BOOK REVIEW

Irfan Habib, Volume II. *The Indus Civilization*, A People's History of India, Aligarh Historians Society and Tulika Books, New Delhi, 2002, pages x+111, Price Rs.225. Irfan Habib and Vijay Kumar Thakur, Volume III. *The Vedic Age*, A People's History of India, Aligarh Historians Society and Tulika Books, New Delhi, 2003, pages viii+100, Price Rs.195.

Professors Irfan Habib and Vijay Kumar Thakur need no introduction to the world of scholars, and their books always invite wide readership. The Aligarh Historians Society has published the first set of three monographs devoted to the early part of the Indian history. The first monograph entitled *Prehistory* has been reviewed earlier. Volumes II and III are now under review.

The present reviewer is particularly indebted to Professor Irfan Habib and several other leading historians and archaeologists in the country for receiving inspiration and help, during the 1980's and onwards, with regard to his research on history of science in India. During his visit to the Aligarh University, the present reviewer lectured on (a) the primacy of India in ancient brass and zinc metallurgy and (b) the Aryan question. Professor Habib applauded the observations under (a) but disagreed with him on (b), the Aryan question. The disagreement continues until now.

The present reviewer put forth his views on the 'Aryan Myth' before a national convention of historians and archaeologists held at Kolkata (July, 1988) quite humbly, as a non-expert, layman and 'one amongst the parents'. While some accepted his views, and some did not, there was no formal rejoinder in writing, and the lengthy paper was published in full¹. Probably it was realised by the organizers that the majority view need not be proclaimed as the only view, and that 'history' is too important a subject to be left exclusively in the hands of expert historians.

Yet, Habib and Thakur have sadly ignored the writings on this subject penned by some non-historians. ¹⁻⁵ An astrophysicist has however received some attention from them probably because he supports the theory of Aryan immigration into India⁶. While reviewing Habib and Thakur's books (Volumes II and III), we would have occasions to refer to Kochhar's work as well⁶.

Volume II: The Indian Civilization

The author ambitiously intends to cover a vast subject inclusive of 'other copper age cultures and history of language change till 1500 BC' in three chapters and 111 pages. In effect, the monograph provides us, in a concise form, the well-considered and articulated views of Professor Irfan Habib (on the above subjects) who carefully tones down the contrary and divergent views. The readers are spared the heat of controversies and are told that the conclusions have almost reached finality. 'Communal and chauvinistic interpretations have been resisted'.

Some of the notes in the book are excellent e.g. those on 'The Methods of Archaeology', 'The Indus Script'. The other notes leave much to be desired e.g. 'The Indus Civilization and the *Rgveda*', 'Reconstructing Language History' etc. in so far as the propositions are controversial.

While discussing the Pre-Indus cultures, Habib strangely ignored Mehargarh, emphasized the Helmand Civilization, which in his own words had little interaction with the Indus Culture, and under-rated the Sothi-Siswal-Banwali traditions and the Ghaggar-Hakra Valley, which may truly be called the Sarasvati Valley. His inference that 'invasions from the West overwhelmed Helmand cities and then the Indus Civilization' (p.64) is unwarranted. Habib has undervalued the rich archaeological data from Kalibangan I and II which clearly indicate *Rgvedic* Sarasvati Valley Culture (pp. 44 and 56). Professor Habib strangely ignores the internationally reputed treatise on science and technology in the Harappan and Vedic eras written by Debiprasad Chattopadhyay and his eleven co-authors² and the evidence of primacy of India in zinc ore mining and metallurgy starting from 1500 BC in Lothal and Rajpura-Dariba^{4,5}.

The Contending Theories: 'A' versus 'B'

Max Muller, the famous scholar and translator of the *Rgveda* noticed the similarities between the Indo-European languages, and proposed in 1859,

that *Rgveda* was compiled around 1200 BC by the Aryans 'who had come to India from outside around 1500 BC'. His theory ('A') was stoutly opposed by Winternitz, Buhler, Macdonnel, Muir etc. John Muir asserted in 1872 that the Rgvedic Aryans were not aware of any land outside, and also that 'the nations whose speech is derived from Sanskrit have sprung from the gradual dispersal of the ancient Aryan race of India'. Swami Vivekananda, the first among the Indians, Pargiter etc. supported John Muir's assertion ('B').

