

Bringing Indology into the Twenty-first Century: Why rich rewards are in store for many fields of science with major implications reaching far beyond Indian shores

Sujay Rao Mandavilli

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Abstract

In our previous papers, we had dealt with the Aryan problem, the identity of the Harappans, the origin of Brahmi and the Indus script, besides other related topics. We had also observed that the autochthonous Aryan theory and the Vedic Indus theories were untenable, and that the conventional theory that immigrants speaking the PIE, or one of the constituents of the PIE, now to be known as Base Indo-European, migrated to India from Central Asia would still hold good. We had proposed that the Dravidian and the Paramunda Indus theories would be untenable, and that the Harappans were intensely multi-lingual, speaking languages that were remote ancestors of the Prakrits of the Gangetic plains. We had shown how linguistic transformations had taken place: this issue was studied as an interplay between two language groups: an ancestor of Vedic Sanskrit spread in a part of India, died out as a spoken language, and became a liturgical language, and a lingua franca of the elite. The speakers of IE languages then took on the languages of the descendants of the Indus for everyday use due to the transfer of populations to the Ganga-Yamuna doab. Sanskrit then re-influenced the languages of the region, even after it disappeared as a spoken language. We had also discussed the origin of the term 'Aryan' which had a cultural connotation in the Rig Veda. We had also proposed that the migrations into India perhaps took place in around 2750 BC, long before the Rig Veda was compiled. In this paper, we discuss the importance of modernizing Indology for various fields of science and the need to replace the now effectively dead Mid-Nineteenth Century school of Indology and Marxist historiography with modern paradigms. We also explain why inaction could be fraught with disastrous consequences. This paper may therefore be construed as a clarion call to scholars from all over the world to take up research on Ancient India, and to raise awareness among scholars of related fields of study. The scientific and the intellectual rewards associated with such an endeavour would be enormous. We also attempt to lay out the contours and identify the key drivers for Twenty-first century Indology.

Introduction: A brief history of Indology

The Aryan issue, the identity of the Harappans, and the nature of inter-relationships between the languages of Europe and the Indian Gangetic plains as observed from the times of William Jones over two hundred years ago have been subjects of intensive academic discourse for decades and have seen much rabble-rousing and mud-slinging, particularly in the recent past.

Well over two centuries ago, on the second of February, 1786, to be precise, Sir William Jones, then a British judge in India, well-acquainted with Indian languages and literature, and also one of co-founders of the Asiatic Society of Bengal, delivered a lecture in Calcutta on the third anniversary of the founding of the afore-said society in 1784, in which he put forth his theory that the Indo-Aryan languages spoken in India were related to those in Europe and had a common ancestor, known as the Proto Indo-European. He stated: "The Sanskrit language, whatever be its antiquity, is of a wonderful structure; more perfect than the Greek, more copious than the Latin, and more exquisitely refined than either, yet bearing to both of them a stronger affinity, both in the roots of verbs and in the forms of grammar, than could possibly have been produced by accident; so strong indeed, that no philologist could examine them all three, without believing them to have sprung from some common source, which, perhaps, no longer exists: there is a similar reason, though not quite so forcible, for supposing that both the Gothic and the Celtic, though blended with a very different idiom, had the same origin with the Sanskrit; and the old Persian might be added to the same family, if this were the place for discussing any question concerning the antiquities of Persia." This speech effectively marked the first turning point for Indology as it was widely quoted and had a major impact at that time. This was in spite of the fact that Thomas Stephens and Filippo Sassetti may have made similar observations much earlier.¹

The Aryan migration theory was later put forth by Max Muller, a German-born and Oxford-based Orientalist, Indologist and philologist in the middle of Nineteenth century as a direct consequence of William Jones' afore-mentioned observations in the late eighteenth century about the striking resemblance between Sanskrit and Classical European languages. Max Muller postulated his theory that the Aryans had migrated into India somewhere in the middle of the second millennium BC, from an urheimat or homeland believed to be in Central Asia. It was then thought that there was no major civilization before 1500 BC in India and that these people had conquered the primitive indigenous tribes then residing in India and had established the Vedic culture in India, thus bringing light and civilization to primitive peoples. A few early Indo-Europeanists, such as Voltaire, Immanuel Kant, and Karl Wilhelm Friedrich Schlegel thought India was the Urheimat of all Indo-European languages. Most scholars, such as William Jones, however proposed that Sanskrit and related European languages had a common source, and that no attested language represented this direct ancestor.

The desire to project India as a linear ancestor of all Western and Greco-Roman cultures can be traced to the Western Romanticism of the 18th century which had perceived India as a country of rich and lost traditions, and a country which had ideals that were long lost in the West and were worth emulating. The German philosopher Johann Gottfried Herder had initially put forward the idea that India was the cradle of all civilization in his book "Ideen zur Geschichte der Menschheit". Inspired by the prevailing sentiments of the times, Friedrich von Schlegel (1772-1829), and to a much larger extent his brother August Wilhelm von Schlegel (1767-1845), were motivated to study Indian languages, literatures and philosophy, and the latter along with Henry Thomas Colebrooke (1765-1837), was one of the pioneering figures in Indology. This unabiding interest in India and its culture in select circles, finally led to the foundation of the study of Indology and comparative linguistics in German

¹ The Aryan Debate (Readings: Debates in Indian History and Society) Edited by Thomas Trautmann 2005 Oxford University Press

universities. Indology as an academic subject emerged subsequently in the 19th century, and interest in the study of India and its history and its prehistory increased rapidly. The Société Asiatique was founded in 1822, the Royal Asiatic Society was founded in 1824, the American Oriental Society in 1842, and the German Oriental Society in 1845. All this led to a scientific study of Sanskrit. Translations of major Hindu texts began in right earnest. A German translation of Hitopadesa or Indian fables was published in 1844. Max Müller's views on ancient Sanskrit literature were published in 1859. In his later years, Max Muller was much more euphoric about India as evidence by his lectures in Cambridge in 1883. In 1897, Sergey Oldenburg launched a systematic edition of key Buddhist texts, "Bibliotheca Buddhica". Centres of learning in Germany were dubbed 'Benares on the Rhine', and in some circles in the West, Ancient India was endlessly eulogized and referred to even as the birth place of every science in the world. Friedrich von Schlegel, for example, sung praises about the Sanskrit language stating: "Here is the source of all languages, all thought, and all poetics, everything, generated in India, without exception." In his work "Über die Sprache und Weisheit der Inder" (1808) he supported the theory of a relationship between the languages and people of Asia and Europe.

Such works and statements appear to have been diametrically opposed to the views of other scholars such as James Mill (1773-1836), who, despite never having set foot on Indian soil, were outright hostile to India, and there were very wide differences in the way India was perceived, even at that time, from scholar to scholar, creating confusion in the minds of other Western scholars and the Western and Indian laity.²

The theory that Sanskrit was the most archaic form of Indo-European and the mother of all Indian and European languages did not last long. The development of historical linguistics, specifically the law of palatals and the discovery of the laryngeals in Hittite, an ancient language spoken in Asia Minor, is believed to have rendered Sanskrit's claim as the ancestor of IE languages void. H.H. Hock has supposedly refuted the Out of India theory, too, in 1999, demonstrating the virtual impossibility of Indo-Aryan languages being ancestors of IE languages, and the impossibility of establishing India as the IE homeland by valid linguistic methods.

Likewise, the term Dravidian refers to a language family, the discovery of which was made in 1816 by Francis Whyte Ellis, and also elaborated upon by Bishop Caldwell in 1856, and this language family comprises four major extant languages and many minor languages. Of these Tamil, Kannada, Telugu and Malayalam were the major languages, and also the major literary ones. Tamil, Malayalam, Kannada and Tulu are classified as Southern Dravidian languages, while Telugu is classified as a South-central Dravidian language. Naiki, Kolami, Ollari and Duruwa are the Central Dravidian languages while Kurukh and Malto are the Northern Dravidian languages. The discovery of the Dravidian language family as a distinct family of languages may be referred to as the second turning point for Indology, even though the term 'Dravidian' would continue to be widely misused like the term 'Aryan' for more than a century to come.

Contrary to popular misconceptions in some circles, Max Muller does not appear to have ever used the term Invasion at the time, preferring peaceful migrations to Invasions. The idea of invasions became ironically fortified when the Indus Valley Civilization, one of Humanity's oldest major civilizations was discovered, and brought to light in the early 1920's. Announcing the discovery of the Indus Valley Civilization, Sir John Marshall stated in "First Light on a Long Forgotten civilization", in the Illustrated Weekly News on the 20th of September 1924. pp 528-32 and 548,³ "Not often has it been given to archaeologists, as it was given to Schliemann at Tiryns and Mycenae, or to Stein in the deserts of Turkestan, to light upon the remains of a long forgotten civilization. It looks

² From Writing Post-Orientalist Histories of the Third World: Perspectives from Indian Historiography, Gyan Prakash, Princeton University

³ Sir John Marshall in "First Light on a Long Forgotten civilization", in the Illustrated Weekly News on the 20th of September 1924. pp 528-32 and 548

however, at this moment, as if we were on the threshold of such a discovery in the plains of the Indus. Now, however, there has unexpectedly been unearthed, in the South of the Punjab and in Sind, an entirely new class of objects which have nothing in common with those previously unknown to us, and which are unaccompanied by any data that might have helped to establish their age and origin. The two sites where these somewhat startling remains have been discovered are some 400 miles apart—the one being Harappa in the Montgomery district of the Punjab; the other at Mohenjodaro, in the Larkhana district of Sind. At both these places, there is a vast expanse of artificial mounds evidently covering the remains of once flourishing cities, which to judge from the mass of accumulated debris, rising as high as 60 feet from the plains, must have been existence for many hundreds of years. Such groups of mounds abound in the plains of the Indus, just as they do in Mesopotamia and the valley of the Nile; and they are especially conspicuous along the old, dried-up beds of the main stream and its tributaries, not only in Sind, but in Bahawalpur state and in the Punjab."

Sir John Marshall wrote in 1926, "To the archaeologist, the site of Mohenjo-daro is one of the most fascinating that can well be imagined. The existence of roomy and well-built houses, and the relatively high degree of luxury denoted by their elaborate system of drainage, as well of the character of many small antiquities found within seem to betoken a social condition of people far in advance of what was then prevailing in Mesopotamia or Egypt."

The epochal event of the discovery of the Indus Valley Civilization may have marked the third turning point for Indology. The descriptions of destruction of forts in the Rig Veda, hitherto interpreted in mythical terms was then taken as an evidence for the destruction of the Indus Valley Civilization. However, there was still no conclusive evidence for an external invasion and few will disagree with the general idea that such scenarios are implausible. This idea of invasion was however, loosely used by scholars across the ideological and political spectrum, and in what typically constitutes loose and shoddy scholarship, many parties unwittingly succumbed to sensationalism. Some Western scholars however accuse Indian scholars such as D.P. Agarwal for introducing the concept of invasions. Nonetheless, the theory was popularized with Sir Mortimer Wheeler's indictment 'Indra stands accused.' After the discovery of the Indus valley civilization, the theory therefore came to be interpreted as the destruction of a relatively advanced civilization of indigenous origin by either invaders or nomadic, pastoral tribes. The identity of the Harappans still continued to be shrouded in mystery, and to a large extent, it still is today. Many naively assume that they spoke some form of a Dravidian language (this may have stemmed from as erroneous or archaic interpretations of the terms 'Aryan' and 'Dravidian') though this is far from being the only interpretation as some other scholars have proposed the Vedic Indus theory (such theories are commonly associated with right-wing Hindu nationalists) or the Paramunda Indus theory which may have something to do with Nineteenth century German ideology: at that time there was an interest in demonstrating a Pan-Aryan brotherhood and in some circles and showing a marked differentiation and a cultural apartheid between the rulers and the ruled and proving that 'Aryans' brought light to the dark sub-continent . [Leach, 1990, 243]

It is well-known today that the term Aryan originates from the Sanskrit word 'Arya', meaning honourable, respectable or noble. Acknowledging this, Max Muller stated "I have declared again and again that if I say Aryas, I mean neither blood nor bones, nor hair, nor skull; I mean simply those who speak an Aryan language. To me, an ethnologist who speaks of Aryan race, Aryan blood, Aryan eyes and hair, is as great a sinner as a linguist who speaks of a dolichocephalic dictionary or a brachycephalic grammar." ⁴ Note: The term 'Aryan' was not used in a linguistic sense till modern times, and the term was at best cultural in the Rig Veda. We have discussed the meaning of the term 'Aryan' in great detail in the paper, "The demise of the Dravidian, Vedic and Paramunda Indus hypotheses: A brief explanation as to why these three hypotheses are no longer tenable", and key conclusions therefrom,

⁴ Max Mueller, Biographies of Words and the Home of the Aryas, 1888, pg 120

are reproduced in this paper for the benefit of readers.⁵ As Edmund Leach states, “As Indo-European studies developed during the Nineteenth century, there was at first no fixed dogma about how the linguistic dispersion of the Indo-European family had come about. Around 1850, Max Muller was still vague. He wrote of the Aryan language, spoken in Asia by a small tribe, originally by a small family living under one and the same roof, as if it were the mother tongue of the human race. But prior to 1872 (and occasionally after that date) he was careful not to distinguish the study of languages from ‘ethnology’ the study of movement of peoples: ‘There are Aryan and Semitic languages, but it is against all rules of logic to speak, without an express or an implied qualification, of an Aryan race, of Aryan blood, or Aryan skulls’. But the last quotation comes from a lecture given at the Imperial University of Strassburg in May 1872, just after the annexation of Germany by Alsace (against the express wishes of the local German-speaking inhabitants). In the earlier part of the lecture, Max Muller expressed his Germanic pride in the reunification of the German nation. His distinction between language and race is clearly under strain. By 1878, he writes without equivocation about the Aryans as if they were a group of people moving outward of some central Asian homeland by a process of conquest. By the 1890’s, the linguist Sir George Grierson was explaining all Indo-Aryan dialect distributions in Northern India as due to past military conquest, a view that appeared without criticism in the 1969 printing of the Encyclopaedia Britannica. “[Leach 1990]

As Marxist scholar late R.S Sharma himself concludes, “Towards the end of the eighteenth century, when William Jones discovered that Sanskrit was similar to Greek, Latin and other European languages, it was postulated that the Aryans lived in an area either in Central Asia or Eastern Europe. They were supposed to have descended from the same racial stock. This concept prevailed in the Nineteenth century and was used as a political weapon in Nazi Germany during the Anti-Jewish campaigns launched by Hitler. After 1933, it was declared that German people constituted a pure Aryan race. In the Nazi view, they occupied that highest place among Aryans and were hence entitled to hegemony all over the world. But scholars who have studied the Aryan problem deeply have come to the conclusion that those speaking the same language need not necessarily belong to the same racial or ethnic stock. Most scholars now think in terms of a proto-Indo-European language rather than once single race”. [Sharma R.S, 1999, 5-9]

In the modern context, the term Indo-Aryan is most often used to refer to a group of languages forming a part of the Indo-European group of languages, whose discovery was famously announced by William Jones in Calcutta in 1786. Indus archaeologists also often loosely use the term ‘Aryan’ while referring to skeletal remains to differentiate them from other Harappan skeletal remains. This term is still misleading, however, as acculturation may have already taken place by then. As Witzel himself points out, attempts to look for physical Aryan bones or for an Aryan identity have generally proven unfruitful. While it is true that the late Dr. Gregory Possehl did talk about ‘Aryan bones’ at times, he, despite his pioneering work in Indus archaeology, in most other respects, and like living scholars like Asko Parpola and others, belonged, at the time of his death, to the now very antiquated Nineteenth century school of Indology. No one is perhaps more experienced in Harappan skeletal biology that Kenneth A R Kennedy. He has categorically and vehemently stated on more than one occasion that attempts to look for an Aryan biological entity have been unsuccessful.

Likewise, the Hungarian researcher Oswald Szemerényi studied all the arguments pertaining to the term ‘Aryan’ and came to the conclusion that the term was not Indo-European but a near Eastern or an Ugaritic term meaning kinsman or companion. He concluded that there was very little evidence to show that the term ‘Aryan’ was used throughout the Indo-European world in ancient times.

⁵ “The demise of the Dravidian, Vedic and Paramunda Indus hypotheses: A brief explanation as to why these three hypotheses are no longer tenable” Sujay Rao Mandavilli (A supplement to the authors papers published in the ICFAI University press on the Aryan problem)

It would also be obvious to most people that the term 'Aryan' was used chiefly only in Ancient Iranian and Indian texts. In the context of the Indian Rig Veda, the term 'Aryan' means cultured or noble and does not connote ethnicity. However, in Iran, the term does appear to have an ethnic connotation at times, and the term 'Aryan' appears to have been far more central to the Iranian identity than to the Indian Identity. Therefore, it would be obvious to most that the probability that it was imported from Iran to India was much, much greater than the other way around. In India, the homeland of the Aryans is called the Aryavarta, and corresponds to the Gangetic plains. The co-ordinates of the Aryavarta are clearly laid out in Sanskrit literature. Very interestingly, the term 'Aryavarta' in India does not refer to the Vedic homeland in the Punjab or a Central Asian Urheimat. This would again imply that the term 'Aryan' was not brought to India from Central Asia from where the migrations of IE speakers was purported to have taken place.

In Iran, the homeland of the Aryans is referred to as the Airyanem Vaejah. The location of the Airyanem Vaejah is also extremely controversial (Some scholars like Elton L. Daniel, Bahram Farah Vashi and Nasser Takmil Homayoun place it in Khwarazm in Central Asia while some other scholars place it in locations as far apart as a region to the East of the Mediterranean and Afghanistan). However, as the term 'Aryan' was used only in Ancient Iran and India, it is unlikely that the term Aryan was brought to Iran from an Urheimat. (If this had been the case, it would have spread throughout the IE world). Therefore, it was much more likely that the term 'Aryan' was coined in Iran where references to an ancient or a mythical homeland, the location of which was external to it, were added. The term 'Aryan' was therefore brought from Iran to India only during the compilation of the Rig Veda which took place between 1700 BC and 1500 BC due to cultural contacts with West Asia. This logic would hold good even if supposed Indo-European migrations into India took place much before the supposed Indo-European migrations into Iran.

The term Aryan, in reference to IE speakers is now obsolete, although a majority of Nineteenth century scholars like Arthur de Gobineau, George Vacher de Lapouge and Joseph Pomeroy Widney, among others, used it loosely and inaccurately in this context. In the Twenty-First Century, the term 'Aryan' is still often used inaccurately and in obsolete contexts only by very senior scholars and by the uneducated layman, although it would be illuminating to see how changes manifest themselves in the coming decades.

There is no known usage of the term 'Aryan' in the West before the eighteenth century. There are a few isolated references to this term by Western scholars. However, these occur in specific contexts only. For example, the Greek scholar Megasthenes only refers to 'Aranois' as people inhabiting the countries adjacent to India. It was only much more recently, in the Twentieth century, Hitler misused the ideas of Rosenberg, Houston Stewart Chamberlain and Gustav Kossinana to create the idea of a superior Aryan race, and this would be by far, the most extreme misuse of the term 'Aryan' that has occurred till date. Therefore, it would be evident, even upon a cursory and superficial observation, that the term 'Aryan', referring to a race or a group of people has its roots neither in history nor in science. [Trautmann, 1955, 20-30]

We can now therefore, safely rule out the following possibilities:

- (a) That the term Aryan refers to a race. The term does have an ethnic identity in Iran, but as the term 'Aryan' was coined in Iran, it could not have been synonymous with migrants who may have immigrated in earlier times. Admittedly, the term 'Aryan' sometimes does refer to more than one group of people in the RV, who were sometimes in opposition to each other, but the primary connotation of the term 'Aryan' in the RV is cultural.
- (b) That the term was used throughout the IE world in ancient times.
- (c) That the term always spread along with the movement of peoples.
- (d) That the term was brought to Iran from an Urheimat.

- (e) That the IE speakers to India (we proposed a date of 2750 BC) called themselves Aryans. (In other words, the idea or notion that the term 'Aryan' was brought to India from an Urheimat is untenable)

We can, however, clearly establish the following:

- (a) The term was coined in Iran and is fairly central to the Iranian identity, the country having been named after it.
- (b) The geographical definition of the term Airyanem Vaejah was made in Iran, although, this location is itself outside of it.
- (c) There is also a possibility as the term may have been brought from outside Iran as some scholars have suggested that the term was Ugaritic. The Ugaritic language was spoken in a region to the North-West of Iran. However, the term appears to have a strong ethnic connotation only in Iran. It is also extremely unlikely, that the term 'Aryan' was used throughout the urheimat for reasons already discussed. The history of the term 'Aryan' may be explored further, taking the work already done as a base.
- (d) The term spread to India during the compilation of the RV phase in the Gangetic plains between 1700 and 1600 BC. This happened due to cultural contacts between West Asia and the Gangetic plains.
- (e) Therefore, the term 'Aryan' in Ancient India clearly did not correspond with the word 'Brahmin' or with the IE speakers, who had lost their identity much, much earlier despite the possibility of an overlap.
- (f) In ancient India, the term Aryan had the following five uses:
 - (i) It mostly referred to a culture in the RV.
 - (ii) It was sometimes used in opposition to the term Dasas or the Harappans in the RV, but this term was always cultural and not racial (despite a small genetic input).
 - (iii) It was used in the term Aryavarta. The term Aryavarta, however, refers to the Gangetic plains and not the Vedic homeland or an Urheimat (which may have even been long forgotten by 1700 BC or 1600 BC). This term appears in later Sanskrit literature only.
 - (iv) It was only in later Sanskrit literature that the term 'Aryan' acquired a linguistic identity, and was used in opposition to the term 'Mleccha' (this term is a derivative of Meluhha i.e. the Harappans)
 - (v) Even if the term 'Aryan' refers to more than one group of people in the RV, it was brought into use after several rounds of acculturation had occurred, and as the term was brought from Iran, did not equate to a small number of immigrants who may have migrated much earlier into India as well.
 - (vi) In the twenty-first century and beyond, the term 'Aryan' should not be used in a plural form. Likewise, the term 'Dravidian' should not be used in plural form either.

Unfortunately, obsolete paradigms continue to haunt us to this day, and Indology, in popular perception, has yet to be liberated from the ghosts of its past, such that the Indology taught in colleges and universities today is widely referred to as the Mid-Nineteenth century school of Indology, and is as such widely believed to be dying. This has prompted several calls for its resurrection in the recent past, both in Western and Indian circles.

