

## CONVERGING VIEWS ON ASIAN PREHISTORY FROM DIFFERENT WINDOWS ON THE PAST

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This special issue of *Man In India* was prepared at the kind invitation of Professor Vijay Jha, who in June 2014 proposed that I prepare a collection of the best papers presented at the conference *Migrations and Transfers in Prehistory: Asian and Oceanic Ethnolinguistic Phylogeography*, which was later held at the University of Bern from the 28th to the 31st of July 2014. The conference was a congenial interdisciplinary event, and the selected and elicited contributions in this special issue reflect views of our shared prehistory from the vantage point of the disciplines of linguistics, archaeology and palaeontology, population genetics and palaeobotany. The papers are divided thematically into three groups. The first set of six papers deals with Northern Asian migrations and expansions, the second set of three studies treats prehistoric population movements in and across South Asia, and the third set of three contributions treats of migrations into Southeast Asia and across the seas.

The first paper on Northern Asian expansions encompasses most of Eurasia in its geographical scope. The Flemish historical linguist Martine Robbeets explains the Trans-Eurasian language family and attempts to correlate the linguistic picture with the facts from archaeology and population genetics. The Trans-Eurasian linguistic phylum used to be known as Altaic, but Robbeets uses the term *Altaic* for the three traditionally recognised branches of the family, viz. Turkic, Mongolic and Tungusic, whilst she uses the term *Trans-Eurasian* for the entire phylum including Japonic and Koreanic. In her contribution, her careful correlation of information from the different disciplines strives to ascertain both the chronology and the geographical localisation of the original homeland and subsequent spread of Trans-Eurasian language communities in prehistory.

The Uralo-Siberian hypothesis developed over the years by historical linguist Michael Fortescue is based on cumulative linguistic evidence supporting the existence of an ancient linguistic phylum comprising Uralic, Yukagir, Nivkh, Chukotko-Kamchatkan and Eskimo-Aleut. In light of the circumpolar Eurasian distribution of this linguistic phylum, Fortescue discusses the differentiation and spread of the distinct branches of this ancient linguistic phylum in time and space, both on the basis of the emergent historical linguistic picture and in light of relevant information from other disciplines. In his detailed discussion, Fortescue touches upon both mitochondrial and Y-chromosomal haplogroups. On a previous occasion, the stunning circumpolar distribution of both the paternal haplogroup and the various Uralo-Siberian language communities compelled me to note: ‘The Y chromosomal haplogroup N appears to be a

marker for the linguistic ancestors of Fortescue's Uralo-Siberian linguistic phylum' (2014: 78). In his earlier work, Fortescue referred to this network of language families as a 'mesh', but years of additional research have now compelled him to conclude the reality of the Uralo-Siberian linguistic phylum as a constellation of deeply related language families empirically supported by historical linguistic evidence.

The Czech historical linguist Václav Blažek in Brno adduces evidence which suggests that geographically the original homeland of Proto-Yeniseian may have lain in the Central Asian steppe and therefore not as far north as the subsequent historically attested distribution of Yeniseian language communities. In this context, Blažek stresses the closer proximity of this older Yeniseian homeland to the current geographical location of the Burushaski. The lexical comparisons adduced by Blažek are also relevant to the old hypothesis which purports that Yeniseian and Burushaski could be branches of a single language family. Against this background and in the context of related studies, the new book entitled *Evidence for the Indo-European and Balkan Origin of Burushaski* by Ilija Čašule, which has just appeared this year, is tantalisingly germane to Blažek's proposition. It is important to remember not only that we must deal with different windows on the past which provide different types of information about prehistory, yet even more crucial is the fact that the past itself took an awfully long time, as some are evidently prone to overlook, and there are many slices of the past which we must gingerly distinguish in any reconstruction.