Confronted by criticisms to his theory, Max Muller stated categorically (1898): "By Āryas, I mean neither blood, nor hair, nor skull; I mean simply those who speak an Aryan language". Yet the racial overtone in the theory was sustained by some European scholars and archaeologists, their Indian followers and the later day Nazis. Even in his 1889 Gifford Lecture, Max Muller had changed his stand: "Whether the Vedic hymns were composed in 1000, 2000 or 3000 BC, no power on earth will ever determine". This circumspection was not shared by his successors. A. A. Macdonell arbitrarily put the date of *Rgveda* as 1200 BC. Even Kochhar, who supports theory 'A', admits that: "Macdonell's logic was rather convoluted but his conclusion have acquired the status of an established truth with the passage of time". (Ref. 6, p.11).

What was worse was that the linguists concocted a 'well-accepted model as the established truth'. According to this model ('A' heavily padded up), the Aryan or Indo-European language originated in the steppes of Eurasia, in a region close to Lithuania. The Aryan 'race' migrated in 3000 BC towards different directions. The Indo-Iranian branch further sub-divided itself around 2000 BC, one sub-branch entering India around 1500 BC, settling down to agriculture, poetry and high philosophy. We are also supposed to believe that the authors of the *Rgveda* did not mention about their original home in Central Asia because 'they had forgotten the fact', and anybody who does not accept this paradigm is 'frankly chauvinistic'².

R.H.Dyson Jr. clearly stated⁷ that 'this paradigm is of limited usefulness'. Summarising the consensus on the subject held by the internationally reputed archaeologists, who had gathered in the 1976 Conference at Kashmir (many of them were foreign scholars and not members of the Sangh Parivar), Dyson wrote that: "There is a continuing lack of agreement over the criteria by which

the presence of the Indo-Aryans can be demonstrated" He further added that the Indian, Iranian and Central Asian scholars have accumulated evidences for continuity in culture in their regions, rather that any sharp discontinuity due to racial intrusion⁷.

Jim G. Shaffer has been more categorical:

"Current archaeological data do not support the existence of an Indo-Aryan or European invasion into South Asia at any time in the pre-or protohistoric periods. Instead, it is possible to document archaeologically a series of cultural changes reflecting indigenous cultural development from prehistoric to historic periods. The early Vedic literature describes not a human invasion into the area, but a fundamental restructuring of indigenous society that saw the rise of hereditary social elites.

"The linguistic similarities (between the Indo-European languages) that are cited as proof of these human invasions have alternative explanations.....What was theory became unquestioned fact. It is time to end the linguistic tyranny"8. Allchins wondered 'at what stage Indo-Iranian languages were first introduced in India, sounded a note of exasperation: 'the task for the archaeologist is not to look for the Aryans', and then finally conceded:

"Our aim of relating linguistic and archaeological evidence remains problematic, and we must allow for several possible hypotheses, none of which at the present can be firmly established or rejected".

Coming back to the discussion on the two books presently under review, we may ask whether the reputed authors were aware of the above-mentioned facts and well-considered opinions; if so, why were these suppressed. Why did the authors deviate from their balanced scholarship and proceed towards the political objective of 'resisting communal and chauvinistic interpretations'. Rajesh Kochhar, who agrees with them, has earned a rare tribute: "Kochhar is not a dishonest man; he does not manipulate the evidence and he freely mentions data which on closer examination go against his own position". We wish that Habib and Thakur may also earn such a tribute in future.

The present reviewer had personally met Prof. H. D. Sankalia, the doyen amongst the Indian archaeologists, and heard his view about the theory of Aryan invasion. Professor Sankalia later sent his written communication to us on the subject:

"These theories (of Aryan intrusion) cannot be proven, unless definite knowledge regarding script, language etc. can be hadThe old problems, first raised in 1930, have remained unsolved" (personal communication to this reviewer dated 10 October, 1986).