As Thomas R Trautmann states, acknowledging the continuing legacy of colonialism "Speaking for myself, having been awakened from my dogmatic slumbers and having gone back to the British pioneers of Indology for a closer look, doing so has been a revelation for me, filled with unexpected discovery. At the outset, it became very clear that most the British Sanskritists, without any exception were empire loyalists and scholars who took it for granted that there was a very close connection between their scholarship and the British colonial adventure in India." [Trautmann, 1999, 277]

As Edmund Leach also pointed out as recently as in 1990, “The origin myth of British colonial imperialism helped the elite administrators in the Indian Civil Service to see themselves as bringing ‘pure’ civilization to a country in which civilization of the most sophisticated, but morally corrupt kind was nearly 6000 years old. Here I will only remark that the hold of this myth on the British Middle-class imagination is so strong that even today, 44 years after the death of Hitler and 43 years after the creation of an independent India and Pakistan, the Aryan invasions of the second millennium BC are still treated as if they were an established fact of history. This attitude fits well with the prejudices of the Nineteenth century English and German scholars who were committed to maintaining a system of sexual apartheid to separate the rulers from the ruled.” [Leach, 1990, 243]

The early years of India’s independence witnessed a battle between proponents of the Nationalist school of Historiography and the Marxist school of Historiography. The Indian Nationalist School of historiography arose from the desire to set right alleged biases and prejudices in Colonial historiography particularly in the works of English scholars such as James Mill⁶ who were hostile to India. It also arose from the desire to search for a national identity and displace the colonial mind set. One of the progenitors of this school was Bankim Chandra Chatterjee. The Indian nationalist school of historiography, however, was accused of being over-reactionary, and as a result of its innumerable flaws which also included methodological ones, had never made much headway in forging a broad consensus among a wide range of scholars. In addition, R.C. Majumdar and other Nationalist historians were often accused of Hindu nationalism and communalism. They were also accused of trying to glorify India’s past and lacking objectivity, consistency of method and rigour. It was also accused of being casteist, and lacking a subaltern perspective. However, nationalist historiography has greatly contributed to the study of India’s cultural history. It has also contributed to the study of regional cultures.⁷

Marxist historians, on the other hand seemed to have held diametrically opposite viewpoints on effectively every issue. They appeared to have had a penchant for brushing away everything as mythology, even ignoring statements by more conservative scholars such as Witzel and Possehl, acting against the interests of science, have been known for practising ideologically-driven discrimination between religions which is against the spirit of the Indian constitution, have never developed paradigms for the cultural study of ancient India, have never adopted multi-disciplinary approaches, and as is their wont, have provided tacit support for racism and imperialism (We even recommended that the term Colonial-Marxist-Imperialist school of Indology be brought into use.) As such, Marxist historiography in India appears to have become equated with senility and old age, as demonstrated by the fact that the average age of its practitioners as of 2015 was 83 years – and is inexorably destined to become a part of history. Marxist paradigms existed on paper or in the libraries of Marxist historians only – most logical thinking Indians never related to them or were ever aware of their existence at all – and Marxist scholars would never have cared. This is precisely what one refers to as dogma. Furthermore, many Marxist paradigms stemmed from Marx’s own views in a nineteenth century context and were like most other dogmas were not open to introspection or re-analysis in the light of changed circumstances or feedback received from extraneous sources. Therefore, there was an implicit foolishness, an inward-looking indifference and mind-numbing nonchalance towards the outside world about Marxist historiography, one that led to a kind of mental paralysis or decapitation. Marxist historians would also have to accept blame for setting a bad example for other ideologues to follow.

All this naturally led to listlessness on the part of the general public- unlike the cultures of Mesopotamia and Egypt, Indian culture is more living in the sense that there is a supposed continuity between early legends and myths which form an inalienable part of the cultural diet of every modern

⁶ Mill, James (1817), *The History of British India* (1 ed.), London: Baldwin, Cradock, and Joy

⁷ D. Gaur, *Essays in History and Historiography*, Anmol Publications, New Delhi, 1995

Indian – this is quite unlike Pakistan and the Middle East where pre-Islamic culture is often wilfully suppressed or not a part of the popular imagination. Also, key and crucial aspects of Indian history remained unresearched, in such a way that the foundations or origins of Indian history remained poorly understood. For any Indian trying to probe or understand the roots of his culture, colonial models fail him miserably, such that he is constantly on the lookout for alternative explanations or paradigms. In 1989-91, Communism collapsed worldwide, and began to be widely seen as a God that failed. Soon, India embarked on a phase of economic reforms, and socialism soon came to be seen as *passé*. At around the same time, India's Hindu nationalist parties became more powerful. A combination of all the above factors ensured that the floodgates were suddenly opened, and a popular atmosphere conducive to revisionism emerged, aided in no small measure at all by a plethora of new-age writers and new-age publications. Towards the end of the 1990's, the popular atmosphere changed so rapidly and suddenly, that anyone who was still "stuck in the old ways" was virtually named a public enemy.

Michael Witzel of the Harvard University, who is commonly associated with the Nineteenth century school of Indology has always been critical of these efforts and he stated in an article in 2000, "In the past few decades, a new kind of history has been propagated by a vocal group of Indian writers, few of them trained historians, who lavishly praise and support each other's works. Their aim is to rewrite Indian history from a nationalistic and religious point of view. [...] Ironically, many of those expressing these anti-migrational views are emigrants themselves, engineers or technocrats like N. S. Rajaram, S. Kak, and S. Kalyanaraman, who ship their ideas to India from U.S. shores. They find allies in a broader assortment of home-grown nationalists including university professors, bank employees, and politicians (S. S. Misra, S. Talageri, K. D. Sethna, S. P. Gupta, Bh. Singh, M. Shendge, Bh. Gidwani, P. Chaudhuri, A. Shourie, S. R. Goel). They have even gained a small but vocal following in the West among "New Age" writers or researchers outside mainstream scholarship, including D. Frawley, G. Feuerstein, K. Klostermaier, and K. Elst. Whole publishing firms, such as the Voice of India and Aditya Prakashan, are devoted to propagating their ideas."⁸

In an article in the Chennai-based Frontline magazine in the year 2000, Michael Witzel and Steve Farmer exposed N.S Rajaram's claim to have deciphered the Indus script as Vedic Sanskrit. This issue was hotly debated at that time, received wide publicity, and Witzel's article was published in the Hindi press as well. Another controversy in the US state of California concerning the portrayal of Hinduism in its history textbooks began in 2005. Christian, Jewish, Muslim and Hindu groups complained that their religions were incorrectly or negatively portrayed and the board sought to correct these by taking the opinion of experts. These groups were allowed to air their views and propose revisions to the text. Initially, most revisions were accepted by the California state education authorities. Witzel however intervened on the basis of information provided to him by one of his students, and sought to nullify or overturn some edits. The edits proposed by the Hindu group were supported by other Hindu groups and motley groups of parents. Professor Shiv Bajpai, who supported the edits and Witzel were unable to reach a consensus on many issues. Thereafter, the controversy and dispute proceeded to California Federal Court, and was settled in 2009.

It was not as if Witzel was wrong entirely; The Rashtriya Swayamsevak Sangh, commonly abbreviated as RSS, was founded in 1925 by Keshav Balram Hedgewar, a doctor by profession. Many RSS stalwarts like Golwalkar were vehemently opposed to the concept of a secular Indian state. In *We, or Our Nation defined* (1938), he stated-

"The non-Hindu people of Hindustan must either adopt Hindu culture and language, must learn and respect and hold in reverence the Hindu religion, must entertain no idea but of those of glorification of the Hindu race and culture ... In a word they must cease to be foreigners, or may stay in the country,

⁸ Witzel, Michael and Steve Farmer. 2000. Horseplay in Harappa, Frontline, 17(20), September 30-October 13

wholly subordinated to the Hindu nation, claiming nothing, deserving no privileges, far less any preferential treatment—not even citizens' rights."

While such extreme views were not always endorsed by the RSS rank and file, few objective scholars today would deny that such views were ahistorical as the terms Hindu and Hinduism are themselves recent in origin and Non-Indian too. Marxist historian D.N Jha has explained the origin of the term 'Hindu' in his paper 'Rethinking the Hindu identity',⁹ and despite his ideological predilections, his conclusions on this issue are certainly not way off the mark. We have briefly discussed the origin of the term 'Hindu' too in our previous papers. Hindutva views on history are naturally fixated on the Aryan problem, and Hindutva interpreters have no love for history for history's sake, despite the fact that most modern and moderate Indians only want the field to be rid of antiquated colonial paradigms that have outlived their utility, and in the interests of the healthy growth of science: no more, no less. In the early days of the Aryan debate, some elements in India supported the idea of an external origin of the 'Aryans', and Bal Gangadhar Tilak famously announced that the 'Aryans' were from the North pole. After the discovery of the advanced pre-Vedic Indus valley civilization, the idea of an external origin of the 'Aryans' began to be seen as an inconvenient truth and had to be quietly buried, or alternatively, it had to be proved that the Rig Veda was Pre-Vedic, or much more interestingly, both Pre-Vedic and Post-Vedic. While we have no vested interests of our own in declaring the IVC Pre-Vedic or non-Vedic, we have discussed why such scenarios are untenable in our paper 'The demise of the Dravidian, Vedic and Paramunda Indus hypotheses: A brief explanation as to why these hypotheses are no longer tenable'. Also, interest in the 'Aryan problem' and similar topics may not manifest itself in large sections of Indian society.

Most Indians, like people elsewhere in the world, are caught up in the humdrum and tedious monotony of daily life to even care, or are more obsessed with topics that typically generate interest among larger sections of society like elsewhere in the world. This gives Hindutva proponents much greater clout and leeway, as the man in the street is rudderless on the 'Aryan problem', and this is to the general detriment of science and society. Such approaches are also against Indian national interest, as the nation tries to instil a scientific temperament amongst its citizens, and ensure that they have a more global outlook. Hindutva fascists, on the other hand, project a narrow worldview of all issues, one that does not even encompass the whole of what we today refer to as Hinduism. It is of paramount importance that concerned and competent scholars, both Western and Indian, get their heads around this relatively complex problem as quickly as possible, in the greater interests of objective science and society. While some Hindu nationalists, and rightly so, only wanted the field to be brought uptodate with colonial myths demolished, and were trying to bring about a public awareness in this regard (an idea that we staunchly support), others were carrying the baton clearly too far, and attempting to clandestinely promote a radically different ideology. The tactics of Hindutva proponents in this regard are presented in a different section of the paper, so that Western and Indian scholars can understand them and can work towards the institution of mitigating or compensating strategies. The ideal long-term goal of intellectuals is to work towards a situation where Hindutva proponents themselves outgrow their own ideology and adopt more international worldviews.

It is not as if Hindutva proponents were the first to misuse history; as a matter of fact they may have well been the last. Dr. B. R. Ambedkar, well-known for his work on the Indian Constitution, and as the champion of the nation's downtrodden Dalit community, who should have logically supported the idea of Aryan Invasions, had the following views on the now-defunct Aryan Invasion theory which was then in its heyday: "The theory of invasion is an invention. This invention is necessary because of a gratuitous assumption that the Indo-Germanic people are the purest of the modern representation of the original Aryan race. The theory is a perversion of scientific investigation. It is not allowed to evolve out of facts. On the contrary, the theory is preconceived and facts are selected to prove it. It falls to the ground at every point." Edmund Leach, likewise, was unequivocally critical of paradigms such as

⁹ Rethinking the Hindu_Identity-By D.N. Jha Religious Studies Review VOLUME 36 NUMBER 2 2010

the 'Aryan Invasion Theory' stating that was not an iota of truth in racial versions of such theories and that only vested interests kept them alive. Stating that early notions and constructs should have been revisited in the light of the Indus Valley Civilization or earlier, he states, "Common sense might suggest that here was a striking example of a refutable hypothesis that had as a matter of fact been refuted. Indo-European scholars should have scrapped all their historical reconstructions and started again from scratch. But that is not what has happened. Vested interests and academic posts were involved. Almost without exception the scholars in question managed to persuade themselves that despite appearances, the theories of the philologists and the hard evidence of archaeology could be made to fit together. The trick was to think of the horse-riding Aryans as conquerors of the cities of Mexico and Peru or the Israelites of the Exodus were conquerors of Jericho." (Leach 2000:128)

It is not as if racial interpretations of terms such as 'Aryan' and 'Dravidian' were a product of colonial political misadventures alone, they had some following among Dravidian nationalists too, who may have liked the idea of 'Aryans' being projected as interlopers. However, there is little evidence to believe that such notions would have been fostered except in cahoots with colonial theories and political motives; Dravidian nationalism was riding piggy-back on colonialism; Colonial constructs were unquestionably the bedrock of Dravidian nationalism per se. In the decades to come, Western and Indian scholars would have been taking undue liberties with the term 'Dravidian' just as they had been with the term 'Aryan' and would end up making Himalayan blunders that may have largely led to the current predicament in Indology. Putting an end to such misinterpretations and misrepresentations will yield rich rewards for all fields of scientific endeavour and will eventually metamorphosize many a field of science.

Marxist Historians are likewise right in criticizing Hindutva, and must be appreciated for their endeavours that led to the curtailment of Hindutva soon after the turn of the Twenty-first century, but they must realize that the only viable long-term approach to combat Hindutva can be through objective scholarship resulting in higher standards of scholarship. This is where Marxist historians have got it horribly wrong, and this can have disastrous implications in the longer term. Marxist historians have harped on the following ad nauseum as if to vindicate their own ideology and errors of omission and commission: (a) Every Historian has a right of interpretation (True, but interpretations cannot precede or be a substitute for objective analysis and the long-term goal has to be to replace subjectivity with objectivity – on this, Marxist historians are dangerously silent) (b) All schools of thought have been encouraged, including Hindutva – Marxist historians have parroted this statement endlessly and even Marxist journals have faithfully reproduced them bereft of further critical analysis (Marxist historians may want to oppose Hindutva for two possible reasons (a) to protect their own dogmas, careers or points of view (b) Out of altruistic considerations and the long-term good of science and society.) Statements such as these cast suspicion on their commitment to science, society and national interest. Expecting objectivity from Hindutva harangues and dilettantes is effectively impossible and is virtually an inane and a risible proposition: Their ideology is but a manifestation of parochialism or a low level or quality of education. The objective, therefore, has to be to marginalize Hindutva, not to give it a reason to exist. Furthermore, Marxist historiography has scarcely made any efforts (the word scarcely has been chosen in view of the fact that there were minor exceptions, and for the record, contributions by many key scholars or 'stalwarts' were non-existent) to expose deep-rooted racism or vested interests that have dogged the field since its inception, and imperialism, Dravidian nationalism and Dalit nationalism, wherever they have acted against the interests of science: Marxist historiography is clearly one-sided in all its pursuits, and given their present dominance in the field, are clearly anti-national from a nationalistic perspective, and anti-science too. Marxist historians have also been overwhelmingly obsessed with providing a counter-weight to the defunct Nationalist school of historiography, and this has been a long-standing bee in their bonnet. Marxist historians set a bad example for other scholars to follow by such demonstrable lack of objectivity. A Marxist historian adopting teleological or deterministic approaches, ceases to be scholar in the longer run and becomes more of a politician. If Marxist historiography is the dominant force,

the whole of mainstream scholarship will be sidelined or rendered obsolete. In India, unfortunately, but not unexpectedly, that is already happening. Marxist historians, of course, could not care. This is a classic case of mental paralysis or incapacitation by dogma, and the truest spirit of their approaches to all key issues, Marxist historiography in India is in a state of heavy comatose, if not already clinically dead. Not for nothing perhaps has it been said that Marxism is the opium of the masses, and this case, an extension needs to be made for Marxist historiography too. As of today, elements who have no commitment to the growth of objective scholarship in India are well-poised to take control of the field in the longer term, with Marxist scholars turning a blind eye to all such latent dangers as usual, and this is not in good augury neither for India, nor for the West.

Another strange manifestation has been the rise of "postcolonial theories" like those of Ashis Nandy and Vandana Shiva who rejected the universality of "Western" science and called for the formulation of indigenous approaches very often just for the sake of doing so or perhaps as a result of a certain kind of rebellious recalcitrance. Our approaches have effectively nothing in common with approaches formulated by such schools of thought. (What we emphasize is universality of principles and ideas and commitment to objectivity and the pursuit of truth). The left-leaning historian of science Meera Nanda commented on the emergence of interesting bedfellows which usually involved an unwholesome collaboration between India's right-leaning "scholars" and post-colonial scholars elsewhere as follows: "Any traditional Hindu idea or practice, however obscure and irrational it might have been through its history, gets the honorific of "science" if it bears any resemblance at all, however remote, to an idea that is valued (even for the wrong reasons) in the West."¹⁰

These type of biased interpretations typical of Hindutva goons are true of Marxist ideologues as well. Even a non-BJP government had declared way back in 2006 in Shantiniketan, "Historians must guard against "saffronisation" or "crimsonisation" of history and avoid trying to find answers to bitter controversies through an non-objective approach, Defence Minister Pranab Mukherjee said today. "Saffronisation and crimsonisation are of no consequence. There should be a continuous judgement and dispassionate pursuit of the truth," Mukherjee said while inaugurating the 66th Indian History Congress (IHC) here. This statement is welcome, and we reiterate that people from all walks of life must show zero tolerance for ideology-driven approaches.

As Professor Edwin Bryant of Rutgers University states in his book, "The Quest for the Origin of Vedic culture: The Indo-Aryan Migration Debate"¹¹,

"Having said that, it seems fair to state from the other side, that while pointing out colonial biases is of fundamental importance—cleansing Indology from the ghosts of the past is a process that is by no means passé—there is still solid empirical data that need to be confronted and addressed if one chooses to tackle a problem like that of the Indo-Aryans; suspicion of colonial motives does not make such evidence disappear. Besides, this is no longer the colonial period; it is still a post-modern one where alternative, suppressed and subaltern views are, if anything, glamorized. Established paradigms have been subverted left, right and center throughout humanities departments all over western academia. Why on earth would present-day western Indologists still be invested in an Aryan Invasion Theory anyway? Whatever may have been the agendas underpinning 19th Century scholarship, the fact is that most present-day western scholars have been unconvinced by the polemical and all-too-often embarrassingly ill-informed arguments they encounter, not because they somehow have some mysterious investment in insisting on an external origin for this language group. There were, and still are, some very good reasons to retain the theory of Aryan migrations, and this evidence needs to be

¹⁰ Prophets Facing Backward: Postmodern Critiques of Science and Hindu Nationalism in India Paperback – Import, 31 Jan 2004 by Meera Nanda

¹¹ "The Quest for the Origin of Vedic culture: The Indo-Aryan Migration Debate", Prof Edwin Bryant Oxford University Press 2003

addressed. Simply aggressively promoting only those selective aspects of the data that are amenable to a specific alternative view with troubling ideological underpinnings is to duplicate the errors and excesses of the much-maligned 19th century European Indological enterprise. Two wrongs do not make a right: European racism and elitism cannot be replaced by Hindu chauvinism. History cannot be written by decibel.

Casting off the legacies of colonialism opens up exciting new possibilities for the understanding of Indian proto-history provided the constraints of the colonial period are not replaced by an equally constraining insistence on a different ideologically driven reading of the historical evidence, whether 'western elitist,' 'secular Marxist' or 'Hindu nationalist.' Unless attitudes to this issue change from all sides, I foresee the perpetuation of two widening divides as the 'Indigenist' position becomes more vociferous: one between western Indologists, and the more persistent voices from the Hindu diaspora, and the other much more serious confrontation between 'leftist' and 'rightist' academics in the subcontinent itself. Most unfortunate, if this trend continues, will be that the entire field will suffer due to loss of communication between differing opinions and points of view—the lifeblood of a progressive field of study. “

We now assert with great confidence and with conviction, in this epoch of inter-disciplinary and avant-garde approaches and endeavours, that we can now finally make a clean break with the past, and that we may well be at the dawn of the fourth turning point of Indology, one of potentially momentous change, one that can well see Indology take off to hitherto unscaled heights of objectivity and glory, aided in no insignificant measure by goodwill and collaboration among its practitioners spread across the globe. This can, in turn, impact many other fields of science positively with implications and ramifications far beyond Indian shores.

It is to this effect, that we have published the following papers in peer-reviewed journals containing original research, and for those not fully aware, here is a recapitulation. A readership of these papers is mandatory to fully appreciate the contents of this paper:

S.No	Name of the paper	Published in	Date of Publication	Comments
1	Syncretism and Acculturation in Ancient India: A new Nine phase acculturation model explaining the process of transfer of power from the Harappans to the Indo-Aryans: Part One ¹²	ICFAI Journal of History and Culture	January 2009	This paper provided the basic model (with proof) which led to the complete solution for the 'Aryan problem' (Part Two) which was published by the ICFAI University press in Jan 2010. Read this if you want to know why early second millennium BC migrations are untenable. The actual date may have been 2750 BC- However the RV was compiled around 1500 BC.
2	Syncretism and Acculturation in Ancient India: A new Nine phase acculturation model explaining the process of	ICFAI Journal of History and Culture	January 2010	This paper provided the detailed solution for the 'Aryan problem' and methods to reconstruct the languages of the IVC with checks and balances. This paper contains

¹² Syncretism and Acculturation in Ancient India: A new Nine phase acculturation model explaining the process of transfer of power from the Harappans to the Indo-Aryans: Part One ICFAI Journal of History and Culture January 2009 Sujay Rao Mandavilli

	transfer of power from the Harappans to the Indo-Aryans: Part Two ¹³			century by century maps explaining how Indian culture evolved.
3	The Reconfirmation and Reinforcement of the Indus Script Thesis: A Logical Assessment and Inquiry as to the Elusive and Enigmatic Nature of This Script ¹⁴	ICFAI Journal of History and Culture	January 2011	This paper clearly shows why the Indus script was a logo-syllabic script. This is a logical and a self-explanatory paper and is our first on the Indus script
4	Alphabetic scripts and other forms of literacy in Post-Harappan India: A logical assessment and inquiry as to the origin and extent of literacy in Post-Harappan India ¹⁵	International Journal of Philosophy and Social Sciences 10/2012	2012	This paper deals with literacy in Post-Harappan India and shows using a multi-disciplinary approach why literacy always existed in isolated pockets in post-Harappans India. This paper is a must-read for the strength of its conclusions, and pinpoints the origin of Brahmi down to the last century using transparent approaches. Also note how this paper proves our solution for the 'Aryan problem': The dates for the introduction of Alphabetic scripts tally with the dates of our acculturation model down to the last century, validating both our model and our approaches to arrive at a date for the origin of Brahmi. This is one of our most important papers will date.
5	Why the Indus Script WAS true writing and why a larger corpus of texts existed in the Indus Valley civilization: Simple proof addressed to mainstream researchers & archaeologists ¹⁶	International Journal of Philosophy and Social Sciences 03/2013	2013	This paper clearly shows why the Indus script was a logo-syllabic script and a lost corpus existed in the Indus. This is a logical and a self-explanatory paper and is our second on the Indus script

¹³ Syncretism and Acculturation in Ancient India: A new Nine phase acculturation model explaining the process of transfer of power from the Harappans to the Indo-Aryans: Part Two ICFAI Journal of History and Culture Part Two Sujay Rao Mandavilli

¹⁴ Reconfirmation and Reinforcement of the Indus Script Thesis: A Logical Assessment and Inquiry as to the Elusive and Enigmatic Nature of This Script ICFAI Journal of History and Culture January 2011 Sujay Rao Mandavilli

¹⁵ Alphabetic scripts and other forms of literacy in Post-Harappan India: A logical assessment and inquiry as to the origin and extent of literacy in Post-Harappan India International Journal of Philosophy and Social Sciences 10/2012 Sujay Rao Mandavilli

¹⁶ Why the Indus Script WAS true writing and why a larger corpus of texts existed in the Indus Valley civilization: Simple proof addressed to mainstream researchers & archaeologists International Journal of Philosophy and Social Sciences 03/2013 Sujay Rao Mandavilli

6	The Demise of the Dravidian, Vedic and Paramunda Indus Hypotheses: A brief explanation as to why these three Hypotheses are no longer tenable	Published directly online in leading research portals	2013	This paper shows why alternative approaches are not tenable – i.e, the Dravidian, Vedic or Paramunda Hypothesis. This paper reinforces our conclusions reached in earlier papers; very detailed century by century maps are provided in this paper as well.
7	Historiography by Objectives: A new approach for the study of history within the framework of the proposed Twenty-First Century School of Historiography ¹⁷	ELK Asia Pacific Journal of Social studies	2015	This is not a core paper for Indology. Read it to know how alternative approaches to Historiography can stand us in good stead. It is expected that Historiography and Indology will be inseparably intertwined, and Indology can no longer be bogged down or bedeviled by obsolete paradigms in Historiography.