Continuing on a related theme, 黄韵之 Huáng Yùnzhi and 李辉 Lǐ Huī at Fùdàn University in Shànghǎi have authored a contribution which attempts to address the old question of the ethnolinguistic identity of the northern populations which in old Chinese sources were referred to as the 匈奴 *Xiōngnú*. Past attempts have identified the *Xiōngnú* with an Altaic population or what Martine Robbeets would call early Trans-Eurasian language communities, whereas some have proposed to identify the *Xiōngnú* with ancient Iranian groups who had strayed into the northeast. Instead, Huáng and Lǐ find support for the theory first proposed by Lajos Ligeti in Budapest and later championed by Edwin George Pulleyblank in Vancouver that seeks to identify the *Xiōngnú* with an ancient Yeniseian population. Of course, it may very well be that the Northern *Xiōngnú* and the Southern *Xiōngnú* were not necessarily of precisely the same ethnolinguistic affiliation. Huáng and Lǐ find support for the theory advocated by Ligeti and Pulleyblank in the preponderance of the paternal haplogroup Q in the descendants of populations whose ancestors historically are likely to have been the *Xiōngnú* mentioned in antique Chinese sources.

It is germane to this discourse once again to draw attention to the Father Tongue correlation first described by a Swiss-Italian team in 1997 (Poloni *et al.* 1997, 2000), even before the appearance of the first Y-chromosomal tree in 2000 (Underhill *et al.* 2000, 2001). Today we have an even higher resolution picture of

the Y-chromosomal haplogroup tree and the world's paternal lineages. On a global scale, this correlation has been found to be ubiquitous, though by far not universal, and this finding allows us to deduce that a mother teaching her children their father's tongue must have been a prevalent and recurrent pattern. It is reasonable to infer that some mechanisms of language change may be inherent to this pathway of transmission. As I hastened to point in a *Festschrift* in honour of Roland Bielmeier (van Driem 2008: 49-50), not only does the high frequency of the paternal haplogroup Q in Yenisseian populations permit us to identify this molecular marker with the spread of Greater Yenisseian or what Gerber has now christened and redefined as Dene-Kusunda in this issue of *Man In India*, but this correlation with certain subclades of the paternal haplogroup Q also confronts us with the even more 'distant time depth of haplogroup P, which was ancestral to both haplogroups Q and R'.

Assuming for the sake of argument the veracity and applicability of the Father Tongue correlation in the case of Indo-European and Dene-Kusunda, then the papers in this issue of *Man In India* by Blažek, by Huáng and Lǐ as well as by Gerber would pertain to the putative time depth of paternal haplogroup Q, whilst the theory of Čašule, if indeed his theory were to be borne out by the evidence, would have to pertain either to the time depth of the ancestral paternal polymorphism P, or to some complexities in the subsequent wanderings of the ancient bearers of paternal haplogroup Q. As some of us know, haplogroup Q is found in parts of the Balkan as well as in a small but noteworthy subset of Brahmin septs of the sub-Himalayan highlands of Nepal, not to mention in some of the Kusunda. Yet it is important to differentiate between one subclade of haplogroup Q and another, for each haplogroup such as Q has its own internal phylogeny in the form of a tree of subclades with greater and shallower time depths. Definitely there is a connection between the Balkan and the Himalayan mid hills, but did this connection unfold at the time depth of the *Yavanas* of Alexander the Great or at a far greater time depth before there was such a thing as Proto-Indo-European? It may soon be made known that the subclade of haplogroup Q found in the Kusunda population of Nepal may reflect a far greater time depth than the slice of time which connects the Dalmatian coast with certain septs of high caste in Nepal's mid hills, for example. There are many slices of time in the past which we must carefully keep distinct. Pending the publication of these fascinating population genetic data, historical linguists will have their work cut out for them, and there is much left to be done.

