Vrata recognises the fish as Viṣṇu. The AP recognizes the fish as Nārāyaṇa. These four accounts therefore present the fish as a form of a god, but they do not agree as regards the individual god.

The study of this story of the Flood through the four accounts which we have brought together above, leads us to draw the following conclusions :–

1. There was a very ancient story of the Flood from which the four accounts we possess at present proceed, as the common traits show.

2. That the original story was written in a Dravidian language, as the story itself is Dravidian in origin and refers to an ancient Dravidian hero.

3. Three at least of the four accounts we have now show a decided purpose to present our hero as an Āryan. The MB by identifying the fish with Brahma, the MP by introducing the fish as Vāsudeva, and the BP by styling the hero to be a devotee of Viṣṇu, and making him recognize this god in the fish.

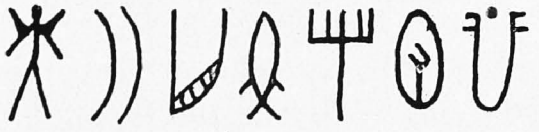
[1] Enciso Viana, *Problemas del Génesis*, p. 156.

4. There cannot be any doubt about the nature of the fish in the original story. The fish was a form of God.

5. As regards the individual god we are inclined to maintain that the god named in the original story was neither Brahma, nor Viṣṇu, nor Vāsudeva. The disagreement amongst the three accounts points to a probable fourth original name.

6. What this name was we may surmise from the Dravidian origin of the story: the name of God was Śiva, or most likely its proto-type Āṇ.[1]

Now, one of the forms of Āṇ, according to the Mohenjo-Daro inscriptions,[2] was the form of the Fish. One of the inscriptions runs as follows:

 [3]

which reads: *adu tali per mīn oriḍa et kaḍavuḷ:* "that is the eight (formed) God, whose one side (form) is the sprinkled Great Fish." This form of God is always styled *per mīn*, "Great Fish", in the inscriptions. Why this form of God, the Fish, was selected in the account of this story and not for instance, the form of the Ram, or the form of the Crab, the natural association between the Fish and the Flood will easily explain. In point

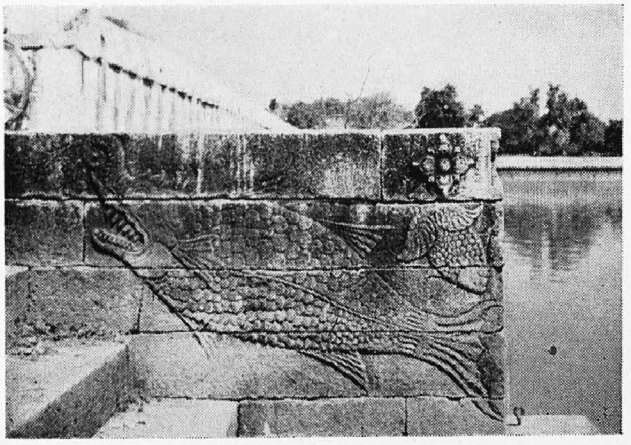


Fig. 279
The sword-fish on the parapet of the Teppakulam, Madurai.

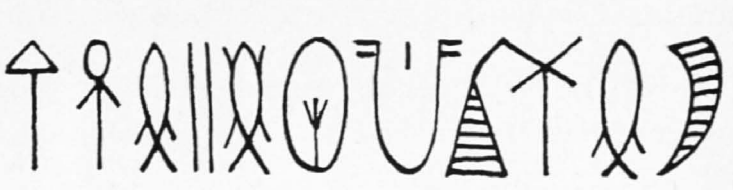
[1] The Śaivite faith of the hero of the Flood may also be revealed from the fact that the name Vivasvat, Manu's father, also means Maheśvara or Śiva, according to the commentator Nilakantha. Muir, *Original Sanskrit Texts*, I, pp. 201-202.

[2] Cf. Heras, "The Plastic Representation of God amongst the Proto-Indians," p. 225.

[3] Marshall, M.D., No. 419.

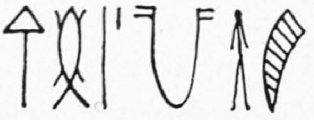
of fact, according to the Babylonian story, the god who announces the flood to Ut-Napishtim is Ea or Enki,[1] the god of the abyss and of the waters, in whose honour the kings of Lagash built seas (tanks) in the temples.[2]

But the fish of this Dravidian story of the Deluge is a horn-fish, which is also called the sword fish, viz. the *Histiophorus brevirostris*. In several Mohenjo-Daro inscriptions the horn-fish is referred to. One says :–



which reads as follows : *kombumīn kōḍikō eḍu sere min irmīn kōḍi kaṇ, i.e.* "See the flag of the two fishes of the imprisoned Mina of the year of the hoisting of the flag of the horn-fish." The horn-fish, therefore, was a symbol on a flag, what is called in Tuḷu *lake*, what was called *lāncana* in Sanskrit in later times, *i.e.* a heraldic device. This flag apparently was hoisted on the occasion of the victory of the Mīnas over the Kāvals, as I have explained elsewhere.[4]

That this horn-fish was the same horn-fish of the Deluge, viz. a form of God, we cannot doubt after reading the following inscription :–



which reads thus : *kombu Āṇ adu ir or mīn kaṇ :* "this Āṇ of the horn is the one living fish-eyed one." The horn therefore is said to

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[1] Hilprecht, *The Earliest Version of the Babylonian Deluge Story*, p. 45, No. 1 ; Peake, *op. cit.*, pp. 45-46.

[2] Deimel, *Pantheon Babylonicum*, p. 111.

[3] Mackay, *op. cit.*, II, pl. XCVIII, No. 514.

[4] Heras, "Mohenjo Daro, the People and the Land", p. 713.

[5] Marshall, M.D., No. 347.

belong to Āṇ, who is well known as a fish-eyed god. Another inscription speaks of the horn as issuing decrees or judgements :–

[1]

which reads: *ilil ire mīn kombu tīrpu adu*, viz. "This is the judgement of the horn of the fish who is in the house." The last three signs of the above inscription are found separately in another inscription,[2] and confirm once more the connection between the horn and judgement.

The veneration of the horn of the sword fish by the ancient Dravidians was equivalent to a sort of betilic cult. It is recorded of the Paravas of the Fishery Coast—an ancient tribe often referred to in the Mohenjo-Daro inscriptions,[3]—that "they used to plant the 'horn' (or the 'sword') of the sword-fish in the sand in the midst of their houses; and when they went a-fishing they garlanded it, and worshipped with ceremonious pomp the spirit (*vālāḷ*) believed to be in it".[4] In the Malay folk-lore, an attack on Singapore by a sword-fish is being referred to. This attack apparently is reminiscent of a raid on Singapore carried out by Rājendra Cōḷa I in 1017 A.D. The sword-fish is the Tamiḷ deity of coastal waters and his snout symbolized that terrible deity in the ritual of fishermen worshippers.[5]

All this shows that Mīn, one of the forms of Āṇ amongst the Proto-Indians, was supposed to be the horn or sword-fish, *kombumīn*. This story of the Fish of the Flood crystallized in the purānic story of the *Mātsyāvatāra*.[6] Another relic is found in the *Gītā*, wherein Kṛṣṇa says: "of fishes I am the *makara*", *i.e.* a large sea monster.[7]

[1] Mackay, *op. cit.*, pl. LXXXIV, No. 79.

[2] *Ibid.*, p. XCIX, No. 633.

[3] Cf. Heras, "The 'Mīnavan' in Mohenjo Daro," pp. 281-288; Heras, "Mohenjo Daro, the People and the Land," pp. 715-717.

[4] *Pattuppāttu*, Pattinapalai, pp. 81-103.

[5] Winstedt, *A History of Malaya*, pp. 26-27.

[6] Cf. Moor, *The Hindu Pantheon*, pp. 108-110.

[7] *Bhagavad Gītā*, X, 31. *Makara* sometimes is translated as "crocodile" or "shark". In this case at most it could be the latter, for *makara* must mean a fish according to the text. Cf. above, p. 377, n. 4.

IV

THE FISH IN EGYPT AND CRETE

In Coptos, upper Egypt, two statues of the Egyptian god Min have been discovered,[1] which seem to be connected with the Indian sword-fish as a form of God. First of all, all Egyptologists admit that Min is a foreign god in Egypt,[2] and even they suggest that he is of Asiatic origin. Mr Wainwright has successfully proved that besides being a fertility god,[3] Min, whose statues are itiphallic,[4] is a sky god.[5] Now the Proto-Indian Mīn is one of the zodiacal constellations and is a very common symbol of fertility.[6] But, besides, in the two Coptos statues of Mīn there are swords of the sword-fish carved on the lower portion of the icon.[7] Egyptologists cannot explain the meaning of this object carved on the statue of Mīn.[8] This is precisely a most interesting connection with the Proto-Indian zodiacal Mīn, and even with the *permīn* of the Indian Flood especially, for the tradition of the Flood apparently also existed in the land of the Nile.[9]

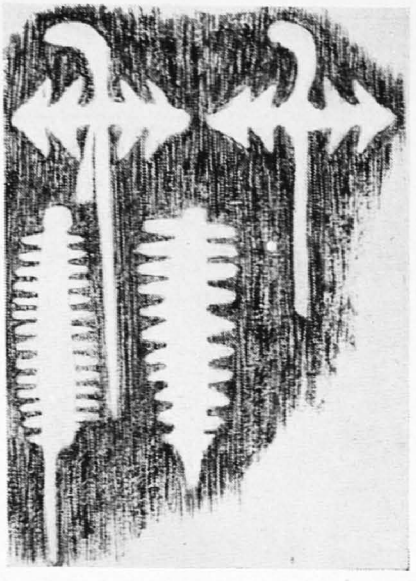

Fig. 280
The sword of the sword-fish carved on a statue of Min, from Coptos, Egypt.

[1] Flinders Petrie, *Koptos*, pp. 1-10.

[2] Flinders Petrie, *The Religion of Ancient Egypt.*, p. 59; Flinders Petrie, *Koptos*, p. 7.

[3] Wallis Budge, *From Fetish to God*, p. 64; Shorter, *The Egyptian Gods*, p. 135.

[4] These statues, which are in the Ashmolean Museum, Oxford, may be seen in Flinders Petrie, *Koptos*, and in Capart, *Primitive Art in Egypt*, p. 223, fig. 166.

[5] Wainwright, "The Emblem of Min", *Journal of Egyptian Archaeology*, XVII, pp. 185-195; Wainwright, "Some Celestial Associations of Min", *Ibid.*, XXI, pp. 152-170.

[6] Heras, "The Religion of the Mohenjo Daro People according to the Inscriptions", p. 13.

[7] See Capart, *op. cit.*, p. 225, fig. 167, No. 2.

[8] Cf. *Ibid.*, p. 224. Together with the swords of the sword-fish, figures of the Red Sea shells named *Pteroceras* are carved on these statues. They clearly "point to an invasion from the direction of the sea". Knight, *Nile and Jordan*, pp. 33-34. Cf. Flinders Petrie, *A History of Egypt*, I, p. 4.

[9] Elliot Smith, *Tutankhamen*, pp. 94 & ff.

More striking still is a new connection that comes from far-off Crete. Amongst the objects unearthed by Sir Arthur Evans in the site of the Palace of Minos at Knossos, there is a small ivory seal representing a ship and two fishes.[1] Of these two fishes one is under the ship, while the other is somewhat ahead, appearing just in front of the ship, as if it were, leading her through the waters. But the most interesting thing about this second fish is that it is much different from the first. It would appear that the artist, while carving the seal, purposely carved two fishes on it in order to show that this second fish is not a fish like the other, viz. that it is not an ordinary fish. Over its head this second fish has a horn and on the top of this horn something like a rake . Now this sign, some times shown with five points instead of four thus, , is found both in Sumer and in Mohenjo-Daro. In Sumer it reads *gal*, in Mohenjo-Daro it reads *per*, and in both the scripts it means "great".[2] This is therefore "the Great Fish" of the Flood and its position in relation with the ship shows that the fish is showing the route to the ship, as is narrated in the Indian Flood stories.

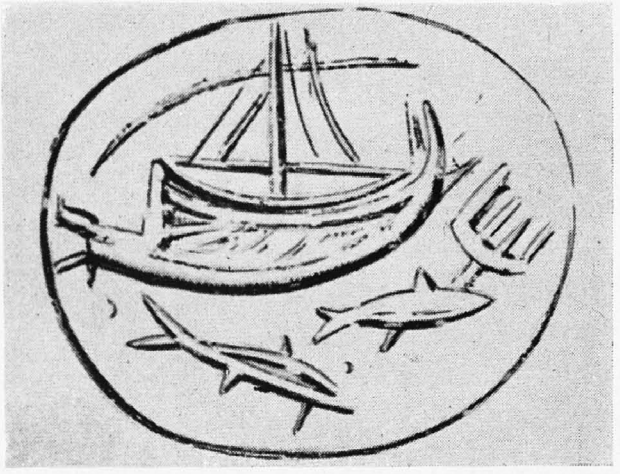

Fig. 281
A vessel and "the Great Fish", on a seal of the early Minoan age of Crete.

This is not the only echo of the Indian Flood that Crete has kept for us. In the long Homeric *Hymn to Apollo*, it is narrated that a ship once travelled from Knossos of Crete to Delphos, being led by Apollo, "his body being in the shape of a dolphin, similar to a great and terrible monster".[3] And just then Apollo is said

[1] Evans, *The Palace of Minos*, II, pp. 239-240.

[2] Cf. above, p. 264.

[3] Homer, *Eis Apóllona*, vv. 399-401.

to have a sword.[1] It is not common to see Apollo holding a sword. Very likely this is a relic of the ancient Indian tradition that introduces the sword-fish tugging the ship of Manu=Satya Vrata.

Fig. 282
The girl impersonating the goddess Mīnākṣī, and the leading fisherman at Madurai.

In the same way in the Babylonian account of the Flood, which evidently was reproduced from the Sumerian account, two gods appear before the boat of Ut-Napishtim, leading the way in the midst of the troubled waters.[2]

The ancient Cretan legend of Apollo as a dolphin leading the ship to Dolphos left its mark in Greek mythology. Apollo was considered the patron of sailors and of colonization, and as such he was supposed to travel over many seas as a dolphin.[3] Apollo-Delphinios, in fact, was the god believed to lead all the ships of merchant adventurers.[4]

In the same way the Indian story of the Flood has left its trace in modern Hindu mythology. The Fish of the Flood, though originally being a form of Āṇ=Śiva, became afterwards an incarnation of Viṣṇu, the *Mātsyāvatāra* of the *Mātsya* and the *Bhāgavata Purāṇas*.

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[1] *Ibid.*, v. 395.

[2] Leonard, *Gilgamesh*, p. 64. Cf. *Revue d'Assyriologie*, XX, pp. 127 ff.

[3] Artemidorus, II, 35.
Allan-Halliday-Sikes, *The Homeric Hymns*, pp. 262-263.

Removing all mythological relics from this episode of the Fish tugging the ship during the Flood, it will only remain that God was directing the ship in that stormy sea. This is precisely what was said by Abydenus in his account of the Flood, according to Eusebius of Caesarea, that the ship of Xisuthrus (Noah) reached Armenia "with the favour of God".[1] The Persian poet Jāmi again records the same divine favour: "If by His generosity (of God), the road had not been open, how could Noah's ark have reached the Mount Ararat ?"[2] The *Book of Wisdom* puts it more graphically still, when it mentions Noah's ark as a vessel which was governed by the hand of God.[3]

V

THE FEAST OF THE FISH CELEBRATED IN MADURAI

India, the country of millenary traditions, perpetuates the memory of the Flood in a practical way. Manu=Satya Vrata was saved from the impending calamity thanks to the announcement made by the Fish, while he was performing ablutions in the River Kritamal. Every year, on the first of February, this great event is commemorated by the simple folk of Madurai in cooperation with the authorities of the Śrī Mīnākṣī Temple.

In very ancient times, when the Kritamal was a conspicuous river, the ceremony most probably took place on the banks of the river itself where Manu was supposed to have received the announcement of the Deluge. At pressent this river looks rather like an abandoned canal half full of muddy water, that extends from a large tank called Mādakkulam to the west of the city of Madurai, crosses the southern quarters of the city and joins the River Vaigai to the south-east of the city. This is the *kūdal* or *saṅgam*, the proper junction of the two rivers which gave its name to the primitive city.

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[1] Eusebius Caesariensis, *Chronicorum* l. I, c. VI: Migne, *P.G.*, XIX, col. 122.

[2] Jāmi, *Yusuf-wa-Zulaikha*, V, 12.

[3] *Wisd.*, XIV, 6.

Fig. 283
The fishing of the fish at the Valaivisuntepakkulam, Madurai.

It being now impossible to hold the ceremony in the Kritamal itself, it is being held in a tank in its vicinity called Valaivisuntepakkulam, "the net-throwing tank".

For this festivity a large *pendal* or *mandapam* is erected in front of a small shrine, wherein a great crowd gathers from very early hours. A little girl, handsomely attired and profusely garlanded, is to preside over the ceremony. She is supposed to impersonate goddess Mīnākṣī, the goddess of fish-eyes, worshipped in the temple, and patroness of Madurai. She comes there to witness the fishing of a fish, which symbolically represents the Fish which made the great announcement to Manu. The young goddess then appoints as her representative a man who is to fish the Fish on her behalf. This man in his turn chooses a few young men who help him in the actual fishing.

The fishing is done by means of a fishing net. When the net is drawn out of the water after catching the fish, there is great jubilation

in the crowd. The fish is put inside a vessel in the same way as Manu did so many thousands of years ago at the Fish's request. This vessel is then placed within a palanquin and taken to one of the waiting elephants which the temple authorities have sent. A procession is then formed.

Several palanquins with images of goddess Mīnākṣī join the procession. The elephants are nicely caparisoned. The one which opens the show carries the flag-bearer of the fish-eyed goddess. Thus the Fish reaches the temple where it is presented to the goddess and where it is kept for several days in the glass vessel. Finally it is thrown into the great Tank of Madurai called the Teppakulam.

Thus does Madurai commemorate every year the Fish that was supposed to have spoken to Manu in a remote past.

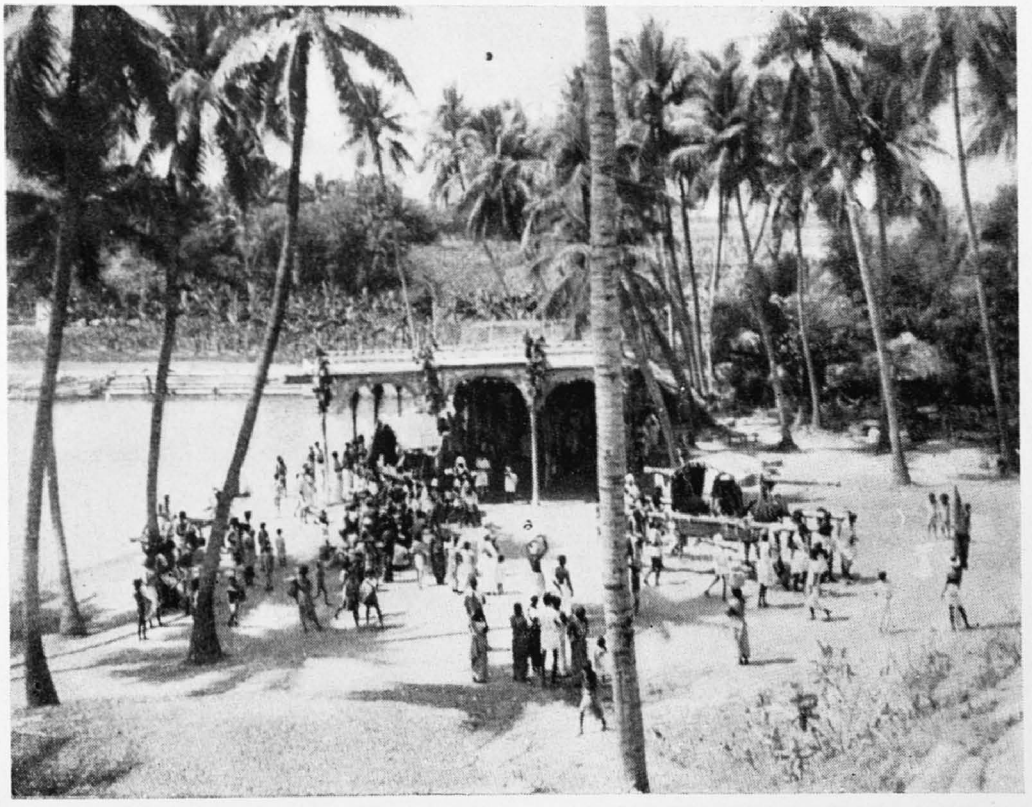

Fig. 284
Forming the procession after the fishing ceremony.