Objectives of modernizing Indology

The following are the key objectives of modernizing Indology, and these alone should act as an incentive for many researchers, both Western and Indian, to enter the field, given their innate potential to usher in positive benefits for many fields in science, and until the transition from the Mid-Nineteenth century school of Indology to Twenty-first century approaches is effectively complete.

Objective # 1

Modernization of archaic terminologies and outdated paradigms

We will be looking forward to a situation where the next generation of Western and Indian Indologists puts various highly inaccurate, misleading or obsolete terminologies that are now ubiquitous throughout Indology including the two highly misused terminologies of “Aryan” and “Dravidian” in proper perspective and educates the general public as well in addition to laying other defunct concepts to permanent rest. These include, but are not limited to: (a) The so-called Indo-Iranian language split (b) The yet-to-be-reconciled-with-the-Kurgan Hypothesis BMAC hypothesis (c) The Rural post-Harappan India hypothesis which has been inconsistent with archaeological data available for forty years, even the recent views of mainstream Western scholars and flies in the face of tradition. Interestingly early mainstream and western Indologists bestowed upon the Gangetic plains encomiums far in excess of what was warranted, calling it in certain extreme cases, the birthplace of every known science in the world, and some Western Indology departments were named “Benares’ on the Rhine.” This was abruptly dumped in favour of Sir Mortimer Wheeler’s dark age hypothesis which was presented without any underlying evidence. (d) The notion of early second millennium migrations (migrations just before the RV was compiled) which borders on the fringes of common sense and is even inconsistent with data available from the region covered by the IVC. (Instead, we have proposed migrations in the middle of the first half of the third millennium BC migrations, around 2750 BC or earlier). (e) The idea that the “Aryans” lived in the Punjab. This is ridiculous because

¹⁷ Historiography by Objectives: A new approach for the study of history within the framework of the proposed Twenty-First Century School of Indology. ELK Asia Pacific Journal of Social studies 2015 Sujay Rao Mandavilli

Buddha was born in the Gangetic plains. (f) The illiterate post-Harappan India hypothesis. This hypothesis is virulently unscientific because it is impossible to disprove the existence of something unless it conflicts with a known principle or law, and textual evidence suggests that there was limited literacy available and that it came somewhere in between. We have discussed this at length in a paper and shown why literacy always existed in isolated pockets in Post-Harappan India (g) Imbalanced coverage: we have instead proposed a one by ten formula here. (h) Arguing against the Vedic Harappan equation using all the wrong reasons either due to ideological constraints or because of obsolete ideas. (i) Much more importantly, India specific approaches have never been formulated, and there has never been an attempt to understand India as one entity, across regions and periods. This is probably why all existing approaches will one day be probably consigned to the rubbish heap of history. This is extremely important because obsolete paradigms have been at the root of many other ideologies which have often operated to the detriment of public interests, Nazism and extreme Dravidian nationalism being two chief examples. Such antiquated notions form the bedrock of many ideologies that work against the interests of science, communal harmony and scholarship. They are partly right here: the tell-tale effects of antiquated scholarship are only now being obliterated from public consciousness, and the pace must greatly quicken in the coming years if these ideologies are to be killed off.

The fact that an inaccurate interpretation of key terminologies have plagued the field throughout the ages will be obvious to most readers. For example, many adherents of the Dravidian Harappa Hypothesis never appear to have made a clear distinction between language and race, and never appear to have taken a strong stand on the racial identity of the Harappans. Even if we consider the hypothesis that the Harappans only spoke a Dravidian language, but were biological ancestors of the people of north-west India, we may still be on extremely shaky ground on account of the following factors (a) The location of the IVC does not correspond to the area where Dravidian languages are spoken at all, which is the Southern part of India. (b) No supporter of the Dravidian Harappa hypothesis has probably carried out a very detailed study of the transformation of Harappan cultures to Post-Harappan cultures. (c) Such theories do not explain how Dravidian languages got imposed on the people of the region, and then vanished without leaving a trace. Scholars have persisted with such paradigms for decades, thereby misleading the public and laying the foundations for communal disharmony.

It should also be obvious to most people that most modern scholars are abandoning the idea of race, in favour of the idea of biological populations, each with its range of variation of traits, which naturally overlap with the ranges of other biological populations. Frank B. Livingstone [Livingstone, 1962, 279] suggests that there are no races at all, only continuous gradations of bodily traits such as complexion without sharp discontinuities which can be taken as the boundaries between races. Even R N Sharma in his textbook "Indian Anthropology" (This should give readers an idea of how outdated textbooks are, and this is not an isolated instance.)¹⁸ states "The oldest race reaching India was the Negrito. The race which arrived in India after the Negrito race was the Proto-Australoid race. These people were more civilized than the Negrito race. The Dravidian or the Mediterranean race came to India after the Proto-Australoid race. "

It is very difficult to find any satisfactory definition of the idea of 'race'. Henri V. Vallois states in his essay 'race' that the idea of humans being an admixture of races is obsolete (Anthropology today: An encyclopedic inventory A.L Kroeber) According to UNESCO, Paris 1951, "In its anthropological sense, the word 'race' should be reserved for groups of people possessing well-defined primarily heritable physical differences from other groups." However, this definition is outdated, and in the twenty-first century such terms are best avoided. Such obsolete notions not only lay the groundwork for

¹⁸ R N Sharma "Indian Anthropology", Lucky Star Career and Competition books

communal disharmony, they also affect the worldview of different ethnic groups, and therefore indirectly endanger minorities like Tamils, who share a geographical space with many other people in the region. It would perhaps not be an exaggeration to state that many fissures in the region in the not too distant past were exacerbated by popular colonial views and lingering misconceptions of history. Therefore, modernization of terminologies and dissemination of Twenty-first century terminologies and paradigms comes in-built with a social responsibility.

One may also refer to any Wikipedia entry on Ancient India to judge for himself how outdated the field is, with all its outmoded and trite terminologies or supposedly state-of-the-art books written just a few decades ago (These are still current in many academic and scholarly circles). There is arguably no field of study in modern times that is as comprehensively and badly outdated as Indology, and many vested interests have clearly ensured that it was not kept up-to-date. The idea that Indology is hopelessly outdated in all respects is now gradually finding its way into several articles in the popular press that are beginning to belatedly mourn or lament its demise.

It is clearly not just Indology that will benefit with an overhaul of terminologies: many terminologies and concepts in several allied fields of science will need revisiting, and doing so may lead to an unprecedented revolution of sorts. As Edmund Leach says in "Aryan invasions over four millennia", "Several more or less coincidental origin myths are involved. The origin myth of Indo-European philologists called for a lineage of wholly imaginary ancestral proto-languages." We have listed some terminologies and concepts that clearly need revisiting in other sections of this paper, and may lay down many more in the days to come in future papers and publications.

Objective # 2

Reconstruction of the languages of the Indus valley civilization

Attempts to reconstruct the languages of the Harappans have thus far been based on two methods. The first was based on a literal Champollion-type decipherment of the Indus script (i.e. what we referred to as Logo-syllabic thesis A) which may have been based on shaky foundations and may be rendered invalid in view of the fact that most seals were apparently meant to be read outside the linguistic gamut of the IVC, and therefore may well have been non-linguistic and that the brevity of the seals would always be a dampener for such initiatives. A Rosetta stone cannot be expected to miraculously surface, as the very existence of such a stone would be subject to historical pre-conditions. A superficial analysis seems to have suggested that it had suffixes and infixes that would suggest it were Dravidian. However, these studies would largely be obsolete from a Twenty-first century perspective and symbolic of antiquated scholarship, and there are any number of reasons why the Indus Valley Civilization could not have been Dravidian-speaking. (Refer our paper "The demise of the Dravidian, Vedic and Paramunda Indus myths: A brief explanation as to why these hypotheses are no longer tenable").

The second much-touted and only alternative method thus far available, was the so-called substratum of Sanskrit, which when critically analyzed would dissipate into nothingness given the fact that Sanskrit had distanced itself from the PIE much before it morphed into Vedic Sanskrit, and therefore it was not the PIE (Scholars' definitions of the PIE have traditionally tended to be vague): If this method were to be understood as Vedic Sanskrit – PIE Influences, it would still be misleading for the reasons put forth in our papers. Readers are requested to go through our model explaining the inter-relationships between Sanskrit, Prakrits and the PIE to understand why this is so.

If sub-stratum based methods are to be employed, these must be accompanied by checks and balances, and these are below. If proponents of this method argue for a particular language, say language A, they must provide proof of the following, and using independent methods. If they cannot provide proof, their conclusions may be termed speculative. If opponents are able to clearly prove that the following checks and balances disprove language A as the substratum, this hypothesis is

deemed falsified because these words would have (a) belonged to the Gangetic plains as in the case of Munda (The RV was compiled there) or (b) would have been shared with South India much later in time as would have been the case with Dravidian:

- (a) Proof of ancientness of language family – Proponents of the any hypothesis must prove using independent methods that the language (or the language family) in question existed in the region during the period of the Indus valley Civilization.
- (b) They must also provide theories to explain the origin and the spread of these languages in these regions.
- (c) They must also explain, wherever applicable, how these languages might have been annihilated, and this is all the more important because IE speakers would have been small.
- (d) Must show how linguistic transformations from Harappan to Post-Harappan India had taken place, as we have in this paper, moreover, given the fact that immigrants would not have been large in number.
- (e) Must show how cultural transformations from Harappan India to Post-Harappan India occurred in detail.
- (f) Must be accompanied by as many additional checks and balances as possible, and we have identified five smoking guns in our present paper.

Even if all these checks and balances are employed, the term ‘Substratum’ would be an antiquated over-simplification as the evolution of Vedic Sanskrit was a much more complex process as was explained in our papers. As such, sub-stratum based methods lend themselves very easily to rampant misuse as the ‘sub-stratum’ can then be used to prove that the Harappans spoke any language belonging to any language group in the sub-continent, the scholars’ fantasies and ideological pursuits being primary determinants.

Different and all-new methods to reconstruct the languages of the IVC along with smoking guns or checks and balances were presented in our previous papers, and these form the basic foundation of our proposals. We request readers to go through them as several methods were proposed, and these are too lengthy to be reproduced here. These were presented in the paper ‘Syncretism and acculturation in Ancient India: A new Nine phase acculturation model explaining the process of transfer of power from the Harappans to the Indo-Aryans – Part Two and in a slightly more elaborate form in the paper “The Demise of the Dravidian, Vedic and Paramunda Indus myths: A brief explanation as to why these hypotheses are no longer tenable”.

Additional notes:

1. The new methods to reconstruct the languages of the IVC as presented in our papers undoubtedly require a not only a thorough knowledge of Vedic Sanskrit, but also several early Prakrits (Pali also preferably) and Old Avestan and the ability to trace word cognates to other languages along with a knowledge of historical linguistics, linguistic morphology, theories of linguistic change, etc.
2. As all these competencies are unlikely to be vested with one scholar, multi-disciplinary approaches would be required, necessitating the constitution of a team.
3. Any methodological problems that arise may be noted so that these can be sorted out.
4. The checks and balances that were proposed as a part of this paper, were deliberately designed to be as independent of this model as possible, and the team is expected to use them to disprove the Dravidian hypothesis once and for all.
5. Structural and grammatical changes could be expected in such cases: For example, words from the IVC may have been transmitted to Vedic Sanskrit in modified form and may have undergone structural changes as a result of having been Sanskritized: To provide an alternative workaround to such scenarios, other approaches which involve working backward from early Prakrits,

particularly NW Prakrits have also been proposed, as these would furnish an independent methodology for comparative analysis.

6. The latter will enable major languages or language groups to be reconstructed separately, and this approach is therefore highly recommended in addition to the easier methods proposed in our approach.
7. These methods when taken together are intended to be as fool-proof as possible. As multiple approaches are presented with Smoking guns, as many checks and balances as possible have been put in place.

Summary of this section: Very detailed methods to reconstruct the languages of the IVC were proposed in our aforesaid papers, and readers are requested to go through them. These are by far our most important conclusions reached till date.

Objective # 3

New paradigms for the study of the Indus script

Over the past eight decades or so, Indology has been centered on the decipherment of the Indus script, and all meaningful progress in Indology and potential breakthroughs linked chiefly to the decipherment of the Indus script, an idea with overtones often associated with the sensationalism and the romanticism of the decipherment of the Egyptian hieroglyphs by Champollion. This notion may have been largely misplaced given the length of the inscriptions and betrays a superficial or shallow analysis of one of the key or core issues associated with Indology. This is in spite of the fact that serious research on the Indus script appears to have begun fairly early: The first publication of a seal with Harappan symbols dates to 1874 and was made by Alexander Cunningham. Since then over four thousand symbol-bearing objects were found. Henry Heras and Yuri Knorozov, the Russian scholar of Mayan hieroglyphs fame had proposed only on the basis of his study of the suffixes and infixes of the Indus script that it was Proto-Dravidian. This idea has effectively formed the basis of Asko Parpola's work since 1969. Around the same time S R Rao, proposed that the Indus script encoded Sanskrit, an idea that did not find many takers in the scientific community. In the early 1970's, Iravatham Mahadevan had published a corpus and concordance of Indus symbols with 3700 seals and 417 distinct signs. This should have laid the foundation for a more analysis-driven approach for the study of the Indus script, in lieu of sensationalized claims of decipherments though unfortunately, it did not. In our previous papers, we adopted a multi-disciplinary approach to study the Indus script, showed it was logo-syllabic, implying a lost corpus existed, and laid bare the differences between the Logo-Syllabic Thesis A and the Logo-Syllabic Thesis B as follows:

S.no	New logo-syllabic script thesis (Logo-syllabic thesis B)	Old logo-syllabic script thesis (Logo-syllabic thesis A)
1	Shows using valid epistemology that the Indus script had certainly reached the syllabic stage.	Assumes the Indus script to be logo-syllabic based on supposed prefixes and infixes in the Indus script. Many scholars have used a structural analysis to prove that the Indus script was Dravidian or Indo-European. This thesis has many limitations because seals would have been non-linguistic and would have been used in trade. There may have been some exceptions to this rule. (The term Indo-European or Indo-Aryan are too ambiguous in today's parlance – for a very detailed discussion refer to the paper 'Syncretism and Acculturation in Ancient India –A new Nine Phase Acculturation model explaining the process of transfer of power from the Harappans to the Indo-Aryans Part two.'

2	Shows using valid epistemology that a longer corpus of inscriptions existed.	The lost manuscript hypothesis has had adherents for several decades. This hypothesis has however been by and large irrelevant to decipherment efforts.
3	Supports the idea that most seals were non-linguistic.	Assumes seals were linguistic
4	Supports the idea that the IVC was multi-linguistic.	Assumes that the IVC was mono-lingual
5	Supports the Idea that progress can only come from a structural analysis of the script. A decipherment with the existing corpus is unlikely.	Supports the idea that a decipherment of the script is possible.
6	Does not consider the decipherment of the Indus script to be of major relevance in Indology as a whole; multi-disciplinary and India-specific research strategies must be the starting point.	Supports the idea that the decipherment of the Indus script is central to further progress in Indology.

Therefore, the following changes are expected with respect to the study of the Indus script:

- (a) It is expected that studies of the Indus script will be analysis-driven and not decipherment-driven in the immediate future. Analyses-driven strategies can be multi-faceted, and can also include a comparative study with the early Proto-Elamite scripts of West Asia. (Some work has been already done in this regard by Walter Fairservis, G R Hunter and others, though GR Hunter's conclusions are prima facie wrong- there would have been no common language between the two civilizations, it was just that the script was borrowed and modified).
- (b) A study of the Indus script is unlikely to central to Indology, at least in the immediate future and therefore rigorous and innovative approaches that are analyses-driven and are neutral to any claims of an underlying language can have a positive impact for the field in the longer run.
- (c) Changes to this approach may be warranted only if a lost corpus is found, and that is unlikely until major archeological discoveries happen.

Objective # 4

Modernizing Indology can have a major impact on Indo-European studies

Another key objective of modernizing Indology is that it can have a major bearing on Indo-European studies as a whole, whose important objective it is to pinpoint the thus far elusive Indo-European homeland and to make an effort to trace the hypothetical ancestor of some three hundred and fifty and odd surviving languages; we may have now passed the days when Indology was perceived to be a weak link in Indo-European studies given the rapid improvement in acculturation models and paradigms within India and ground-breaking work in Indus archaeology over the past couple of decades. As a matter of fact, Indologists can now play a crucial or an enhanced role in driving Indo-European studies and proposing or vetting paradigms for intended use in similar scenarios elsewhere. One key and unanimous conclusion that has emanated from our previous papers is that the Anatolian hypothesis or the Anatolian Neolithic model proposed by Colin Renfrew and others is untenable from India's point of view and be dropped forthwith in a wholly unmodified form, and subject of course, to other non-Indological considerations, if any. Renfrew's hypothesis which was modified several times over the past quarter of a century in response to strident criticism from Non-Indological and

Indological scholars, initially sought to explain the spread of Indo-European languages into Southern Asia by way of two possible approaches: a Plan A that saw the Neolithic economy spread south-eastwards from Anatolia to India (thus the Indus Valley Civilization was regarded as Indo-European in this scenario.) (This is wrong because it requires pushing back dates to as far as 7000 BC, and was falsified on multiple grounds in our earlier papers) or Plan B that explained the Indo-Iranians in terms of a much later migration of Bronze Age peoples from the Asiatic steppe lands southwards into the territory of southern Central Asia and the Indus. (From our perspective, parts of this approach may hold good. However, the actual solution to the problem is much more complex: refer our earlier papers). Renfrew eventually abandoned Plan A for Plan B, however, a more recent solution to the homeland problem by Bouckaert et al (2012), and also supported by Paul Heggarty, appears to argue for a variation of Renfrew's original Plan A, i.e., a homeland set in Anatolia in the Seventh Millennium BC with expansions both west into Europe and east into Asia. We seek to reiterate that all the models fail the complexities of Indian history very badly, and that author has the audacity and the temerity to state that these are, from India's perspective, expunged.¹⁹

The Near Eastern model is another model currently supported by a small minority of scholars. The chief proponents of this model have been the linguists Tamaz Gamkrelidze, Vyacheslav Ivanov and Stanislav Grigoriev. Per this model, the homeland is located south of the Caucasus, and Indo-European expansions are purported to have taken place somewhat later than the dates associated with the Anatolian Hypothesis (the spread of farming is not a critical element of the Near East model).

Marija Gimbutas' homeland which is a part of the much more widely-accepted Kurgan hypothesis or the Pontic- Caspian model, calls for a homeland including regions to the East of the Caspian Sea in the steppes and this includes Georgia, Azerbaijan and Armenia, and parts of Turkmenistan and Uzbekistan was well. Our theory will not cause any major disruption to this model, and upon a very preliminary analysis, call for extending the urheimat slightly eastward to include more regions in Turkmenistan, Uzbekistan, Tajikistan, Kyrgyzstan, (encompassing Samarkhand, Dushanbe and Tashkent) and even parts of northern Afghanistan and regions to the west of the Khyber pass from where the purported migrations to India took place. Whether Anatolia will form a part of this homeland is open to debate. We do not know if the whole of the steppes will constitute this postulated expanded homeland either. Modifications to Gimbutas' model have been proposed by scholars such as Kortlandt too, and this proposed a homeland in the Eastern part of Ukraine, or the north of the Caspian sea, and such wide divergences in opinion, which result in differences of up to three thousand kilometers or more in the source location, can die if a multi-PIE approach is indeed adopted. In the multi-PIE approach proposed in our previous papers, we stated that the PIE may not have been a single languages or just a group of dialects, but perhaps a language group in itself, spoken over a much larger spatial region than hitherto envisaged, and could also be envisaged as a space-time continuum of dialects or related languages. We can identify two stages. Stage A: Movements within the homeland after the domestication of the horse leads to the dissemination of cultural traits and the evolution of common cultural traits within the urheimat. (Alternatively, knowhow of horse domestication may have been passed on from community to community in the IE homeland, or a more realistic solution may have involved the combination of both scenarios) Stage B: Movements of people take place from various parts of the Urheimat to Europe, Iran and India. We may note the following here: (a) it is not necessary that movements of people to Europe, Iran and India took place from the same location (b) it is not necessary that transhumance movements to Europe, Iran and India took place at the same time, and the differences in timeframes for migration for each of these regions may have been large, even if only one wave of migration to each such region had occurred. It is not even necessary that this language replaced all other languages in the outlying regions, but only interacted with them in a process of prolonged interplay as happened in the case of India. This is why we had even proposed the term 'Base Indo-European' instead of 'Proto Indo-European'. This group would have comprised

¹⁹ Twenty-first century clouds over Indo-European homelands: J P Mallory Queens University, Belfast

languages which disappeared within the homeland itself, and hypothetical extinct minority languages which may not have fitted into the term 'Base Indo-European' or 'Proto Indo-European'. These may be referred to as isolates.²⁰

Therefore, in an extreme case, the ideal solution will involve a partial combination of the Kurgan hypothesis the Anatolian hypothesis and the Near Eastern hypothesis, implying that the homeland encompassed parts of all the three regions. Over the next couple of years, scholars can test whether such approaches work in the real world or not. Thus, knee-jerk reactions to new discoveries need to be avoided, and there is currently a tendency to change the location of the Urheimat as new data is found. Improved acculturation models from India can have a major bearing on Iranian studies and Indo-European studies in general, and we will be looking forward to such a revolution in the years to come. This can even unleash a transformation in the study of human languages and migratory patterns. This can be one of the key uses of the approaches presented in this paper, and they will thus be of immense scholarly value even to researchers who do not normally consider Ancient India to be a focus area of their study. This approach, of course does not superimpose pre-defined boundaries, but proposes various approaches that can be used or developed in the days to come to delineate future boundaries of an Urheimat.

Therefore, we conclude that linguistic evidence would be the strongest in this case and can actually be considered to be the clinching evidence. Archaeological evidence would come only a distant second, and the farming expansion model is open to very serious debate, and may not be tenable at all.

We consider the multi-PIE hypothesis (with the resultant group of languages known as Base Indo-European) to be one of the key premises of our approach and the potential key to seemingly irreconcilable contradictions. In other words, when the going gets tough for a scholar, the urheimat is simply expanded to cover more geographical territory, or include more languages. To word it differently, our model supports the idea that the term 'Indo-European homeland' may have been a relatively vague idea in linguistic terms, a core urheimat notwithstanding, and may have been more or less analogous to the region where horse domestication first took place. If contradictory evidence exists, the boundaries of the homeland need to be extended (and not shifted!). This assumed added importance in view of the fact that J P Mallory and other leading scholars are unanimously of the opinion that no one model can explain all dimensions of the problem or even accommodate existing linguistic and archaeological evidence adequately. We will reiterate that gross over-simplifications are ill-suited to the realities of the real world. For example, the fate of the Neo-grammarians' supposed reconstruction of the PIE in the Nineteenth century is well-known. It failed an analysis of Hittite, which in this case may have largely a product of the local soil as well. Our approach is vastly different from the Space-time approach proposed by Meid as well.

Yet another possibility is a comparative analysis of all the languages in the Urheimat as identified from all the three approaches, and from our perspective, this can be the starting point of a study. This is one possible way – though perhaps overly complex, still very controversial at this point, and fraught with dangers and pitfalls en route. Methods to test this theory can be put in place, and this can include comparing aspects or features of present-day languages in the Urheimat which have already been overlaid by scores of other language groups not necessarily related to Indo-European (i.e. these languages need to be studied individually) with those of Europe and India, therefore necessitating some kind of a sub-stratum based approach, and tracing characteristics of languages in the Urheimat individually (we may refer to these as source languages from our perspective) to destination languages in Europe and India which will be Vedic Sanskrit, Old Avestan, Hittite, or other archaic languages of Europe. This approach can, in turn, be of major use in defining the boundaries of the Urheimat.