Some eminent scholars like Professor Irfan Habib have not yet abandoned the 'Aryan intrusion' myth. It is quite understandable that they find it hard to discard their life-long conviction about an unproven hypothesis which they had earlier imagined to be a settled fact. But they should not cast aspersions on 'some professional archaeologists for embracing a view (on the Aryan question) quite contrary to what they had held earlier' (Habib, Volume 2, p.71).

The paradigm 'B', namely the axiom regarding the autochthonous nature of the *Rgvedic* civilization, received a shot in the arm when Sir Aurel Stein discovered the courses of the lost river (*vinās'ana*) Sarasvati in 1942, and after Indian independence, many Pre-Harappan, Mature Harappan and Post-Harappan sites were discovered around its bed. It became evident that we may view the ancient Indian history not in terms of the Aryan intrusion into the Harappan scene, but as 'the Harappan bubble in the *indigenous* Aryan lake'!

The proponents of paradigm 'A' did not give up, and argued that the middle channels coming from the Sivalik mountains were and are small channels (vinās'ana) and not big rivers. They ignored the total picture of the Landsat imagery obtained during 1979-1982 and the proof that prior to tectonic movements the perennial streams of Sutlei ('hundred palaeo-lithic channels' of Satadru) and Yamuna, both coming from the snowy Himalayas, used to meet Sarasvati and make it mighty (nadītamā). Kochhar admits that at Shatrana, 60km. South of Patiala, the two perennial rivers joined and suddenly widened its bed to a constant width of several kilometers (Ref. No.6, p 123). Yet, he and Irfan Habib have identified the present Helmand river or Avestan Harakhvaiti in Afghanistan as the naditama Sarasvati. They forget that Helmand does not meet the sea like Sarasvati (RV. 7.95.2), which was not only nadītamābut also devitama (RV.2.41.16). The archaeologists have certified the Mother Goddess or Devi-cult as vibrant right across Mehergarh, Harappa to Bhagwanpura for centuries: where is that tradition on the bank of Helmand? Kochhar at least conceded (Ref. No.6, p 138) that more research is needed to substantiate the paradigm 'A' particularly (a) archaeological excavations on the bank of Helmand in South Afghanistan and (b) detailed studies of the geomorphology and hydrology of the Ghaggar-Hakra in India and Pakistan. We have quoted Sankalia (1986) who also believed that lot more work is needed to prove the theory of Aryan migration. Habib and Thakur did not concede the necessity for further research, and smugly accepted the linguists' Aryan hypothesis as a settled fact. They would not consider the suggestion that the Indo-European languages had their origin in India.

While visiting the Aligarh University, the present reviewer asked Professor Irfan Habib which of the two river-names originate first, Sarasvati or Harakhvaiti. He replied that it must be the second one, since the Aryans came from the West. Once you accept a hypothesis as a settled fact, everything else follows, has to follow! Habib may consider Max Muller's famous statement that the Zoroastrians, who believed in the Vedic *rta* and *atharvan* 'migrated from north India to Afghanistan and Persia after a serious schism' (*Science of Language*, 1898, volume 2, p.70).

The West to East migrationary theory has been so infective that while linguists started from Lithuania to depict the Aryan saga, Habib and Thakur postulated the Rgvedic Aryan proceeding towards India from Harakhvaiti or Helmand in Afghanistan (Volume III, pp. 4 and 17-18), and even an astrophysicist of Kochhar's stature suggested that the early parts of the *Rgveda* were written on the banks of Helmand. Kochhar also suggested that Lord Rama lived on the banks of Hari-rud (both the rivers in Afghanistan) sometime in 1450 BC and proceeded via Bolan Pass eastwards towards Ravaṇa Lanka which was an island in the middle of the river Indus (Reference No.6, pp.208-212).!

We have provided enough evidences and arguments (which need not be repeated) in favour of the indigenous nature of our Indus-Saravasti valley traditions and the Vedic civilization ^{1,10-12}. But it is not our onus to prove anything. While paradigm 'A' is an unproven hypothesis, paradigm'B' is an axiom which has not yet been disproven; the latter resembles the axiomatic statement that 'two parallel lines never meet when extended', which stands, until it is shown otherwise.