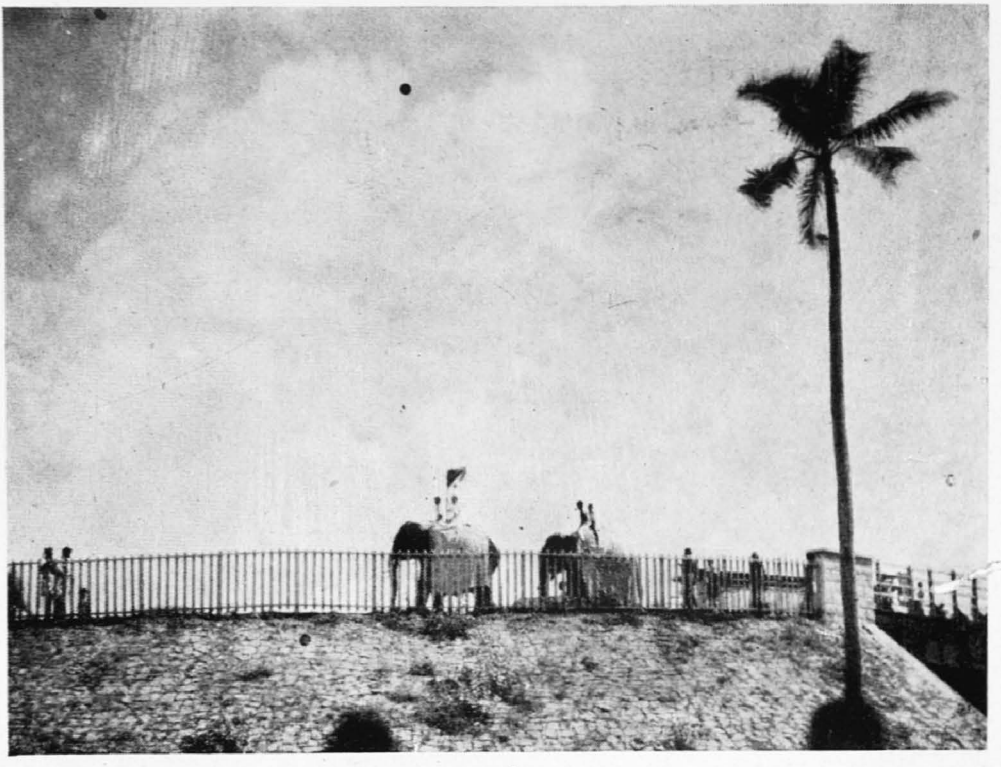

Fig. 285
The head of the procession returning to the temple.

Appendix

THE STORY OF THE FLOOD IN SUMER

The story of the Flood is doubtlessly a landmark in the history of Sumer. Some fragments of a tablet concerning this catastrophe were published and translated as far back as 1914. But the connected account of the event is only found in the poem of Gilgamesh, the famous half-legendary king of Uruk (Erek), discovered by the middle of the last century in the library of the Assyrian King Assurbanipal. This poem is written in the Semitic language of Babylon. It is now beyond doubt that the story of the Flood was introduced into the poem at a later period.[1] The original language of the poem was very likely Sumerian, for it is now acknowledged that the Babylonian Deluge myth is of Sumerian origin.[2] When this Semitic

[1] Wallis Budge, *The Babylonian Story of the Deluge*, p. 26.
[2] Kramer, *Sumerian Mythology*, p. 97.

Fig. 286
Images of Mīnākṣī in their *palkis* for the procession.

translation was made, it is a matter of surmise. The only thing we know is that Assurbanipal, in about 668 B.C., "had caused this ancient text to be preserved in a carefully prepared copy";[1] which was not the only one, for other tablets or fragments of them have also been unearthed in Nineveh itself.[2]

Yet these are not the only accounts of the Flood coming from Mesopotamia. Berossus, the priest of Bel, whom we have mentioned several times,[3] also included the narrative of the Flood in his history. The name of the hero, builder of the ship, who was with his family saved from that great calamity, is not Ut-Napishtim, as in the poem of Gilgamesh, but Xisuthrus, the son of Ardates. This name of the hero of the Flood connects Berossus' account

[1] Leonard, *Gilgamesh*, p. IX.
[2] Cf. Wallis Budge, *op. cit.*, p. 38.
[3] Cf. above, p. 187.

directly with the Sumerian tradition rather than with the Babylonian translation of it, for the Sumerian tablet mentioned above calls the hero of the Flood Ziusudra,[1] of which the Xisuthrus of Berossus is only a Greek transliteration.[2] Ut-Napishtim seems to be a Babylonian translation of the Sumerian name which means "The day of prolonged life".[3] A Hurrian fragment of the story of the Flood found in Boghaz-koi, the Hittite capital, calls the Flood hero Nahmanlel or Nachmolel, which seems to mean"Pleasing to the God." This seems to be the name most approaching the name of the hero of the biblical story[4] and, incidentally, not very dissimilar to the name of the Indian hero Manu.

The rest of the story substantially agrees with the story of Ut-Napishtim. In both the cases God announced the Flood. According to Berossus, Xisuthrus was ordered to write "a history of the beginning, procedure and conclusion of all things", and to bury it in the city of Sippara (Shuruppak), which is also the city wherein Ut-Napishtim lived.[5]

The historicity of the Flood is now beyond doubt among critics and exegetes. "There is little reason to doubt", in the words of Seton Lloyd, "the authenticity of the historical event which afterwards came to be referred as *the* Flood".[6] "It would be absurd", says Sir C. Leonard Woolley "to deny the ultimately historical character of a story which bears on itself the stamp of truth".[7] On this account, the same author finally confesses that "the book of Genesis suddenly becomes personal and historical".[8]

It is also evident that the Sumerians regarded the Flood as an historical event, so as to include it within the frame of their history;

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[1] Kramer, *op. cit.*, p. 97. Such is also the name of the hero of the Flood in the *King List*. Jacobsen, *The Sumerian King List*, p. 60, n. 113.

[2] See different spellings of this name in fragments of different Greek authors, in Jacobsen, *op. cit.*, p 76, note 34.

[3] Landersdorfer, *Die sumerischen Parallelen zur biblisch Urgeschichte*, pp. 7-26.

[4] Burrows, "The Discovery of the Flood", *The Dublin Review*, CLXXXVI (1930), pp. 10-12. Also in *J.R.A.S.*, (1925), pp. 281-282.

[5] Cory, *Ancient Fragments*, pp. 26 ff.

[6] Lloyd, *Twin Rivers*, p. 17.

[7] Woolley, *The Sumerians*, p. 31.

[8] Wollley, *Abraham*, p. 20.

for some of their tablets contain lists of kings who reigned before the Flood, and Gilgamesh, the ancient King of Uruk, was supposed to be a descendant of Ut-Napishtim, the hero of the Flood. Moved by these ideas some modern authors consider the Flood as an event in Sumerian history, so that those pre-Flood kings should also be Sumerian kings.[1] Again Sir Leonard Woolley says : "The (Sumerian) annalists in their sober table of the reigns of kings made mention of it (the Deluge) as an event which interrupted the course of history. Then came the Flood, and after the Flood 'kingship again descended from heaven'".[2] According to the *King List* the Flood took place during the reign of Ubara-Tutu of Shuruppak.[3] Accordingly says Woolley once more : "The Sumerians of 2000 B.C. believed, probably with reason, that the Flood interrupted, but did not dislocate altogether the national life".[4] Accordingly it is stated that "the Sumerian occupation of the country dated from before that great disaster".[5] It is therefore admitted that the Sumerians survived the Flood.[6]

If that were so, how could the accounts say that all the people of the country perished ? Sir Leonard himself admits that the Deluge was only a local disaster confined to the lower Valley of the Two Rivers, "but for the occupants of the Valley, that was the whole world".[7] How the Sumerians escaped death, he tries to explain : "The cities which, walled and raised on artificial platforms, resisted the Flood, were the seats of the Sumerian invaders ; it was the open villages of the more barbarous Semitic-speaking folk, that felt the full fury of the waters".[8] If that were so, what was the need for the Sumerian Ziusudra to build the ship ? By taking refuge within one of those cities, he could have been saved.

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[1] Cf. Gadd, *History and Monuments of Ur*, pp. 25-26.
[2] Woolley, *Ur of the Chaldees*, pp. 21-22.
[3] Jacobsen, *The Sumerian King List*, p. 77.
[4] Woolley, *The Sumerians*, p. 33.
[5] *Ibid.*, p. 31.
[6] Woolley, *Ur of the Chaldees*, p. 32.
[7] *Ibid.*
[8] Woolley, *The Sumerians*, p. 32.

Our Sumerian archaeologists, enchanted with the idea that the Deluge occurred in Sumer, easily find circumstantial evidence to prove that it occurred there. "The details harmonize so perfectly with the local conditions of the southern delta that only here could the tale have originated".[1] The final conclusion covers more ground by its exclusiveness than what the premise allows, for there could be similar or better conditions favouring a flood elsewhere. In any case, they had for a long time been looking for tangible proofs of the Flood in the course of the excavations and finally they seemed to have found them in the shape of eight feet of sediment in the city of Ur. Evidently the silt was the relic of *a* flood. It must be of *the* Flood.[2] It was a foregone conclusion. Continuing their excavation under that layer of sediment Sir Leonard Woolley sings gloriously : "We were down in the ruins of that Ur which existed before the Flood".[3] The same evidence soon came from three more cities, Kish, Warka (Uruk) and Shuruppak (Fara).[4] Fr Burrows, one of the excavators, with a tremendous mass of scientific array, proved the historicity of the Noachic Flood, after having been in the antediluvian city of Ur.[5] Yet this optimism was soon cowed down, for in further excavations conducted in the same spot, seals bearing the image and exploits of Gilgamesh, a post-diluvian King of Uruk, were found under the alluvial layers of Ur, which were supposed to be relics of the Flood.[6] That was undoubtedly the relic of *a* flood, but not of *the* Flood. Our archaeologists themselves acknowledge that "lower Iraq is a country where floods are a most common occurrence".[7]

Nor was the enthusiasm of those authors less objectionable when they brought forward the testimony of the Sumerian documents as

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[1] *Ibid.*, p. 31. Cf. Woolley, *Abraham*, p. 170.

[2] Woolley, *Ur of the Chaldees*, p. 29.

[3] *Ibid.*, p. 30. Cf. Woolley, *Abraham*, p. 170.

[4] Lloyd, *Mesopotamia*, p. 88 ; Lloyd, *Twin Rivers*, p. 17.

[5] Burrows, "The Discovery of the Deluge", *The Dublin Review*, CLXXXVI (1930), pp. 1-20.

[6] J. Renie, while reviewing *Ur en Chaldée* par Sir Leonard Woolley, *Nouvelle Revue Apologétique*, 1939, p. 184.

[7] Lloyd, *Twin Rivers*, p. 17. Cf. Woolley, *The Sumerians*, p. 31 ; Contenau, *L'Epopée de Gilgamesh*, p. 205 ; Enciso Viana, *Problemas del Génesis*, pp. 188-196.

fully trustworthy, for placing the Deluge within the frame of Sumerian history. For so do also other nations besides. Indian scriptures narrate the story of the Flood as an event occurred in the life of an Indian King, Manu =Satya Vrata, and it is announced in the city of Kūdal, modern Madurai. Have we to admit, owing to these authorities, that the Flood occurred as well in India, and that also this nation had a hero saved from that great calamity? How many Noah's would then finally exist?

We should easily realize that the old scribes of the Sumerians, in the same way as Berossus, who after so many centuries followed in their footsteps, were not writing a history of the Sumerian nation, but only of the Sumerian land, *i.e.* of the land occupied by the Sumerians. That is the reason why the ten prediluvial kings are introduced and why the Flood is mentioned. On the contrary, if the Flood account is considered as a chapter of Sumerian history, if those pre-Flood kings are supposed to be Sumerian kings, as those archaeologists would make us believe, these events must be placed as having taken place later than the landing of the Sumerians on the shores of Mesopotamia.[1] These Sumerians, who settled along the banks of the Euphrates and Tigris, were, as we shall see in the next chapter, descendants of 'Hām, one of the sons of Noah. How could those pre-Flood kings of the list be Sumerians, when the ancestor of the Sumerians, 'Hām, had not yet entered the field of history? The account of the Flood itself, as well as the archaeological results of the excavations, if studied dispassionately, suggest that the pre-Flood history is not Sumerian history. First of all Ziusudra=Ut-Napishtim lived at Shuruppak in an Akkadian District, not in one of the Sumerian cities. When Ea, betraying the secret of the council of "the great gods who conceived a plan to make a stormflood", announced the forthcoming disaster to Ut-Napishtim, he with marvellous ingenuity whispers the secret to the dwelling where Ut-Napishtim lived, not to Ut-Napishtim himself directly; and this dwelling happens to be not a brick built house, one of those houses

[1] Cf. above, pp. 186-201.

the Sumerians built as soon as they landed in Mesopotamia,[1] but a reed-hut, as were the dwellings of the Semitic folk whom the Sumerians found there. So Ut-Napishtim himself reveals to Gilgamesh :–

"He (Ea) told their discussion to a reed-hut :
'Reed-hut, reed-hut ! Hut-wall, hut-wall !
Reed-hut, listen ! Wall, take it in !
Thou man from Shuruppak, son of Ubara-Tutu,
Tear down thy house, build a ship !
Let riches go, seek life,
Despise possessions, save thy life !
Bring living things of all kinds into the ship,
The ship that thou art to build !' . . .
I understood, and I say to Ea my Lord :
'I perceive, my Lord, what thou sayest ;
I hold it dear, and will carry it out.
But what shall I say to the city,
To the folk and to the elders ?'
Ea opened his mouth and speaks,
Says to me, his bondman :
'Man, thus shalt thou speak unto them:
Enlil hath taken a loathing to me,
Therefore will I not any longer dwell in your city.
The land of Enlil I will not see more' ".[2]

Ut-Napishtim therefore is not to see the land of his birth any more. His ship had to land elsewhere. It was not to be a local flood, one of the many local floods that occurred in lower Sumer.

Now if we study the *King List* we shall find that the first dynasty of Kings after the Flood is at Kish, not in Sumer, but in Akkad, in upper Mesopotamia inhabited by the Semites. Moreover in this dynasty there are four names which are Semitic.[3] Then comes the dynasty of Uruk and then the first dynasty of Ur, which are fully

[1] Cf. above, pp. 197-198.

[2] Leonard, *Gilgamesh*, p. 61.

[3] Cf. Woolley, *The Sumerians*, p. 48.

Sumerian. It seems therefore that the beginning of the post-Flood history of Mesopotamia, according to this document, is Semitic. The Sumerians are late comers after the Flood. In point of fact Sir Leonard Woolley confesses that in the lowermost levels of Ur he found "the same flints and coloured pottery of the non-Sumerian folk".[1]

It seems therefore very doubtful, nay almost impossible, that the Flood should have affected lower Mesopotamia only. Mesopotamia may possibly have been affected, but the Flood undoubtedly covered a much larger area. We should remember that both in the Babylonian and in the Indian account, as well as in the biblical story and in Berossus, the ship stops at a mountain, and there are no mountains in lower Mesopotamia.[2]

The Flood is therefore an event prior to the history of Sumer and of the Sumerians. But it was an event of such an extraordinary importance, owing to its destructive effects as well as to the miraculous providence of God upon the family of Noah=Manu=Ut-Napishtim, that its memory was deeply engraved in the minds of Noah's descendants. When the Sumerians, children of 'Hām, landed on the shores of Mesopotamia, the memory of the Flood was one of the souvenirs, which they brought from India, a souvenir which did take deep roots in the new land at a later period, so as to appear a Sumerian story in its origin, growth and final development, just as it appears Indian in India and Egyptian in Egypt.[3] Our explanation is confirmed, though negatively only, by the recent excavations of Mesopotamia. Although the names of several ancient Mesopotamian cities, such as Sippar and Shuruppak, are spoken of as having been ruled by some of the pre-diluvian kings "no contemporary document has ever been found during recent excavations in the ruins of those cities which would link any one of the names in the list with the

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[1] Woolley, *Ur of the Chaldees*, p. 29.

[2] As to the actual extension of the Flood cf. Sutcliffe, *Who perished in the Flood?* (C.T.S.), pp. 10-20. Cf. also below, pp. 474-477.

[3] The same phenomenon took place in connection with the myth of the Lion-Fighter, of which we shall speak in a further volume of this work. The myth, originally Indian, takes a Sumerian shape in Sumer, with a Sumerian hero (Gilgamesh) and a Sumerian setting, though still keeping a few Indian characteristics.

consecration for instance of a building or a statue, and so establish them as real persons".[1]

There cannot be now any doubt as regards the relationship between the Sumerian account of the Flood and the biblical version of it. The general opinion among Sumeriologists is that "the biblical deluge is not original with the Hebrew redactors of the Bible".[2] Accordingly the Flood story of *Genesis* is qualified as a "variant" of the Sumerian Deluge epic.[3] Though differences between the biblical and Sumerian stories are very great, yet the parallelisms, including verbal identity and actual phraseology, are very remarkable. There is no objection in admitting that the story of the Flood as told in *Genesis* is based on the Sumerian legend ; but the author of the former put aside all the mythological elements which had crept in, the latter thus giving us the true history of that event, "the purified Hebrew version".[4]

Many critics have tried to prove that the Hebrews learned of the Sumerian Flood through the Babylonian version, at the time of the captivity of Babylon, thus declaring that the author of the Hebrew version was not Moses but a much later author. But Sir C. Leonard Woolley finds much greater differences between the Babylonian legend and the biblical account than between the latter and the early Sumerian stories ; and since the oldest written versions of the Flood story in Sumer go back to more than two thousand years before Christ, *i.e.* "as early as the time of Abraham's birth", he is of opinion that the Hebrews knew the story through Abraham.[5] Moses therefore heard of the Deluge through the descendants of Abraham in Egypt and could thus consign it to writing in the book of *Genesis*.

As regards the ten kings who according to the *King List* reigned before the Flood, they were not Sumerian kings in the least. They

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[1] Lloyd, *Twin Rivers*, pp. 16-17.

[2] Kramer, *Sumerian Mythology*, p. 97.

[3] Woolley, *The Sumerians*, p. 31.

[4] Woolley, *Abraham*, p. 157.

[5] *Ibid.*, pp. 169-172.

have been compared to the ten kings of Egypt in pre-historic times, to the ten successors of Gaiomart, the first man of Iranian scriptures, to the ten *pitṛs* who lived after the creation in India, and to the ten antidiluvian kings of Berossus' chronicle.[1] Hence they very probably are the Sumerian counterpart of the ten patriarchs, mentioned in *Genesis* before the story of the Flood.[2] Fr Burrows compares the meanings of the names of the *King List* with those of the biblical Patriarchs, and finds some very striking resemblances and parallelisms.[3] The present writer even considers the possibility of finding other Indian counterparts of the ten Patriarchs in the lists of the previous Buddhas and of the Jaina Tīrthaṅkaras.