²⁰ THE INDO-EUROPEAN FAMILY — THE LINGUISTIC EVIDENCE by Brian D. Joseph, The Ohio State University

The obvious basis of this approach is of course the idea that only a small number of 'PIE speakers' would have left the homeland, and the same languages would have been continued to be spoken in the homeland even after the migrations took place. However, this is much easier said and done or at least two reasons, even given the Author's rather minimalistic and rudimentary knowledge of the history and culture of Central Asia, and there will obviously be many glaring chinks in our armour: These issues, needless to say, are at the core of the complexity of the debate and intransigence of viewpoints. (a) The early languages in the Urheimat are not directly attestable and there was no writing there at this point in time. (b) Language shifts have taken place in the Urheimat too, and these have been dramatic (research on the process and underlying causes has been poor): to Iranian, Turkish, Russian, Mandarin Chinese, and Even Arabic and linguistic transformations there may be extremely complex. There are a wide variety of languages spoken in the region, sometimes lumped conveniently into the controversial term 'Altaic'. (c) Innovative approaches such as sub-stratum based approaches as applied to the present-day languages of the region and identification of isolates in the region, along with work on other early cultures and civilizations of that area and a thorough study of the linguistic history of the region may help, although we may well be shooting in the dark at this point. (d) Time alone can stand witness to the outcomes of all endeavours, and whether at all such approaches are workable is unknown at this point (The author is somewhat sceptical himself)- They are certainly worth a try.²¹ If this does not work, the revised homeland can be delineated using the methods described in our paper, and using some kind of a hard evidence and be used as a stepping stone for more focussed research. These two approaches may be called Approach A and Approach B from our perspective. If Approach A does not work, Approach B may still be eminently workable. In Approach B, the IE homeland needs to be worked out carefully using approaches not involving an attestation of the ancient languages of the homeland, but only indirect evidence, and may therefore include, partly or in whole, the urheimat from all the three hypothesis i.e, the Kurgan hypothesis, the Anatolian hypothesis, and the Near-Eastern model . The earliest attested IE languages such as Vedic Sanskrit, Avestan, Ancient Greek and Hittite can be taken as a base and worked back using the approaches presented in our paper (We have describe ten different ways in which Indo-Europeanization could have taken place). In the case of India, this is certainly possible, and the ancestor of Vedic Sanskrit can easily be traced back to the language(s) of the Vedic homeland and earlier. This approach may help in the reconstruction of the "PIE" as a group of distinct inter-related languages.

Such models would also address another key point: motives for human migration. From the point of view of India such migrations would not be hard to justify given the fact that small numbers of people were involved, and as a more recent study claims, migrants were males. A small group of males may have crossed the Khyber Pass accidentally on horseback, and may have been unable to find their way back, triggering a series of acculturations as was explained. A similar logic or reasoning may need to be worked out for other regions as well, and if the urheimat were substantially expansive, migrations involving larger distances may not be warranted. Another factor to be always borne in mind is that these migrants were naturally more mobile than populations in surrounding outlying regions, given their association with the domesticated horse.

Our observations from India also seem to indicate that a complete annihilation or replacement of languages cannot normally occur, except in rare situations. Therefore, a roller ball model would be the one that would stand by us faithfully and in good stead in an overwhelming majority of practical situations. As Horton and Hunt have pointed out, assimilation and acculturation are always two-way processes involving some amount of give-and-take, and exceptions to this principle may be relatively rare. However, the Doctrine of Insubordination does imply that the subordinating language is not on even keel with the subordinated languages, and as such it may take a greater effort to break its

²¹ History of Civilizations of Central Asia, Volume I and II (UNESCO Publishing)

stranglehold. The relationship between the newly-discovered Jiroft Civilization and Old Avestan may also warrant further investigation taking into account our learnings from India. Likewise, the languages of Europe may have not been linear descendants of the PIE as commonly assumed but may have only been heavily influenced by them or may have evolved as a result of a more complex interplay of linguistic forces. (However, the key difference in case of Europe is that Pre-Indo European cultures there may have been less advanced than those of Iran or India). Such critical analyses may eventually beget improved acculturation models for Europe as well, if sensible use is made of scant data. We may refer to this as the Eighty Twenty rule, or one that would work in most situations. If any scholar wants to propose extremely simplistic scenarios (They may have got away with that in the past), they must back it up with adequate data and analysis. Another aspect to be borne in mind is a reconciliation of populations. We did that in India with amazing results and this must be likewise done elsewhere to avoid the dangers of over-simplification and erroneous conclusions. Likewise, several other erroneous and simplistic assumptions about human migrations and language replacement may need rethinking, and this exercise will undoubtedly push the boundaries of knowledge even further. Even Michael Witzel states in his paper "The home of the Indo-Aryans", "Mallory's model is essentially a roller-ball model, an immigrant civilization joins the local one, transforms it by taking on many of its aspects, and then sets to move in a recurrent billiard-like fashion. "

Therefore, before any model is formulated,

- (a) The possible motives for human migrations which can be broadly classified into pull factors and push factors need to be studied on a case to case basis, the key assumption for our purpose being that humans need not migrate unless they need to do so. Even if this assumption does not always hold good in the real world, we will nonetheless insist on it, as it automatically places the onus on those proposing such migration to carry out basic introspection. This may render invalid any possible fantasies or over-simplifications like the crude Out-of-Africa theory.
- (b) The possible motives for human migrations need to be studied much more critically when larger numbers of migrants are claimed.
- (c) The possible motives for human migrations need to be studied much more critically when migrations involving larger geographical distances are claimed.
- (d) The possible motives for human migrations need to be studied much more critically when migrations to regions with less salubrious weather conditions, or those un conducive to agricultural, economic or intellectual development are claimed.
- (e) The ability of the region in question to produce the numbers to facilitate migrations also needs to be taken into account, i.e, a reconciliation of the populations of the source location to the proposed size of the migrations needs to be carried out. By this we can avoid fantastic claims of large-scale migrations into India which are unsupported by genetic evidence.
- (f) A reconciliation of the claimed size of migrations with the population of the destination likewise needs to be carried out. If this had been done in the case of India, we could have easily concluded that the number of migrants were small in relation to the Harappans, and that simplistic models of language replacement in this context would have been virtually impossible. For example, in the case of India, acculturation involving small groups of people can easily be explained from a 'Lost tribe hypothesis' – a small group of individuals accidentally crossed the Khyber Pass on horseback, and did not know how to get back, triggering a series of acculturations that was explained. It is expected that the number of migrants will be compared with the pre-existing populations of various destinations taking into account the estimated population of source destinations.
- (g) The geographical features of the regions involved must always be kept in mind.
- (h) It is expected that a reasonable quantum of additional direct and indirect evidence will be sought in support of any model to prevent an ideological misuse. This may include linguistic or archeological evidence.

- (i) It is expected that this study is done in true letter and spirit and is used to test any model.
- (j) It is expected that this study is done in true letter and spirit and is used to formulate 'Linguistic transformation models' for each destination separately.

From our perspective, Linguistic change or replacement, now to be known as linguistic transformations arising out of Human Migrations can be of the following ten types, and we briefly explain them below. Some concepts have already been described by J P Mallory, Witzel or other scholars, even though our compilation and classification of scenarios is much more comprehensive and detailed. These typically involve changes to two or more languages, and such changes can be of many types including word-borrowing, changes to grammatical structure etc. We propose the following ten scenarios of linguistic transformation:

- (a) Complete replacement or Annihilation: We had proposed in our earlier that this would be a very simplistic view, and one that may be practically rare and inapplicable to most situations. A scholar wanting to prove such a scenario, is expected to provide adequate data ruling out other scenarios. This is to preclude more complex analysis from being carried out. Such scenarios have however, happened in the real-world on occasion examples being the case of the USA and other parts of North America, where native languages were effectively annihilated. This can be justified on account of factors such as the nature or level of development of languages native to the region vis-à-vis those of immigrants, political factors, and the fact that populations may have been much more willing to assimilate in the emerging local culture as immigrants. The latter contributed to the linguistic suzerainty of English. In spite of this, French, another immigrant language, is only slowly dying out in Louisiana, and is far from dead in Quebec, where it is actually thriving, and is the chief language of the province. This process appears to have happened in Southern Sri Lanka as well, though in slow motion, as immigrants from North India in 600 BC may have been relatively small in number. It is likely that other languages of the region, like those spoken by the present-day Veddahs of the region, were subsumed over a protracted span of time. However, as these languages may have also heavily influenced the language of the immigrants, and this may be a fit case for a roller-ball model, and not plain-vanilla and simplistic annihilation. The classification of this scenario as a roller-ball model may also be in order because the Sinhala language in its present form certainly did not exist when immigrations were purported to have taken place, and Sinhala is a product of Sri Lankan soil. furthermore, other languages have not disappeared completely from Sri Lanka and languages other than Sinhala and Tamil are spoken in pockets including in areas where both Sinhala and Tamil are the majority languages. As this may be a protracted and long-drawn process in a majority of the cases, we may refer to it as the ripple-effect model as was observed in the case of Sri Lanka. This may also be referred to as the Survival of the fittest model as observed in the case of the USA.
- (b) Linguistic Sub-ordination: Linguistic Sub-ordination was another concept we had discussed in our previous paper, and may be relatively more common, at least in the short to medium term. We had also introduced the 'Doctrine of Insubordination' where we discussed that languages could cede functions to other languages much more easily, thereby losing them, rather than complete annihilation. This concept has been explained in detail in one of our previous papers. Allied concepts were 'Theory of Win-Win Propositions', 'Context and Role-based suitability', 'Context and Role-based indispensability'. Etc.
- (c) Roller-ball model (Single loop): In this case, an alien language spreads upto a certain point in a given region, loses its original form, and takes over characteristics and influences of a language or set of languages native to the region. The languages native to the region are also heavily influenced by the alien language, such that they are transformed significantly. Initially

both languages or language groups may continue to flourish for a while, as complete language replacement may be a much slower process.

- (d) Roller-ball model (Double or Multiple loop): This is an extension of the Single Loop Roller-ball model where both groups of languages keep influencing each other as was observed in case of India. Refer our detailed model on the relationship between the PIE, Sanskrit and Prakrits. Such complex scenarios may be relatively rare, and may have happened because 'Special conditions' such as de-synthesis and the spread back of 'Aryan' Culture into the North-West of India were involved.
- (e) Extended Roller-ball model (Roller-ball model combined with Billiard-like extensions): In this model, a language spreads upto a certain point through one of the methods described above, and then spreads primarily through cultural diffusion at later points in time to various other outlying regions. This is what Witzel and J P Mallory may be referring to while using the term 'recurrent billiard-like fashion'. This may explain the Indo-Europeanization of most of Europe. The key evidence for this comes from the wide variations in the dating of various languages belonging to the IE family, and this approach may be applied if the process of Indo-Europeanization in a given region began late. To study this methodically, a thorough knowledge of histories in various regions along with a knowledge of the Ancient and modern languages of the region is mandatory. This type of a scenario manifested itself in Ancient India too, with both Prakrits and Sanskrit influencing various Dravidian languages separately. Typically, the second type of a spread begins after the language has already achieved respectability in a given region or has established itself; examples here are Greek, Latin or Sanskrit. This explains how Sanskrit influenced the languages of South East also. A critical analysis of all our findings would of course rule out any notion that spread of languages necessarily happened in tandem with the movement of peoples. No other assumption can perhaps be as damaging to our cause than this.
- (f) Assimilation: The language(s) of the immigrants die out completely over a period of time, leaving behind virtually no trace. This is diametrically opposed to the idea of annihilation of languages, and may likewise happen under rare or special circumstances. Examples of such scenarios are Non-English speaking immigrants into the USA, and the decline of the Telugu language in Tamil Nadu. Persian in India did not survive long after the decline of the Mughal empire, in spite of the fact that it did impact the languages of the region.
- (g) Cultural diffusion without transhumance movements or 'Pure Acculturation': This may be relatively rare from the perspective of Indo-European studies and the onus will necessarily be on proponents to explain how linguistic transformations happened through this method happened without any vested interests being involved. However, such paradigms are common in the Twenty-first century due to the ubiquity of technology.
- (h) Transhumance movements without linguistic change: In this scenario, there is minimal or no interaction between speakers at least in the short-term to the medium-term. Such scenarios have been observed in India too, and may have been more common in case of pre-historic migrations.
- (i) Lateral influences: Lateral influences are not just an interesting theoretical possibility: they have actually been observed in the context of Indo-European studies. i.e. Lateral influences between Iran and India which played a key role in the evolution of Vedic Sanskrit. This possibility therefore needs to be considered at every stage in various contexts.
- (j) Variants or combinations of the above scenarios may also be pervasive in the real-world and as such it is only expected that scholars will take cues from the above scenarios. Thus we wish to sidestep over-regimented approaches at every stage of the discussion.

We would refer to these as the 'Ten types of linguistic change associated with Human migrations.' In our view, and at least from our rather more focussed perspective centred on linguistic change wrought by external means, the above classification would constitute a vastly superior approach to existing classification models which are also discussed in passing in this paper, and should address linguistic

changes arising out of transhumance movements at an enhanced level of granularity. This approach always talks about two or more streams of languages and adds several more dimensions to the issue, including mandating a knowledge of local histories and issues. This approach can also provide supplementary explanations to vexatious issues such as the relationship of Hittite with other branches of the Indo-European family given the absence of several typical PIE features in this branch. JP Mallory has provided two plausible explanations, but our approach above can naturally provide more plausible explanations as whole-scale language replacement is not always the most credible scenario. As explained, our model supports the idea that the term 'Indo-European homeland' may have been a fuzzy idea in linguistic terms, and may have been more analogous to a region where horse domestication took place. Additionally, the rationale for the replacement of the term 'PIE' by the new proposed term 'Base Indo-European' should be readily apparent to readers and we strongly believe this is the way ahead.

Case studies and lessons learnt: It is expected that scholars will prepare case studies and a list of lessons learnt for each case, the premise here being that each scenario can be different, and worth a detailed study, and no one-size-fits-all approach is possible.²²

The following issues would also be central to the above-mentioned debate, and it is expected that a scholar would analyze them on a case to case basis.

- (a) The number of immigrants vis-à-vis the numerical strength of the local population
- (b) The technological and cultural superiority or attributes of the immigrants vis-à-vis the local population
- (c) Cultural attributes and policy adopted by the local populations
- (d) Attitudes or linguistic loyalties of the immigrants
- (e) The Linguistic distance between the languages of the immigrants vis-à-vis the local languages
- (f) The degree of linguistic inequality between the languages of the immigrants vis-à-vis the local languages. This will encompass sentence structure and aspects of Grammar too; for example we had used the fact that IA languages are SOV languages unlike most other IE languages which are SVO languages to campaign for a Roller-ball model.
- (g) Other factors such as 'Linguistic Osmosis' (Refer to the 'Theory of Linguistic Osmosis' proposed in our previous paper) – This will include both extraneous factors and internal considerations like ethnic rivalry etc.²³
- (h) The level of evolution of the language of the immigrants
- (i) The level of evolution of the languages of the destination area
- (j) The standing of the immigrants in the social hierarchy of their newly adopted homeland.
- (k) Any other factors or considerations understood from a detailed analysis of the issue in question.

Any discussion will be wholly void unless accompanied by a thorough knowledge of the local history or histories, culture, languages both ancient and modern, and knowledge of any other extraneous factors impacting such issues. A familiarity with linguistic and archaeological evidence pertaining to the area is also mandatory. Thus, we do not propose a model where a scholar attempts to acquire proficiency in a large number of additional or distantly related languages in an unreasonably short span of time. For the author, or virtually anyone else in question, this would essentially be an unworkable proposition. What is required is a collaborative effort between scholars of various hues and colours, across cultures and varying backgrounds, in such a way that the resultant synergies lead to an exponential increase in knowledge. We have many more examples to prove the importance of this kind of approach: for example, we had in our previous papers, demolished the idea of BMAC

²² GENERAL LINGUISTICS AND INDO-EUROPEAN RECONSTRUCTION Frederik Kortlandt

²³ Observations on language spread in multi-lingual societies: Lessons learnt from a study of Ancient and Modern India Sujay Rao Mandavilli ELK Asia Pacific Journal of Social Sciences

constituting archaeological evidence of migrations into India. We had also demolished the old Horse-chariot paradox, the Indo-Iranian language split-up, and such other myths, and this had worked wonders from our point of view. This is precisely what we refer to as fruits the 'Globalization of science' approach. Choosing the right resources is critical for the success of any endeavour such as this which is expected to be intensely multi-cultural, not just from the West and India, but from regions such as Eastern Europe, Iran, Turkey, Central Asia, Russia, China and South America as well, as this is expected to prevent the fossilization of intellectual cul-de-sacs and foster mutually beneficial dialogue, and Western scholars need to understand that India-based scholars may be ideologically-driven too, many of them incompetent.

The Indo-European language family comprises several main branches, and it is therefore expected that unique or appropriate techniques will be adopted for the study of each, will be adopted as required, keeping in mind the general principles above. Classifications have been proposed by scholars such as August Schleicher, E. Sturtevant, Gamkrelidze, Ivanov, Vladimir Georgiev and Eric Hamp, and the key branches are below:

- (a) Indo-Aryan languages of North India and Sri Lanka (More commonly known as Indic). Of the Vedic Sanskrit is the most archaic, with hymns orally transmitted from 1650 BC -1380 BC.
- (b) Iranian languages such as Farsi (from Old Persian).
- (c) Romance languages such as Spanish, French, Italian (from Latin).
- (d) Greek or Hellenic languages (From Ancient Greek) which is attested from Linear B inscriptions dating back to 1400 BC.
- (e) Germanic languages such as English, Dutch, German (from Gothic).
- (f) Celtic languages such as Irish and Welsh (from Ancient Celtic).
- (g) Baltic languages such as Lithuanian, Latvian, and the extinct Old Prussian which are attested from 1400 AD.
- (h) Slavic languages including the early medieval language Old Church Slavonic and the modern Slavic languages (Russian, Polish, Czech, etc). The oldest form of this language is attested from 900 AD.
- (i) Armenian in both Classical and modern forms.
- (j) Albanian in two main dialect groups i.e. Geg and Tosk dating to 1500 AD.
- (k) Anatolian, including Hittite, Palaic, Luwian, Lydian, Lycian, and other languages of ancient Asia Minor (this is a mostly extinct group). Hittite and Palaic are the oldest attested languages of the Indo-European language family, with records dating back to 1800 BC. Hittite was also the administrative language of Hatti, an ancient kingdom and was recorded in Cuneiform tablets.
- (l) Tocharian, consisting of two languages (Tocharian A and B) with documents dating from the 6th to the 8th Century AD, known from archaeological sites on the Silk Road, in the Chinese province of Xinjiang (This group became extinct by the 10th Century AD).
- (m) Other likely Indo-European languages are Phrygian (Anatolian region), Messapic (Italy), Macedonian, Tarstessian and a number of other poorly attested ancient languages in Asia and Europe.²⁴

These papers also call for the 'Globalization of science': instead of imposing or straitjacketing a Nineteenth century European worldview with all its foibles and infantile eccentricities, scholars from different parts of the world are expected to participate in all such complex endeavours: specialists from different regions in Eastern Europe, West-Central Asia and Iran, for example who are familiar with the different ancient and modern languages of their respective regions, those who are likewise familiar with the history and geography of those regions, and ideally those who are able to analyze world-wide problems in the light of problems pertaining to their regions, and challenge old or well-established ideas without losing sight of the big picture. In addition, it is expected that there will be

²⁴ On the internal classification of Indo-European languages: survey Václav Blažek

centralized teams well-versed with theories of linguistic change and scenarios pertaining to the birth and death of languages. This will allow new light to be thrown on several old problems and allow fresh perspectives to manifest themselves in a way that will catapult knowledge to an altogether different league. These may even be in the form of completely new perspectives on old clichés or shibboleths.

Models proposed in the Mid-Nineteenth century may not have been just shaped by the zeitgeist of those times: they may have been shaped by the limited experiences of their proponents or experiences taken from their respective cultural backgrounds, just as Indian scholars' experiences may have been likewise extremely flawed or limited given their lack of training in scientific method or limited international exposure at that time. Firstly, Western scholars may have been overwhelmed by the linguistic and cultural diversity of the Indian sub-continent. Secondly, Western scholars have been conditioned by simplistic models of linguistic change as understood from a European perspective in the Eighteenth and Nineteenth centuries. Thirdly, Western scholars of the time may have lacked the crucial feel of Indian cultures at that time just as their Indian brethren may have had similarly narrow or limited views. Globalization in its present form is slowly but surely rendering concepts like 'National Character' obsolete. It is expected that the 'Globalization of Science' will ensure the process is logically completed by allowing experiences of scholars from different parts of the world to interact with each other meaningfully, leading to an exponential increase in knowledge.

The 'Theory of linguistic osmosis' has a bearing on language spread as per our model; English spread more or less in unmodified form across the globe because it was already a standard literary language at the time and because it already had currency elsewhere; these would not have been the case with any of the constituents of the PIE, allowing them to be modified or subsumed easily.

Older models explaining the relationship of languages are now presented below for comparison:

The Tree Model: The Tree Model was first popularized by August Schleicher around the year 1860. In its simplest and crudest form, the 'Tree model' consists of a 'Proto-Language' (Proven or imagined), say 'A' branching into languages 'B', 'C' and 'D'. 'B', 'C' and 'D' in turn may have further branches. From our perspective, this antiquated model is too simplistic and theoretical to have any realistic value, at least in the context of Indo-European studies. Scholars would perhaps be hard-pressed to demonstrate real-world examples.

Our criticisms of this model are many. These include:

- (a) It is too over-simplified to handle the complexities of the IE debate.
- (b) Proto-languages cannot be assumed. This would be an erroneous assumption.
- (c) Simplistic versions assume that the PIE was one language.
- (d) It assumes over-simplistic models of language replacement. In real terms, the split of a mother language into two or more daughter language without wide-ranging influences from other languages or dialects may be relatively rare, or an extremely slow process. Even the evolution of Latin into French and Italian may have involved an interplay with a large number of other languages or dialects. We will recall the Eighty: twenty rule here. This involves a classification of scenarios into likely or unlikely. It is necessary for a scholar arguing for a scenario that may be unlikely to furnish additional evidence in support of his stand.
- (e) Although the number of languages has oscillated through the ages, the general or the common tendency is for languages involving a small number of speakers to disappear and a consolidation of dialects to take place. Bona fide exceptions may be those involving migrations as these are triggers for linguistic change. The assumptions of the Tree model may render it unworkable in the real world in a vast majority of cases.

The Wave Model

The Wave Model was first proposed by Hugo Schuchardt and Johannes Schmidt around 1870 as an alternative to the 'Tree model'. Under the Wave Model, an instance of language change arises usually from within a geographical region, and from there spreads to adjacent speaker groups. The propagation of the change is therefore like a 'wave' which expands away from its centre as the new feature is adopted by other languages usually in the region. Additionally, different features may spread independently of each other in different directions and different periods of time. According to Bloomfield (1933: 317), "Different linguistic changes may spread, like waves, over a speech-area, and each change may be carried out over a part of the area that does not coincide with the part covered by an earlier change."

The Wave Model, along with its complex extensions, may not address all kinds of scenarios arising out of Human migrations, and is already ingrained as a part of one of the scenarios proposed in our paper.