Within P, the brother clade of haplogroup Q is R, and the presence of the ancestral clade R\* in Indian populations could be construed as evidence for the hypothesis of an ultimate Indian homeland for Indo-European. This hypothesis must not be confused with the antique view entertained by Sir William Jones, who espoused the opinion that all Indo-European languages derived from Sanskrit. This view, which even at the time was poorly informed, arose through

Sir William Jones' garbled understanding of the Scythian linguistic theory of his day. Today we know the Scythians to have been an ancient Iranian group, but to scholars in western Europe in the 17<sup>th</sup> century the term Scythian denoted mysterious peoples of antiquity who lived on the Pontic steppe and in the Caspian region. Marcus van Boxhorn, who was fond of quoting from *De origine actibusque Getarum* by Jordanes, written in the 6<sup>th</sup> century, envisaged this region as having served as the *vaginâ gentium & officinâ nationum* 'vagina of peoples and breeding place of nations', whence all Indo-European peoples derived. He frequently used this phrase in his correspondence on Scythia as the homeland of the peoples speaking related Indo-European languages, for example in his letter to Constantijn Huygens on the 21<sup>st</sup> of April 1644 (van Boxhorn 1662: 166). In 1647, the Scythian language family outlined by Marcus van Boxhorn and Claudius Salmasius in Leiden encompassed Latin, Greek, Germanic, Baltic, Slavic, Celtic, Indo-Iranian, including Sanskrit.

In 1647, the Scythian language family did not yet contain Albanian, which Rasmus Rask first suggested was Indo-European at the beginning of the 19<sup>th</sup> century. Albanian was only demonstrated to be Indo-European in 1835 by Joseph Ritter von Xylander. In 1647, Scythian likewise did not yet include Hittite, Luvian and Palaic because the clay tablets on which these extinct languages were recorded in cuneiform script had not yet been discovered, and later recognised as Indo-European by Bedřich Hrozný only in 1915. Manuscripts written in Tocharian languages were not discovered until the beginning of the 20<sup>th</sup> century. In 1810, the Scythian language family was renamed Indo-Germanic by the Danish geographer Malte-Brun, then living in exile in Paris, and thanks to the influential linguistic writings of Julius von Klaproth in Paris the name *Indo-Germanic* came to replace the earlier name *Scythian* for this theory of linguistic relationship. Only much later did the term *Indo-European* overtake Indo-Germanic in popularity, although the first attestation of the name *Indo-European* occurred quite early, namely in 1813 in a book review by the English polymath Thomas Young, who provided a critical assessment of *Mithridates* by Johann Christoph Adelung. Portions of this story have been told in detail elsewhere (van Driem 2001: 1039-1051, 2005: 285-291).

By contrast, William Jones believed that most of the languages 'from the China Seas to Persia', including Latin and Greek, all derived from Sanskrit. Accordingly he called this language family the 'Indian branch'. Jones' two other language families were the 'Tartarian' and 'Arabian branches'. His three branches derived from Noah's three sons, whereas languages not belonging to these three branches were considered by Jones to be 'antediluvian' vestiges, i.e. remnants from before the Biblical Flood. In Jones' conception, Sanskrit was ancestral to Latin, Chinese, Ancient Egyptian, Japanese, the languages of Ethiopia, Peruvian, the Celtic languages, Mexican, Greek and Phoenician, whose speakers all 'had a common source with the Hindus'. In a rather bizarre twist to

the tale, Jones' study of Hindi led him to believe that Hindi was unrelated to Sanskrit. Instead, Hindi was of 'Tartarian or Chaldean origin' (Jones 1786, 1792, 1793). Nonetheless, the absurd myth ascribing the discovery of the Indo-European language family to Jones remains astonishingly robust.

In shrill contrast to Jones' quaint Biblically inspired view, the hypothesis that identifies the spread of the paternal lineage marked by haplogroup R with the spread of Indo-European would situate a pre-Indo-European or even pre-Nostratic homeland in the Indian subcontinent. In a much later slice of prehistory, a subset of the derivative clades of R spread to the Pontic Caspian, whence they spread into Asia Minor, Europe and even back into the Indian subcontinent. Even further in the past, the presence of F\* and K\* in Indian populations represents additional molecular evidence for the even more daring hypothesis that the Indian subcontinent may have been the ultimate primordial fatherland of most of linguistic and genetic phyla outside of Africa, although this time lies well beyond the linguistic event horizon, at a time depth beyond the linguistically reconstructible past accessible to methodologically rigorous historical linguistics. Both the paternal haplogroup R and its fraternal clade Q derive from an ancestral haplogroup P, which must at one point in time have been rooted in the Indian subcontinent.