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[1] Steinmueller, *Some Problems of the Old Testament*, I, pp. 86-87.

[2] Simón Prado, *Praelectiones Biblicae*, V.T., I, pp. 75-76.

[3] Burrows, "Notes on the Antediluvian Kings," *Orientalia*, I, pp. 58-59.

CHAPTER V

THE HAMITIC INDO-MEDITERRANEAN RACE

I

THE MIGRATIONS OF THE DRAVIDIANS

THE studies in the Proto-Indian civilization, in which I have been engaged for a number of years, both in India and in Spain and Italy, have led me to investigate the origins of the post-diluvian history of man, when the division of the great Noachic family took place.

In the course of my study I witnessed the primitive Dravidian tribes of India leaving the shores of their country to settle in *kurukūr*, "foreign lands", and in particular in the plains of Sumer, under the command of Uvanna (Oannes), Andubar and Odakon.[1] There, being known as *Sumerians*, they began building brick houses, according to *Genesis*,[2] after the pattern of those left at Mohenjo-Daro or other cities of India.[3] Members of the same Proto-Indian family likewise settled in Syria ; thus they lay the foundations of the great *Hittite Empire* ;[4] and hence proceeding forward they reached the Mediterranean shores, where, known as *Phoinikés* (*Phoenicians*) from the name of their own tribe, the Paṇis ("Palm trees"), they launched the greatest commercial undertakings of ancient times ;[5] while others definitely settled in both the islands and the continent of Greece and in the Italian peninsula, where they are respectively known as *Minoans*, *Minyans* and *Etruscans*.[6]

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[1] Cf. above, pp. 186-201.

[2] *Gen.*, XI, 3.

[3] Cf. Marshall, *op. cit.*, III, pls. XXIV, XLIV, XLV, etc. ; Vats, *op. cit.*, II, pls. XXX, XXXII, XXXIII and *passim*.

[4] Cf. Garstang, *The Hittite Empire*, pp. 1-9. The connections between the Hittites and the Proto-Indians may well be noted through their religion, their script and their sculpture. The affinities of the latter with Indian sculpture were pointed out as early as 1898 by Condor, *The Hittites and their Language*, pp. 129-130. We shall speak about this problem at length in the second volume of this work.

[5] Autran, *Mithra, Zoroastre et la préhistoire aryenne du christianisme*, pp. 65-72. This migration will be studied at length in the following volume.

[6] Apollodorus, II, 1. Both ancient historians and archaeology point to Asia Minor and Syria, *i.e.* the Hittite Empire, as the original immediate home of the Etruscans. Cf. Haddon, *The Wonderings of Peoples*, p. 41.

Meanwhile other Dravidian tribes had also sailed from India to colonize the Yemen,[1] the future Land of Punt of the Egyptians. The *Periplus of the Erythraean Sea* narrates the foundation of the city of Eudaemon—the modern Aden—the centre of trade of the *Minaeans* of Yemen, thus : "It was called Eudaemon, because in the early days of the city when the voyage was not yet made from India to Egypt, and when they did not dare to sail from Egypt to the ports across the ocean (those of India), but all come together at this place, it received the cargoes from both countries, just as Alexandria now receives the things brought both from abroad and from Egypt".[2] The author of the *Periplus* clearly shows that Eudaemon was founded by the merchants of India—the Mīnas, called Minaeans by Strabo,[3]—as a stepping stone to proceed to Egypt. Pliny speaks of these Minaeans, as of the oldest commercial people of Arabia, who had a monopoly in the trade of myrrh and frankincense through their control of the caravan routes from the producing regions.[4] The same author testifies to the relationship existing between these Minaeans and King Minos of Crete.[5] Prophet Ezechiel commemorates the fact that their trade expeditions reached the very Phoenician city of Tyre.[6]

These Minaeans finally, as seen above, crossed the Red Sea, and took possession of the land of the Nile, wherein they caused the wonderful *Egyptian civilization* to flourish.[7] In an instruction of Pharaoh Merikara, of the IXth dynasty, to his son (*c.* 2250), the old Monarch, describes the country of their origin in Asia, whence so many invasions had entered Egypt. "The country wherein he (the Asiatic) dwells is difficult, owing to its rivers, its numerous trees and its mountains which make the paths uncomfortable. As regards himself he can never remain in the same place ; his legs are

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[1] Hommel, "Arabia before Islam" in *Encyclopaedia of Islam*, I, pp. 377-380.

[2] *The Periplus of the Erythraean Sea*, 26, p. 32. Cf. above, pp. 355-356.

[3] Strabo, XVI, 4, 2.

[4] Pliny, *Natural History*, VI, 32.

[5] *Ibid.*

[6] *Ezech.*, XXVII, 22.

[7] Elliot Smith, *The Ancient Egyptians*, pp. 81-101. Cf. above, pp. 325-339.

Fig. 287
Arrival of dark people from Asia in Egypt, from a painting in the tomb of Beni-Hassan. (XIIth dyn.)

always on the move and he always fights from the time of Horus".[1] Merikara seems to depict India, certainly not Arabia or Mesopotamia, with its numerous rivers, vast forests and very high mountains. He moreover commemorates that first Indian invasion of the times of Horus.[2] Then these Asiatics spreading along the Northern Coast of Africa, where they were known as *Garamantes, Libyans, Numidians* and *Bereberians,* finally landed in the Iberian Peninsula, where the Romans met them and styled them *Iberians,*[3] because they lived near the river *Ibār,* called by the Romans *Iberus.* Finally, some of the Iberians of Spain, progressing northwards settled in central Europe and even in the British Isles, where under the denomination of *Druids* they were later racially confused with the Celtic late comers.[4] These waves of successive migrations are acknowledged by modern anthropologists. The earliest one which arrived in Egypt is styled of "Proto-Hamites," and it is suggested that the movement began in the latter part of the glacial period. "Successive migrations of light-skinned, pastoral Hamites came later. The earliest of these spread all over north Africa, those in the east were the archaic Egyptians, to the west were the Libyans (and their descendants the Berbers), those who crossed the Mediterranean formed the European branches of the Mediterranean race".[5]

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[1] Papyrus 116 of Petersburg, in Moret, *Des Clans aux Empires,* pp. 253-254.

[2] Cf. above, pp. 292-294.

[3] Philipon, *Les Ibères,* pp. 37-139. Cf. below, p. 485.

[4] Schulten-Bosch Gimpera, *Fontes Hispaniae Antiquae,* I, p. 63, vv. 195-198. Cf. Heras, "Quiénes eran los Druidas ?", *Ampurias* (Barcelona), II, pp. 17-32.

[5] Haddon, *The Wanderings of Peoples,* pp. 54-55.

All these ancient nations may now be considered from the anthropological point of view. First of all, Keith establishes the principle that the typical Hammite is dolichocephalic or long-headed.[1] It is also acknowledged that the Mediterraneans are dolichocephalic.[2] And Sergi thinks that "the Egyptians, as well as all other Hamitic peoples came from Asia".[3] "At the beginning of history," says Haddon, "Asiatics came into Egypt at first from the south, bringing possibly bronze and probably the plough and corn";[4] while Mons. Poisson is of opinion that the Mediterraneans entered Europe from the South in the course of the mesolithic period.[5]

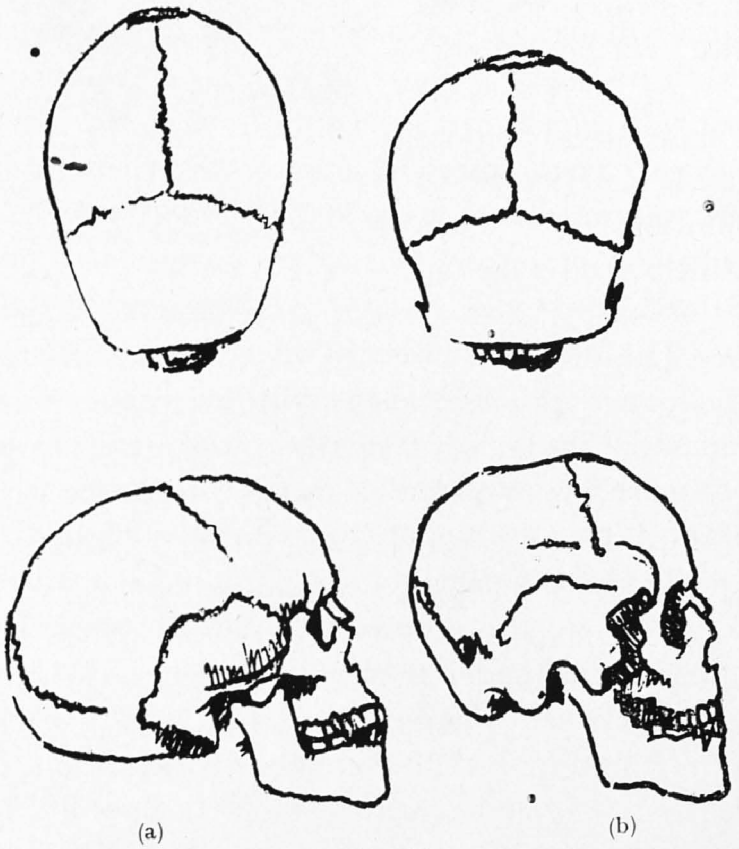


Fig. 288
The two most ordinary cephalic types: (a) Dolichocephalic of the Proto-Indo-Mediterraneans; (b) Brachycephalic of the Indo-Europeans.

As regards India itself, the results of the ethnographical studies of Risley cannot be more significant. "All along the eastern and northern frontier of Bengal", says he, "we meet with a fringe of compact tribes of the short-headed or brachycephalic type, who are

[1] Keith, "The Racial Character of the Southern Arabs", in Thomas, *Arabia Felix*, p. 327. In the dolichocephalous type the breadth of the head is less than four fifths of the length; while in the brachycephalous or short-headed people the breadth is at least four fifths of the length.

[2] Poisson, *Le Peuplement de l'Europe*, pp. 98-99.

[3] Sergi, *The Mediterranean Race*, p. 85.

[4] Haddon, *op. cit.*, p. 55.

[5] Poisson, *op. et loc. cit.*

beyond question Mongolian. Starting from this area and travelling up the plains of India northwestward towards the frontier of the Punjab, we observe a gradual but steady increase of the dolichocephalic type of head... Bengal itself is mostly mesaticephalic, and dolichocephaly only appears in some of the Dravidian tribes. In Behar dolichocephalic averages are more numerous; in Oudh and the North-West Provinces this type is universal and it reaches its maximum in the Punjab".[1] Ripley, after acknowledging that the authochthonous population of India is dolichocephalic and Mediterranean,[2] affirms: "There can be no doubt of their racial affiliation with our Berbers, Greeks, Italians and Spaniards. They are all members of the same race, at once the widest in its geographical extension, the most populous, and the most primitive of our three European types".[3] The great Italian anthropologist Sergi was extraordinarily startled when realizing the absence of the well known so-called Āryan type from the actual population of India; and, not daring to affirm that the Āryan invaders had been absorbed by the former inhabitants of the country, astonishingly concludes that "the Aryans of India were anthropologically different from the Aryans of Europe, who are brachycephalic".[4] That is the reason why Dixon wrote about the Āryan invaders, in 1911: "The newcomers were tall in stature, fair of skin, and were a blend of Caspian and Mediterranean types".[5] He had been misled by the universal cephalic type in India. What Sergi and Dixon did not dare to say in the beginning of the century has been boldly

Fig. 289
A portrait in stone of a bearded Mohenjo-Darian.

[1] Risley, *Tribes and Castes of Bengal*, I, p. XL.
[2] Ripley, *The Races of Europe*, p. 450.
[3] *Ibid.*, p. 151.
[4] Sergi, *Gli Arii in Europa e in Asia*, p. 86.
[5] Dixon, *The Racial History of Man*, p. 266.

affirmed by Hall, of the British Museum, somewhat later: "Among the modern Indians, as amongst the modern Greeks or Italians, the ancient pre-Āryan type of the land has (as the primitive type of the land always does) survived, while that of the Aryan conqueror died out long ago".[1] This dolichocephalic type prevalent now throughout India is, therefore, the ancient Dravidian or Mediterranean type. "The Dravidians," says Prof. Suniti Kumar Chatterji, "apart from the Mohenjo-Daro context, have been suggested as being a Mediterranean people. The Mohenjo-Daro civilization shows noteworthy Mediterranean and West Asian affinities".[2] In point of fact out of the four definite types of skulls discovered among the few human remains unearthed in Mohenjo-Daro, the Mediterranean type is the most numerous :–

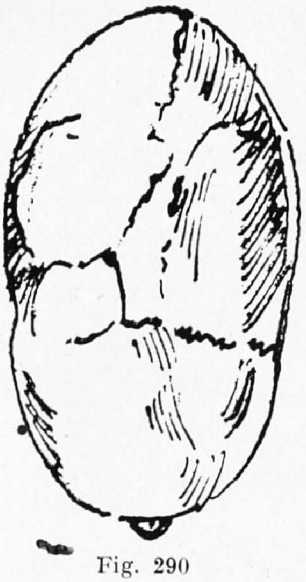


Fig. 290
A dolichocephalic skull discovered at Mohenjo-Daro (*Norma occipitalis*).

Proto-Australoid Race	..	..	..	3 skulls
Mediterranean Race	..	..	..	6 ,,
Mongolian Branch of the Alpine Stock			..	1 ,,
Alpine	..	..	..	1 ,, [3].

Turning now to Mesopotamia, the above mentioned Mr Hall will again tell us of the ethnographical affinities of the Sumerians. "It is to this Dravidian ethnic type of India, that the ancient Sumerian bears most resemblance, so far as we can judge from his monuments. He was very likely a southern Hindu of the Dekkan . . . And it is by no means improbable that the Sumerians were an

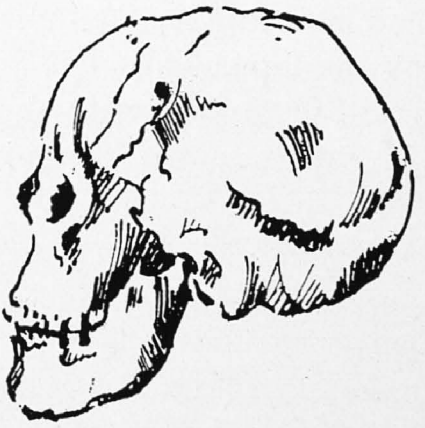


Fig. 291
A dolichocephalic skull unearthed at Mohenjo-Daro (*Norma lateralis*).

[1] Hall, *The Ancient History of the Near East*, p. 173.
[2] Chatterji, *Indo-Aryan and Hindi*, p. 43.
[3] Marshall, *op. cit.*, II, pp. 638-644.

Fig. 292
A Proto-Indian of the Indus Valley from Mohenjo-Daro.

Indian race which passed certainly by land, perhaps also by sea, through Persia to the valley of the Two Rivers".[1] Buxton and Rice are of the same opinion: "There are indications that the older population both in India and Mesopotamia before the coming of the round heads, was similar".[2] The studies of Sir Arthur B. Keith have confirmed this view. After examining the skulls unearthed during the excavations conducted in several Sumerian cities, Sir Arthur has found that the Sumerians were dolichocephalic and of large intellectual capacity.[3] It is now, therefore, admitted that the Sumerians were dolichocephalic,[4] different from the Semites living amongst them.[5] Accordingly Prof. Elliot Smith thinks that the Sumerians belonged to the Mediterranean race.[6] The Sumerians, according to Haddon, "consisted of a very dolichocephalic type with a strongly projecting occiput, finely cut face, straight narrow nose, fine lips and bearded—this may be regarded as Mediterranean".[7] Frankfort opines that even the people of al-'Ubaid belonged to the Mediterranean race,[8] as he finds that their skulls, as well as the skulls of Ur, are Mediterranean.[9] According

Fig. 293
A Sumerian from Khafaje.

[1] Hall, *op. cit.*, pp. 173-174.

[2] Buxton-Rice, "The Report on the Human Remains found at Kish," *J.R.A.I.*, LXI (1931), p. 93.

[3] Barton, "Whence Came the Sumerians?", *J.A.O.S.*, XLIX, p. 267.

[4] Barton, *Semitic and Hamitic Origins*, p. 39; Frankfort, *Archaeology and the Sumerian Problem*, p. 42.

[5] Poisson, *Le Peuplement de l'Europe*, p. 119. Keith admits that the Sumerians were mixed with the Semites at Ur. Cf. Frankfort, *op. cit.*, pp. 40-41.

[6] Mackenzie, *Myths of Babylonia and Assyria*, p. 7.

[7] Haddon, *The Races of Man and their Distribution*, p. 101.

[8] Frankfort, *op. cit.*, p. 40.

[9] *Ibid.*, p. 41. Yet Woolley, undoubtedly influenced by the antiquated common idea that anything great could not but be Āryan, says that the Sumerians belonged to the Indo-European stock of the human race. Woolley, *Ur of the Chaldees*, p. 117.

to Dixon the dolichocephalic Mediterranean type has prevailed all over Mesopotamia at all ages of history.[1]

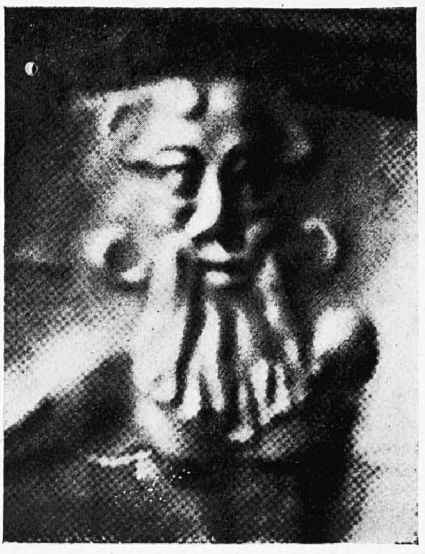


Fig. 294
The traditional dolichocephalic portrait of Gilgamesh, King of Uruk, on the Sumerian seals, after one of the Akkadian period.

Proceeding northwards we now come to the Hittite Empire. The Hittites are often described as Indo-Europeans. Yet Cowley, who has studied them well, would not describe them all as such. "The Egyptian portraits (of the Hittites)," says he, "look as if the people were dolichocephalic and probably of a Mediterranean stock".[2] This he takes as the original Hittite substratum.[3] Evans also describes at least part of them as dolicocephalic.[4] The controversy about the race of the Hittites is mainly based upon the philological studies of the Czech scholar B. Hrozny, which nevertheless are not without suspicion. The official language of the Hittites, generally called 'Hittite', was supposed to have affinities with the Indo-European languages. Yet "the greater part of the vocabulary is of non Indo-European origin".[5] This seems to suggest the existence of an ancient Hittite language, totally different from the Indo-European languages, which was at a later period

Fig. 295
Bust of a Sumerian cut in shell, from Khafaje.

[1] Dixon, *The Racial History of Man*, pp. 252-253.
[2] Cowley, *The Hittites*, p. 31.
[3] *Ibid.*, p. 32.
[4] Evans, *The Palace of Minos*, I, p. 7.
[5] Gurney, *The Hittites*, p. 119.