Some scholars have suggested that one has to prove that the Rgvedic civilization was autochthonous. This reminds us of an argument that since the earliest man originated in Africa, no civilization in Asia has been truly autochthonous! Consider the earliest dates in the Egyptian, Sumerian and Chinese civilizations; we do not have any date earlier than the earliest. So do we presume that these civilizations were not autochthonous but founded by immigrants?

We were once asked by a young irate archaeologist as to what is the proof that the theory of Aryan intrusion into India is wrong. Our reply was that the onus of producing satisfactory proof lies on the shoulders of the proponents of a hypothesis. The Aryans might have 'entered' into India, but let this be proven. We are simply contesting this theory. Does an atheist have to prove that God does not exist? Professor Sankalia (1986) fully accepted the merit of our argument.

We have already quoted Allchins (1983), who conceded the feasibility of other hypotheses, and Shaffer (1984) who supported the theory of the indigenous nature of the Rgvedic Civilization.

Since there is no archaeological proof yet of the so called Aryan intrusion into ancient India, 'we should leave the Aryan question alone', as Romila Thapar had suggested in 1973. The students and the 'people' need not be made to swallow the Aryan theory, and their minds poisoned about a fictitious Aryan-Dravidian bi-*racial* paradigm.

Volume III: The Vedic Age

This volume authored by Irfan Habib and Vijay Kumar Thakur seeks to cover the period1500-700 BC and also the topic of 'coming of iron'. As in the previous volume, there are some excellent notes e.g. on Historical Geography, The Caste System, Epic Archaeology etc.

Inappropriate interpretation and even suppression of some key passages in the *R gveda* are lamentable features which spill over from Volume II to Volume III.

Several examples may be provided:

- (1) Max Muller's statement on the Zoroastrians moving from India to Afghanistan has been ignored.
- (2) The river Sarasvaiti was stated to reach the ocean (RV. 7.95.2) whereas Harakhvaiti or Helmand does not end up in sea.
- (3) Sea navigation of the *Rgvedic* seers (RV. 1.25.7, 1.116.5, 7.88.3) has been ignored.
- (4) Habib remarked (II, 71) that the *Rgveda* has no female deity or goddess, completely ignoring Aditi, Sarasvati the *devītamā* (the best goddess), and her iconic description (Rv. 1.164.49, 2.41.16, 5.42.12, 6.61.10, 7.36.6, 7.95.6, 7.96.2, 9.5.8, 9.81.4). Habib did not find the 'goddess with tiger's body' depicted in the Kalibangan seal (II, 60, 71) described in the Vedic literature. 'Lion-like' Sarasvati is described in RV. 6.49.7, 6.61.8, 7.96.1, 10.65.13 and *Krsna Yajurveda* 1.2.12.
- (5) The opponents of the *R gvedic* seers, namely Harappan *paṇi's* or merachant did not speak any different language (III, 16); only their dialects were different (*mṛdhravāca*, pronouncing 's' and 'h, clearly the fleeing Zoroastrians, RV. 5.32.8, 7.6.3).
- (6) Habib agrees that spread of language does not mean racial intrusion, and that 'Aryan' has no racist connotation; yet, he tries to save his position by pleading that a very small number 500 per year might have sneaked into India regularly for 200 years, so as to keep the Indian population 'racially' unaffected (II, 96-100).
- (7) He ignores the profound implications of the Vedic fire altars and sacrificial spots in the Harappan Kalibangan, Banawali, Lothal etc.
- (8) Habib and Thakur have left out some important details of the Rgvedic civil war. The opponents of the \$\bar{A}ryas\$ (who were in the east) came with paras'u from the west (RV. 7.83.1 & 2-7). The Devas lost in the earlier battles and won the last battle in the north-east region and then pushed the enemy back towards the west (Aitreya Brāhmaṇa, 1.3.3). The Sarasvati valley topography in the Haryana-Punjab region is sufficiently clear in the Vedic texts.