Any approach will also need to address underlying causes of linguistic change over a period of time which may include Social Factors, Political factors, Technological factors, Cultural diffusion which may arise due to contact with aliens etc, and to similarly understand the principles of linguistic convergence and divergence. Our basic assumption here is that the rate of linguistic change is never constant and may fluctuate very widely due to a result in an interplay of all the above factors and as was amply demonstrated from our papers. It would also be necessary to understand such changes in conjunction with various factors so that linguistic changes can be better-justified or analysed with underlying causes, and periods of relative non-linguistic change can be segregated from periods of relative linguistic change and similarly justified. ^{25 26 27}

Objective # 5

To use a scientific study of Indology as a weapon against Hindutva and other ideology driven approaches

Using a scientific study of Indology as a weapon against Hindutva and other ideologies of various hues and colours, avoiding all further prevarications or ado, is expected to be one of the key objectives of a Twenty-first century Indologist, and discharging this function may typically require skills that individuals with a scholarly disposition may not possess. This may therefore be seen as an extended function of the discipline, and strategies to mitigate ideology-driven approaches must be necessarily be chalked out with the greatest of care, and must encompass public awareness campaigns too. Hindutva comes first in our list of ideologies, not because of our own partialities or a sense of unfairness, but because it has the maximum potential to cause damage in the longer-term. We have always acknowledged the fact that other ideologies such as Dravidian nationalism, Marxism and Dalit nationalism have been allowed to operate unfettered for too long, and Hindutva misuse of history may have well begun the last. Hindutva tactics involving the much-hyped 'Aryan problem' are presented in the following paragraphs, and the need to contest such approaches stem from the following core considerations:

- a. Scientific and scholarly considerations must always take precedence over other considerations. This is necessary from a narrow nationalist perspective, too.
- b. Even from a nationalist perspective, what is good for science is good for India in the long run.
- c. One of our key objectives is to foster a scientific outlook among the wider Indian populations, and Hindutva strategies are in obvious conflict with this goal, and can do a great deal of damage the psyche of individuals and the national psyche in the longer run.

²⁵ Trees, Waves and Linkages: Models of Language Diversification Alexandre Francois

²⁶ The Routledge Handbook of Historical Linguistics, Edited by Claire Bower and Bethwyn Evans, Routledge

²⁷ Indo-European linguistics: An introduction James Clarkson Cambridge

- d. One of our key objectives is to foster a global and an international outlook among the Indian populations, and likewise rid the Western population of their narrow Euro-centric worldview, and to encourage both Indian and non-Indian scholars to become global denizens in the truest sense of the term. Hindutva strategies are in obvious conflict with this goal, and can do a great deal of damage to science in the longer run.
- e. Such approaches are even damaging from the narrow perspective of disciplines such as Hinduism studies, as only an objective-driven approach can be the foundation of historical studies of Hinduism.

Hindutva approaches with respect to the 'Aryan problem', an obsession among Hindutva ideologues are presented below, and it is expected that readers will read them with a great degree of care and corroborate them with right-wing ideologies:

- a. Shouting out against a myth, an obsolete or a half-imaginary theory i.e. The Aryan Invasion theory (which should have been abandoned before it actually was-or at least the fact that it was abandoned should have been communicated properly to all affected or concerned parties). This was the chief strategy of Hindutva revisionists in the 1990's and the early 2000's, and was usually a ploy to promote Hindutva theories such as the VIT. This ploy may have worked then as the AIT was only gradually retreating from the popular imagination. In any case, no present-day scholar anywhere in the world subscribes to the AIT anymore. Therefore, a criticism of the Aryan Invasion theory is wholly irrelevant from a Twenty-first century standpoint. As Romila Thapar points out in the article "Hindutva and history" (Frontline, Volume 17, issue 30, Sept 30-Oct 13, 2000) "Why then do Hindutva ideologues - Indian and non-Indian - keep flogging a dead horse and refuse to consider the more recent alternative theories? For them the only alternative is that if the Aryans were not invaders, they must have been indigenous. That there is a range of possibilities between the two extremes of invaders or indigenous does not interest them. The insistence on the indigenous origin of the Aryans allows them to maintain that the present-day Hindus are the lineal descendants of the Aryans and the inheritors of the land since the beginning of history. This then requires that the presence of the Aryans be taken back into earliest history. Hence the attempt to prove, against the prevailing evidence from linguistics and archaeology, that the authors of the Rigveda were the people of the Indus cities or were possibly even prior to that." As Witzel says of N S Rajaram (EJVS, Volume 7, (2001), issue 2 (March 31) "As Rajaram's star dimmed, however, renewed beating began of a much more ancient dead horse -- the Aryan Invasion Theory ("AIT") -- of which, 50 years after the theory's heyday, I am fantasized by Rajaram et al. as the archetypal Western champion."
- b. Confusing immigration with invasion (i.e. deliberately) is another tactic of Hindutva proponents. A definition of the two terms can be found in any English dictionary. A very morbid fear of complex acculturation models – these have become extremely complex in the recent past, and can explain all aspects of Indian culture well – also characterizes Hindutva. As Witzel points out, "K (Kazanas) does not have a firm grasp on the complexity of the AIT discussion; he confuses, like Elst, invasion (intentionally) with immigration, trickling in etc.; this leaves all disturbing details by the wayside and simplifies his job enormously: always beating down the straw man, 'invasions', as in his elaborate Norman example! In fact, his summary (p. 22) § 19 reads like a farce... (Ruckspiegel, Pratibimba, Rear view mirror "The Kazanas fiasco" (7/5/2001)). Dr Robert Zydenbos, who has unequivocally stated that he does not support the idea of an invasion, only immigration, has spoken very strongly against Hindutva tactics and calls AIT-bashing "shouting out against a myth". (He has likewise been fantasized by Hindutva proponents to be an archetypal AIT supporter, which, as stated above, he is not.) Zydenbos very categorically states ""In recent years, certain persons in India have revived a 'debate' over what is known as the Aryan Invasion Theory. Basically, this oversimplified and outdated theory says that the original speakers of Indo-European

languages (Sanskrit and its derivatives), the Aryans, were invaders who overran the subcontinent, destroying older civilizations and subjugating the peoples of those earlier civilizations. Although certain elements of this old theory still hold good (such as the origin of the Indo-Aryan, i.e., Indian branch of the Indo-European language family being outside the Indian subcontinent), no up-to-date academician today takes the whole of the old theory as valid." ('A Hindutva polemic', by Robert Zydenbos)

- c. The general Hindutva obsession with the issue of whether the "Aryans" came from inside or outside India, to the exclusion of all other serious problems facing Indology. This is irrelevant to history because identities can keep changing from generation to generation, and as immigrants could only have been extremely small in number (it is also virtually impossible that they identified themselves as 'Aryans'), they would have lost their identity long ago. The question of immigration or non-immigration is practically irrelevant from any standpoint, more so given that only small groups of people were involved, and should not interest anyone except a small group of specialists. Needless to say, such paradigms will not even offend anybody at all. Very few can even deny that people of this kind are not interested in history but in politics. The "Aryans" migrated to Iran and other parts of the world as well, but nobody creates a hue and cry there. Witzel has, time and again, pointed out that the term 'Aryan' only has a cultural connotation in the RV. Hindutva protagonists deliberately introduce covert shenanigans and proffer dubious arguments to mislead the laity and the gullible.
- d. Let us assume momentarily that the Aryan Invasion theory did exist in the popular public consciousness till 2005. We give them this liberty as there unquestionably been a failure from many sides. The BJP and their cohorts have however, killed it in polemical style since; now that the RSS and their ignominious cronies have killed it off, why shout about it after they themselves have pronounced its death? How many times does this demon have to be killed? It is no longer a demon apparently. It is just a straw-man. Anyone who shouts out against the defunct AIT will be declared politically motivated. This is the only way fanatics can be shown their place. What other tricks do they have up their sleeve? Hindutva is clearly a shallow and a crude ideology and is only associated with a low level of education.
- e. Hindutva proponents are, if all these arguments are taken into account, very clearly not interested in history or have no love for history for history's sake: The history of the Gangetic plains was, and is being researched by scholars such as F.E Pargiter, Smith, Rau, Witzel and several others. Hard-core Hindutva proponents will not be interested in history because it will conflict with their ideology, and their contributions to this sphere of study are logically non-existent.
- f. We also draw our readers' attention to the Indus script fiasco: In 2004, Steve Farmer proposed that the Indus script was not a script at all. This provoked several angry reactions from Western and Indian scholars. Scholars of many different hues and colours objected. These included several truth-seekers and lovers of science and history. Among the Indian scholars who very strongly objected were Rajesh Rao, S Kalayanaraman, Mayank Vahia, Nisha Yadav and Iravatham Mahadevan. One may like to draw to attention of Hindutvavaadins' role in this fiasco. Hindutva proponents, (they will, of course, go deliberately unnamed) were conspicuously absent even as most Western scholars defended the Indus script theory on behalf of Indian scholars and researchers; the reason for this would be quite clear to most impartial observers: The Indus script is very clearly outside the purview of Hindutva. This speaks volumes about their patriotism and clearly exposes the shallowness of the Hindutva ideology.
- g. Equating a sub-sect of Hinduism to the whole of Hinduism and then equating Hinduism to the whole of India is an obvious tactic adopted by proponents of Hindutva ideology. The term Hinduism is itself a mirage, because it is recent in origin, and the obvious objective of all Hindutva strategies is to demonize Christians and Muslims. It would be obvious to most that Hindutva is nothing but crass and degenerate Brahminism of the worst kind. While few will

deny that Brahminism has contributed in a major way to what is what is today known as Hinduism, and Sanskrit has played a major role in the cultural and linguistic unification of India in a manner no other language could have, given the fact that it was primarily a lingua franca of the elite in post-Harappan India, Hinduism does not comprise of Brahminism alone. This would be very greatly undermining the diversity of Indic religious traditions. Proponents of extreme versions of Hindutva will also never talk about Sanathana Dharma. The reasons for this are not too far to seek: Hindutva has nothing whatsoever to do with the capaciousness of Sanathana Dharma or the tolerance or the innate respect for diversity enshrined therein.

- h. When it was proposed that the IVC could not have been Vedic, Hindutvaadins began introducing a crude “is “mine” older” or “is “theirs” older” competition .i.e. Vedic civilization is pre-IVC theory. This type of an approach does not qualify as a science at all; Hindutva relies on history to promote its political ideology. No more, no less.
- i. Using the services of foreigners who probably cannot understand the complexity of Indian culture to promote Hindutva. Employing the services of foreign scholars has been a key component of the Hindutva approach.
- j. Using the perceived weaknesses and irrationality of Marxist historiography as an excuse for promoting the Hindutva movement. Readers are welcome to read the writings of Marxist Historians such as D.N Jha, for example, and assess for themselves whether they are unbiased or not. Remember the golden rule, “One kind of bias provides a justification for every other kind of bias” (scholars of this type are as guilty as Hindutva proponents themselves because such scholarship throws up counter-reactions and only leads to a polarization of views). If the menace of Hindutva is to be contained, balanced scholarship is the only way. The only difference between these groups of people is that the former is driven entirely by the desire to boost sectarian pride, the latter by dogma. The day may even come when people of this type are declared to be as guilty and as inimical to national interest as Hindutva proponents themselves. However, Hindutva proponents use such ideology-driven approaches as a pretext to promote their own theories. Using Dravidian nationalism as an excuse to promote Hindutva is another Hindutva technique, and Dravidian nationalism will almost certainly perpetuate the Hindutva menace, and therefore, a change in attitude from all sides is warranted. A desire to boost sectarian pride will never get people very far; it breeds counter-reactions always. Dravidian Harappa proponents must always be willing to take contradictory evidence into account, and must present their ideas only if they are convinced that they are correct. Sentimental approaches make people nutty. Of what use is a proposal if it does not stand the test of time or if the targeted audience makes a mockery of it? Using Euro centrism as an excuse to promote Hindutva is also a well-known Hindutva strategy. Read posts in ‘Indo-Eurasian research list’ for example, and the day may even come when people of this type are declared to be as guilty and as inimical to science as Hindutva proponents themselves. Many scholars, both Western and Indian, have been critical of this type of an approach. Farmer’s approach has been undermine the hard-work put in by scores of American, European and Indian scholars in uncovering India’s past. While no scholar, Western or Indian will oppose a quest for the truth, few would deny that Farmer’s approach is loaded with bias and prejudice, and this fact was tacitly acknowledged by Farmer himself in a post in the ‘Indo-Eurasian research list’. (We say this not because of any antipathy but to drive home a point. We say this in the interests of science and scholarship.) This approach is dangerous for many reasons (a) it sets a bad precedent not only for Indology but for other sciences as well. (b) it undermines the hard work put in by American, European and Indian researchers, makes a mockery of objective scholarship, and results in a loss of confidence in mainstream scholarship, particularly Western scholarship in Indology, which at the time of writing this article, may already be in very steep decline. This is unfortunate, because most moderate Indians insist on an East-west

collaboration in Indology as well as a major role to be played by the west as this would be crucial to the containment of religious fanaticism and other kinds of ideology-driven approaches. People of this type are therefore, typically not India's problem. They are America's problem, and a problem of the West, because they give American and Western science a bad name, and this is distressing, more so because the West has much to benefit from it financially and intellectually. While Steve Farmer may be no friend of India, it is clear that is no friend of science and objectivity either, and while we acknowledge their contributions in tackling the Hindutva menace, they owe their existence almost entirely to Marxist dogma in India and well-entrenched cabals that would like the Nineteenth century school of Indology to continue in some form or the other. (c) such approaches automatically lead to a polarization of views and as long as such approaches continue, Hindutva will almost certainly exist. Farmer's approach has also been to "corrupt" scholars of the caliber of Witzel and Dr Richard Sproat, whether they may be individually guilty or not, and it is most sad that this has been allowed to happen, to the detriment of science. His approach has also always been to drag Indology backwards, in the direction of the Nineteenth century, parading it as objectivity. One may read the so-called Indo-Eurasian research list if he likes. We say this not because we have any hatred against him at a personal level. We say this because it stymies progress in many areas and produces counter-reactions. All this is ephemeral and transient; such digressions cannot last long and will ultimately be left by the wayside. Many new epigraphic and archaeological discoveries are being made constantly in the subcontinent. The IER, with its apparent bias and racism is not a place where new discoveries are analyzed and discussed, although Witzel may, individually, not be entirely guilty, as Steve Farmer may have been largely responsible for his degradation over the past few years, and at times have made an earnest attempt to bring order into to the mayhem, at other times being swayed by his assistant. If, on the other hand, they are willing to change, and turn over a new leaf, everyone must welcome it. This approach is like Katherine Mayo's in her much-maligned 1927 book 'Mother India' i.e. to take anything that may be of some pride to locals and negate it, to give Western culture an upper hand. Can this kind of an approach survive in the longer run? We leave it to the lay-man to decide. The plight of colonialism is well-known. One of her fixations was Indian cultures' imagined cruelty towards animals. Is this true, in comparison to other cultures given that many Indian sects abhor cruelty towards animals in any form? Given that Western universities depend on Indian students, India-bashing of this kind, in the guise of scholarship is not a bad business strategy, it is anachronism. Archaic Western scholarship had for long depended on Marxist dogma to propagate imperialism. All this will change in the next decade as both get consigned to the rubbish-heap of history. On the other hand, what contribution did Hindutva proponents make in exposing this bias? Absolutely nothing, in the view of most. This may be because they are not interested in anything that is outside the purview of AIT-bashing! This is by now a hackneyed, and a stale old trick, and would now even appear ludicrous to most. What other tricks do Hindutvavaadins have in their stable? Their approaches clearly reflect their narrow and parochial mindset. Hindutva will not survive if like-minded individuals create and awareness among the larger sections of the public. On the other hand the fact the viable alternatives do not exist means that Hindutva is a ticking time-bomb. Hindutvavaadins, sensing mainstream scholarships imminent demise, are waiting on the wings to take over.

- k. Using the fact that current approaches to Indology are considered to be hopelessly obsolete to their full advantage instead of opting for via media solutions. There can be no smoke without fire; Hindutva proponents managed to wrest control of institutions such as the Indian Council of Historical research because there is a failure from all sides. Older Indologists must understand the limitations and drawbacks of obsolete models and Marxist historians must similarly understand that they must take a major portion of the blame. Marxists historians have argued that all schools of historiography have been encouraged. This

is wrong, because dogmatic scholarship such as those always attributed to Marxist historians throw up counter-reactions. Marxists themselves are legitimizing Hindutva. As long as dogmatic Marxist historiography exists, Hindutva will continue to exist. We will even argue that dogmatic Marxist historiography is one of the pillars of Hindutva. The approach must be to marginalize Hindutva, not to give it a reason to exist. Only people who are free from ideology or dogma will have the moral and ethical right to speak out against Hindutva. Only the abandonment of their ideology will give them enormous power and the ethical and moral right to criticize other ideologies as well. While there may be no consensus on most or many issues even among the so-called Marxist intelligentsia, the fact that there is a clear and an illogical and an irrational bias among some sections of the left is visible and apparent to most logical thinkers. This, of course may be a purely ideology-driven one, and not necessarily one driven by an intention to deceive. When a Warangal-based student painted Hindu deities in the nude, he was supported, as it was artistic freedom. The same was the case with M F Hussein. When the Dutch cartoon controversy erupted, the response was tragically and quite drastically different. We only demand that all sections of the intelligentsia take a common stance regardless of religion. A section of the left intelligentsia categorically stated that they would not condone fanaticism of any kind, irrespective of whether it was Hindu or Islamic. This kind of a pronouncement is always welcome, but must be followed up with action consistently. A change is nonetheless perceptible, and this will serve to bring people on all sides of the table together one day, regardless of ideology. The Marxist magazine 'Frontline' criticized the Varanasi bomb blasts, and rightfully so. Even former hardliners like Prakash Karat have apparently learnt to change with the times. This kind of a change in approach is welcome, and would actually be beneficial to the interests of scholarship. This cannot however be said of all sections of the left, and one may do his or her own homework to assess whether this statement is substantiated. We will differentiate between the left, the far left (the differences being the degree of ideology), and what we may call the disoriented and antediluvian far left, which is essentially driven by dogma. At least the third category has to change, and the author is of the firm conviction that this can eventually happen. If this does, Hindutva will be marginalized. We will always say, 'one kind of a bias legitimizes every other kind of bias.' We will also be looking forward to a quantification of bias and prejudice of all kinds, and this is an exercise interested scholars must undertake. This can be done only by proving Hindutva and Marxist dogma empirically, analysing Hindutva and Marxist writers and their works thoroughly, that we can lay the foundations for a more objective school of Indology. We will look forward to such works from scholars in the near future. Remember the golden rule: Absence of a male fide intention can be no excuse. The road to hell can be paved with the best of intentions. If dogmatic Marxist historians still wish to persist, others must declare them to be anti-science and anti-national just as Hindutva is declared anti-science and anti-national. Mainstream Western and Indian scholars are equally guilty because they persist with outdated paradigms. Marxist scholars have clearly made no effort whatsoever to expose Farmer's bias in the IER even though it is as damaging to science as Hindutva misuse of history. Clearly, dogmatic Marxist historiography of the kind practiced in India is biased, one-sided and irrational, and due to this, we declare them anti-national in some respects, even though they may have no mala fide intentions per se. The fact that their approach is one-sided has been pointed out by many other scholars and we are certainly not the first to have done so. In many cases, they may be working against national interest, and in what cases they are working against national interest, they themselves may have no control, given that they may be entirely driven by dogma, unlike that approach that should be ideally adopted by logical-thinking individuals. As has been pointed out Marxist historiography has become synonymous with obsolescence and senility, and this kind of an approach cannot even continue beyond one or two generations, and will lead to depleted intellectual faculties, illogical and irrational behaviour, loss of personal respect and dignity, lowered level of professional competence,

and such individuals may frequently act against national interest and interests of science and will inflict, like Hindutva, damage on the education system as well. We will persist with this categorization, however provocative it may seem, till they change, or can at least provide a convincing refutation backed by data. We can still find Western and Indian scholars talking about the terms 'Aryan' and 'Dravidian' in a racial context, and arguing facetiously for second millennium BC migrations, for example. All this needs to change, as they can be pronounced guilty for encouraging Hindutva. Modernization of Indology is the only sure fire method to nip Hindutva in the bud before it evolves into a Frankenstein monster of uncontrollable proportions and devours objective scholarship completely in the next couple of years. Those who do not want such a thing to happen must forge a consensus to found a new school of Indology. This must happen as soon as possible because we are leaving too many things open to risk, and the loss of objectivity in scholarship will be to the major detriment of the west. Marxist intellectuals rightly criticized Hindutva and their endeavours that culminated in the containment of Hindutva must be highly appreciated. However, by persisting with outdated paradigms, Marxist intellectuals are actually encouraging imperialism and racism. Marxist historiography is one-sided, and India is none the better for it. Hindutva misuse of history may be a reaction to Marxist historiography. Needless to say, Hindutva proponents have a vested interest in promoting their own ideology, not just criticizing Marxist historiography because it may be biased, and the result of one kind of bias is that it produces an unequal counter-reaction, the end-result being far worse than the relatively innocuous Marxist dogma that may have produced it in the first place. Both ideologies i.e. the Marxist-imperialist nexus and Hindutva may have actually depended on each other for survival, even to some extent providing a stimulus and a *raison d'être* for both. What one sees is a strange hate-love relationship between Hindutva and Marxist approaches. If Hindutva is decimated, and a new truth-seeking school of Indology replaces it, Marxist historiography itself will lose every reason to exist. One ideology cannot be a substitute for another. The best antidote for Hindutva fascism is objective scholarship, not any other form of ideology; the latter will be clearly exacerbating it more in the longer run. All students who wish to join Indology courses in mainstream institutions must become a harbinger of change by insisting that obsolete paradigms be abandoned forthwith. The nineteenth century school of Indology will have a vested interest in prolonging its existence, and those who subscribe to it may have an emotional attachment to it that is not in the long-term interests of scholarship. Scholarship is global, not local. By resorting to tactics such as these, Western scholarship will not only be digging its own grave (this will be sad as it has contributed so much and the rest of the world has still so much to benefit from Western scholarship) but will also be producing counter-reactions that will undermine its own well-being.

- l. Excessive reliance on Sanskrit literature instead of relying on multi-disciplinary approaches is another weakness of the Hindutva strategies.
- m. Taking full advantage of the fact that the man in the street cannot understand or will not be interested in understanding the complexity of the Aryan problem and using his historical naivety to their advantage. Hindutva strategies are extremely complex, albeit somewhat stale now, and those who understand them must expose them. It is of paramount importance that the masses, or at least intellectuals be educated on Hindutva strategies, and modern paradigms must be similarly widely disseminated. This leads to loss of credibility of mainstream institutions, as mainstream Indology was apparently ill-prepared to deal with this kind of a Hindutva onslaught in the 1990's, and only sustained campaigns and arm-twisting by Witzel, Zydenbos and others staved off an impending catastrophe. In a situation like this, a revolution in Indology will be most likely only be triggered from the outside, or as a collaborative effort between Indian and Western scholars, or when a generation change happens. Such a change can provide the only lasting

immunity against all future Hindutva takeovers, but if this is to happen, the general public has to be educated appropriately.

Having said this, a vast majority of the Indian population will not even be pre-occupied with topics such as this, and the idea of acculturation in the manner described above will certainly not cause upper caste Hindus to be made scapegoats or villains of the show, adversely impact caste or cultural relations amongst Hindus, or cause Hinduism to be seen as an alien import in the eyes of ordinary practising Hindus, or even adversely impact its reputation in any other manner. The fears of right-wing parties in this regard are wholly unfounded as we have long-passed the days of over-simplified imported constructs and models, which must now be permanently laid to rest. This is therefore an earnest appeal not only to Right-wing parties, but all elements across the political and intellectual spectrum espousing ideological constructs, not to sacrifice scientific objectivity at the altar of parochial or ideological considerations.