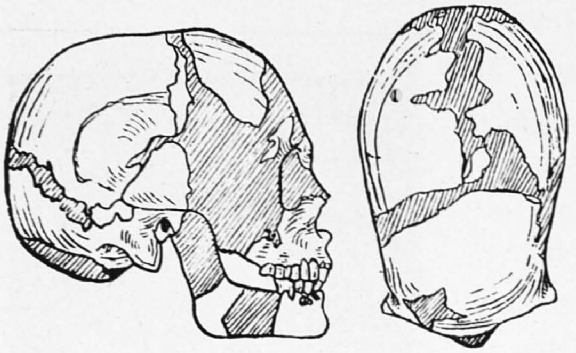
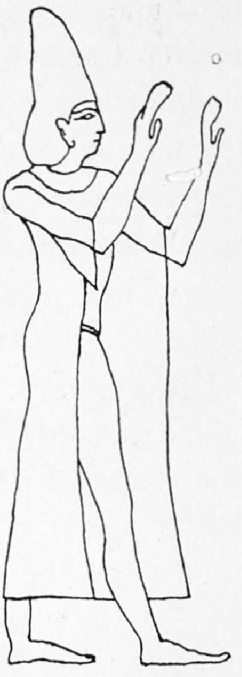


Fig. 296
A dolichocephalic skull found at Troy by Schliemann.

influenced by the Indo-European languages spoken by different waves of immigrants in the neighbourhood, the Mitanni the Kassites and even the very Āryas, on their way to Iran and to India.[1] In point of fact the Proto-Hittite or Hattian language is totally different from the other later Indo-European languages.[2] This Proto-Hittite language presents some agglutinative characteristics which place it very close to the Dravidian languages of India.[3] It is well known how the Hittites spread up to the western coast of Asia Minor and even mixed with the people of Troy, at present called Hissarlik, helping them in their war against the Greeks.[4] Now "of the three skulls found by Schliemann in the second city of Troy it is significant that the two male skulls were dolichocephalic while the female skull was brachycephalic."[5] (Fig. 296). The skulls excavated at Hissarlik, as Sergi remarks, have "a special form of ellipse constantly found in Africa and in the Mediterranean as far as the extreme west, in Spain and Portugal and in the Neoli-



Fig, 297
A Hittite Prince, brother-in-law of Ramesses II, from an Egyptian bas-relief at Abu-Simbel, Nubia.

[1] The mention of Mitra, Indra, Varuṇa and the Nāsatyas by the Mitanni at the end of their treaty of peace with the Hittite King Suppiluliuma (14th cent. B.C.) evidently proves their connection with the tribes of the Āryas before their final settlement in the east. Cf. Albright, *The Archaeology of Palestine*, pp. 86, 182. About the treaty of peace between the Mitanni and the Hittites, cf. Konow, *The Aryan Gods of the Mitani People*, pp. 1-2.

[2] Gurney, *op. cit.*, p. 129.

[3] Cf. *Ibid*, p. 122. It is true that the language only is not a safe index to determine the race of a nation. Nevertheless when a nation has successively spoken several languages the most ancient of all has the greatest probability of being the original language, which we may call the racial language of the nation.

[4] Gladstone, *Homeric Synchronism*, p. 178; Schliemann, *Ilios*, p. 159.

[5] Sayce, "The Aryan Problem — fifty years later," *Antiquity*, I, p. 209. These male skulls were of soldiers, probably Hittite helpers, as the weapons found with them show.

thic interments of Great Britain. . . I find that all these forms are common to the countries we have explored, to Egypt and to Ethiopia".[1] Consequently he concludes: "I am convinced that the primitive population of Lycia and the rest of Asia Minor, as also of Syria, is of the same type as the Egyptian, and derived from the same centre of diffusion. This primitive population constituted the Hittite nation, which, in this case, could not have been Turanian, as Wright and Sayce believe, nor of brachycephalic Armenoid type as Luschan argues".[2] "That is," adds Prof. Bhupendranath Datta, "he takes the primitive population to be of dolicocephalic type, like the other Mediterraneans".[3] "Summarizing the anthropological history of Asia Minor, we draw the following conclusions. First, that the Mediterranean or Iranian racial type represents the older layer in this part of the world . . . A second racial element, subsequently superposed, is that of the Armenoid or brachycephalic type . . . Finally on top of all has come the modern layer of immigrants and more or less nomadic Turks and their fellows".[4]

Fig. 298
The Greek physician Asclepius, after a bust of the 4th century B.C.

The same are the ethnographical results of the excavations held in Crete, about the ancient Minoans. The oldest tombs discovered in that island are of Mediterranean dolichocephals.[5] They still continue the same in later times. "The great majority of the skulls found in Crete", says Barton, "are dolichocephalic. It seems clear,

[1] Sergi, *The Mediterranean Race*, p. 150.

[2] *Ibid.*, pp. 150-151.

[3] Datta, "Ancient Near East and India," *The Calcutta Review*, LXIV (1937), p. 257.

[4] Riply, *op. cit.*, p. 448.

[5] Poisson, *op. cit.*, pp. 126-127; Dottin, *Les Anciens Peuples de l'Europe*, p. 19; Dussaud *Les Civilisations Préhelleniques*, pp. 445, 455; Dixon, *op. cit.*, p. 193.

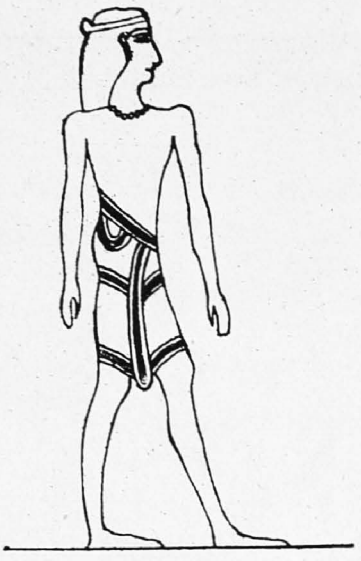


Fig. 299
An inhabitant of the Land of Punt in S.W. Arabia, after a bas-relief in Deir el-Bahari.

therefore, that the bulk of the population belonged to the Mediterranean race".[1] And this type seems to have prevailed in Greece during the historical period, as the numerous Greek statues and busts kept in museums all over the world sufficiently prove. (Fig. 298).

As regards the old kingdom of the Minaeans of Arabia Sir Arthur Keith finds its present inhabitants anthropologically related not with the inhabitants of North Arabia but with the inhabitants of north Africa.[2] He finds in them clear "Hamitic affinity",[3] and remarks that some of them "give a strong hint to the Dravidian, *i.e.* Tamil or Singhalese".[4] "The occurrence, in South Arabia, of these types," says he, "raises an interesting question ; have they an Eastern (Indian) origin, or have the Dravidians moved in from the west, or have both come from a common (intermediate) centre, or, finally, do both represent remnants of a once common aboriginal population, the traces of which are now largely obliterated through the impact of later waves of migration ? . . . How are we to account for the resemblances of the Hamites of Africa with the Dravidians of India ?".[5] On the other

Fig. 300
A skull found in the cemetery of Adichanallur, S. India.

[1] Barton, *op. cit.*, p. 53.

[2] Keith, "The Racial Character of the Southern Arabs", in Thomas, *Arabia Felix*, pp. 310 and 319-321.

[3] *Ibid.*, p. 327.

[4] *Ibid.*, p. 331.

[5] *Ibid.*, p. 332.

hand a modern traveller finds that the present people of South Arabia, totally different from the Arabs of the central and northern regions, resemble the type of the old Sumerian sculptures and statues.[1]

The last remark of Sir Arthur introduces us to the lands of Egypt. The great anthropologist Prof. Elliot Smith is of the opinion that the pre-Dynastic Egyptians belonged to the Mediterranean race just as the Sumerians.[2] Such is also the opinion held by Dixon.[3] On the other hand he has also stated that it is not possible to distinguish between a skull found in the cemetery of Adichanallur, Tirunelveli District, and a few pre-Dynastic skulls of Egypt.[4] (Figs 300, 301). In a similar way, Keith finds an extraordinary similarity between the Sumerian skulls and the pre-Dynastic Egyptian skulls to the extent of affirming that both seem to have a common origin.[5] Dr Stoessiger, still more dogmatic, affirms that the 60 skulls found in the pre-Dynastic tombs of Egypt are eminently dolichocephalic, but having such differences as are only found among the ancient Indians.[6] Mons. Poisson also avers that the culture discovered in the pre-Dynastic tombs of Egypt is the culture of the Mediterranean dolicho-

Fig. 301
A skull discovered in a Meydum Mastaba, Egypt.

[1] Cheesman, "The Deserts of Jafura and Jabrin", *Geographical Journal*, LXV (1925), p. 125.

[2] Elliot Smith, *The Ancient Egyptians*, p. 144.

[3] Dixon, *op. cit.*, pp. 193-194.

[4] Cf. Slater, *Dravidian Element in Indian Culture*, p. 81, n., pls. VI and VII.

[5] Cf. Barton, "Whence Came the Sumerians?", *op. cit.*, p. 267.

[6] Stoessiger, "A Study of the Badarian Erania recently excavated by the British School of Archaeology in Egypt", *Biometrica*, XIX (1927), pp. 125-127.

cephalic nations.[1] And Mons. Jéquier concludes that the race that inhabited archaic Egypt "was very familiar to the race which in the oldest times dwelt throughout the Mediterranean basin, and related in particular to the Libyans and Bereberes. Thus one finds the same funeral ritual, and the same system of burial in primitive Egypt, in the Greek Islands, in Greece and even in Italy. All this seems to suggest a racial relationship among the peoples that inhabited these countries before the Aryan (*sic*) invasion. They have also pointed out some elements of Sudanese or rather Nubian origin. . . . There is nothing there of Aryan or even Semitic races".[2] This similarity of race consequently caused no change in the original Hamitic population of Egypt when other Mediterraneans invaded the country of the Nile. "The historical invasions of Egypt", remarks Haddon, "were by peoples of such close physical similarity, that the racial type was little affected by them; thus the invasions of the Delta by the Libyans from the west, and the Mediterranean 'sea-peoples' from the north in the thirteenth and twelfth centuries B.C. made no lasting impression on the population".[3]

Fig. 302
Portrait of a captive of the Lebu (Libyans), from a sculpture of Medinet Abu, Egypt. (4)

As to the other ancient nations of North Africa, Bates, who has made very deep scholarly studies of their different aspects, informs us that "from the Mediterranean to the Sudan, and from the Atlantic to the Red Sea dialects of the Hamitic family are yet to be found".[4] From which he concludes that the substratum of the population of this vast tract must have been Hamitic, though the present

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[1] Poisson, *op. cit.*, p. 123.
[2] Jéquier, *op. cit.*, pp. 85-86.
[3] Haddon, *op. cit.*, p. 58.
[4] Bates, *The Eastern Libyans*, p. 42.

Fig. 303
Portrait of an Iberian youth found in the Cerro de los Santos, Eastern Spain.

population appears at times blended with negroid and xanthochroid elements. The purest of all seem to be the Berbers of Sahara who are decidedly dolichocephalic, with a few brachycephals who are considered a foreign element.[1] These Berbers, in spite of a slight negro and Arab mixture, are supposed to be "purer and more typical than any other Hamitic people of the present times".[2]

The archaeological and ethnological studies made by Dr Bosch Gimpera, of the University of Barcelona, have proved the important role played by North Africa as the centre out of which the Hamites finally migrated to Spain.[3] Accordingly Mons. Montandon writes: "Anthropologically, therefore, the Indo-Afghans are united to the Berbers of North-Africa and to the Iberians of Spain and surrounding islands".[4] In point of fact the skulls found in the Spanish *dolmens* are all dolichocephalic.[5] "As in France", says Dixon, "the Mediterranean type seems to have been the most important (in Spain).

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[1] *Ibid.*, p. 41.

[2] *Ibid.*, p. 44.

[3] Bosch Gimpera, "La Prehistoria Africana y el Origen de los Pueblos Camitas", *Anuario de Prehistoria Madrileña*, I (1930), p. 9.

[4] Montandon, *La Race. Les Races*, p. 260.

[5] Munro, *Prehistoric Britain*, p. 187.

The brachycephalic elements cannot be determined, but seem to have been relatively much less abundant than in France; and the peninsula appears to have retained its predominantly dolichocephalic character until the end of the neolithic times".[1] From North-east Africa including Abyssinia to the Atlantic all peoples have been found predominantly Mediterranean.[2] This is particularly remarkable in the region of the Sahara and Libyan deserts and[3] round Carthage.[4] So are also the Guanche of the Canary Islands.[5]

Fig. 304
A soldier of the land of Canaan, after an Egyptian painting.

Passing now to the eastern lands of the Mediterranean basin, the Natufian skeletons discovered in the now famous caves of Mount Carmel by Miss Garrod have been recognized as undoubtedly belonging to the Mediterranean race by Sir Arthur Keith and Dr T. McCown.[6]

As regards the Phoenicians, Prof. Albright reporting the progress of Prof. Dunand's excavations in the chalcolithic cemetery of Byblos, says : "The human skeletal remains are of special interest, since they were abundant and in part well preserved. The average height of the men was 356cm. (5 ft. 2 in.) and the crania are prevailingly long-headed (therefore dolichocephalic) (in a few cases mesocephalic). As pointed out by Dunand, the physical type of these chalcolithic

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[1] Dixon, *op. cit.*, p. 153.

[2] *Ibid.*, pp. 204 and 205.

[3] *Ibid.*, p. 203.

[4] *Ibid.*, p. 199.

[5] *Ibid.*, p. 201.

[6] McCown, *The Ladder of Progress in Palestine*, pp. 45-50. This is the earliest settlement of the Mediterranean man known up to now, as it belongs to the mesolithic period (10,000 to 8,000 years ago). Was this perhaps the first Hamitic settlement which History must register, one of whose offshoots, migrated to India where the race especially developed and progressed, intellectually and materially, to the extent we now so much admire ?

men of Byblus approximated closely to that of the mesolithic Natufians of Carmel (in the old land of Canaan), whose remains were recovered by Miss Garrod several years ago. It is also related to that of the Badarians of Upper Egypt who flourished not later than *c.* 4000 B.C. Since the precise type of man in question survives only in traces, we are hardly justified in making any inferences with regard to the linguistic group to which it belonged. The most plausible view is perhaps that it represents the basic stock from which the north-east African Hamites sprang".[1] "The Natufians themselves", adds Prof. Albright, "were typical early Mediterraneans, with slender bony structure, long-headed (dolichocephalic) and delicate of features".[2]

Fig. 305
Portrait of an Etruscan, after a sarcophagus from Cerveteri, in the neighbourhood of Rome.

The conclusion arrived at by these American scholars cannot be very encouraging to those who defend the Semitic origin of the Phoenicians. The same seems to be the result of the scientific examination of archaeological relics. Miss Moore, after studying the features of an image of a Carthagenian priestess (who occupying such a high rank must belong to the original Phoenician stock), remarks: "The Semitic mould is hardly recognizable".[3]

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[1] *The Bulletin of the American Schools of Oriental Research*, No. 60, December 1935, pp. 4-5.
[2] Albright, *The Archaeology of Palestine*, p. 60.
[3] Moore, *Carthage of the Phoenicians*, p. 147.

The Etruscans of Italy also are acknowledged to be dolichocephalic,[1] (Fig. 305) and consequently to belong to the Mediterranean race.[2] This type seems to spread from the valley of the river Po in North-eastern Italy.[3] The same type is found in Sicily, spreading from the eastern coast,[4] and in Sardinia.[5]

The migrations of the Iberians to Central and Western Europe are once more confirmed by ethnographical studies. Ripley, after studying a number of points of contact between the so-called neolithic people of central Europe and the Sumerians,[6] concludes that the Hallstatt people were of Mediterranean type.[7] Dixon also acknowledges a "predominantly dolichocephalic population, primarily of Mediterranean type", existing in France from the Neolithic times down to the Carlovingian period;[8] and considers probable that "the larger part of the Mediterranean peoples came (to the British Isles) from Britanny across by sea to the southern coast, in the vicinity of the Island of Wight, and thence spread along the coasts and across the Irish Sea".[9] Similarly Haddon says: "Various branches of the Mediterranean race first spread over Southern and Western Europe and the British Isles as neolithic man".[10]

In particular, as regards the British Isles it was Sir Daniel Wilson who, after the study of all the craniological materials available, as early as 1850, maintained that "the earliest British people were characterized by markedly elongated and narrow skulls, to which he gave the name *kumbecephalic;* and that after a time a brachycephalic people appeared on the scene".[11] Accordingly the crania found in the chambered cairns of Wiltshire, Somerset, Glou-

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[1] Ripley, *op. cit.*, pp. 260. Cf. p. 265.
[2] *Ibid.*, p. 269; Dixon, *op. cit.*, pp. 142-143.
[3] Dixon, *op. cit.*, pp. 193-194.
[4] *Ibid.*, pp. 140-141.
[5] *Ibid.*, p. 149.
[6] Ripley, *Races of Europe*, p. 439.
[7] *Ibid.*, p. 500.
[8] Dixon, *op. cit.*, pp. 54-55.
[9] *Ibid.*, p. 65.
[10] Haddon, *op. cit.*, pp. 40.
[11] Munro, *Prehistoric Britain*, pp. 238-239.

cester, Dorset and some neighbouring localities and in the Island of Arran belong to a dolichocephalic race.[1] Finally after the systematic exploration of many barrows all over Britain, Dr Thurman could express his results in this classical aphorism: "Long barrows, long skulls; round barrows, short skulls".[2] (Fig. 306). Therefore all the long barrows contain bodies of Mediterraneans, and must be earlier that the round barrows, which seem to be the tombs of the later invaders of Indo-European stock.[3]

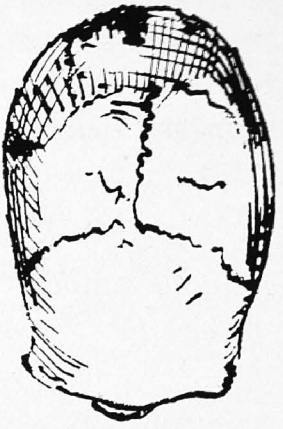

Fig. 306
Skull from a long barrow in Britain.

Lord Abercromby arrived at the same conclusion after the study of the English beaker to which he was the first to assign a continental parentage, viz. the 'corded ware' of Jutland and the 'bel-beaker' of Spain.[4] The 'bel-beaker' folk came to England "from the south, almost certainly from Spain. They were round-headed and buried their dead in separate graves, without barrows. They used a copper dagger, attached to its hilt by a short tang of the metal, and they made a fine pottery which was either red or black. Their beakers, unlike the corded ware, had no constriction between neck and body. Instead, they show a graceful outline like an inverted bell, and the whole vessel is covered with zones of fine ornamentation".[5]

Accordingly it has been acknowledged that the civilization of the Iberian Peninsula, and especially that of Portugal, exercised a great influence in England and in particular in Ireland.[6] It is well known in fact that "a strong element of the Mediterranean type exists in the south of England and of Ireland. The Iberians would

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[1] *Ibid.*, pp. 186 and 239.

[2] *Ibid.*, p. 239.

[3] Cf. Dixon, *op. cit.*, pp. 64-65.

[4] Mitchell-Kennedy, "Prehistoric Man in Scotland", *Chambers Journal*, 1932, p. 787.

[5] *Ibid.*, pp. 787- 788.

[6] Bosch Gimpera, 'I rapporti fra la civilta mediterranea nella fine dell' eta del bronzo", *Atti del Convegno Archeologico Sardo*, 1926, p. 3.

be the invaders according to tradition ; and recent prehistoric studies have established that there existed direct relations between Ireland and Spain in very ancient times. Fleure, in his study about the valleys of England, admits that "the brown people of his country belong to the race hailing from Africa".[1] This pre-Celtic Iberian or Mediterranean type appears to dominate in Wales,[2] and specially in South-Wales.[3] This is the type surviving in "so many people still living on the more secluded and out-of-the-way portions of the British Isles".[4] They are described by Dixon as "a dolichocephalic brunet type, with a stature which, while absolutely above the medium, is yet relatively the shortest in the region".[5] These ethnographical similarities and numerous points of contact between the Mediterranean cultures and the early culture of Ireland in particular, had inclined a Spanish scholar of the early 19th century to believe that the Phœnicians had reached the shores of Ireland.[6] These people of Iberian stock settled in Ireland are known in the traditions of the island as Fomorians.[7]

The Mediterranean family of dolichocephals did not stop in France and the British Isles. We find them in Belgium, south of Chanvaux,[8] in the valley of the Rhine and Southern Germany and in some places of Switzerland, like Pierre-Portay and Chamblandes, near Lausanne.[9] The same dolichocephalic type has been discovered in many tombs of the bronze age in Sweden and Denmark.[10] Mons Poisson remarks that "proves of an immigration of the Mediterranean race hailing from the south and probably from Africa are found almost in the whole of Europe".[11]

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1 Poisson, *op. cit.*, pp. 94-95.