In Volume III, Habib and Thakur have been very insistent on dating the Vedic literatures, a job no scholar can perform with any precision. The authors themselves admit that Vedic literatures provide 'fragmentary, hazy picture for political history to be constructed' (III, 45) and are 'difficult to match with archaeology' (III, 73). Yet they proceed arbitrarily to affix dates to specific portions of the *Rgveda* and subsequent Vedic literatures (Table 1.1, p.28 and Table 2.1, p.65). Then, they provide 'archaeological evidence' for the period 1500 to 700 BC within and outside India, and try to match archaeology with literary evidence. The net result is that the suggested dates of the Vedic literature appear to be settled facts.

Of course, the authors admit in the footnotes of the aforementioned tables that 'all(such) dates are hypothetical and only help to indicate sequence of the stages of compilation' (III,28). Then why did the authors leave the epics out of their reckoning (III,45). *Kṛṣṇa*, the crucial character of *Mahā bhāarata*, was mentioned in *Chāndogya Upaniṣad* and Pānini's *Aṣṭ adhyāyī*; he must have been a historical figure well before 700 BC. His *Gītā* has deeply influenced Indian history.

A.Ghosh 'distanced himself strongly' (III,92-94) from the misuse of archaeology in the services of not only the *Purāṇas* such as *Mahābhārata*, but also of *Rgveda*, all undated literary sources and linguistic paradigms. Habib and Thakur stated only half of the truth regarding A. Ghosh's statement (III,93).

A discussion on 'Peninsular India' and Cultures (1500-700 BC) has been included (III, 80-85); does the topic come under the 'Vedic Age'? 'The Coming of Iron' (III, 85-90) is a very brief and inadequate discussion. The authors could have gained through the use of more recent literatures such as reference no.4, Chapter XII. In the Post-Harapan era, Indian technicians successfully alloyed copper with zinc at Lothal, mined zinc ore at Rajpura-Dariba, and attained primacy in the world with regard to not only cementation brass but also distilled metallic zinc. These developments (1500-500 BC) have been chronicled carefully (reference no. 4, Chapter XVIII and reference no.5). For unknown reasons, Professor Irfan Habib, who was made aware of the literature, ignored the details. Smooth transition of Harappan to PGW pottery at Bhagwanpura, depicting the saga of continuity in Indian Culture, has been

ignored possibly because discontinuity, invasion or intrusion hypothesis had to be highlighted.

Late K.T.M. Hegde's scientific research on PGW, BRW, BSW and NBPW potteries was of a sterling character¹³. It revealed that the ancients had the knowledge of elutriation of clay for PGW family of wares, the efficacy of oxidizing and reducing conditions in the furnace (nilalohita), formation of the black phase (magnetite) as an intermediate step of reduction of red iron oxide hematite (BRW Pottery) towards ultimate product formation of metallic iron, and the importance of reh or sajji matti (containing sodium carbonate, bicarbonate, sulphate) on the Ganga-Yamuna river bank, which could react at high temperature with siliceous material to produce a glassy layer on the NBPW pottery and provide the unique black (blackness on account of magnetite) glaze on the de-luxe ware¹³. These developments partially fell within the period 1200-700 BC, and were summarized in reference no. 4, Chapter XI. However, no notice was taken of these literatures and developments by Habib and Thakur. The single most important and tragic omission by them has been that of the internationally reputed work of Debiprasad Chattopadhyaya², who in collaboration with a dozen of talented co-authors, surveyed the history of S&T in ancient India during the Harappan era (Reference No.2, Volume I) as well as the Vedic Age (Volume II). Professor Irfan Habib could have emulated Joseph Needham and Debiprasad Chattopadhyaya in soliciting collaboration from well informed illustrious scholars.

The discussions on religion (III, 21-26 & 58-63), economy (pp.46-52) and society (pp.52-58) in the Vedic Age are reasonably good though very brief. The authors have developed their Aryan paradigm on the basis of linguistics (vide their discussion on philology, glottochronology etc., Volume II, pp. 102-105). Yet there is so little deliberation on the Vedic contribution to linguistics (Volume III, p.64). The treatment of Vedic medicine (III, 65) also leaves much to be desired.