Likewise, Dravidian nationalists too, who have been thus far very open to debate, must realize that the epoch of outdated colonial constructs which shaped their world-view is now over. Apart from being incorrect, they promote friction among various ethnic groups in a manner that is devoid of any logic, and if they still wish to persist with their paradigms must address all the issues we have raised in all our papers. The golden rule here is 'What is good for India is good for Tamil Nadu (and vice versa)'.

Dalit Nationalists too have to realize that they will have to forgive and forget, and that Dalits too can prosper and thrive under the awning of an objective and a multi-disciplinary school of Indology, one that will allow contentious issues like the Caste system to be researched with objective precision, and they too can flourish only in a prosperous, forward-looking India. We still have works like Kancha Ilaiah's 'Why I am not a Hindu' being launched at irregular intervals on the lines of similar books published by Bertrand Russell and Ibn Warraq. While he may have been venting out his pent-up ire here, all parties must learn to bury the hatchet sooner or later, and needless to say, this process itself can be accelerated by a more objective and uptodate approach to Historiography.

Marxist historians must likewise mend their ways and change with the times. Readers may make a note of the following quote for example from Marxist Historian Irfan Habib, and draw their own conclusions, "Let us look at why a historian chooses a subject. To give a very mundane example, because I had a Communist background, I chose to work on the agrarian system of Mughal India, at the same time that my friend, the late M. Athar Ali, chose the structure of nobility under Aurangzeb, because, being of a liberal persuasion, he wished to examine how far religious identities impinged on Mughal administrative functioning. We would not have chosen these different topics if our personal predilections were identical. So, even in research work, the very fact that one chooses a particular topic may reflect some previous presumptions about what is more significant in history." ²⁸ After the decline of Hindutva revisionist efforts following the overthrow of the BJP government in 2004, the Marxist comrades and apparatchiks were back in business, and for them it was certainly back to business as usual. They shot off a letter to the central government urging it to celebrate Emperor Akbar's birth anniversary with great pomp and grandeur. This proposal was of course promptly rejected by the Congress government for its blatant political overtones. Few would deny the positive attributes of this emperor in relation to other Mughals- but this was the most unsophisticated form of evidence yet that Marxist historians had not done their homework to set right alleged biases, or

²⁸ THE PHILOSOPHY OF HISTORY: Irfan Habib Journal of History and Social sciences Volume: II, Issue I, January-June 2011

even made an earnest attempt to understand the causes for the rise of the Hindutva. The certain scenario they will die leaving behind a bigger mess for humanity doesn't perturb them, the spent forces that they are: of course, they brush it way by saying Hindutva has always been allowed. Mental paralysis through dogma, as usual!

The Author is reminded of childhood experiences he had with his history textbooks starting from the late 1970's to the early 1980's. These textbooks were exactly the same as those that were prescribed at a central government level, there was a brief mention of the Indus valley civilization with its cities and with its drainage system. There was no mention of Vedic and post- Harappan India at all and this is clearly a product of Marxist handiwork and dogma. Even at a tender age, the author had realized that there was a complete mismatch between popular culture and history textbooks and that seriously amiss. There was an over-emphasis on the Islamic period and the reign of Emperor Akbar was alone covered in thirty pages. There was an over-emphasis on British India, and too and on the other hand virtually nothing was mentioned about India's long struggle for independence. Nothing was mentioned about regional cultures, and this may have had something to do with the Marxist tendency for over-centralization although this is antithetical to unity. The state government was so puffed about this that it had introduced a supplementary textbook. These paradoxes were impossible for the author to solve at such a young age, and like most others of his day, he clung on to Amar Chitra Katha books, among several other publications of the same genre, to satiate his hunger and craving for knowledge: these typically mixed history with myth and laid the foundations of superstition, blind faith and false nationalist pride this must have happened to millions of children at the time, and this process is only being neutralized not due to changing paradigms in historiography, but due to the blowing winds of globalization. Needless to say, this is a perfect recipe to promote revisionism, and a free-for-all approach involving knaves and crooks. This is a classic case of fools rushing in mindlessly while angels prefer discretion. 'History is not a free-for-all where even the man in the street can claim to be able to write history textbooks', Romila Thapar once complained bitterly. 'Rewriting history textbook has now become a wholesale cottage industry' lamented Witzel. If historians promoted effective and ideology-free approaches, such efforts would invariably and inevitably vanish into nothingness.

Thankfully, things have changed for the better, and the more recent textbooks seem to be much better written with a much better coverage on key topics and events and do not promote bigoted views. Bringing in further changes will be a sure panacea for most ills affecting historiography; these will counter the Hindutva behemoth more efficaciously too.

We had recommend a formula where (a) Pre-Harappan India and the history of lesser known people (b) The IVC (c) The history of the culturally crucial and critical Post-Harappan India (d) The history of India between 600 BC and 1000 AD (e) The Mughal period (f) The British raj (g) The history of Post-Independent India (i) The history of Dravidian and other cultures (j) Common cultural threads, basic concepts, special topics etc were given equal coverage. We called this a "One by Ten formula". Scholars were to be encouraged to come up with strategies for explaining basic concepts to students. This would naturally have involved explaining how different aspects of Indian culture got formed while always encouraging students to think for themselves. The origins of different aspects of Indian culture must naturally be evaluated in a global context and the origin of different technologies such as chariots, bronze and copper must be explained to students. This will ensure that the man in the street does not get carried away by proponents of theories such as the 3100 BC Mahabharata theory.

On the other hand, a version of the website of the ICHR once in currency, effectively stated that nothing existed between the IVC and the Buddha – this was of course a travesty of truth, and an idea impossible to sell to any logical thinker. Marxist historians wouldn't of course have cared. This is dogma and business as usual. On the other hand, this approach is changed under selective circumstances: usually when a bashing of the period in question is proposed to be carried out by the same set of ideologues. A Communist party website wanted to describe the attack of the IVC by 'Aryans', and did so in exhaustive detail, thereby betraying their duplicity and lack of integrity; Even

Dr Shareen Ratnagar, in an article on the 'Aryan' debate, focussed only on the attack on the IVC by the 'Aryans': the ideal should have been a comprehensive discussion of issues pertaining to the debate. Legitimate and welcome criticism of Hindutva methods and tactics, are accompanied by the usual subterfuges: to promote Marxist worldviews. These are not a figment of the author's imagination; they are a product of painstaking work done by him at the annals of the ICHR, amongst other institutions par excellence. All these tactics need to be included in the Marxist historians' hall of shame. If mainstream scholars follow a one-sided approach, who else can be blamed for the mess? Such approaches cannot therefore pass muster, and are doomed to fail, and not certainly before they throw up other counter-reactions, and leave critical issues such as long-term objectivity to the vagaries of chance.

Marxist historiography is clearly in need of glasnost and perestroika, but in this case, it may already be a case of a trifle too little, too late. Marxist historians may have been long accused of veering towards an ideology-induced state of semi-brainlessness, but at this point in time, Marxist historiography in India is already clearly on its deathbed, as the rest of the world has already noted, and Marxist historians, intellectually incapacitated by dogma, really couldn't care.

Sensing that the Indology in its present form may not exist in the long run, Hindutva forces are making a bold attempt to take over the field to the natural detriment of the West and India in the longer term. This time their approaches will be more underhand, less blatant, and more carefully played out, as the general public, once-bitten, is bound to be doubly shy. Bringing the field up to date can greatly prevent this. As known to all or most readers, there was a major Hindu revival in the 1990's. While this did have the characteristics of a neo-fascist movement, some of their grievances were legitimate. Modernization of the field can put paid to these efforts. Modernization of the field can marginalize Indian nationalism as a scientific approach to Indology can alone help contain Indian nationalism. Indian nationalism has been riding piggy back on Hindutva and objective scholarship will result if the field is modernized. Non-modernization of the field will be putting too much to open risk, and will inevitably lead to mainstream and objective scholarship finding itself beleaguered and then alienated from the general public, foreshadowing its eventual and inevitable marginalization and irrelevance, and its ultimate flight into obscurity and oblivion.

The following Golden rule always applies, and must be the guiding principle for any scholar: The interests of objective science and scholarship take precedence over national interests under all circumstances wherever a conflict is observed or witnessed between the two; likewise, national interests always take precedence over ideological considerations. If the three do not conflict with each other or can function harmoniously or effectively, there is no problem at all and they can be allowed to co-exist in absolute peace; if the three cannot co-exist harmoniously or peaceably, the rule specified above always comes into effect.

Objective # 6

To help in Indian National Integration and promote communal harmony in the sub-continent

The canonical Hindutva approach has been to equate a narrow subset of Hinduism with the whole of what we today call Hinduism and then attempt to equate it with the whole of India, and most other Hindutva strategies stem from such an approach. While such a monolithic interpretation of Indian culture may be tempting to some, and may appear to be an attractive tool of national integration, they are not just ahistorical and unscientific, but, in keeping in mind the RSS worldview, are directly targeted against Christians and Muslims and are likely to beget counter-reactions and lead to disillusionment and disenchantment in many circles.

The Marxist view as usual appears to be diametrically the opposite; Marxist historians seem to revel in proclaiming that virtually no underlying unity exists in Indic religious traditions – religion and culture are inexorably interlinked, but interestingly, common cultural traits and linguistic affinities found

across the sub-continent are often far more pervasive and deep-rooted in the collective psyche than religious symbols of unity. Not only is the Marxist approach fallacious as a tool of combating Hindutva – not only would other thinkers reject them in due course, they would be a recipe for long-term Hindutva takeover. (one has rarely heard of Marxist historians talk about National integration, communal harmony in the ideal sense or harmony among linguistic groups just as one has never heard them talk about objectivity). Marxist approaches are also innately divisive and dangerously counter-productive as there is no better policy than one that seeks to lay bare the truth a priori once it is known, and then proceed to build paradigms and strategies for national integration over it.

Holistic approaches to national integration can stem only from comprehensive and deep-rooted thought and commitment. The most logical approach that would come to anybody's mind is to identify common cultural, linguistic and religious symbols and use them as tools of national integration, while emphasizing diversity and underlying unity and commonality of traits within that diversity. Hindutva communalism, closed-mindedness and sensationalism or illogical, defective, one-sided approaches perpetrated by Marxist historians (These are now already widely equated with senility and dotage) cannot take people very far, and will eventually be shown the door. One reason Marxist historians may have unknowingly adopted divisive strategies is to impose their ideas of class struggle in as many situations and contexts as possible. Another reason Marxist historians may have adopted divisive strategies is owing to the fear the acknowledging any aspects of 'Hindu unity' across the ages may awaken the 'Hindutva monster'. There is no substitute to objectivity and intellectual honesty in the longer term: all other approaches are inapt and will be left by the wayside in due course. There is absolutely no need to promote divisive strategies with pre-conceived, misplaced or doctrinaire notions, and this would be a calamitous and a ruinous approach.

"India", as Winston Churchill once famously remarked, "is merely a geographical expression. It is no more a single country than the equator". This may, when logically and carefully analysed, be no more than an aberration and at best a reflection of antiquated, externally-imposed models and concepts. India's struggle for freedom was a long one, one in which many stalwarts valiantly laid down their lives. Mahatma Gandhi was Gujarati-speaking and hailed from the west of India. Lokamanya Tilak hailed from Maharashtra in the West. Lala Lajpat Rai belonged to the Punjab. Jawaharlal Nehru was a Kashmiri Pandit. Vivekananda was Bengali-speaking. Subramaniya Bhartiyar and V O Chidambaram were great freedom fighters from Tamil Nadu, in the extreme South of India. All these leaders spoke different languages belonging to different language groups. Did these leaders ever pause to ask for freedom for their own provinces? They fought heroically, even dedicating their entire lives for the birth of a united, free India. The only major and ultimately successful secessionist movement at that time was that of Pakistan, and the history of that idea was a complex and chequered one. The idea of the Dravida Nadu or a Dravidian-speaking states may have best been popular in a few circles in Tamil Nadu, and not even among all or most Tamil-speaking peoples. In Karnataka, Kerala and Andhra Pradesh, this idea had virtually no popular support at all. Kashmir apart, threats to India's unity and integrity began to emerge only as a result of autocratic policies pursued by the Indian government in the 1970's. Kashmir apart, separatism may be currently advocated by a few fringe elements some of whom are undoubtedly goaded on by obsolete and patently false historical models or national integration strategies. The Khalistan movement or the movement for an independent Sikh homeland was itself a product of the 1980's and may be traced to the then government's zeal or penchant for over-centralization-it has since whittled down considerably.

Even if one were to approach this issue from a purely political point of view, India had long periods of political unity preceding the British: The Mughal Empire in its heyday extended well into Tamil Nadu and till the banks of the Cauvery river. The Mauryan empire, at its peak, likewise extended into interior Tamil Nadu well before the Christian era. Prakrit and Sanskrit influences in Tamil were fairly deep-rooted and the Tamil script is itself borrowed from the North. Likewise, Buddhist and other influences in early Tamil epics are very evident even to the layman. Even Assamese, the most important language spoken in the North-east is classified as Indo-Aryan and most inhabitants of the region identify

themselves as Hindus. Likewise the only elements in the West who still speak about India as a wholly-artificial entity with no *raison d'être* are colonial, left-leaning Indologists. On the other hand, there were elements in India's political spectrum who were of the view that national integration could be accomplished only through linguistic and cultural hegemony. There have also been vested elements from time to time who have used the evidence of a pan-Indian culture to make irredentist claims. All this is good food for thought, and is amply demonstrative of the shallowness of most current or erstwhile approaches. All ideology-driven elements are certainly to blame here, which includes Marxist historians too. For them, fundamental obligations such as these were not even a part of their roll-call-of-duty. Anyone who has read this paper in its entirety will unanimously conclude that Historiography in India has suffered immensely due to ideological handicaps, and that historians of various hues and colours have failed to discharge their duties effectively. What is more astonishing is that the government and India's intellectual elite have failed to protest and to drive an awareness of such issues. Most of those who have protested this far, unfortunately, have themselves been driven by vested interests. A revolution of sorts is long and seriously overdue.

As Shashi Tharoor says speaking of the peoples of the sub-continent, "These people have stood by each other in times of need. They fought the British together. India has not disintegrated despite numerous challenges since independence. One answer is the physical realities of the subcontinent, a geographical space within which the people of India have moved freely across for centuries. This, in turn, he says, has resulted in the history of each group overlapping with and affecting that of the others. Tharoor says, with diversity emerging from its geography and inscribed in its history, India was made for pluralism: the political life of modern India has been rather like traditional Indian music: the broad rules are firmly set, but within them, one is free to improvise, unshackled by a written score."

As A. L Basham observes, 'No land on earth has such a long cultural continuity such as India, since, though, there were more ancient civilizations, notably Iraq and Egypt, these were virtually forgotten by the inhabitants of those lands, and were overlaid by new intrusive cultures, until nobody remembered 'The book of the Dead' or the 'Epic of Gilgamesh', and great kings such as Ramesses II or Hammurabi were not recorded in any living tradition. Only Nineteenth century scholarship resurrected them from oblivion, and if they are now national heroes, remembered by every school-child in their respective lands, this is not due to the historical genius or retentive folk memory of those concerned. On the other hand, the Brahman repeats in his daily worship, hymns composed over 3000 years ago, and tradition recalls heroic chieftains and the great battles fought by them at about the same time. In respect of the length of continuous tradition, China comes second to India, and Greeks makes a poor third. The Pre-Vedic Indus Valley Civilization bequeathed to later times, sacred animals and trees, the Mother Goddess, and many aspects of Indian culture.'²⁹

In his book, "The culture and civilization of Ancient India in historical outline" D D Kosambi states

"A dispassionate observer who looks at India would be struck by two mutually contradictory features: diversity and unity at the same time. The endless variety to be found in India in terms of costume, religion, the physical appearance of the people, food, climate, geographical features, is striking though not incongruous. In spite of this mind-boggling diversity, there is an underlying unity that runs very deep. The mere variety that India offers is not enough to characterize the ancient civilization of the country. Africa or the single province of Yunnan in China offer similar diversity. But the great African culture of Egypt has not the continuity that we find in India over the last three thousand years or more. Egyptian and Mesopotamian culture as we trace them back from today, do not go beyond the Arabic.

²⁹ A Cultural History of India edited by A.L Basham Oxford India paperbacks

The Incas and the Aztecs vanished soon after the Spanish conquest. The continuity of Indian culture is perhaps its most important feature.”³⁰

This is literally a manna from heaven. It's about time historians lay aside toxic and convoluted approaches like those followed by Hindutvavaadins or brain-dead approaches like those followed by Marxists, to formulate innovative strategies in this regard. Even if one makes an attempt to contest these issues from the perspective of a devil's advocate, we will point out that attempts to categorize all the nations of the world into two categories namely artificial and natural will fail miserably: if one were to adopt a scale rated from one to ten, what rating would India get in spite of its mind-boggling cultural diversity? We leave it to readers to decide.

We will be looking forward to newer and more innovative approaches towards this goal from the next generation of scholars.

However, at a broad level, the following rules must apply

- (a) All common cultural, linguistic and cultural traits shall be used as tools of national integration and can be fully exploited for the aforesaid purpose
- (b) Approaches shall not be directly or indirectly targeted against or be unfair to any religious, cultural or linguistic group.
- (c) No compromise of the truth shall be entertained under any circumstances: Acknowledgement of the fact that only truth-seeking and unbiased endeavours can stand a nation in good stead
- (d) No kind of bias direct or indirect shall be entertained
- (e) One of the historian's key objectives is to formulate strategies for national integration but it must be done in a manner that does not conflict with any of his other duties or objectives.

In our paper 'Historiography by Objectives: A new approach for the study of history within the framework of the proposed Twenty-First Century School of Historiography'³¹, we had proposed that formulating national integration strategies would be one of the bona fide duties of a historian provided such approaches do not compromise objectivity or conflict with his other duties. Similar approaches may be taken up for evaluation by Pakistan and other nations who will be benefitted by radical changes in Indology.

Objective # 7

To contribute towards the foundation of a twenty-first century school of historiography

There are several underlying causes of bias in historiography. We may lay down the key underlying causes as follows:

1. Zeitgeist
2. Cultural mindset
3. Religious attitudes
4. Political ideas and constraints
5. Other Ideological constraints
6. A historian's immediate environment

³⁰ "The culture and civilization of Ancient India in historical outline" D D Kosambi

³¹ 'Historiography by Objectives: A new approach for the study of history within the framework of the proposed Twenty-First Century School of Historiography' Sujay Rao Mandavilli ELK Asia Pacific Journal of Social Sciences Vol 1, Issue 2 (2015)

7. Absence of personal commitment to objectivity or impartiality
8. Other Personal attributes of a historian
9. Errors
10. Lack of awareness on latest tools and techniques and current research and lack of awareness of research carried out elsewhere.

Most of the underlying and quantifiable causes of bias can be corrected in our view, and we therefore emphasize what we now call 'Objectivity in Mindset' which we must always seek to nurture and promote, towards the end goal of training historians appropriately and adequately. We speak about 'Objectivity in Mindset' because we believe it can be inculcated with proper training and greatly temper the ill-effects of bias and prejudice. Many historians of eminent fame have acknowledged that objectivity cannot be compromised even under the most adverse circumstances. According to Butterfield, objectivity is the expression of history. According to P. Gardiner, a historian must be objective, and must not be driven by personal interests of any kind. Dilthey and Renier have opined that objectivity is one of the core attributes of a historian.

The importance of objectivity in historiography increases manifold if the importance of historiography in relation to other social sciences is understood. To quote H.C.Darby, "History is the central social science, of which all others must feed. It is the basis of social sciences just as mathematics is to natural sciences." According to Friedrich Meinecke, "Historicism is the greatest spiritual revolution of the Western world, comparable to the Copernican revolution." According to Dilthey, "only Historicism can shatter the last chains which philosophy and natural sciences could not break."

Standard objectives

We had listed out a standard set of objectives in our paper 'Historiography by objectives: A new approach for the study of history within the framework of the Twenty-first century school of Indology. The standard objectives proposed as a part of our afore-mentioned paper are presented below (anyone endowed with elementary common sense would endorse these), and readers can evaluate for themselves whether current approaches address these adequately. As they most obviously do not, we seek to reiterate that a revolution in Indology, must go hand in hand, in this case, with a revolution in historiography:

1. To swear allegiance to the truth at all times: intellectual honesty and objectivity are of paramount importance in any endeavour, and would be the cornerstone of any historian's approach.
2. To strive towards accuracy and precision.
3. Insistence on hard or irrefutable evidence and data wherever possible, to back up all findings.
4. To work towards the greater good of society, and act in the interests of science and strive towards the enhancement of scientific knowledge.
5. To always keep stakeholder interests in mind and work towards furthering stakeholder interests.
6. To work towards a stakeholder-friendly approach to history-writing, and stakeholders may vary on a case to case basis.
7. To enable and facilitate a synthesis with various fields of science, and to follow a multi-disciplinary approach wherever possible: This should be one of the core objectives of a 21st century historian.
8. To proactively work towards solving unresolved issues in science and history and to facilitate an environment where vexatious problems in science and history can be solved.

9. To strive towards evidence-based and objective revisionism and only where revision becomes necessary, and to denounce and combat ideology-driven revisionism and revisionism driven by vested interests.
10. To work towards elimination of narrow parochial interests and vested interests in scholarship. To create a spirit of bonhomie and camaraderie in research and foster better understanding between groups. To guard against intellectual elitism and work towards the democratization of science and the dissemination of knowledge.
11. To work towards the creation of a peer-review mechanism in the field of historiography by forging healthy partnerships with other scholars.
12. To work, in the longer-term towards the formalization and improvement of processes which can be adopted for various aspects of scholarship; this would encompass various activities from the time, new evidence is discovered, a new topic is taken up for research, or a new hypothesis is formulated, review and examination of hypothesis, debate and dialogue until incorporation in textbooks, including crucial checks and balances to be followed before material enters the student's presentation layer.
13. To constantly work towards the identification of pseudo-scientific approaches and approaches inimical to the advancement of science and scholarship throughout the lifecycle. To critique, without resorting to ad hominem attacks, pseudo-scholarship of all kinds and to work towards the quantification of bias, prejudice, and pseudo-scientific approaches at all stages in the lifecycle, and in the greater interests of society i.e. Analysis of Pseudo-scientific approaches (APSA)
14. To acquire competence in all allied areas, and to be up-to-date with all developments in all related fields of science.
15. To create a framework where specialists such as anthropologists, linguists, comparative historians and other scholars can carry out their research.
16. To work towards a situation where the distinction between various fields of science gets blurred.
17. To consider history as a science as work towards bridging the gap between arts and sciences in such a way that the distinction between arts and sciences is bridged to the extent possible.
18. To work towards the creation of a seamless framework so that history across regions can be studied.
19. To work towards the creation of a seamless framework so that history across periods can be studied.
20. Globalized approach: All problems and solutions must be re-examined from an international background to ensure scholarship is global in nature.
21. To combat alternative historiographies by rendering them meaningless in the long run.
22. To constantly pursue new vistas and opportunities in history writing.
23. To guard against dogma by constantly engaging in a process of self-introspection.
24. To analyse, any new data or evidence without undue delay and use it to review and reformulate hypotheses as applicable.
25. To never discard contradictory data that does not fit into a hypothesis. Contradictory data or evidence, on the other hand, must be welcomed, and carefully scrutinized and analysed, and a synthesis will always lead to a better solution. The scholar must also guard against simplistic solutions or solutions that do not work in the real world.
26. To guard against vindictive approaches and take what is useful from other ideology-driven approaches. For e.g. Subaltern history from Marxist historiography.