2 Cf. Llod, *A History of Wales*, I, p. 15.

3 Finn, *The English Heritage*, p. 7. The ancient inhabitants of South Wales, people of swarthy complexion and curly hair, were identified by Tacitus with the Silures, who were old Iberians. Cf. Munro, *Prehistoric Britain*, p. 247.

4 Munro, *op. cit.*, p. 147.

5 Dixon, *op. cit.*, p. 72.

6 Villanueva, *Ibernia Phoenicea*, cap. XXVIII, p. 126ff.

7 Lawless, *Ireland*, pp. 5-6.

8 Poisson, *op. cit.*, p. 94.

9 *Ibid.*; Dottin, *op. cit.*, pp. 45-46.

10 Dottin, *op. cit.*, p. 45.

11 Poisson, *op. cit.*, p. 95. Cf. Sergi, *The Mediterranean Race*, pp. 205-232.

All these ancient nations, originators of the great civilization of ancient times, constitute the *Mediterranean race*, so wonderfully described by the anthropologist Sergi.[1] Hence these civilizations, proceeding all from the same root, having all similar essential elements, though taking all pride in their characteristic typical sidelights, may rightly be called Proto-Indo-Mediterranean civilizations.[2] Sergi supposed that the original cradle of this Mediterranean race was Africa, probably the Sahara region.[3] Dixon first seemed doubtful about this point : "The sources of this Mediterranean factor are not yet by any means clear." Yet, he is finally inclined to make it south European : "Since it was already abundant in the Southwest of Europe, it may have crossed from Spain or perhaps from Italy and journeyed eastward along the northern coast of Africa to the Nile delta and so on up the river".[4] We may now show, following the indication of St Isidore of Seville, that the North African migration of the Mediterraneans took place following the opposite direction ; and that their place of origin was India.[5]

II

THE DRAVIDIANS AND THE HAMITIC FAMILY

But what race is this Mediterranean race from the biblical point of view ? Or in other words, what relationship did ever exist between those Proto-Indo-Mediterraneans and the three sons of Noah ?

Before studying this question we may remind our readers of what Keith has stated, as shown above, viz. that "the typical Hamitic is dolichocephalic". This anthropologist moreover equates the

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[1] Sergi, *The Mediterranean Race*.

[2] This Mediterranean race is practically equivalent to the so-called "Turanian race" of ancient ethnologists, an artificial denomination coined to denote those peoples which preceded the Indo-European or Semitic nations in South Europe and West Asia. The word Turanian comes from the noun Tūra found in the *Avesta*, as the name of a clan inhabiting ancient Iran prior to the invasion of the Āryas. Cf. Heras, "The Dravidians of Iran", in *Indica*, p. 166.

[3] Sergi, *op. cit.*, p. 43.

[4] Dixon, *op. cit.*, p. 193.

[5] Cf. above, pp. 399-403.

two terms 'Hamitic' and 'Dravidian'.[1] Now in order to elucidate this question, so interesting not only in relation with biblical studies, but also from the broader viewpoint of general ethnography, it is worth studying the biblical narrative of the first exploits of the Sumerians before the beginning of Abraham's history. Chapter XI of *Genesis*[2] gives an account of those beginnings and of the spreading of the Sumerians throughout the world at the foot of the tower of Babel.[3] According to recent interpreters only a portion of the descendants of Noah settled in Sennaar=Sumer.[4] They were the Sumerians.[5] Now in Chapter X, while mentioning the parting and spreading of the children and descendants of Noah throughout the known world, the writer introduces Nemrod, as the King of that portion of Mesopotamia inhabited by the Sumerians,[6] and at the same time he informs us that this Nemrod was a descendant of Khus, a son of Cham or 'Hām, Noah's second son.[7] Therefore we may rightly conclude that Nemrod, King of the Sumerians, probably one their first kings,[8] himself a Sumerian, was a descendant of 'Hām. This reveals to us what the origin of the Sumerian nation was, doubtlessly issuing likewise from Noah's second son, that is Hamitic.[9]

Having settled this point we could easily deduce that, since the Sumerians are Hamitic, the Proto-Indians, who are the trunk out of which the Sumerians are only a branch, must also perforce be of Hamitic origin. In point of fact the eldest son of 'Hām is mentioned as Khus.[10] Now the country of Khus is said to be neighbouring on the Arabs ;[11] through which country one of the rivers of Paradise,

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[1] Keith, "The Racial Character of the Southern Arabs", *op. cit.*, p. 327.

[2] vv. 1-9.

[3] The attention of the readers is drawn to the fact that the biblical account does not speak of the dispersion of the whole human race, in this passage; such dispersion was already referred to in the preceding chapters.

[4] Kortleitner, *op. cit.*, p. 13.

[5] *Ibid.*, p. 15.

[6] *Gen.*, X, 10.

[7] *Gen.*, X, 8 ; *I Par.*, I, 10.

[8] Such a thing seems to be hinted at by those words : "And the beginning of his kingdom was Babylon" (X, 10). He is now identified with the Sumerian hero Nimurta, who is said to have slain dragons and monsters. Kortleitner, *op. cit.*, p. 15. note 1.

[9] Such is also the conclusion of Kortleitner, *op. cit.*, pp. 15 and 18.

[10] *Gen.*, X, 6 ; *I Par.*, I, 8.

[11] *II Par.*, XXI, 16.

the Gehon or Gison, is mentioned as flowing.[1] According to modern exegesis this country seems to be east of ancient Sumer, *i.e.* lower Mesopotamia,[2] that is Elam, in modern Iran, bordering on the country of the Hindu-Kush, *i.e.* India. Schoff in the *Periplus of the Erythraean Sea* finds Khusite reminiscences in relation with the coast of Makran (Balochistan) and in the geography of the place.[3] After the study of all this evidence some authors had announced, already more than half a century ago, that the descendants of Khus seem to be the first inhabitants of India known to history.[4] In point of fact the Rabbi Benjamin of Tudela had visited Chulam (Quilon) in Malabar in the 12th century and he faithfully records in the account of his travels that that city was situated "on the confines of the country of the sun-worshippers, who are descendants of Kush, are addicted to astrology and are all black".[5]

We find some circumstantial evidence of this Hamitic origin of the Indian race in the very literature of India. It is well known that the Noah of the Indian Flood is Manu.[6] Consequently Manu is styled "the son of Vivasvat",[7] equating him with Yama, the first man, that is the first father after the Flood, confusing him with the progenitor of mankind. Thus he is called "a father" or "our father";[8] for he was in fact the father or ancestor of the Indians themselves, being the children of 'Hām. Thus the *Śatapatha Brāhmaṇa* describes the race of Manu as the Indian race.[9] Manu moreover is called the first sacrificer and institutor of the sacrifice,[10] a clear reminiscence of the sacrifice he offered after the Flood,[11] an event of extraordinary importance rightly commemorated also by

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[1] *Gen.*, II, 13.

[2] Cf. Enciso Viana, *op. cit.*, pp. 113-114.

[3] Schoff, *The Periplus*, p. 162. Cf. above, pp. 384-387.

[4] Laouenan, *Du Brahmanisme*, II, p. 352; Viçwa-Mitra, *L'aurore indienne de la Genèse*, pp. 208-217.

[5] Benjamin of Tudela's Travels, in Komroff, *Contemporaries of Marco Polo*, p. 309.

[6] Cf. above, pp. 413-418.

[7] *Ṛg.*, Vāl., 4, 1; *Ath.*, VIII, 10, 24; *Śatapatha Brāhmaṇa*, XIII, 4, 3, 3, etc.

[8] *Ṛg.*, II, 33, 13. Cf. Lenormant, *Histoire ancienne de l' Orient*, I, p. 107.

[9] *Śatapatha Brāhmaṇa*, I, 8, 1, 6-10.

[10] *Ibid.*, X, 63, 7; I, 76, 5; I, 44, 11; *Taittirīya Saṁhitā*, I, 1, 2, etc.

[11] *Śatapatha Brāhmaṇa*, I, 8, 1, 7; *Gen.*, VIII, 20.

Genesis,[1] by Berosus[2] and by the *Poem of Gilgameṣh*.[3] Now Manu is said to have had children, but only one of those children is specifically mentioned twice in Indian *śruti*. His name is Nābhānediṣṭha ("the nearest to the navel"), a name which originally perhaps is not a name, but only an epithet of endearment, or perhaps an adjective showing that he was the youngest of the brothers. In connection with this boy, who is said to have been studying, it is narrated that he was deprived of the part of inheritance which corresponded to him, when Manu divided the property among his children ;[4] or when the brothers divided the property of their father among themselves, they did not give him the share that corresponded to him.[5] This persistency in showing Nābhānediṣṭha as deprived of his property, (though the two accounts differ in the way how he was deprived), may be a memory of the punishment inflicted on 'Hām, in the person of his son Canaan (as we shall see later) when Noah heard of his lack of respect to himself. Nābhānediṣṭha thus would be 'Hām himself ; and it would be quite fitting that the Indians should remember him and his being chastised by his father, as he was the ancestor of the whole Hamite nation. He is once more spoken as "the Prince in heaven" in the 10th *maṇḍala* of the *Ṛgveda*,[6] which is so much influenced by Dravidian thought. This denomination shows the high respect with which Nābhānediṣṭha's memory was held among the Dravidians of India. Once more this respect is clearly detected in that exclamation : "Welcome the son of Manu, ye who are most wise",[7] which we find repeated four times in another hymn of the same *maṇḍala*. In the *smṛti* the sons of Manu have increased up to nine[8] and even ten,[9] in order to explain the early origin of the castes (not only the main four castes, but even some of

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[1] *Gen.*, VIII, 20.

[2] Wallis Budge, *The Babylonian Story of the Deluge*, p. 29.

[3] *Ibid.*, p. 37.

[4] *Taittirīya Saṁhitā*, III, 1, 9.

[5] *Aitareya Brāhmaṇa*, V, 2, 14.

[6] *Ṛg.*, X, 61, 18.

[7] *Ibid.*, 62, 1-4. It is acknowledged that this son of Manu referred to in this text is Nābhānediṣṭha. Cf. Griffiths' trans. II, p. 460, n. 1.

[8] *Viṣṇu Purāṇa*, IV, 1, 5 ; *Mārkaṇḍeya Purāṇa*, LXXI, 11-12.

[9] *Śrīmad Bhāgavatam*, IX, I, 11-12 ; VIII, XIII, 2-3 ; *Padma Purāṇa*, Pātāla Khaṇḍa.

the sub-castes). The names of these sons of Manu vary in the different Purāṇas, nor are they always given in the same order, which shows that the tradition about this numerous progeny of Manu is not deeply rooted. Yet amongst them all Nābhānediṣṭha is always mentioned, though at times his name is differently spelt. It is preferably written as Nābhāganediṣṭha, though once intead of spelling Nābhāga, it is given as Na-bhāga, "no share", with a clear allusion to the legend of Vedic literature referred to above.[1] This legend is also repeated in the *Śrimad Bhāgavatam* though with new added embroidery to make him appear the ancestor of the Brāhmaṇas.[2] Yet purānic as well as epic literature speak of a fault committed by one of the sons of Manu, here specifying it in detail—having killed his preceptor's cow (*guru-go-badhat*)—which is made the cause of his becoming a Sūdra, but he who committed the offence is not Nābhānediṣṭha in this case, but Pṛṣadhra.[3] The specification of this fault evidently belongs to a later period of cow veneration which is totally absent in early history. The transfer of the fault from Nābhānediṣṭha to his supposed brother is perhaps due to the increase of the veneration of the former, clearly revealed already in the *Ṛgveda*, which veneration did not cause his special punishment of not sharing the paternal inheritance with his brothers to be absolutely forgotten.[4]

In a similar way the Hamitic origin of several Mediterranean nations is confirmed by new light coming from both sacred and profane history. One of the sons of Canaan, 'Hām's first born son, was Hetha,[5] who apparently was the ancestor of the Hittites, called always in Holy Writ "*Hethaei*" in later times. Sidon was a brother of Hetha, since he also was a son of Canaan.[6] Now Sidon is supposed to be the father of the Phoenicians, one of whose most famous cities

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[1] Cf. Wilson, *The Vishnu Purāṇa*, III, p. 231, note 1. Sometimes he is spoken of as Nābhaga, the son of Diṣṭha. Cf. *Mārkaṇḍeya Purāṇa*, CXIII, 2.

[2] *Śrīmad Bhāgavatam*, IX, 41, 1-13.

[3] *Viṣṇu Purāṇa*, IV, 1, 12. Cf. *Harivaṁśa*, 659.

[4] Cf. Heras, "The Curse of Noe", *Catholic Biblical Quarterly*, XII, pp. 64-67.

[5] *Gen.*, X, 15; *I Par.*, I, 13.

[6] *Ibid.*

was named after him. Consequently both Hittites and Phoenicians were Hamitic.[1]

In the same way Mizraim, who settled in Egypt[2] and is always considered as the ancestor of the Egyptians, is also a son of 'Hām. Moreover it is a fact that Egypt is called "the country of 'Hām" several times in the Psalms of David,[3] which shows a persistent tradition among the Hebrews that Egypt was inhabited by descendants of 'Hām. Modern scholars fully agree as regards the Hamitic origin of the Egyptians,[4] (Fig. 307) and consider the Egyptian language as the most important member of the Hamitic group.[5]

Fig. 307
A portrait of Pharaoh Seti I, after an Egyptian bas-relief in a temple at Abydos, showing the dolichocephalic shape of his skull.

The Bible likewise informs us that one of the sons of Mizraim was Lehabim,[6] who is supposed to be the father of the Libyans, called Lubim in other biblical books,[7] which is translated as *Libyes* by the *Septuaginta*. Accordingly in the oasis of Siwa, the most famous

[1] It has been said, since Mövers published his book, *Die Phonizier* (Bonn, 1841-1856), that the Phoenicians were Semitic, on the plea that they spoke a Semitic dialect. That was the effect of the confusion that has existed sometimes between race and language. Cf. Heras, "La Cuestión Arya", *Razón y Fe*, CXX, pp. 290-291. The present writer has studied the Phoenician civilization in a special way and has found that it is thoroughly Hamitic. Moreover the Phoenician migration, according to the documents we possess now, proceeded from the Erythraean Sea, that is the Arabian Sea, *i.e.* the shores of India. The ancient names afforded by the texts recently unearthed in Ras Shamra, as much as the national name, "Phoenicians", point out India as the country of their origin.

[2] *Gen.*, X, 6; *I Par.*, I, 8.

[3] *Ps.* LXXVIII, 51; CIV, 23, 27; CV, 22.

[4] Cottevieille-Giraudet, *L'Egypte avant l'Histoire*, p. 149.

[5] Gray, *Foundations of Language*, p. 365.

[6] *Gen.*, X, 13: *I Par.*, I-11.

[7] *II Par.*, XII, 3; XVI; *Nah.*, III, 9; *Dan.*, XI, 43.

place of worship in Libya in ancient times, 'Hām himself, their ancestor, used to receive adoration.[1] The modern inhabitants of Libya are still classified as Hamitic, though much mixed with the negro population.[2]

Furthermore we must draw the attention of our readers to the opinion of several historians, archaeologists and philologists who aver that the Hittites of Syria,[3] and the Iberians of Spain[4] either were nations belonging to the Hamitic race or were speaking Hamitic languages. It is therefore now beyond doubt that the Mediterranean race represents the Hamitic family among Noah's descendants.[5] In this family, if there are backward nations as the Berbers, the Kabyles, the Tuaregs, the Abyssinians and the Gallas, there are also nations of great civilization such as Sumer, Egypt, Phoenicia, the Hittite Empire, etc.[6]

The Mediterranean race, ethnographically considered, forms the brown sub-group within the white race,[7] which is said to be found in Europe in the Iberian Peninsula, South France, South Italy, Islands of the Mediterranean and in continental Greece.[8] This group is well known through the deep green colour of the eyes, through the black colour of the hair and even through the colourless complexion and sometimes its tanned shade. All these typical features of the Hamites seem to be the inheritance of their father and founder, 'Hām himself, whose name in Hebrew, from the root *'hāmam*, "hot", means "the brown one"; but on no occasion "black", which

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[1] Belgrave, *Siwa*, p. 77.

[2] Bates, *The Eastern Libyans*, p. 43.

[3] de Cara, *Gli Hethei Pelasgi*, II, p. 32; Delaporte, *Les Hittites*, pp. 310-311.

[4] Bosch Gimpera, *El Problema Etnológico Vasco y la Arqueologia*, p. 35; Bosch Gimpera, *La Prehistoria de los Iberos y la Etnologia Vasca*, pp. 20-22.

[5] Some vague connections between the Hamites and the Mediterranean race were already noted by a number of authors. Cf. Barton, *Semitic and Hamitic Origins*, pp. 9-10. The same author, after describing the first appearance of the Hamites in history, adds: "Anthropologists have long called this the Mediterranean race". *Ibid.*, p. 14. Also cf. Dawson, *The Age of the Gods*, p. 145.

[6] Joliat, *L'Antehistoire*, p. 40.

[7] That the Hamites belong to the white race is readily admitted by anthropologists. Cf. Barton, *op. cit.*, p. 14; Joliat, *op. cit.*, pp. 39-40; Poisson, *op. cit.*, pp. 23-40. In this connection it is interesting to note that the Dravidian god Siva, who generally is painted black, is at times represented of white complexion. Cf. Stevenson, *The Rites of the Twice-born*, p. 374.

[8] Poisson, *op. cit.*, pp. 23-40.

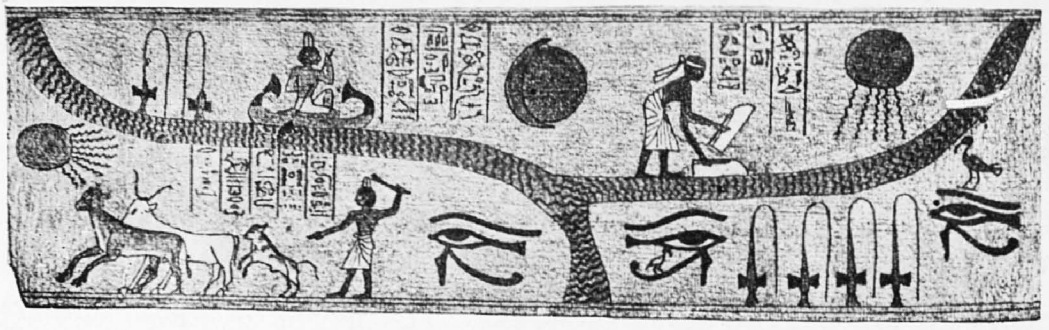

Fig. 308
Dark Egyptians sporting in the Fields of Lalu, after a painting in the Papyrus of Nebkopit, in Turin.

would be *'Hum*.[1] This name was most likely given him, as was customary in those early days, after having seen his olive complexion.

We may here refer to some ancient documents that mentioned this dark head, *i.e.* hair and complexion, of some ancient nations which are classified as Mediterranean.

Let the first be the *Ṛgveda*, which referring to the tribes the Āryas found in India, when they entered the country, classified them as "dusky-skinned".[2] The author of the *Periplus* says in particular that the men of Gujerat are black.[3]

The Sumerian epic of the creation and the Deluge informs us that the earth goddess and the earth god, helped by Anu, the heaven god, and Enki, the water god, fashioned, the "dark-headed people", evidently meaning their own ancestors, the ancient Sumerians.[4] Similarly the inscriptions of the time of King Sargon of Akkad aver that goddess Ishtar gave him the rule over *nisi salmat kakkadi*, "the black-headed people".[5] Sargon's son, Hammurabi, in his famous code of Laws, declares that god Enlil gave him "the black-

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[1] Lenormant, *Histoire ancienne de l'Orient*, I, p. 266.