The authors' treatment of the *Upaniṣads* (III, pp. 59-63) is excellent but for two remarks. The *Upaniṣads* have been stated to be 'essentially mystical, not rational tracts' (p.59). We suppose that these are at least as rational as the *Bible*, the *Quran* and the unproven paradigms in science, linguistics and social philosophies. The authors concede (Volume III, p.62) that: "The *Upaniṣads*

undoubtedly constitute an important landmark in the development of philosophical thought in India; their worldwide acclaim, however, is recent". Has the acclaim been only recent? This life inspiring philosophy has been not only a source of inspiration to all Indians, ever since the age of the *Bhāgvad Gītā*, but also hailed all over the world, during the spread of Buddhism in Asia, prolonged contact with the Greek civilization, spread of Christianity (vide the early statements in the Gospel of Saint John, later in 500 AD Saint Denis), neo-Platonic Hellenic Vedantism of Plotinus in Alexandria and the advent of Sufism. Dara Shukoh and Schopenhauer (mentioned by the authors, III,62) came much later.

The authors have rightly hailed (III,60) the monistic and syncretistic contributions of the *Upaniṣads*: 'The ultimate unity of the Universe, the Creator and the Soul has been accomplished' (*tat tvam asi* in *Chāndogya Upaniṣads* VI, 16.2). They could have also highlighted the Rgvedic concept of secularism.

R gveda does not proclaim an atheistic version of 'secularism', the dictionary meaning of the term being 'sceptical of religious truth, worldly, not sacred'. Rgveda respects and accepts all genuine religious pursuits and exhorts all to act in unison, pray together and rise above sectarianism and communalism (RV. 10.191.1-4). The authors could have observed that this earliest literature in the world displays a rare kind of spiritual secularism and syncretism.

In conclusion, we recommend that the two volumes written by the well-known authors may be widely and carefully read, and wish all success to the Aligarh Historians Society in their struggle against communalism and chauvinism.

REFERENCE

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- 2. Debiprasad Chattopadhyay, *History of Science and Technology in Ancient India I*. The Beginnings, Firma KLM Pvt. Ltd., Kolkata, 1986. II. Formation of the Theoretical Fundamentals of Natural Science, 1991. III. The Astronomy, Science and Society, 1996.

- 3. Arun Kumar Biswas and Sulekha Biswas, 'History of Science in India: In the Search of a Paradigm', *Indian Journal of History of Science*, 24.3 (1989) 193-200. In this paper Debiprasad Chattopadhyay's view on the Aryan question was criticized. Both Chattopadhyay and B. N. Mukherjee had read the manuscript, disagreed, but recommended that Biswas and Biswas's 'hypothesis is quite thought-provoking and worthy of publication'.
- 4. Arun Kumar Biswas, *Minerals and Metals in Ancient India*, Vol.I, D. K. Printworld (P) Ltd., New Delhi, 1996. Habib and Thakur could have considered the contents of the 21 chapters outlining archaeological evidence particularly, II. Pre-Harappan India III. Mohenjo-Daro, Harappa, XI. Iron, PGW and Urbanisation, XII. Iron in Ancient India, XVIII. Zinc and Brass in Ancient India etc. Biswas's Vol.II deals with literary evidence in ancient India starting with the *Rgvedic* literature.
- 5. Arun Kumar Biswas, 'The Primacy of India in Ancient Brass and Zinc Metallurgy', *Indian Journal of History of Science*, 28.4 (1993) 309-330. The contents of this paper were presented in a seminar at the Aligarh Muslim University and applauded by Professor Irfan Habib.
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- 12. B. B. Lal, *The Earliest Civilization of South Asia: Maturity and Decline*, New Delhi, 1997.
- 13. K.T.M. Hegde, 'Scientific Basis of the Technology of the Three Ancient Indian Ceramic Industries', in *Archaeology and History* Essays in Memory of Sri A. Ghosh, edited by B.M.Pande and B. D. Chattopadhyaya, Agam Kala Prakshan, Delhi, 1987, Volume I, pp. 401-410.

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