27. The criticism and elimination of restrictive approaches in other ideologies e.g. Historical Materialism to the extent it impedes science or scholarship.
28. To desist from forming any pre-conceived notions about the causes and effects of events i.e. thus he must refute determinism and teleology, and any restrictive notions of a covering law, and acknowledge the fact that this is one of the key differences between history and the sciences as events are often shaped by the free will of actors.
29. To look for avenues where he can impact society positively as a historian and play a role in shaping the future in collaboration with other scholars.
30. To understand the realities of a multi-polar world and desist from adopting Euro-centric or other region-centric approach in a way that would affect his judgment or impartiality. Understanding issues from the points of view of different cultures would help a scholar broaden his horizons and act in the greater interests of scholarship.
31. To encourage a critical analysis of religion and constantly re-examine the role of religion in society; to work towards purging unhealthy aspects of religion using a critical analysis approach, and by acknowledging that fact that not all religions are the same.
32. To constantly analyse all pseudo-historical claims made from time to time such as the existence of Lemuria, the existence of Atlantis, claims of a heavier-than-air flight by Shivkar Bapuji Talpade in India in 1895, expose fraudulent claims wherever applicable and spread scientific awareness among the masses.
33. To focus on the history of science both within a specific region, and across the world by focussing on the history of physics, chemistry, mathematics, writing systems and metallurgy to name a few, and to use such study to draw inferences and directly and indirectly enhance scientific output.
34. To participate in new areas of study such as Cliometrics which can greatly help in economic development of nations and reduce poverty and work towards bridging the gap between history and economics, and work towards combining such approaches with DPPF and other techniques.
35. To keep religious fanatics in check by facilitating higher standards in education. To constantly look for innovative ways to eradicate blind faith and superstition and fight pseudo-science by promoting scientific versions of history. To help combat superstition and blind faith by promoting scientific versions of history.
36. To adopt localized approaches wherever required. For example he can work towards better national integration and communal harmony within a region by eliminating common misconceptions, or highlighting common or shared elements of culture, or work towards better frameworks in cultural studies.
37. To constantly identify new research methods and new research techniques that can be of use to other historians and to take pride in his or her avant-gardism. To work towards a transition from a scenario where pre-defined historical methods are followed, towards a situation where a scholar is free to define his own methods (SDM's or scholar-defined methodologies), provided they do not contradict standard scientific epistemology.
38. To constantly identify new objectives that can make history writing more purposeful, and seek new vistas in historiography.
39. To play a key role in conservation and preservation of historical sites in collaboration with scholars in other fields such as archaeologists by helping create awareness and through an assessment and evaluation of such sites from a historical and cultural perspective.

For those who may choose to be cynical of our list of objectives, however valid they may be, let us now take an alternative perspective. According to S.K Kocchar “Teaching of History” (Sterling Publishers Pvt Ltd 1979)³², the following are the central aims of teaching history from an Indian perspective

1. To promote self-understanding – To achieve cultural awareness and for greater understanding between specialists.
2. To give a proper conception of time, space and energy.
3. To enable the pupils to assess the values and achievements of their own age.
4. To teach tolerance
5. To cultivate valuable intellectual attributes.
6. To broaden the intellect
7. To teach moral principles
8. To cultivate a forward outlook
9. To impart mental training and stimulate thought, judgment and discrimination
10. To give training for handling controversial issues
11. To help resolve contemporary social and individual problems
12. To develop an international outlook
13. To foster national feelings
14. To develop some useful mechanical skills

How have Indian historians fared here not excluding those associated with the Marxist school of Historiography? Even a callous and an indifferent reader or a neutral third-party observer can draw his own conclusions. All this is enough proof that the whole field is in need of a dire strategic overhaul. If this is not done on absolute priority, disastrous consequences, including a take-over of the field by the far right are most likely to ensue. The only way to succeed and to prevent such a calamitous catastrophe from occurring is to brush all wishful or delusional thinking under the carpet and address these fears head-on by rethinking the fundamentals of the discipline.

Objective # 8

To bring about rapid social and cultural change

Although the term ‘culture’ is widely used in everyday debate and discourse, there have been very few all-encompassing or wholly satisfactory definitions of the term till date. According to British scholar E. B Taylor, “Culture is a complex whole which includes the knowledge, beliefs, attitudes, morals, laws, customs, and other capabilities and habits acquired by them as a member of society.” According to B. Malinowski, “Culture comprises inherited artefacts, goods, technical processes, ideas, habits and values.” According to E.A Hoebel, “Culture is the integrated system of learned behaviour patterns which are characteristic of the members of a society and which are not as a result of biological inheritance.”

Cultures may also be represented as belief-systems whose characteristics are unique to a given society. According to Ward Goodenough, “A society's culture consists of whatever it is one has to know or believe in order to operate in a manner acceptable to its members. Culture is not a material phenomenon; it does not consist of things, people, behaviour, or emotions. It is rather an organization of these things. It is the form of things that people have in mind, their models for perceiving, relating, and otherwise interpreting them (32, p. 167). “

³² S.K Kocchar “Teaching of History” (Sterling Publishers Pvt Ltd 1979)

Culture is the ecological basis which conditions and fosters the development of individuals through enculturation. According to Dewey, a social existence is a necessary pre-requisite for the development of a human mind in an individual. A culture's values are its own ideas about what is good, right, fair, and just, and there may be differences in values from culture to culture. Culture encourages the youth in a given society to mimic the lifestyle of its elders. It cannot always be quantified because it exists at an unconscious or a sub-conscious level. Culture in an all-encompassing term and includes technologies, modes of economic organization and production, lifestyle, purchase habits, modes of living, modes of social grouping and political organization, religious beliefs etc. (Binford II, p. 323) Culture also has a bearing on attitudes and behavioural patterns of individuals. (Harris 41, p. 16)

Scholars such as Margret Mead talk about National Character. National character studies refers to a set of anthropological studies conducted around the time of the Second World War. According to Hans Kohn, "Life in a common territory, subject to the same influences of history and legal systems, produces certain common attitudes and traits, often called national character." Although this approach was criticized for over-generalization, its association with nationalism and racism, and its ability to produce stereotypes, and is regarded by many as being irrelevant in the present age of globalization, some aspects of this approach may still hold good and were extended by Geoffrey Gorer and Ruth Benedict for other societies. We therefore use this or similar approaches as necessary.

Many aspects shape culture. According to Max Weber, religious notions and moral ideas of religious origin give a special impetus to economic development or hamper it, and can facilitate or impede cultural change as the case may be. In many societies around the world, religious beliefs would constitute the crux of the belief-systems of a culture, and such beliefs would be indispensable to and inalienable from society. According to Barbara Miller³³,

Religious beliefs are expressed by

- (a) Doctrines, direct statements about religious beliefs
- (b) Mythical stories about supernatural forces or beings

Therefore, religious beliefs have a major role to play in many societies. According to Claude Levi-Strauss, myths function in a philosophical and a psychological way. According to Malinowski, a myth is a charter for society in that it expresses core beliefs and teaches morality. No society would demonstrate this more clearly than India, where myths abound in the daily consciousness. There are many reasons why such myths have been ingrained in Indian culture.

As D D Kosambi states, "At the very outset, we are faced with what appears to be an insuperable difficulty. India has certainly no historical records worth the name. Chinese annals, county records, the work of early historians such as Ssu-ma Chien, inscriptions on Oracle bones enable the history of China to be traced with some certainty from around 1400 BC. Even Rome and Greece offer far better historical literature. Even the Egyptian, Babylonian, Assyrian and Sumerian records have been read. In India, there is only vague popular tradition, but with very little documentation above the level of myth and legend."

This kind of a continuity of cultural traits along millennia, a penchant for myth-weaving, a reliance on traditional sources of information, the fact that there are many open-ended issues, the woeful inadequacy of present-day historical models and the existence of other ideology-driven approaches all taken together makes for a deadly lethal cocktail and one that leaves Indians constantly looking for better alternatives and approaches: Marxist historians and Nineteenth century Indologists are dangerously silent on this issue, even though even though it portends and presages

³³ Barbara Miller, Cultural Anthropology Sixth edition

great dangers in the long-term. The common man in the West, or the tiny sliver of the populations in the West involved, absorbed or otherwise acquainted with Ancient Indian affairs may even have been largely oblivious of this given the vast distances of time and space till the dawn of the internet age; this cannot be expected to continue in the longer term in the rapidly globalising world. Marxists historians of course exhibit the usual foolishness and naivety here – while Hindutva forces cannot be expected to contribute positively to any such meaningful endeavours, the naivety and the indifference of Marxist approaches, also perhaps greatly anaesthetised by their ideology's innate proclivities, are to be analysed and documented carefully to ensure all parties understand all dimensions of the issue.

Change is an inherent part of any culture, and no culture can remain static in the long-term. There are many reasons for cultural change. Economic, political, environmental, technological, religious reform etc. According to Kingsley Davis, "By social change, it is meant only such alterations as occur in social organization, that is structure and function of society." According to Wallace and Wallace, "Social change is change in social structure or organization." According to Mclaver and Paige, "Social change refers to a process responsive to many types of changes, to changes in the manmade conditions of life, to changes in the attitudes and beliefs in man, and to the changes that go beyond the human control to the biological and physical nature of things." As can be clearly seen, Social change and cultural change are closely inter-related and work hand-in-hand leading to a cultural and economic renaissance, revitalization or readjustment of sorts in societies whenever such changes are warranted and leads to intellectual catharsis as well. Needless to say, religious dogmas and beliefs greatly determine a society's obduracy or propensity for change. Contrarily, religious dogma can engender intellectual and cultural intransigence and paralysis.³⁴

During the past couple of years, Darwinian theories of Cultural change have become extremely popular. According to such theories, Cultural change is primarily a process of adaptation and natural selection albeit in a cultural milieu. It is based on the premise that man must maintain a collaborative relationship with his environment, which, in this context, can be of many types, in order to survive. This process is guided by the same rules of natural selection that govern biological adaptation (Meggers 56, p. 4). Cultures tend to change naturally towards the achievement of equilibrium in most situations; but when such balances are upset by environmental, demographic, technological, or other extraneous or systemic changes, further changes echo through the cultural system, and may result in weakening it or permanently altering it. Feedback mechanisms in cultural systems may thus operate both negatively (toward self-correction and equilibrium) and positively (toward disequilibrium and directional change). Most anthropologists also leave room for cases where an ideology, home grown or imported, transforms the social and economic order often leading to permanent change. Many modern anthropologists use the term "Universal Darwinism", coined by Richard Dawkins (1983), to explain the inherent idea that cultures are on the path to adaptation and innovation.³⁵

Such theories are superior to early theories of Cultural diffusionism. Many early anthropologists conceived of culture as a collection of traits and studied the diffusion, or spread, of these traits from one society to another. Critics of diffusionism, however, pointed out that the theory failed to explain why certain traits spread and others do not. Important theorists on culture have included Franz Boas, Emile Durkheim, Ruth Benedict, and Clifford Geertz.

In sum, there is a general tendency towards homogenization and universalization of cultural traits with a gradual elimination of aberrations and absorption of outliers. However, this may be a non-uniform process, and it is expected that there will be always areas of cultural lag. However, there are forces that drive towards a homogenization and universalization of traits and values, and some that work in

³⁴ THEORIES OF CULTURE Roger M. Keesing Institute of Advanced Studies, Australian National University Canberra A.C.T., Australia

³⁵ Evolutionary Theories of Cultural Change: An Empirical Perspective, Richard R. Nelson Columbia University Version: January 18, 2005

the diametrically opposite direction. The former drivers generally tend to override the latter, and this is akin to a 'Yoyo model' where convergence tends to take place over a period of time despite fluctuations in the short to medium term. Cultural Traits, values, ideologies or technologies propagate on the basis of two primary factors: Their utility and their appeal. The same can be said of ideologies also. Traits, values or ideologies with low utility and low appeal dies out faster E.g. Marxist Historiography while those with high utility and high benefit propagate faster. Some traits may have zero or negative utility and may be harmful to society and may still spread because of their appeal E.g. Hindutva. Likewise, traits, values ideologies or technologies that have a high utility quotient may also have negative ramifications in the long-run.

Here, we also seek to underscore the fact that Cultural Changes can be wrought for the welfare of humankind through a concerted effort of anthropologists and historians, and the role of anthropologists and historians in the regard should be seen as active and not passive and certainly not that of a mute bystander or spectator.

The term 'Thought-world', on the other hand, is a much more interesting term and represents the world as seen in terms of the attitudes, belief systems, assumptions etc. of a given society or people. It also seeks to explain why people of different cultural backgrounds react to different situations the way they do, and have curiously different approaches to key issues. For examples, Americans may value individual freedom more than the Indians of Chinese. Chinese and the Indians, on the other hand, may value family values more. Americans may tend to be more creative in ad hoc ways that the Germans who may prefer a more disciplined approach to creativity and innovation. The latter may be less artistic than the Italians. Indians, on the other hand may have a disorganized approach to creativity, and within their own self-imagined and self-imposed boundaries may be flexible enough to greatly compromise objectivity and purpose. In many traditional contexts, Indians may have exhibited very little penchant for objectivity, and at times may have preferred harangue and debate not as a tool for resolving differences of opinion, but as an end in itself. Each culture may therefore, hold its own cherished values in high esteem and have pejorative views of ideals espoused by other cultures. Another similar term that readily springs to mind is 'Cultural ecology', and this term has been elaborated by many writers.

There are often many seemingly irreconcilable positions within ones thought-world. For example a highly educated Indian citizen may have no qualms about being a scientist and a palmist or an astrologer at the same time. He may also be an astrophysicist and knowingly or unknowingly subscribe to Hindu creationism or worship Godmen on many occasions. Yet, he may carry on unperturbed for decades without one feeling the need for a reconciliation of obviously paradoxical views. Westerners too fall prey to this when they take up a study of Oriental cultures, and it is miraculous how they are able to juxtapose so many different viewpoints without once feeling the need to reconcile them, or even investigating their compatibility at a basic level. Thus perfectly educated men and women are often able to don many hats with great gusto and insouciance, and in a manner that bewilders mute third-party spectators.

Thus, differences in positions are both inter-cultural and intra-cultural, and in some cases lie wholly within the individual also. It is only but natural that the blowing winds of globalization will eventually make such wide differences in opinion redundant and bridge gaps. But there are several caveats and riders. This process, if left to chance may happen slowly or incompletely. Also, it is likely that undesirable traits will propagate because they have a greater utility quotient or because they are more alluring or have a feel-good-factor. Needless to say, the enhanced role of an Anthropologist and a historian in such matters would be key to substantive and directional progress.

Here are some general rules of thumb we could propose: Firstly, honest, truth-seeking scholars do not associate themselves with this or that ideology, and refuse to be confined by doctrines or rigid constraints; Secondly, ideologues invoke an extraneous or a pre-defined approach, or an authority,

and sacrifice a large amount of creativity or dynamic flexibility for the aforesaid pre-defined approaches. Thirdly, honest approaches place the pursuit of the truth above the interests of any ideology. Ideology-driven approaches do not. Fourthly, honest approaches seek contradictory data and make pro-active attempts to reconcile views. Ideology-driven scholars do not. Fifthly, all ideology-driven approaches need to take recourse to some form of sophistry. Honest approaches need no such crutches. Sixthly, all ideology-driven approaches hold a small group of practitioners in higher esteem or regard- a Hindutvavaadin will always quote Hindutva supporters, while Marxist historians will always quote Marxist historians- their approaches are not universal in nature. Seventhly, all ideologies propagate differences, not mitigate them. Ideologies polarize, honest approaches reconcile permanently or in the long-term, and across all complex dimensions. They bridge worlds.

If these rules of thumb are a yardstick, both the right and the left perform extremely poorly and fail all the tests; as they would be incapable of soul-searching of any kind, it is upto the interested public to undo damages arising from such approaches. "If science were explained to the average person in a way that is accessible and exciting, there would be no room for pseudoscience." Said Carl Sagan famously.³⁶ We do agree with the idea that Hindutva approaches are much more damaging to society than Marxist historiography, this may in large part be only because the former have popular appeal, and the latter has virtually none. There have been sporadic cases of protests against Marxist historiography too, not all of them organized by Hindutva supporters, and many of these were reported in the popular press. By this reckoning, Marxist historians may not only be damaging to science, society and the education system, they may also be indirectly or unknowingly laying the foundations for pseudo-scientific thinking among the masses.

Left-leaning author Amartya Sen makes interesting observations about Indians in his book, 'The argumentative Indian' where he claims Indians have a deep-rooted penchant and desire for debate and discourse. On critical examination, this may only be a Marxist or a one-sided analysis, and only a part of a much more deep-rooted set of issues stemming from unresolved key issues centred on India's complex past.³⁷ Therefore, such complex issues cannot be left to chance. The anthropologist and the historian, who will go by the name Indologist here, share a great responsibility in enforcing such changes and ensuring that society evolves for the better.

Objective # 9

To use a scientific study of Indology to combat superstition and blind faith

Using scientific historical constructs to disseminate a scientific viewpoint can go a great way in revolutionizing and transforming society, as most Indians rely on tradition and blind faith well into the twenty-first century. A scientific reconstruction of history (and not one driven by any other dogma) will go a long way in educating the people and can do for India what Charles Darwin's theory of evolution and Copernican theories effectively did in the West aeons ago.

Needless to say, the process was already begun by pioneers and thinkers in India over a century ago, and needs to be taken to its logical and fruitful conclusion, and strategies need to be devised and honed to suit the needs of the modern times. During the 19th century, Hinduism developed a large number of new religious and reformist movements which sought to rid Hinduism of many of its undesirable elements such as the Caste System, Sati and Child Marriage. Popular reformers of the period were Raja Ram Mohan Roy, Swami Dayananda, Swami Vivekananda and others.

³⁶ The Burden of Skepticism Carl Sagan, The Skeptical Inquirer Volume 12.1, Fall 1987

³⁷ The Argumentative Indian: Writings on Indian History, Culture and Identity, Amartya Sen Penguin books, 2006

A much more rigid and a dogmatic religion, Islam has routinely missed the reformist bus since its inception, and has eluded reform as most earlier well-intentioned reformist movements had come to naught. However, such movements have picked up steam again in recent decades as Iranian reformist, Ali Sina, Syrian-born Author Wafa Sultan, British- Pakistan author Ibn Warraq, Egyptian-American human rights activist, Nonie Darwish, British-Indian author, Salman Rushdie, Bangladeshi-born writer, Taslima Nasrin, Somali-born, US-based scholar Ayaan Hirsi Ali, British author Anwar Shaikh and others have jumped on the reformist bandwagon, and have sought to create an awareness on the more sinister side of Islam among populations of Moslem countries and the West. Some eminent Non-Moslem writers and thinkers have joined the fray, and this includes Robert Spencer, Richard Dawkins, Daniel Pipes (a mild critic) and Franklin Graham among others.

Such efforts may be necessary, if not long overdue. According to a leading website, www.thereligionofpeace.com, there were a total of 26026 Jihad attacks since 9/11. In May 2015 alone, there were 262 attacks leaving 3277 people dead and 1798 grievously wounded. May 2015 was by no means an exception, as almost all months since 2001 have borne testimony to a similar number of killings.

Nonetheless it is all not hunky-dory with Hinduism either. Hedonistic and sybaritic Gurus routinely dupe the gullible and the naïve, proclaiming themselves to be incarnations or messengers of God. This is seen as the easiest route to prosperity and fame, even if the message they carry is not at odds with the well-being of society. The idea of an all-embracing faith, emphasis on charity and service are seen as ruses to attract people generally disenchanted with the material grind. No wonder then, are millions of educated men and women seen flocking to them with the hope of spiritual salvation. A scientific approach to history, and its wider dissemination among the masses can make a great difference to their fortunes as the concept of the ten incarnations of Vishnu is known to be a post-Buddhist era concept, and is relatively recent in origin. Hinduism also seems to be inseparably associated with other pseudo-sciences such as Astrology and the like (all these have a large fan following), all of which need to be re-examined critically in the light of Twenty-first century, and without any pre-conceived notions. The supposed timelessness of Indian culture and the archetypal Indian's feeling of timelessness equip him with a false sense of superiority and give him a sanctimonious outlook that exasperates people unfamiliar with Indian culture. If this has to change, Hindutva and Marxist approaches are not the way: they can only aggravate the situation and make matters worse. The all-encompassing panacea to all such ills would be objective scholarship. This can and must happen, and all the cavils and the quibbles of the right and the left will then be left to bite the dust.

Richard Dawkins lamented the fact that Christian creationism still rules the roost in the West. Such concerns pale into nothingness if the scenario in India is taken into account. Most middle class Indians, and highly educated ones, are utterly bewildered and perplexed on very basic aspects pertaining to the origin of their culture and often don multiple hats, one professional or technological, one spiritual, unable to carry out a reconciliation between mutually conflicting beliefs even at a very basic level.

During a trip to Lepakshi in Andhra Pradesh some twenty-five years ago, the author had visited a monument that was built during the Vijayanagara Empire in the fifteenth century AD. The Author was surprised to discover that the chief guide of the temple who eked out a living explaining the history of the temple to Indian and foreign tourists, had claimed that the temple was built during the Ramayana epoch, and even that Jatayu, a bird-like mythical creature, had visited the temple, and did so with great flourish and elan and without even batting an eyelid. This so-called lecture was targeted at the Indian middle class and the stray foreign tourist who were eagerly lapping up all that he had to say without the slightest of suspicion and equivocation and were listening with rapt attention. In this case, several issues were readily apparent (a) The speaker had his timelines all wrong (b) the speaker had got the geography all wrong. This monument was located in South India, and may be called what we

may referred to as the localization of myths. (c) This was clearly a myth and would constitute mixing up myth and history.

This lack of historical sense is something that even F E Pargiter observed way back in 1922, and is deeply ingrained in the Indian psyche to the general detriment of a scientific temperament. The date of construction of the famous temple at Tirupathi, and the history of the worship of this deity is of no interest or consequence to its pilgrims or the layman whatsoever, who throng in droves to worship this deity- and neither is the conservation of sites of obvious or potential historical or archaeological interest-it is this vague timelessness about Indian culture that is very interesting and defies logic, however unhealthy it may be in many of its ramifications.

Much was made of N Mahalingam's speech in the JNU way back in 2010, in many circles in the West: and this was derided and projected as a symbol of a decadent or a backward India, one with poor educational standards- this gentlemen, now deceased, was seen a symbol of entrepreneurship during his day, and was known for his altruistic and yeoman service and his philanthropic activities. He was a staunch Gandhian to boot, and was a man of unwavering integrity and honesty. We reproduce excerpts from his speech:

"In Indian history our ancient classical works, Veda, Purana and the Ithihasa had a system of calendar. Earlier, a Chathur Yuga was considered a period as many as 43,20,000 years, and the recent research has established the new calendar.

Mahapralayam	10 x 14 x 72 x 12160	=	122572800
Pralayam	3 x 14 x 72 x 12160	=	36771840
Kalpam	14 x 72 x 12160	=	12257280
Manvantras	72 x 12160	=	875520
Chathur Yuga	12160	=	12160

Lunar and Solar Years.

The British rulers in India tried to create an Ephemeris for the past history of the country. Swamikkannu Pillai belonging to Coimbatore District was a great scholar. In his Ephemeris published in the early 1920, he had traced back the history and found certain facts based on the current Panchangam which was in use in Tamil Nadu. His main finding was that the Ramayana and Mahabharatha dates do not tally with the present calendar and therefore Sri Rama and Lord Krishna were not historical characters, but only figments of the imagination.