[2] *Ṛg.*, I, 130, 8; II, 20, 7; IX, 41, 1-2.

[3] *Periplus*, Schoff's ed., p. 39. Some sectors of the population of India are definitely of negroid type owing to the early mixture of the Dravidians with negritos especially settled on the coasts. About this question of skin colour cf. Johnson, "Race et Caste dans l'Inde," *L'Anthropologie*, pp. 176-181. Cf. below, pp. 473-476.

[4] Langdon, *Sumerian Epic of Paradise, the Flood and the Fall of Man*, p. 17.

[5] Kortleitner, *De Summeriis*, p. 16.

headed people" as his subjects.[1] Once more Lipet Ishtar, a King of the Dynasty of Isin that ruled *circa* 2.200 B.C., says that he will lead "the dark-haired people" just as the lamb is led by its mother.[2]

About the Egyptians Plutarch records the tradition that Osiris, a very ancient god (*sic*) of their race, was black-coloured.[3] Prof. G. Elliot Smith, whose authority on the anthropology of the early Egyptians is so great, says as follows: "The hair of the Proto-Egyptian was precisely similar to that of the brunet European or Iberian people of the present day. It was a very dark brown or black colour, wavy or almost straight, and sometimes woolly".[4] Herodotus calls the Egyptians *melainas*, "black",[5] perhaps after comparing them with the white Hellenoí of the Indo-European stock, who must have been then very numerous in Greece.[6]

As regards the people of North Africa Bates affirms that "the Libyan in earlier Egyptian art is regularly a *brun*".[7] Accordingly Nemesian, himself apparently a Cathagenian, calls the Mazax, a nation inhabiting eastern Libya, *coloratus*,[8] "coloured". That was perhaps the reason why the black hydriae in Greece were, at least in later times, called "Libyans".[9] As regards other physical features, they may be graphically seen by comparing the faces of Herakles and Antaeos, in a painting of the fight between the Greek hero and the Libyan giant, due to the brush of Euphronios. (Fig. 309). "Herakles", says Bates, "is given the usual straight profile common to Greek graphic art in general, and to other Euphronian Greek faces in particular; Antaeus is

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[1] Code of Hammurabi, obv, XXIX, 11ff. Cf. Pridaux, "The Sepulchral Tumuli of Bahrain", *A.S.I. Report*, 1908-1909, p. 60.

[2] Dawson, *op. cit.*, pp. 126-127. Cf. Sayce, "Who were the Amorites?", *Ancient Egypt*, 1924, p. 75.

[3] Plutarch, *De Iside et Osiride*, XXXIV.

[4] Elliot Smith, *The Ancient Egyptians*, pp. 50-51.

[5] Herodotus, II, 57.

[6] According to Jardé, *La Formation du Peuple Grec*, p. 92, only 10% of the present population of Greece is blond.

[7] Bates, *The Eastern Libyans*, p. 40.

[8] Nemesian, *Cynegetica*, 261.

[9] Hesychius, *Lexicon*, word '*Libyas*'.

represented as having a nose well-shaped but slightly aquiline, and strongly marked supraorbital ridges. The treatment of the hair also differs in the two. That of the Greek hero is short, and ends in a roll of curls at the nape of the neck, and from the ear up and across the forehead. The beard is short and the moustache slight. In the case of the Libyan giant the hair is long and matted and it projects over the brow in a manner which at once recalls the Egyptian representations. The beard is long and pointed, the moustaches longer and fuller than those of Herakles".[1]

Fig. 309
Contest of Herakles and Antaeos, in which the Mediterranean type of the latter is truly depicted; after a painting by Euphronios on a Greek vase.

The people of Mauritania are also supposed to have the same brown complexion. "The Moor has the same colour as the Indian", says Lucan, *concolor Indo Maurus*.[2]

Similarly the Minoans of Crete seem to have been brownish. In the ancient paintings of Crete men are always represented black.[3] "The Aegeo-Cretan paintings", says Mons. Jardé, "present to us a man in whom we at once recognise the *homo mediterraneus*, and the measurements of the skeletal remains confirm this impression: short stature, dolichocephalic skull, brown skin, black wavy hair. These are the classical characteristics of the Mediterranean race".[4] Such is, for instance, the portrait of the 'cup-bearer' of the Palace of Minos, whose features are dark complexion, wavy hair, long skull, "purely

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[1] Bates, *op. cit.*, p. 260. Cf. Richter, *Attic Red-figured Vases*, pp. 53-54, fig 43.
[2] Lucan, *Pharsalia*, IV, 678-679.
[3] Mosso, *The Palaces of Crete and their Builders*, pp. 317-319.
[4] Jardé, *La Formation du Peuple Grec*, p. 91. Cf. Cohen, *Nouvelle Histoire Grecque*, p. 21.

Mediterranean".[1] (The fact that women were painted white only shows the wish to improve their appearance on the part of the artists). Even on a Tyrrenian vase of a later period Apollo is shown black and Artemis white.[2]

Fig. 310
The cup-bearer of the Palace of Minos, after a fresco in the same Palace.

But in reality women were as brown or olive-complexioned as men. The daughters of Danaos appear in Argos, in a chorus of one of Aeschylus' dramas, saying: "We, of swarth sun-burnt race," *helióctypon génos*.[3] And in a further passage the King of Argos himself compares them to other Mediterranean nations owing to their dark-hued complexion :–

"Nay, strangers, what you tell is past belief
For me to hear, that you from Argos spring ;
For ye to Libyan women are most like,
And nowise to our native maidens here.
Such race might Neilos (Nile) breed, and Kyprian mould,
Like yours, is stamped by skilled artificers
On women's features ; and I hear that those
Of India travel upon camels borne,
Swift as the horse, yet trained as sumpter-mules
E'en those who as Aethiops' neighbours dwell".[4]

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[1] Stobart, *The Glory that was Greece*, p. 32
[2] Notor, *La Femme dans l'antiquité*, I, p. 125.
[3] Aeschylus, *The Supplicants*, 145.
[4] *Ibid.*; 273-282. (Trans. by Plumtree, *The Tragedies of Aeschylus*, p. 147).

Plumtree after translating this passage adds in a foot-note : "The description would seem to indicate :–(1) that the daughters of Danaos appeared on the stage as of swarthy complexion ; and (2) that Indians, Ethiopians, Kypreans and Amazons were all thought of as in this respect alike." Even the very Muses are said by Pindarus to have black tresses.[1]

In point of fact it is well known that the ancient inhabitants of Greece are called by Herodotus and Euripedes *Pelasgoí*, Pelasgians.[2] Homer seems to suggest that the original Peslasgians dwelt in Asia Minor,[3] where they were allies of the Trojans against the Achaeans.[4] They are also found in Crete,[5] and in Epirus, round about Dodona.[6] They most probably should be identified with the early Indo-Mediterraneans. But why were they styled Pelasgians ? According to the most probable opinion this name comes from the word *pelós*, which means "dark-coloured", "dusky", "ash-coloured"; and it was applied to "the swarthy men from the East".[7] Apparently, therefore, these people from the East, whom we now acknowledged as the Indo-Mediterraneans, were called "the dusky ones", *Pelasgoí*.

Fig. 311
Two Keftiu (Cretans) of dark complexion, carrying rich gifts to the king of Egypt, after a painting in the tomb of Rekh-ma-Rā, Thebes.

The last relics of the Minoan population of Greece, according to well founded opinions were the Philistines.[8] "About the same

[1] Pindarus, *Isthmians*, VI, 23.
[2] Herodotus I, 56, 57 ; Euripides, *Orestes*, 857.
[3] Homer, *Iliad*, II, 840 ; X, 429.
[4] *Ibid.*, XVII, 288.
[5] Homer, *Odyssey*, XIX, 177.
[6] Hesiod, fragm. 18.
[7] Liddell-Scott, *A Greek English Lexicon*, word '*Pelasgós*'.
[8] Breasted, *The Conquest of Civilization*, pp. 259-260 ; Robert-Tricot, *Initiation Biblique*, pp. 474-475.

time", says Haddon, "we find movements from the Aegean to Cyprus and the Syrian coast, which introduced the Philistines and other peoples into Palestine. The fall of the Cretan civilization was doubtless connected with these changes in the Eastern Mediterranean".[1] Now, in Egyptian monuments the complexion of the Philistines is the same as that of the Hittites and Semites, viz. orange or brownish, "but their profile, with the straight line of forehead and nose, reminds of the European or Mediterranean populations".[2]

Fig. 312
Head of a 'coloured' Etruscan, from a painting in the Tomba Golini I at Orvieto.

The same was the complexion of the Etruscans: *Coloratis... Etruscis*, says Martial,[3] referring "to the coloured Etruscans".

As regards the Iberians of Spain and the Druids of England, Tacitus informs us that they had coloured complexion and wavy hair.[4] Modern historians also describe these early inhabitants of England and Ireland, as people of swarthy complexion and dark hair and eyes.[5]

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[1] Haddon, *The Wanderings of Peoples*, pp. 23-24. Cf. Albright, *The Archaeology of Palestine*, p. 114.

[2] Desnoyers, *Histoire du Peuple Hebreu des Juges a la Captivité*, I, p. 37.

[3] Martialis, *Epigrammata*, X, 68, 3.

[4] Tacitus, *Julii Agricolae Vita*, II. The modern Spanish novelist Alarcón while describing one of his heroes, says: "The Señor Corregidor... was of a brown greenish complexion, just as most of the children of both Castillas". Alarcón, *El Sombrero de Tres Picos*, p. 10. One born in the centre of Castilla was St John of the Cross, who is depicted by his contemporaries as "of a swarthy complexion" (*de color trigueño*) or "somewhat brownish". Crisógono de Jesus, *Vida y Obras de San Juan de la Cruz*, p. 495 and p. 496 n.

[5] Munro, *op. cit.*, p. 247; Finn, *The English Heritage*, p. 7; Lawless, *Ireland*, pp. 5-6. The majority of these modern authors emphasize the short stature of these people. There is no evidence, either historical or physiological, to substantiate this description. The Mediterranean

It may be objected that it is at first sight illogical that the descendants of Noah's son who was cursed by his father, should have been so successful in upbringing such a high civilization, that placed them in the lead of the human race not only in ancient times but even now-a-days. For modern civilization is the final issue of Roman and Greek civilizations amalgamated; and the civilization of Greece and Rome mark the last stage in the evolution of the ancient Mediterranean civilizations.

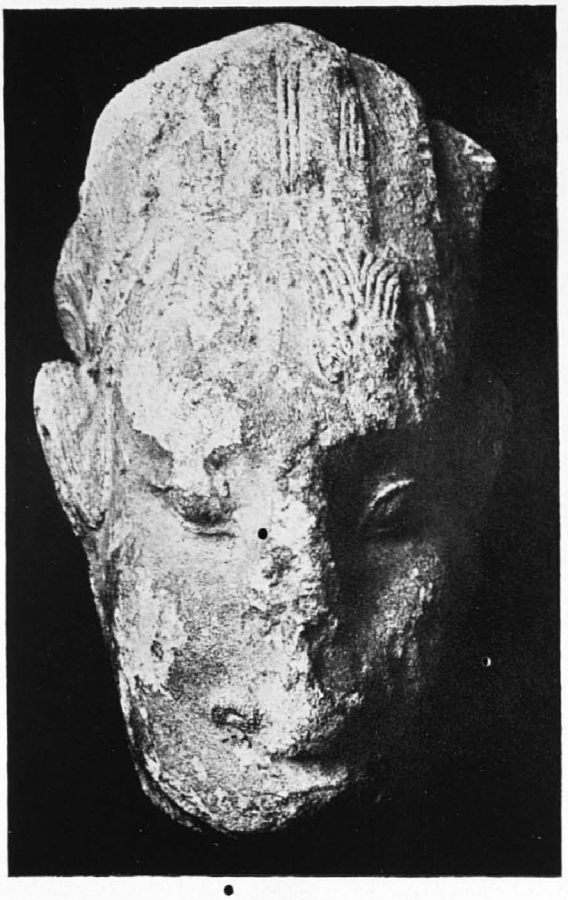

Fig. 313
Portrait of an Iberian Lady of high rank, having almond-shape eyes, from the Province of Alicante, Eastern Spain.

This is indeed an ordinary objection against the identification of the Hamitic race. It is true that 'Hām committed a very objectionable fault, meaning lack of respect towards his father Noah.[1] But it is not correct to state that 'Hām was cursed by his father. In point of fact hardly could Noah have cursed one of his sons, whom God had plentifully blessed when the Flood was over.[2] Hence once Noah was acquainted with the

race cannot be described as a stunted race : the biblical Goliath (*I Kings*, XVII, 4) and the Libyan Antaeos (Pherecides, fragm. 33e : Muller, *Fragmenta Historicorum Graecorum*, IV, p. 80), who are depicted as great giants, belonged to the Mediterranean race. In point of fact Lawless, *op. et loc. cit.*, remarks that this description of the Mediterraneans of Ireland is very odd, for the word *Fomorian*, by which they are designated "in early Irish legend is always used as synonimous with the word giant".

[1] *Gen.*, IX, 22.

[2] *Gen.*, IX, 1-11. Thus God forbade prophet Balaam to curse the people of Israel, "because it is blessed". *Num.*, XXII, 12.

disrespectful attitude of his son 'Hām during his own state of drunkenness, he only cursed 'Hām's youngest son, Ç̣hanaan.[1] "Hām therefore," says St Augustine, "was cursed in his son, as in his fruit, that is, in his own work".[2] This prophetic curse was fulfilled when the chosen nation of Israel conquered the lands of Chanaan and destroyed the Chanaanite nation, according to the formal donation of that land to the Hebrews by Iahve.

What we have said hitherto sufficiently shows that the old opinion according to which the negros of Africa are the descendants of 'Hām is scientifically baseless.[3] "The common tradition which supposes that Cham ('Hām) is the father of the negro race", says Mgr Le Roy, "is not founded on the Bible. The Hamitic nations mentioned in Chapter X of *Genesis* are not the negroes".[4] The only apparent foundations for such a belief seemingly were the blackness of their complexion in which they imagined to see a relic of the brownish complexion of 'Hām; and the uncultured state of these tribes which placed them under the white nations. Precisely in this state of subjection they were seeing the fulfilment of the supposed curse which had befallen the Hamites.

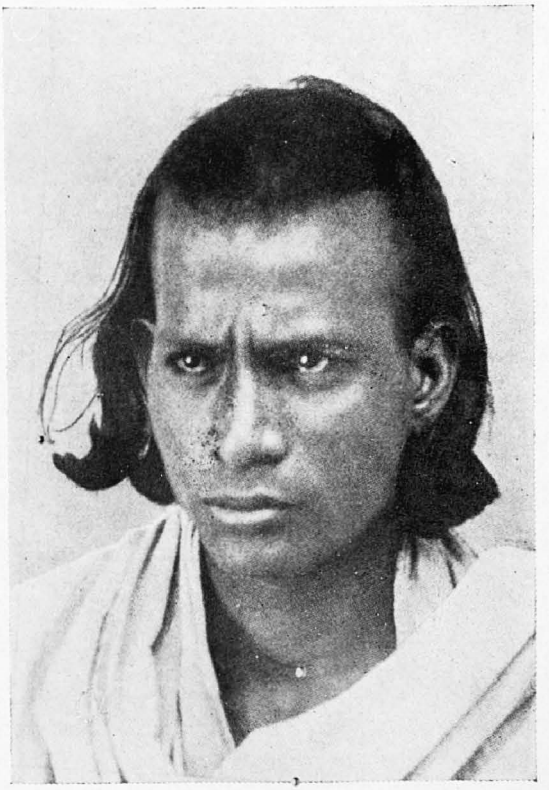

Fig. 314
Portrait of a Mīna from Rājastan, of clear dolicocephalic type.

[1] *Gen.*, IX, 25; X, 6.

[2] St Augustine, *De Civitate Dei*, XVI, 2: Migne, *P. L.*, XLI, col. 478.

[3] Cf. Joliat, *op. cit.*, p. 40; Le Roy, *La Religion des Primitifs*, pp. 364-365; Lenormant, *Histoire ancienne de l'Orient*, I, pp. 303-304.

[4] Le Roy, *op. cit.*, p. 473, n. 1.

For the matter of that, the black race seems to be a pre-Flood race. When the Dravidians of India, whom we already know and identify now as the original nucleus of the Hamitic race, settled in the land that spreads between the Indus and the Ganges after the Flood, they found there, and especially on the southern shores of the country, a race of *negritos*, a sub-group of the black race, who have left numberless relics of their past through the country in the shape of prehistoric implements and ethnological characteristics.[1] Their descendants live still in the Andaman Islands of the Bay of Bengal. Very early the Hamitic Dravidian settlers were mixed with the negritos, and the issue of those unions naturally have very typical physiological features, which are very often discovered today among the people of South India : short stature, very black complexion (not precisely the darkened one of the Hamites), protruding lips, flat nose, curly hair. When the Āryas entered India, round about 1,300-1,000 B.C., they wondered to find such strange features in their opponents, the Dāsas or Dasyus of the *Ṛgveda*, and left a brief but vivid description of their despised ugliness in the Ṛgvedic hymns by saying that they were *anas*, "noseless".[2] Even centuries later the author of the *Periplus* recorded that the Cirrhadae, on the Eastern coast of South India, were "a race of men with flattened noses".[3] Similarly a Niṣāda, is described by the *Bhāgavata Purāṇa* as "black like a crow, very low-statured, short-armed, having high cheek bones, low-topped nose, red eyes and copper-coloured hair".[4]

[1] Ruggeri, *Outlines of a Systematic Anthropology of Asia*, pp. 43ff, thinks that India was successively occupied by :-

1 Negritos (Platyrrhine).
2 Pre-Dravidians (Australo-Veddiac).
3 Dravidians (tall, dolichocephalic).
4 Aryans (dolicocephalic *(sic)* doubtful)
5 Leukoderms (brachycephalic Alpines). The mixed relics of Nos. 1 and 2 are beautifully described by Ctesias : "*In media India homines vivunt nigri qui Pygmaei apellantur, lingua a ceteris Indis non discrepantes ; sed statura perquam pusilla ; nam longissimi duorum cubitorum, plerique unius cubiti dumtaxat cum dimidio altitudinem non excedunt. Comam alunt longissimam usque ad genua et infra etiam demissam, barbam quoque quibusvis aliis hominibus promissiorem gestant. Quae ubi adjustam excreverit magnitudinem, vestes amplius non induunt sed capillos poene demittunt ab occiputio multum infra poplites, et barbam pedibus tenus ante praetendunt. Hinc denso crinium amictu totum circumsepti corpus zona eos constringunt et pro vestitu habent . . . Horum Pygmaeorum tria millia rex Indorum in suo comitatu habet, nam sagitarii sunt peritissimi*". Ctesias, *De Rebus Indicis*, 11. Cf. Haddon, *The Wanderings of Peoples*, pp. 17-18.

[2] *Ṛg.*, V, 29, 10.

[3] *Periplus*, 62. (Schoff, p. 47).

[4] *Bhāgavata Purāṇa*, IV, 14, 44.

In point of fact these Niṣādas are described as issuing forth from the thighs of Vena when they were rubbed by the Brāhmaṇas after Vena's death. Then "a being came forth of the complexion of a charred stake, with flattened features and dwarfish stature. He at once cried to the *munis*: 'What am I to do?' They replied: 'Sit down (*niṣīda*).' On this account his name was Niṣāda".[1] Centuries later Bāṇa described a young mountaineer, with similar negroid physical traits: "His dark forehead was like a night that always accompanied him in his wild exploits; . . . while his somewhat bleared eye with its scanty lashes, seemed by its native colouring to distil hyena's blood which had been applied as medicine; his nose was flat, his lower lip thick, his chin low, his jaws full, his forehead and cheek-bones projecting, his neck a little bent down while one half of his shoulders stood up".[2] All these types reveal a mixture of the Dravidians with the old negritos of prehistoric times.[3] The pure Dravidian race of Sind, the Punjab and Kashmir is totally different from them.