Prof Srinivasa Raghavan of Vivekananda College could not accept this view. He analysed 33 different calendars of India and found the Kerala and Kashmir calendars, called the Saptha Rishi calendars were the earliest. He started working from 1925 trying to trace back the time scale. It took him 50 years that is from 1925 – 1975, to enable him to confirm that both Vyasa and Valmiki were not imaginary characters, but they were really ancient scholars who wrote the history of Sri Rama and Sri Krishna. His work was all done with paper and pen. The Vishnupurana says that the Saptha Rishi takes 100 years to move from star to star and so in 2700 years, it comes to its original position. Prof.Srinivasa Raghavan took this as the base for his research. He thus established Lord Krishna's date as 3112 B.C., and Lord Rama's date as 4400 B.C. And the Saptha Rishi Era started in 8576 during the time of Vaivastha Manu. This work of Prof. K.Srinivasa Raghavan was blessed by Kanchi Sankaracharya Sri Chandrasekharendra Saraswati in 1975, and His Holiness was kind enough to agree with his views and blessed the work. In 1978, I discussed with the Supreme Court Advocate of Delhi, who had settled in Madras, Sri V.G. Ramachandran, who was highly proficient in this particular area of Vedic

Astronomy. Sri G..Sampath Iyengar from Mysore, who authored a number of books in Astronomy, was also fittingly drawn into this vital field. Sri Ramachandran established the date of Sankara as 509 B.C., Asoka as 12th Century B.C., and Lord Buddha as 18th Century B.C. Sri Sampath Iyengar and his wife had studied together the Valmiki Ramayana 17 times in the original. They concluded Vali and Sugriva were forest men dwelling in the forests. They were not Vanaras (monkeys), but they were Vananaras (men in forest). He is the author of Significance of Ice Age, Riddle of the Ring and Kishkinta to Lanka. Prof. K.Srinivasa Raghavan declared that the Saptha Rishi Era commenced in 8576 B.C. and Sri Rama's date of birth as 4439 B.C., and Sri Krishna's date of birth as 3112 B.C., and the commencement of Kaliyuga as 3104 B.C. This date did not fit in with ancient copper plates and the Aihole inscriptions on stone. So Srinivasa Raghavan had said that further research is necessary. In the 1989 Ethiraj College Seminar, 300 Professors in all departments from South India attended, and I was the Chairman of the college. The proceedings of the Conference were published in 1982 and it got into the hands of Sri N.P.Ramadurai in 1986. Sri N.P.Ramadurai, a traditional Tamil scholar, with the knowledge inherited by his masters pursued the researches already made by Prof.Srinivasa Raghavan, analysed the planetary and stellar positions as mentioned in the Ramayana, the Mahabharatha, the Vishnu Purana etc. Sri N.P.Ramadurai took 10 years to complete his research with calculator and submitted his report in 1996. He analysed the period of rotation of each planet and found that once in 12,160 sidereal years, all the planets align themselves on both sides of 300th degree and occupy the same position of each rotation. Accordingly, the duration of Kaliyuga is 1216 sidereal years. Prof. Srinivasa Raghavan took the movement of Saptha Rishi from star to star as 100 years and his calculations were based on that. But Sri N.P. Ramadurai took the work further by reducing 100 years to 99... 98... 97.....83...82...81 years and his work filled the gap. Vyasara's Mahabharatha says Sri Krishna's period was considered as 28th Chathuryuga and so (28 x 12160) take our civilization during Mahabaratha period to over 3 lakh years. "

Without the slightest disrespect to this gentlemen, some elements of this speech are indeed disturbing, and betray a wide chasm in oriental and occidental approaches to issues. In this case, objectivity is replaced by grandiloquent claims and a desire to boost sectarian pride. This is replete with pseudo-scientific approaches and myths galore. While science is universal, this shows how much more work needs to be done to inculcate a scientific temperament among the masses.

All this goes to indicate that there is something seriously wrong with the education system and some drastic reform is required. There is a lot more work to be done – Hindutva approaches are demonstrably and manifestly dangerous to the pursuit of scholarly objectivity and will not work. Eurocentrism begets dangerous reactions in India, and is not in the interests in science either. Marxist history is clearly one-sided and leads to a permanent ideologically-driven polarization of views, and is anathema to rational thought. The same can be said of all other ideologies as well, such as Dalit nationalism, Dravidian nationalism, Indo-centrism, and egregious and inept approaches espoused by New age writers in India and their doppelgangers elsewhere. All the seemingly mindless and repetitive whinging in our papers can only stop if concrete remedial action manifests itself and if the end-result is seen in the form of tangible and palpable benefits to society – as it is the least of our intentions to propose a one man army approach.

Progress on this score will call for the 'Globalization of science' and lead to what we called 'Scientific progress at the speed of light' with immense and appreciable rewards for society.

Objective # 10

To use theories such as this to interface with latest advances in anthropology and genetics

According to the Anthropological Survey of India, there are 4,635 identifiable communities, diverse in biological traits, dress, language, forms of worship, occupation, food habits and kinship patterns. Most

of these communities have a mixed ancestry and it is now almost impossible to identify their roots. They could be traced to Proto-Austroloid, Palio-Mediterranean, Caucasian, Negroid and Mongoloid. The racial component is also quite varied, drawing from almost every stock in the world. This plurality is also reflected in the number of languages in use. Apart from thousands of dialects there are as many as 325 languages and 25 scripts derived from various linguistic families - Indo-Aryan, Tibeto-Burman, Dravidian, Austro-Asiatic, Andamese, Semitic, Indo-Iranian, Sino-Tibetan, Indo-European and so on. The Indian society, as a consequence, is a social and cultural amalgam with many of its constitutive elements losing their specific identity, and at any rate none existing in its initial pure form. [Singh K S, 1995].

Thus, one could argue that scientific theories of racial origins of Indians need be extremely complex, to accommodate such complex and varied data, and practical experience. Most unfortunately, this is not true, and most historical models that were considered current and upto-date until recently were at best, ridiculous over-simplifications, driving truth-seekers in search of better alternatives. The field of Genetics has seen an exponential growth in knowledge in the recent past, and major and crucial breakthroughs have been made from the time of Mendel, the discovery of the double-helix structure of DNA by James Watson and Francis Crick, and more recent advances such as analysis of Mitochondrial DNA, all of which can greatly contribute to the study of human origins. The Genographic project, has made laudable efforts too, in an Indian context, though lamentably, they were ham-strung by obsolete historical models. The over-simplified and highly unsophisticated Out-of-Africa model too, has been heavily criticized in the recent past, and the author, among others, is eagerly awaiting a replacement. While a study of human origins, or the spread of humans across the globe when even spoken language was in its infancy (if at all it did exist), is unlikely to have a direct bearing on IE studies and vice versa, both involve human migrations at very different periods in time, concepts generated during the course of such studies particularly those pertaining to the spread of non-linguistic traits, can be of widespread utility as they can be applied in varying contexts.

Objective # 11

To help in Indo-Iranian studies and research on the ancient history of Iran

Approaches such as this can be put to fruitful use to further studies on the ancient history of Iran too. The Iranian branch of the Indo-European language family is one of the most important branches of this family. It is also closely related to what we refer to modern Indo-Aryan languages of India because of Avestan influences in the RV. The term 'Aryan' was unique to Ancient Iran and India as it chiefly used in these two countries in Ancient times, although it may have been of Iranian origin. Researching the history of post-Harappan India can also have a bearing on the history of Ancient Iran, for example, and it may throw up new clues and cues. A new civilization, Jiroft by name, has reportedly come to light in the Sistan and Kerman provinces of Iran. The relationship between this and the Avestan culture is unknown yet, but it is expected that acculturation models in India can have a bearing on Ancient Iranian studies as well as key principles can be put to use in an Iranian context as well. Therefore, we can have inter-disciplinary and inter-cultural teams at work, and this is likely to expand the boundaries of our knowledge rapidly indeed. This is important because the ancient history of Iran is perhaps much less clear than the history of ancient India at this point, and to any remaining sceptics of our model, we will point out that the date of the origin of Brahmi as identified through several approaches tallied perfectly (and indeed to the last century) with our acculturation model. (Refer our paper on Post-Harappan literacy)

Objective # 12

To help the research of the history of writing systems and origin of Indian alphabets

In our previous papers we had provided a very detailed model for the evolution of Brahmi using various multi-disciplinary approaches and had shown how these led exactly to the same result – these

also tallied with our acculturation model down to the last century. We will now examine in brief why it is time to revisit all theories regarding the origin of Brahmi, and explain why current theories have already become outdated.

Reason # 1 Current theories on the origin of Brahmi are based on outdated theories of the origin of alphabetic scripts.

Reason # 2 Current theories on the origin of Brahmi are based on obsolete theories such as early Second millennium migrations which few mainstream scholars will be willing to subscribe to at this late date.

Reason # 3 Current models are based on obsolete Nineteenth century theories such as rural Post - Harappan India hypotheses which few mainstream scholars will be willing to subscribe to at this late date.

Reason # 4 Current models are based on older versions of the AMT, and we now know that contacts with West Asia were crucial for the formation of the cultures of the Gangetic plains.

Reason # 5 Revising Theories to bring them in line with latest models can have a bearing on the research of alphabetic scripts in general.

Reason # 6 Earlier theories regarding the origin of the Brahmi alphabet were so full of paradoxes that even mainstream scholars, many of them Western, have tended to swing towards the indigenous Brahmi theory. Bringing theories uptodate can enable a consensus to be reached.

Therefore, a modernization of the field can have huge stakes on the history of alphabetic systems in general, and can have far-reaching implications for epigraphy.

Objective # 13

To facilitate better research on Old World Civilizations

We have proposed several methods to reconstruct the various languages of the Indus Valley civilization. The result can easily be compared with the languages of Mesopotamia and Egypt as known from other studies so that comparative research on old world civilizations is facilitated, and the origin of Old World languages and the inter-relationship between them better understood. This kind of a study will also facilitate a better understanding of the Indo-Europeanization of these languages as well in specific scenarios and allow for better models on the origin of languages.

Objective # 14

To use this as a template for religious and cultural studies of Ancient India

We draw our readers' attention to the fact that many attempts have been made to outline the cultural history of India since decades, but with a limited degree of success. More noteworthy attempts have included attempts by eminent scholars such as A.L Basham. However, these appear to be tame and insipid by today's standards given the fact that holistic historical models and inter-disciplinary models were lacking in the day. Bringing historical models uptodate will allow them to be used as a launching-pad for enhanced cultural studies in the sub-continent. Given the plurality and the complexity of Indian sub-cultures and ethos, such studies can easily become the benchmark for cultural studies elsewhere, and can trigger off a revolution of sorts across the world. Such approaches are also expected to help popularize multi-disciplinary and India-specific approaches for the study of Ancient India and popularize approaches based on transparency, collaboration and goodwill among researchers in the interests of advancement of research by bridging cultural and ideological distances.

Objective # 15

To use this as a template to study the invention & dissemination of other technologies such as metallurgy and transportation technology and disseminate widely research on the history of science

This should be one of the key objectives of modernizing Indology. Less than two decades ago, leading scholars were talking about the Indo-Europeanization of India by means of Chariots, searching for the use of metals in the IE homeland, and were similarly discounting better research done elsewhere on the import of Iron into the sub-continent. Obsolete models were a stumbling block for a research into the history of writing systems too, as demonstrated amply from our papers. Such approaches were widely seen to be puerile in all their dimensions and left other researchers and the lay-man looking for better alternatives and explanations.

Objective # 16

To research the history of the caste system

Needless to say, the history of the caste system which is described in RV 10.90.11,12 can be satisfactorily researched only by researching the history of Post-Harappan India, as the two are inexorably inter-related. By sidestepping this crucial period in Indian history, Marxist historians and others may stand accused not only of compromising on objectivity, but also producing other adverse counter-reactions, and blocking research on other aspects on Indian history. We now have a fair idea of how and why the caste system was formulated, even though further research may be necessary.

Objective # 17

To help promote indo -US ties and ties between India and other countries

The collaboration between Geoffrey Hardy and Ramanujan in the 1910's, and also the recent growth of IT and ITES in India are good examples of what collaboration between people of different cultures can achieve amidst the pressing challenges of the real-world, although this can hardly be said of Indology, a field of study that is still bogged down by unnaturally vast differences of perception and opinion. These are largely a product of intrinsic cultural differences which can be bridged not by the approaches of the right or the left, but by honest scholarship only. Those who blindly advocate the cause of a dying discipline such as Mid-Nineteenth century Indology may be limited in number, either lacking in imagination or common sense, doing so due to professional constraints or wishing to adopt a 'play-it-safe' strategy. Indology instead of providing a platform for meaningful East-west dialogue and discourse, may have reached a point in its history where it may have become the biggest thorn-in-the-flesh for meaningful East-West dialogue and communication. Modernizing the field can allow it to become the epicentre of improving cultural and political ties between India and other nations, particularly nations such as the USA and Germany, and can help reap rich political dividends.

Objective # 18

Better research on Modern Indian languages

Modern Indian languages can greatly benefit from improved acculturation models; for example as a result of our approaches, the impacts of Prakrits and Sanskrit on various Dravidian languages such as Tamil, Telugu and Kannada can be studied at much greater level or granularity and precision, and the origin of Dravidian languages more scientifically explained. Likewise, newer approaches such as these can revolutionize the history of modern Indo-Aryan languages as the relationship between Sanskrit and the Prakrits is known at a granular level of detail.

Objective # 19

Can help fight new-age movements and all other forms of pseudo-science

A pseudo-science may be defined as a collection of organized or unorganized beliefs or practices falsely claimed or mistakenly regarded as being based on scientific method, but does not adhere to a valid scientific method, cannot be reliably tested, or otherwise lacks scientific status. A field, practice, or body of knowledge can reasonably be called pseudoscientific when it is presented as being consistent with the canons of epistemology or scientific method, but in practice fails to meet basic scientific norms. Examples of pseudoscience include acupuncture, ancient astronauts, Atlantis, Vastu, Feng Shui, astrology, numerology, palmistry to the extent they are not verifiable scientifically or are at odds with scientific method.

Likewise, pseudohistory is a term applied to a type of historical revisionism or non-mainstream views. It claims to be history, and supposedly uses standard methods and techniques (which do not conform to standard procedures and methods), and are inconsistent with established facts or with common sense and often involve sensational or dubious claims which would be in conflict with established facts or scientific principles. Examples of pseudo-historic claims include the existence of Atlantis, the existence of Lemuria (this had mainstream backing at times), dubious methods for dating the Sphinx, claims of visits by extra-terrestrial aliens by Erich Von Daniken and the like.

It has been observed that rationality and agnosticism was on the rise early the Twentieth-century with prominent thinkers, authors, scientists and intellectuals declaring themselves agnostic or rationalists (This term should not be confused with the term atheism, as the latter may assume the characteristics of a pseudo-science by itself). These men were not fanatics or men of shallow judgement; on the contrary, they were eminent men of science and learning and were often trend-setters in their respective fields. It would have been natural to expect, all other things remaining constant, that this form of an enlightenment would have spread to all sections of society. Alas, this did not happen.

Astonishingly, and rather unexpectedly, one saw the proliferation of new-age movements in the subsequent decades and the rise of cults, sects and individuals masquerading as saints, purveyors of truth and paragons of virtue. Needless to say, the underlying causes of such a phenomenon merits a thorough investigation in the fair cause of objectivity and scholarship.

In our view, the demand for pseudo-scientific constructs increases when,

- (a) A latent demand for it exists; i.e. mainstream scholarly works do not whet the public's appetite for knowledge sufficiently. (Demand Factor)
- (b) Unresolved issues exist within or across disciplines and main stream scholarship makes little headway in dealing with such issues or brush them under the carpet. (Demand Factor)
- (c) Mainstream scholarly works are not sufficiently end-user focused or end-user centric. (Demand Factor)
- (d) Scholarship is of reasonable quality but is not disseminated widely. (Demand factor)
- (e) Any bias or ideology-driven approaches in mainstream scholarship exist. (Demand Factor)
- (f) Poor quality of education that is not an antidote to popular myths or legends or is not sufficiently global in its outlook. (Demand factor)
- (g) Demand exists for components which mainstream scholarship cannot be expected to satisfy- E.g. Spiritual bliss. (Demand factor) in this case all the other factors will at least render alternative approaches less effective or harmful.
- (h) Fools, crooks and knaves consequently rush in, hoping to make a quick buck. (Supply Factor)
- (i) These individuals take recourse to sensationalism with mercenary objectives, and act to the detriment of the general public. (Supply Factor)
- (j) This damages the cause of science further and makes mainstream scholarship less relevant leading to a catch-22 situation.

Bias and prejudice may be systemic, as in the case of Hindutva, Dravidian nationalist, Marxist historiography or Dalit Nationalism or non-systemic and innocuous as the following examples amply demonstrate:

- (A) Some scholars sought to replace the racism and the Eurocentrism of the Nineteenth century in the formulation of new paradigms. An example that readily comes to one's mind is the Out-of-Africa model explaining the origin of Homo sapiens which was first developed in the 1980's. While elements of this hypothesis are undoubtedly true, this would constitute a gross oversimplification of sorts, and did lead to angry reactions from elsewhere, and counter-proposals in due course.
- (B) The notion of creationism in its strictest canonical sense has been rendered progressively obsolete by the works of scientists such as Copernicus, Galileo and Darwin. While scholars such as Albert Einstein, Charles Darwin and Stephen Hawking did believe in the idea of an abstract God that was not at odds with the idea of scientific theories of creation, there are sections who believe that such a concept is fundamentally at odds with science. This results in two mutually contradictory views and an unresolved issue that is of great interest to the man in the street. Other scholars have opined that the notion of an abstract God cannot be proven or disproven by science. This does naturally led to a dichotomy of views and is a perfect recipe for misuse. Scope for such misuse can at least be partially mitigated if balanced and objective scholarship analyses the pros and cons of the debate from the point of view of the man in the street.

We reiterate that pseudo-history can be marginalized only if

- (a) Mainstream scholarship pursues rigorous scientific methods at all times
- (b) High Quality scholarship that wins the trust and respect of the general public is pursued and elimination of all forms of shoddy scholarship is effected.
- (c) An Unwavering and a passionate quest for the truth at all times is pursued.
- (d) Mainstream historiography is ideology-free: natural differences of opinion should not encompass ideological predilections.
- (e) All answers are available from history text books or other mainstream literature, and mainstream scholarship is adequately wide-ranging in its pursuits.
- (f) Textbooks are more user-friendly and stakeholder-focused and make an earnest attempt to address fundamental issues.
- (g) Mainstream scholarship eschews flaccid and ineffectual approaches and adopts more focused and purposeful approaches aimed at inculcating a scientific mindset.
- (h) Mainstream scholars make greater overtures to the general public and make more sincere efforts to connect to them such that minds and souls are bridged – it goes without saying that this is not possible in the longer-term until ideology-driven approaches are eliminated.
- (i) Attempts are made to resolve unresolved issues proactively and on a prioritized basis.
- (j) Attempts are made to bridge cultural worlds and ideological differences.
- (k) Attempts are made to resolve paradoxes and chasms across disciplines.
- (l) Earnest attempts must be made to expose pseudo-science and pseudo-history as such, in a way that is aimed at a general public, and is convincing and free from other ideological considerations.
- (m) All ideological scholarship of the present day is exposed using standard scientific methods and quantified as applicable in the interests of scholarship. This will, needless to say, constitute one of the core duties of the next-generation scholar.

Objective # 20

To help in conservation of archaeological sites

Sadly, conservation of archaeological sites of interest to the sub-continent has thus far been largely ignored in the West, and has been largely a prerogative of the Archaeological Survey of India or its counterpart in Pakistan. This is in spite of the fact that many key sites may need greater protection and could do with a greater infusion of funds for upkeep and maintenance. It is expected that creation of worldwide awareness of key historical sites will be one of the cornerstones of Twenty-first century school of Indology.

Objective # 21

Continuation of traditional functions such as popularization of Indian literature abroad

It is also expected that the traditional functions of Indology such as the popularization of Indian literature among foreign audiences will continue unhampered and unhindered. This function will also assume added importance in view of the renewed interest in India worldwide, and the reinterpretation of Indian history due to improved historical models. Teaching of Indian languages worldwide, one of Indology's long-standing and most ancient holy cash cows, is likely to get a boost as interest in India increases.

Objective # 22

Research on Post-Harappan history

The book 'Ancient Indian historical tradition' by F.E Pargiter which was published in 1922 was the first book to research 'Post-Harappan history' in exhaustive detail (The IVC lay undiscovered then), and this publication was largely ignored due to the subsequent focus on the IVC. Later, Smith, Rau and to a lesser extent, Witzel, have written on Post-Harappan history too. Urban development in this period was noted by Hermann Kulke, Dietmar Rothermund, Frank Raymond Allchin, Erdosy, Eltsov and Jim Shaffer too. Possehl, in his later writings, also clearly reached the above conclusions. It is an open fact that Marxist historians have, due to ideological considerations, ignored this period in history, and have done so to the detriment of science and scholarship. They may be opposed to a period in Indian history, but they would be automatically acting against national interests and would be eviscerating Indian history of much of its substance. Western scholars must likewise learn to discriminate between objective scholarship, and this kind of a Marxist approach, and this is an earnest appeal the author would like to make. The desertification of North-Western India is also a fact, and we have taken the views of Rafique Mughal, Possehl and Kenoyer on the aforesaid issue: this would be crucial to understanding how various aspects of Indian culture were formed. Likewise, Witzel, has opined that although the bulk of Puranic literature was compiled between 200 BC and 200 AD, it does contain memories of older periods. Similar observations were made by Franklin Southworth and A L Basham as well. ^{38 39 40 41}

We have also shown in our previous papers how our acculturation model tallied with the origin of Brahmi as shown in our paper on Post-Harappan history down to the very last century. This by itself would constitute a corroborative evidence, and more evidence can be sought as research gets underway.

Researching this period in history can have enormous rewards for the cultural and intellectual history of India and can provide a formidable bulwark against revisionist attempts by winning the hearts and

³⁸ From Harappa to Hastinapura: a study of the earliest South Asian city and civilization from the point of view of archaeology and ancient Indian literature, Eltsov, Piotr Andreevich

³⁹ 'A History of India', Hermann Kulke and Dietmar Rothermund

⁴⁰ Frank Raymond Allchin and Erdosy "The Archeology of Early South Asia"

⁴¹ Franklin Southworth Linguistic Archaeology of South Asia Routledge

the minds of the Indian public. It can also positively impact research on India's linguistic history, and the history of Iran among other topics.

Objective # 23

To help lay the foundation for improved acculturation models worldwide and assist in resolving vexatious issues like the origin of humans and the inter-relationship between the world's languages

New approaches from India can trigger off a zest for improved acculturation and historical models elsewhere in the world besides also helping in Indo-European studies. Our observations on human migrations, and the models of language spread arising therefrom, it is also expected, may have a bearing on other pre and proto-historic migration studies across the world, one of which is undoubtedly the vexed issue of human origins itself – the latter has become a battleground among advocates of two popular and rival theories, and is of much greater interest to the average global citizen than Indology ever can be.

Objective # 24

To look for other innovative areas of study

Illimitable ideas and wondrous possibilities will readily present themselves, if the field is modernized and brought upto date with the latest evidence, and these can push the boundaries of human knowledge to uncharted territory and form new interfaces with other social sciences. A study of a history of history, a history of mythology, ill-effects of ideologically-driven scholarship (QEPIS) are some exciting possibilities that can push the boundaries of human knowledge even further. This is expected to be an area where scholars of other hues and colours can contribute immeasurably.

Conclusion

In conclusion, few objective scholars will deny the fact that the intellectual rewards of bringing Indology upto date are enormous, and the long-overdue process of replacing the Nineteenth Century school of Indology with a Twenty-first century school of Indology must be begun in all earnestness. We have proposed the following two catch-phrases that should be of some use in promoting awareness. If there are any further inordinate delays, they will need to assume the proportions of a battle-cry:

- A. Change the intellectual climate now!
- B. Indology needs a revolution and a makeover: Ask for it in the name of science!