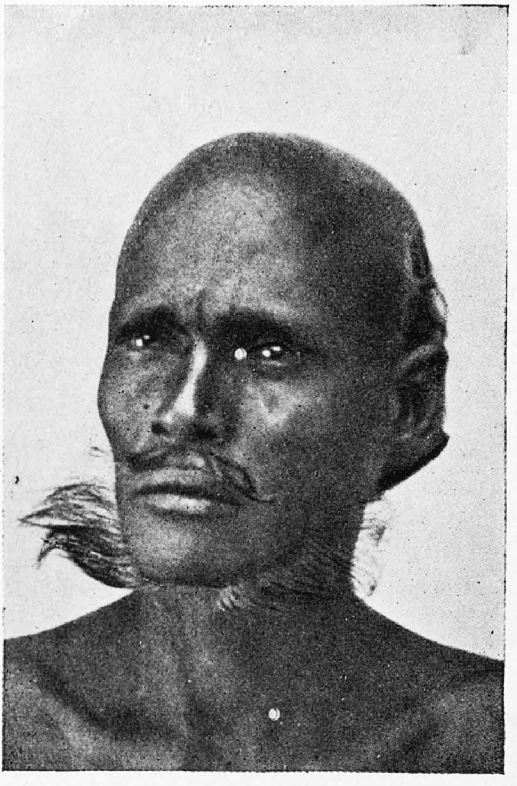

Fig. 315
Portrait of a Bhill from northern Gujerat displaying some negroid features.

All these data point to the fact that at the time of the settlement of the Dravidians in India after the Flood, there existed in this country the tribe of the *negritos* widely spread along the coasts of south India. This tribe, being an offshoot of the negro

[1] *Viṣṇu Purāṇa*, I, 13.
[2] Bāṇa, *Harṣa-carita*, XIII, 259-260 (Cowell-Thomas, pp. 230-231).
[3] Cf. above, p. 466, n. 3.

race, discloses the existence of the latter a few centuries after the Flood, when there had not been time enough for the formation of this race of such typical physiological features, unless it is admitted that this race is pre-diluvial.

III

RACIAL RELATIONS OF THE DRAVIDIANS

We do not know how long a period had elapsed since the time when Noah's Deluge was over, till the settlement of the Hamites in India. We sincerely believe that that period was not very long, since we have not found any vestige of the Hamites in any other part of the world prior to their taking possession of India.[1] Yet, even if we suppose a thousand years to have passed between the two events mentioned above, which is a very long period indeed, this time is certainly very short and not sufficient at all to obtain the physiological evolution of the negro race within it ; and much less the production of the negrito sub-group of that race, which was already in India at the end of that period. Hence there is no other possible solution than to admit that the negro race is a pre-diluvian race.

This foregoing conclusion does not imply any contradiction with the biblical account of the Flood. The writer of *Genesis* says that the Flood covered the whole earth,[2] that during that eventful catastrophe all men living upon the earth perished.[3] Yet all these expressions do not refer to the whole land inhabited by man (as some pretended), for at the time of the Flood the whole earth was already peopled: but only to the land inhabited by the descendants of Seth, the third son of Adam and Eve.[4] The descendants of Cain and of other sons and daughters of Adam and Eve, not named in the biblical account,[5] are here overlooked for all practical purposes.

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[1] Cf. above, p. 454, n. 6.

[2] *Gen.*, VII, 18-20.

[3] *Ibid.*, VI, 7.

[4] *Ibid.*, IV, 25.

[5] That there were some children of Adam and Eve not actually mentioned in *Gen.*, IV, the fact that not even the wife of Seth is spoken of clearly proves. Cf. Sutcliffe, *Who Perished in the Flood ?*, pp. 10-12.

This interpretation seems evident after studying what the fundamental cause of the Flood was. This cause was the illicit union, between the sons of God and the daughters of man, out of whose union, such moral corruption had issued and infected Seth's family.[1] The sons of God were the males of the family of Seth.[2] They were thus called, for God exercised a special protection and watchfulness over them, since in their family his only begotten Son had to take human flesh. The daughters of men were the females of Cain's family and of all other descendants of Adam and Eve, who had already forgotten the divine laws and the first revelation made by God to man. St Augustine explains that Seth was the founder of the city of God on earth, just as Cain was the founder of the city of men.[3] Just as the pagan wives of Solomon had corrupted his heart, in times much posterior to the events which we are commenting upon,[4] so in the same way, on this occasion, the daughters of men caused the customs in the family of the sons of God to be also corrupted. God, therefore, wanted to purify his own family ; and in order to obtain this purification, He caused a Flood to drown all its members, excepting Noah, his wife and his sons with their wives, who had not been contaminated by that general looseness of customs.[5] Thus God preserved in perfect purity that branch of the great human family, within which the Redeemer of mankind was to be born.

Having up to here ascertained who the descendants of 'Hām are, one may possibly ask : Who are the descendants of the other two sons of Noah, *i.e.* Sem and Japhet ?

The Semites are very well known, the Jews and the Arabs, all of them practically descending from Abraham : the former as child-

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[1] *Gen.*, VI, 2-5.

[2] Hetzenauer, *Commentarius in Librum Genesis*, p. 312.

[3] St Augustine, *op. cit.*, XV, 17 : *Ibid.*, col. 460.

[4] *III Reg.*, XI, 4.

[5] The Catholic Church has never declared that the universality of the Flood, according to the biblical account, should be forcibly understood as anthropologically universal, *i.e.* having caused the death of *all* men, excepting those in Noah's family. The very text of the first epistle of Saint Peter (III, 20-21), which compares the universality of those that perished in the Flood, outside Noah's ark, with the universality of all those who do not obtain salvation outside the Church, may be perfectly maintained as referring only to the universality of those of Seth's family who perished in the Flood.

ren of Isaac, the latter as the issue, at least to a great extent, of Ismael, the son of Abraham's slave Agar.[1]

It is not so easy to investigate who the Japhethics are. It is customary to call Japhethic all the inhabitants of Europe in general. Amongst them the Mediterraneans were also classified. They, as shown above, belong to the Hamitic race. Yet, if we put aside the southern and occidental nations of Europe, who, in spite of the later Āryan invasion, have remained as Hamitic as ever,[2] we may safely say that the Japhites people the European continent. They are, as a matter of fact, the Indo-European nations that occupy the eastern, northern and central part of Europe, plus the Āryan tribes and their congeners who migrated to the east.[3]

The identity of the Āryas with the descendants of Japheth is clearly deduced from the innumerable lexical similarities between Dravidian languages and Sanskrit. The former are purely Hamitic languages. Now, putting aside the flexible development characteristic of the evolution of Sanskrit, there are numberless Sanskrit words which evidently have the same roots as the Dravidian words. Such equations may also be easily found between the Dravidian and Greco-Latin lexicons.[4] Nor is this practically showing that Sanskrit proceeds from an unknown primitive Dravidian language. The cause of all those similarities is that both Dravidian languages and Sanskrit proceed from a common origin; though the former, for having kept their agglutinative character, appear more archaic, while Indo-European and later Sanskrit, having adopted a flexible evolution, has a modern outlook. In Noah's ark one language only was spoken. It is not therefore strange that the descendants of

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[1] From the anthropological point of view the Semites, the Hamites and the Mediterraneans are all so similar in type that Professor Elliot Smith and other anthropologists have regarded them as three variants of a single racial stock. Cf. Dawson, *The Age of the Gods*, p. 145; Gray, *op. cit.*, p. 358; Kortleitner, *op. cit.*, pp. 24-25.

[2] Cr. Heras, "La Cuestión Arya", *op. cit.*, p. 314.

[3] Joliat, *op. cit.*, p. 41.

[4] Over this very interesting point the four fascicules of *An Etymological and Comparative Lexicon of the Tamil Language* by the late Fr S. Gnana Prakasar, O.M.I., (published in Jaffna, Ceylon) throw a flood of light. Cf. also Pope, "Notes on the South-Indian or Drāvidian Family of Languages", *I.A.*, V, pp. 157-158; Cuny, *Etudes prégramaticales sur le domaine des langues indo-européennes et chamito-sémitiques.*

Japheth would possess a vocabulary in some way similar to that used by the descendants of 'Hām.

From all the statements made above we may rightly conclude that all the races, nations, tribes and families, which are not included in this three-fold family — Jews–Arabs = Semites, Mediterraneans = Hamites and Indo-Europeans and Āryas = Japhites — must be considered, just as the negroes, as races and nations from the pre-diluvian period.[1] Such is, for instance, the yellow race. Such are the Red Indians of America. Such the Esquimos of the Arctic regions and the Malays of south-eastern Asia. Such finally the Basques of Spain and France, who are at present the only representatives of the pre-Hamite population in the Iberian Peninsula.[2]

To deduce from this that post-diluvian races are superior to those of pre-diluvian origin would be a totally wrong conclusion, for all races have a common origin. It would be still a more illogical pretension to raise one of the three Noachic families over the other two, on the plea of its supposed higher physiological perfection. The only elements which may lift a race over another, or over other races in general, are the effects of the intellectual faculties of its members that finally crystallize in its civilization. And as regards this point, history by revealing the hidden secrets of past ages has discovered to us that in ancient times the Hamitic nations, which we now call Indo-Mediterranean, created the highest and most wonderful civilization in all the different branches of human knowledge.

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[1] "Several races had their origin before the deluge." Steinmueller, *Problems of the Old Testament*, p. 122.

[2] The Basques racially are neither Iberians nor Hamites; yet they have preserved in their Euskalduna language the primitive Iberian language, which is Hamitic. Very recently extraordinary connections have been discovered betwen this language of the Basques and Etruscan. Cf. Esandi, *Vascuence y Etrusco*. Similar connections had already been found long ago between the pre-Hellenic language of Greece, the pre-historic language of Italy and the Iberian language. Cf. Cejador y Franca, *Ibérica*, II. The Basque language, substantially being the Iberian language, *i.e.* an agglutinative language, is very similar in lexicon and grammar to the Dravidian languages of India. They are all languages belonging to the same Hamitic family. Yet a number of elements of Euskalduna are foreign to the Dravidian family. They seem to proceed from the old Basque language prior to the adoption of Iberian.

APPENDIX

THE ORIGINAL NAME OF THE PROTO-INDO-MEDITERRANEANS

1. The word *Drāvida*, given in late Sanskrit literature[1] to the *Dāsas* or *Dasyus* of Vedic times, does not seem to be of Āryan origin. During the early days the pre-Āryan people of India were denominated by the new-comers by a Sanskrit word, *Dāsa* or *Dasyu*, which showed the appreciation they had of their neighbours' social status, rather than a name by which they were generally known amongst themselves and amongst the nations of the vicinity. They hated them as their former enemies at the time of the Āryan invasion. But at a later period the Āryas seem to have learnt the real name of their former opponents, but modifying it a bit, as was always customary,[2] they called them *Drāvidas*. For the ancient Dravidian name seems to have been *Dramila*,[3] a name which is still found in inscriptions of the 8th century.[4] But was this a name known in the Proto-Indian period ?

First of all let us investigate what was the meaning of this name.

The word *Dramila*, as it is, though showing a clear Dravidian origin, nevertheless has an evident corrupted morphology.[5] It

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[1] Cf. for instance Manu, X, 43-44.

[2] For instance in the *Ṛgveda*, VII, 21, X, 99, 3, *śisna* stands for *cuṇṇi* (Dravidian). Later on the *Colas* of the South were known in northern India as *Śulikas*. Cf. Heras, "Who were the Śulikas ?", *J.A.H.R.S.*, I, pp. 130-131.

[3] Caldwell, *A Comparative Grammar of the Dravidian Languages*, pp. 8-9.

[4] *S.I.I.*, II, p. 372. The change of the word Drāvida is a phenomenon well known in philology. The Latin word *lingua* was in ancient times *dingua* according to Marius Victorinus (Keil, *Grammatici Latini*, VI, 26, 3). This is the old form, in full accordance with the old Indo-European word *dṇghuā* or *dṇghu*. Cf. English '*tongue*'. Walde-P., *Vergleichendes Worterbuch der indogermänischen Sprachen*, I, p. 792. Hence it has been suspected that this initial *l* of lingua is due to influence of the Sabin language (Ernout-Meillet, *Dictionnaire étymologique de la Langue Latine*, p. 524). We come across a similar phenomenon in Sanskrit. In *Ṛg.* I, 1, we have the word *ila*, instead of *iḍa*, which seems to be the original Sanskrit form (Thumb, *Hanbuch des Sanskrit mit Texten und Glossar*, p. 91). The *l* seems therefore the effect of the relations between Sanskrit and Dravidian languages, from which all guttural consonants probably come. (This inclines us to suggest that the *l* of *lingua* probably comes from the Etruscan language, which seems to be a Hamitic language of the same family as the Dravidian languages of India). It is therefore natural that the opposite phenomenon would occur here. The Dravidian word *Dramilar* used by the Āryans should become *Dravidar*. As regards the changing of *m* into *v*, it is not strange at all either. For instance in Sanskrit the primary ending of the first person of dual is *-ves* and *-vos* ; while in plural is *-nes* and *-mos*. Now it is evident that the first person of dual and of plural must have psychologically been in intimate relationship. Therefore that *v* and the *m* must practically have been almost the same. Moreover these two consonants are interchangeable in Sanskrit. Cf. Caldwell *op. cit.*, p. 10. They are also interchanged in Celtic language. Cf. Dottin, *La Langue Gauloise*, p. 62.

[5] Caldwell, *op. cit.*, p. 9.

is a characteristic note of Dravidian languages not to have two consecutive consonants in the same syllable; all the consonants are separated by vowels. Consequently in the word Dramila a vowel has been eliminated which formerly separated the two consonants *D* and *r*.

Moreover the initial consonant *D* was in more ancient times *T*. Such hard consonants were very often softened later. But what was the missing vowel? The missing vowel most likely was a short one, for the suppression of a long vowel is not so easy. Considering all possible eventualities and especially the fact that in ancient Tamil dictionaries we come across the word *Tiramida*,[1] in which there is an *-i-* between the *T* and the *r*, it may be suggested that the missing vowel was an *-i-*,[2] thus the whole word reading *Tiramila*. What is the meaning of this word?

This word is a compound word. The two compounding elements are *tira* and *ila*. Now *tira* means "wave" and "sea"; *ila* means "leaf"; but in very ancient times *il* also meant "son".[3] In fact the Tamil word *pillai* evidently is derived from the word *il*. This word has the original connotation of an offshoot in relation to the main object. Such is the leaf in relation with the tree and the son in relation with the father.[4] Consequently *Tiramil*, in which the two elements are joined by an euphonic *m*, means" "the son" or "the child of the sea", and *Tiramilar*, in plural, "the sons" or "the children of the sea". Is this meaning probable as referring to the ancient Dravidians?

It cannot be more accurate. Seafaring activities are traditional among the ancient Dravidians of India. The tribe of the Mīnas= "fishes", was so called on account of their inclination to sea trade.

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[1] *Ibid.*

[2] *Ibid.*

[3] Cf. Heras, "The Vēlāḷas in Mohenjo Daro", pp. 52-53.

[4] In Basque language, the old Iberian language of Spain (a Hamitic language of the same family as the Dravidian languages of India), *-ili* means "hair", which is also an offshoot of the head. It may incidentally be added that *il* also seems to be the origin of the Latin word *filius*, "son", and even of the English word *'child'*.

They were like fishes, always in the water.[1] The *Tirayars*="the people of the sea", were apparently called so on the same grounds. They were more the people of the sea than of the land.[2] From very ancient times there were five sub-tribes of the Tirayars who traded in different countries, Burma, Ceylon, Bengal and China. (The trade destination of the fifth tribe, called Pallava Tirayar, is unknown). In the Western Coast, the *Paṇis*, of Ṛgvedic fame, were also carrying on maritime trade and the commercial exploits narrated in the *Bāveru Jātaka* are probably due to their cunning.[3] We find Minaei in the Yemen corner of the Arabian Peninsula,[4] and Minyas in Boeotia, Northern Greece.[5] These probably were two colonies of the ancient Mīnas of India, and there are reasons to state that the Sumerians of Mesopotamia, the ancient Egyptians, the Hittites of Syria, the Phoeniçians, the Minoans of Crete and Mycaeneans of continental Greece, the Etruscans of Italy and the Iberians of Spain were but as many offshoots of the great Proto-Indian family. Elsewhere I have described a signet belonging to the Mīnas found in the island of Ibiza, east of Spain.[6] They travelled from Spain to far off Ireland.[7] Certainly if any nation in ancient times deserved the name of "children of the sea", it was the Proto-Indian nation.

A modern Tamiḷ proverb, which evidently has its roots in very ancient times, seems to summarize the story of the millenary sea-faring exploits of the ancient Dravidian nation. It runs as follows :-

Tirai kaḍal ōḍucum
Tiraviam tēḍu.

Which means: "Running over the sea and making money".

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[1] Cf. Heras, "Mohenjo-Daro, the People and the Land," p. 708.

[2] Kanakasabhai Pillai, *The Tamils Eighteen Hundred Years Ago*, pp. 47-48. Heras, "The Tirayars in Mohenjo Daro", pp. 73-78.

[3] Cf. Heras, "The Origin of the Round Proto-Indian Seals discovered in Sumer", pp. 47-48.

[4] Strabo, XVI, 4, 2.

[5] *Ibid.*, IX, 2, 3.

[6] Heras, "Two Rings of the Museum of Ibiza (Spain)", *Bhārata Kaumudi*, I, pp. 285-289.

[7] Cf. above, pp. 457-458, 471.

Fig. 316
A Keftiu from Crete carrying precious objects to Egypt, after a painting in the Tomb of Rekh-ma-Rā, Thebes.

But was this name, *Tiramilar*, a name they had given themselves in the Proto-Indian period?[3] This will be disclosed anon.

2. It has already been proved that the ancient Dravidians of India were the earliest colonizers of continental Greece.[1] Herodotus speaks of them and narrates that a band of them led by a chief named Pandion was settled in Athens.[2] They had come to the continent from Crete.[3] Now this name, Pandion, is a slightly modified form of the dynastic name of the old Kings of Madurai. In fact when Greek authors speak of the Kings of Madurai they always call them by the same name Pandion.[4] This equation of names is a new link between the early colonizers of Greece and the Dravidian people of South India. The maritime enterprises of the Minoans of Crete throughout the Mediterranean offer another perfect equation of the character of this nation with the seafaring activities of the Mīnas, Tirayars and Paṇis of Proto-Historic India.

Now, Herodotus calls this early people of Greece *Termilai*.[5] If we examine this name carefully we shall trace a very significant similarity with the name *Dramilar*. First of all the latter portion of the name *-ilai*, if denuded of the evident Greek plural termination *-ai*, is originally *il ;* which is the same second element of the word Dramilar meaning "son" or "child".

The former element *Term* is also the same as the word *Dram* = *Tiram*. *Term* has also two consonants *-rm-* which must be separated by a short vowel. Thus *Term*, becomes *Teram*. Now in Dravidian

[1] Autran, *Mithra, Zoroastre et la préhistoire Aryene du Christianisme*, pp. 65-103 ; Boulnois, *Le Caducée*, p. 81.

[2] Herodotus, I, 173.

[3] *Ibid.*, I, 173 and VII, 92.

[4] Strabo, XV, 1 ; *Peryplus of the Erythraean Sea*, 54, 58, 59 ; Apollodorus, III, 14, 7 ; Pliny, XXVI, 23, 26 ; Ptolemy, VII, 1, 11, 89 ; Dionysos Periegeta, 509.

[5] Herodotus, I, 173.

languages the short *i* and the *e* may be easily interchanged, thus *Teram* becoming *Tiram*. Therefore the Termílai of Herodotus are the same Dramilar of India. Apparently, therefore, this nation had already been called by the name Tiramilar when they left the shores of India for their new home.

It is not so easy to fix the date of this migration. The early Minoan period seems to coincide with the 3rd millennium B.C.[1] The arrival of the Indian people in the continent must have taken place practically during this period and certainly not towards the end. Hence we may safely suppose that during the beginning of the third millennium they had already left the shores of India. In fact the name itself Termílai, kept by Herodotus, shows the early age of the migration. The initial T had not yet been softened, at that time, as had occurred in the case of the word Dramilar.

3. There is still another form of the same name amongst the Mediterranean nations which confirms the western colonization of the Proto-Indian people.

The Latin writer Rufus Festus Avienus of the 4th century A.D. has kept for us the account, by an ancient navigator of Marseilles, of the 6th century B.C., of a cruise round the Iberian Peninsula. The account describes the cities, capes, mountains and rivers that are seen from the sea giving their respective names and pointing out the tribes that were inhabiting the different sections of the country. When passing in front of the coast of Portugal, Avienus refers to the clash that had once taken place between the Celts (called by him Cempsi) and some of the ancient tribes of the country.

One of these tribes, as mentioned by him, is the tribe of the *Draganes*. Avienus's words are as follows :–

> *"Cempsi atque Sefes arduos colles habent*
> *Ophiussae in agro. Propter hos pernix Ligus*
> *Draganumque proles sub nivoso maxime*
> *Septentrione conlocaverunt larem".*[2]

[1] Cf. Hewes, *Crete the Forerunner of Greece*, p. XIII,

[2] Schulten-Bosch Gimpera, *Fontes Hispaniae Antiquae publicadas bajo los auspicios y a expensas de la Universidad de Barcelona*, I, p. 63, vv, 195. Cf. Siret, *Questions de Chronologie et Ethnographie*, pp. 104-105, 183-184, 435-436.

This passage may be translated into English thus:–

"In Ophiussa land on mountains high
The Cempsi and the Sefes live.
And the Ligurian stubborn with the Draganes
To snow-clad north their quarters moved
In far off land, because of them."

Much has been said about the tribe of the Draganes mentioned in this passage. Schulten calls them "a Ligurian tribe", though different from the whole nation of the Ligurians.[1] In fact had they been Ligurians, they would not have been differentiated from the Ligurian nation, by the Marseillian seafarer. These two nations had only one thing in common. Both were forced by the invading Celts to leave the Iberian peninsula and to settle in a northern country covered with snow. Yet this does not mean that both nations settled next to each other. The Ligurians settled near the Alps in northern Italy; the Draganes went farther north and stopped in central Europe and in England.

Yet none of the views of these authors as regards the Draganes seems to be satisfactory. The Draganes are still a mystery in the history of the Iberians of Spain. But now knowing the origin of the Iberian people of Spain, and comparing this name with the other two names which had been studied just now, we believe we may give the solution to this historical puzzle.

The first syllable of the word *Draganes* is the same as the first of the word Dramilar, if the euphonic *-m-* is excepted. In fact this is not needed in the word Draganes, for the second element of the word starts with a consonant. Accordingly this syllable would correspond to the ancient word *Tira*. But there is a very great difference, at least at first sight, between the second part of the word *Draganes* and the second part of the word *Dramilar*. I said, "at first sight", for this difference seems to exist only in the form and not in the meaning. The latter part of the name *-ganes* is derived from the Greek word *geneá, -ás*, which means "generation", "extraction",

[1] *Ibid.*, p. 27. Cf. Bosch Gimpera, *El Problema Etnológico Vasco*, p. 37.

"race", "family", "posterity". By a simple metathesis "geneá"= "gená" has become "gáne", while passing through many copies from the 6th century B.C. to the 4th century A.D. Thus Draganes has no other meaning than Dramilar. It means "the family of the sea".

These Draganes therefore seem to be a section of the Iberian nation, to whom the original name of the whole nation was still attached by the informant of the Marseillian seafarer. To say that they were Draganes was not to say that the other Iberians were not Draganes. But the latter were also and more generally known by the name of their main city. Thus those living in and round the city of Cose were named "Cosetani"; those of Ilerda, "Ilerdetes"; those of Oria, "Oretani"; those of Ausa, "Ausetani"; those of Edeta, "Edetani"; those of Indiaka, "Indigetes", etc. Such also is the origin of the name "Iberi"; the tribes living along the river Iber, originally *Ibār*, "the beneficent river", were called "Iberi", or Ibāri, originally Ibarrar,[1] a name which was later on extended to all the tribes of the Eastern Coast of Spain.

But their original name seems to be Draganes, which is the half hellenized form of the Proto-Indian name Tiramilar.

4. This name furthermore appears somewhat modified in Latin literature referring to some inhabitants of France, Ireland and England. It is well known that the Iberians of Spain travelled to central and western Europe both by land and by sea. Avienus has spoken of this land migration in the passage explained just now. They were the pre-Celtic inhabitants of these lands and of south-western Europe. It has been already explained that the Druids were the relics of these Iberian people in Celtic times.[2] This name will be studied here.

The most common form of this name is *Druidae*, in Latin. Yet there are other forms found in Latin authors. Victor Aurelius

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[1] This name is still extant as a family name among the Easks, Ibarra, which according to them means "people of the river bank."

[2] Heras, "Quiénes eran los Druidas?", *Ampurias*, II, pp. 17-32.

calls them "Drysadae".[1] Ammianus Marcellinus writes "Drasidae"[2] and "Dryaridae".[3] Lucan has "Dryadae",[4] and Diogenes Laertius "Dryides".[5] In epigraphic documents we also find two new forms of this name in singular, "Droata"[6] and "Gutuater".[7] The latter is also used by Caesar.[8] Besides in Irish the Druids are named "Drui" or "Druad" and[9] in Wales they are called "Derwydd".[10]

The etymology of the word "Druid" received a very early attention. Pliny seems to have been the first who studied it. "It seems probable", says he, "that the priests themselves (the Druids) may derive their name from the Greek word for that tree (the oak)".[11] Scarcely could they derive their name from the name of the oak,[12] when they themselves did not know the Greek language.

In modern times another more scientific etymology has been given, which nevertheless has not satisfied the critics. According to this explanation the word *drui*, which seems to be the original form kept in Irish, comes from the word *sui*, which in Celtic means "wise". Accordingly "Druids" would mean "the wise men".[13]

Now, a study of all the names given to the Druids, in connection with the names examined previously, can easily be made out.

The word "Drasida" used by Ammianus Marcellinus is the same name "Dravida", after exchanging the *v* and the *s*. Philologically this change is not easily explained, but it is not impossible. It is probably due to a wrong pronunciation or perhaps to a mistake or confusion in writing. The form "Drysada" used by Victor Aurelius seems to be the same word after exchanging the first two

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1 Victor Aurelius, *De Caesaribus*, IV, 2.
2 Ammianus Marcellinus, XV, 9, 4.
3 *Ibid.*, XV, 9, 8.
4 Lucan, *Pharsalia.*, 451.
5 Diogenes Laertius, I, 1.
6 Kendrick, *The Druids.*, p. 100.
7 *Corpus Inscriptionum Latinarum*, XIII, 1577.
8 Caesar, *De Bello Gallico.*, VI, 3, 1 ; VIII, 38.
9 Hubert, *Les Celtes depuis l'époque de la Thène et la civilization Celtique*, p. 275.
10 *Ibid.*, p. 276.
11 Pliny, *Natural History*, XVI, 249.
12 In Greek oak is *drys*.
13 Hubert, *op. cit.*, p. 276.

vowels by metathesis and converting the *i* into *y*.[1] In all the other forms the *s* has been eliminated,[2] as happens very often when this consonant is found between two vowels.

The appearance of the *u* in the word "Druida" and its Irish and Welsh original "Druid" and "Derwydd" is quite natural after having the *y* in this syllable. The *o* of "Droata" is the same *u* converted into *o*. In the Welsh name it is worth noticing the appearance of an *e* in the first syllable quite in accordance with the original name Tiramila and its hellenized form Termilai.

The name "Gutuater" is of special interest. Apparently the original name was Tuater, in which the syllable *-uat-* corresponds to the same -uad- in the Irish name "Druad". The initial *T* is the *D* returned to its original strengthened form of the word Tiramilar. How the *-r* of the first syllable, which had always been retained disappeared in this case, it is difficult to explain. One would perhaps suspect that the last syllable of this word *-er*, has by an unknown and mysterious way shifted from the first syllable of the word to the end. In that case, the word thus formed "Teruat" would find its parallel in the Welsh word "Derwydd".

But the addition of the syllable *Gu*, which had apparently been prefixed later, now remains to be explained. The particle *co* in Celtic language was often prefixed to mean "union".[3] Originally this particle was naturally used with names in plural, for instance *co-frères=confrères*. But later even each singular individual of this union was referred to with the same particle, thus: *confrère*. This particle *co-* seems to be the origin of the syllable *gu-*. The change of *o* into *u* is well known.[4] The sound *k-* of *co* has been softened into *g-*. Thus *gu-* is the particle meaning "union", and in this particular case it means the union or college or society of all the Druids.

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[1] The *y* of Drysadae may also come from the *av=au* of the word Drāvida. The conversion of this diphtong into *y* is not unknown in Celtic philology. Cf. Dottin, *La Langue Gauloise*, p. 70. This *y* is also found in Diogenes Laertius and in Lucan.

[2] See Chart on p. 490.

[3] Cf. Dottin, *op. cit.*, p. 106.

[4] Cf. *Ibid.*, p. 60.

Thus we finally may draw the inference that the *Druid*, as well as all the forms meaning this clan both in the continent and in the British Isles, come from the word Dravida or Dramila, meaning therefore originally "the children of the sea".

5. On reaching this point an analysis of the whole subject may be made by means of a chart, in which the chronological, geographical and probable phonetical developments of this word may be seen at a glance. (See chart on following page).

As far as possible, the words have been written in the plural form, excepting those numbered under 13, 15 and 17, for obvious reasons; and also No. 19, which shall be explained presently. The plural terminations of all these words are of three kinds. Nos. 1-5 have the Dravidian termination *-ar*. Nos. 6-7 have their termination in Greek. All the rest are in Latin. Even No. 19 is written "Gutuatres" in Latin by Caesar. In our chart the word is in the singular, (as is found in the inscription at Le Puy), in order to discuss its termination *-er*. The explanation given above is a quaint but suggestive syllabical metathesis; but the comparison of this termination with that of the first cases of the chart (Nos. 1-5) makes one suspect that this termination *-er* might be a relic of the old Dravidian plural termination *-ar*, the real meaning of which being unknown to Caesar, was substituted by him by the latin plural termination *-es*.

As regards the first part or element of the name *Tiram* it is interesting to notice that the original initial *T* or its softened form *D* has always been kept.

The second letter *-i-* was soon eliminated in India itself (Nos. 3-5) as is natural (it being a short vowel) and continued being eliminated throughout, excepting in Greece (No. 6), in Wales (No. 17) and probably once in Gaul (No. 18). The third letter *-r-* has persevered throughout excepting in No. 5 and probably in No. 18. In the first case the disapperance of *-r-* is easily explained as the initial *dr-* is always softened in the Prākrits into *d-*.[1] The latter case would also

[1] Caldwell, *A Comparative Grammar of the Dravidian*, p. 9.

Nos	Geographical Setting	Probable Dates	Sources of Information	Diffrerent Forms of the Word (They have been put in plural as far as possible)		
				First Element	Second Element	Plural Termination
1.	India	6.000 B.C.	Philological Reconstruction. (Cf. No. 2).	T I R A-M	I L	A R
2.	,,		Ancient Tamiḷ Vocabularies. (Caldwell, p. 9).	T I R A-M	I D	A R
3.	,,		Sanskrit Inscriptions of S. India and	D..R A-M	I L	A R
		1573 A.D.	Tāranātha's Tibettan *History of Buddhism in India*.	D..R Ā-V	I D	A R
			Manu, X, 43-44.			
5.	,,		Name of those who speak Tamiḷ. (Caldwell, pp. 8-10).	T.... A-M	I L	A R
6.	Greece	c. 484-425 B.C.	Herodotus, I, 173 ; VII, 92.	T E R..-M	I L	A I
7.	Spain	6th Century A.D.	Avienus, *Periplus*, VIII, 197.	D..R A..	G A N	E S
8.	France and the British Isles	330-400 A.D.	Ammianus Marcellinus, XV, 94.	D..R A-S	I D	A E
9.	,,	4th Century A.D	Aurelius Victor, *De Caesaribus*, IV, 2.	D..R Y-S	A D	A E
10.	,,	39-65 A.D.	Lucan, *Pharsalia*, V, 451.	D..R Y..	A D	A E
11.	,,	330-400 A.D.	Ammianus Marcellinus, XV, 9, 8.	D..R Y A-R	I D	A E
12.	,,	First half of 3rd Century A.D.	Diogenes Laertius, I, 1.	D..R Y..	I D	E S
13.	,,		Name of the Druids in Irish.	D..R U..	I	
14.	,,	100-44 B.C.	Caesar, *De Bello Gallico*, *passim*.	D..R U..	I D	A E
15.	,,		Name of the Druids in Irish.	D..R U..	A D	
16.	,,		Inscription in the Island of Man. (Kendrick, p. 100).	D..R O..	A T	A E
17.	,,		Name of the Druids in Welsh.	D E R W..	Y D D	
18.	,,		(?) Original from of No. 19.	G U T E R U	A T	
19.	,,		Inscription of Le Puy. (*Corpus Inscriptionum Latinarum*, XIII).	G U T.. .. U	A T	E R

be explained if the strange but suggestive metathesis pointed out in No. 18 is accepted.

The fourth letter *-a-* perseveres all throughout in India (Nos. 1-5), in Spain (No. 6), and in two cases in Gaul (Nos. 8 and 11). It disappears in Greece (No. 6) and undergoes several other changes, but always retaining a vowel sound, into *-o-* (No. 16), into *-u-* (Nos. 13-15 and 19), into *-w-* (No. 17) and into *-y-* (Nos. 9-12).

The last letter of this first element of the name *-m-*, is also kept in India, excepting in one case when it is converted into *-v-*, through Sanskrit influence (No. 4). It also remains in Greece (No. 6). In two cases in Gaul it becomes *-s-* (Nos. 8 and 9) and in one *-r-* (No. 11). In all the other cases both in Spain and in Gaul it completely disappears (Nos. 7, 10 and 12-19).

As to the second element of the name *il*, the initial *i-*, remains always in India (Nos. 1-5), in Greece (No. 6), in four cases in Gaul (Nos. 8, 11, 12 and 14) and in three in the British Isles (Nos. 13, 14 and 17). But it has become *a-* in three cases in Gaul (Nos. 9, 10 and 19) and in two cases in the British Isles (Nos. 15 and 16). In Wales the *i-* becomes *y-* (No. 17).

The second letter, which is originally *-l* becomes *-d* twice in India (Nos. 2 and 4), a change due to Sanskrit influence, as explained above. It remains *-l* in Greece (No. 6) as a proof of immediate Dravidian influence, without any Āryan contact, in Herodotus. It remains *-d* in seven cases in Gaul and the British Isles (Nos. 8-12 and 14-15); it reduplicates once in Wales (No. 17) and becomes *t* twice, once in Gaul (No. 19) and once in the Island of Man (No. 16).

In Spain the word *il* "son" is substituted for its corresponding Greek. This substitution, nevertheless, was done by the Greek writer of the *Periplus*. The original name used by the Iberians of Spain most probably was the original name *ilar*.

All these are very few changes, indeed, and practically all are very easily explained, if we consider the enormous length of time and space that this name has bridged. One may rightly wonder at

the perseverance of this name in the course of about three thousand years, spread from western Asia up to central and western Europe. Really the Tiramilar were wonderful people.

6. In the study of the names given to the Indo-Mediterraneans throughout the Mediterranean basin, we have not mentioned the Etruscans of Italy, nor any name attached to them which could be equated with the names studied in the previous chart. And yet such name exists in relation to the Etruscans, too. The Etruscans were often called Tyrrenians in classical times. Consequently the eponymous father of the nation was supposed to be Tyrrenos, said to be the son of Atys, who had migrated from Lydia to Italy.[1] The meaning of this name is nevertheless unknown nor do the classical Greeks seem to have had an inkling of it. Yet we may now, after being acquainted with the origin of this nation, suggest the real significance of this name. The word *tira* (which may very well be transliterated *tirra*, owing to the peculiar Dravidian pronunciation of the 'r'), as seen above, means "wave" and "sea". Accordingly, *Tyrrenoi* would have an adjectival characteristic meaning, "those of the sea", which is precisely a meaning very similar, if not so significant, to the Greek demomination *Termilai*. That the ancient Greeks were not acquanited with the true meaning of the word, the names *Tyrrenikè zálassa*[2] and *Tyrrenikòn pélagos*[3] seem to suggest, owing to their redundant character, meaning in fact "sea of the sea". We may point out incidentally, that this denomination "Tyrrenian sea", continues to be given to the ocean to the west of Italy down to Sicily.

7. The persistence of these nouns connected with the sea applied to the ancient Indo-Mediterraneans spread through the Mediterranean basin may finally explain an expression often found in Egyptian records which has up to now been a puzzle to the

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[1] Strabo, 219, 221.

[2] Dionyssos of Halicarnassus, *Antiquitates Romanae*, I, 10, etc.

[3] Plutarch, *Camillos*, 16; *Paulos Aemilios*, 6.

historians of the land of the Nile. These Nilotic records of a later period very frequently mention "the people from over-sea" or simple "the people of the sea", of whom the Egyptians of the Delta were much afraid on account of their violent depredations.[1] Among them, if we are to believe the sculptures of Medinet-Abu, there were Tyrrenians, called Tuirsha by the Egyptians, and Teucrians, named Tikkarai in the records. They are styled as pirates of the coast of Egypt.[2] Yet these "people of the sea", qualified as pirates, are acknowledged as the "undoubted ancestors of the classical people of Greece and Asia Minor".[3] They were the enterprising *children of the sea* coming from the East. Once more the knowledge of Indian History elucidates an important point of ancient Mediterranean times which has remained obscure up to now. *Ex Oriente lux.*

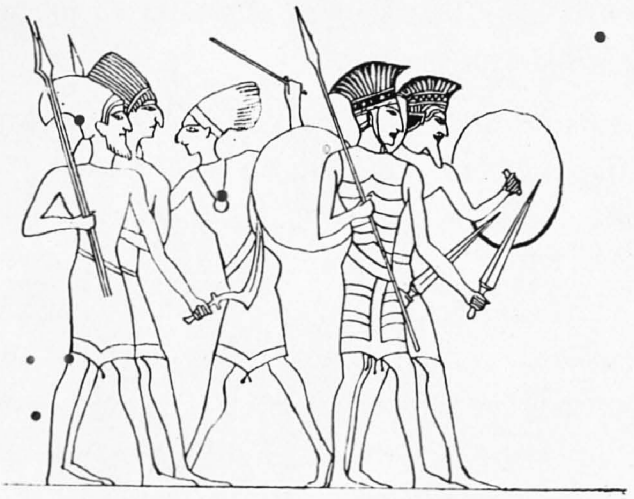

Fig. 317
A Group of "the people of the sea", after the sculptures of Medinet-Abu, Thebes, of the time of Ramesses III. Those of the left are Tuirsha (Tyrrenians), those of the right are Tikkarai (Teucrians).

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[1] Cf. Myres, *The Dawn of the History*, p. 189. Cf. above, p. 452.

[2] *Ibid.*, p. 207.

[3] Jardé, *La Formation du Peuple Grec*, p. 96.

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