As for the putative linguistic phylum which is hypothetically associated with the paternal lineage Q, in the Bielmeier *Festschrift* (2008: 40) I rejected my earlier archaeologically inspired name 'Karasuk' in favour of 'Greater Yeniseian', retaining the original English spelling *Yenisseian*, which followed the early German and Dutch sources, in which the doubling of the *s* ensured a voiceless pronunciation. A newer Russian-inspired spelling with a single *s* has more recently into vogue. In 2010, Vajda adduced evidence for what he called 'Dene-Yeniseic', a hypothetical linguistic phylum encompassing Yeniseian and the Athabaskan-Eyak-Tlingit a.k.a. Na-Dené languages of North America. In a study of the Himalayan corridor as a conduit in prehistory (2014: 80), I introduced the term 'Dene-Yeniseian' to refer to the putative linguistic phylum comprising Athabaskan-Eyak-Tlingit, Yeniseian, Kusunda and Burushaski.

All these earlier studies on the topic ever since the pioneering work of Toporov in 1969 have now been surpassed in this special issue of *Man In India* by the meticulous study provided by Pascal Gerber of Bern University. In both amassing and critically assessing a large body of evidence, Gerber has renamed the hypothetical linguistic phylum *Dene-Kusunda*, for which he has now provided the most rigorous comparative historical study to date. By virtue of this monumental study, Gerber's chosen name *Dene-Kusunda* has come to supersede the clumsier coinages of his predecessors. This critical comparative study of formidable girth and depth and exacting methodological rigour will tantalise and delectate all who harbour an interest in the linguistic prehistory of the Yeniseians, the Burushaski, the Kusunda and the Na-Dené language communities of

North America, whether one approaches this putative linguistic phylum with the mind set of the skeptical splitter or that of the gullible lumpner, or is inclined to vacillate between these two extremes. This contribution has now opened up a new terrain of comparative linguistic research as much as it also represents a turning point in the field.

The last paper in the set of papers on the prehistoric migrations in northern Asian deals with genomic analyses of modern and ancient peoples to and within the Japanese archipelago in light of the linguistic picture, contributed by 齋藤成也 Saitō Naruya and Timothy Adrian Jinam from Mishima. This fascinating study attempts to reconcile the differences between the genetic and linguistic landscapes. There have been several waves of population movements from the Asian mainland into the Japanese archipelago, with each wave of peopling effacing some of the legacy of previous waves. Linguistic assimilation has rendered Japan relatively uniform through a process of élite dominance, thus obliterating any linguistic vestiges of earlier population strata other than Ainu, which remains still marginally present in the north of the archipelago. The authors have compared the remaining residual linguistic diversity in Japan with the genetic picture. At the same time, the genetic landscape shows a generally close proximity between the population of the main four Japanese islands and the Ryūkyū islanders, effectuated during the last major wave, coetaneous with the last major linguistic assimilation, whilst the linguistically still most divergent Okinawans continue to retain a higher percentage of aboriginal Jōmon genes.

The next batch of three studies focus on the Indian subcontinent. The first contribution by archaeologist মনজিল হাজরিকা Manjil Hazarika of Cotton College State University in Guwahati embodies a careful correlation between the linguistic picture and the archaeological and ecological landscapes in northeastern India. As an archaeologist addressing the implications of ethnolinguistic phylogeography and the insights of historical linguistics, Hazarika resembles archaeologist Jim Mallory in the latter's quest to interpret the archaeological record of western Eurasia in light of Indo-European historical linguistics. Hazarika's study in this volume presents a précis of the author's book entitled *Prehistory and Archaeology of Northeast India*, soon to be published by Oxford University Press in Delhi, this being a reworked and expanded version of the doctoral dissertation which Hazarika defended with the highest honours at the University of Bern in 2014. His arguments for the preeminent role of northeastern India as a staging area and as a thoroughfare throughout the course of prehistory are extensive, and this wonderful paper only begins to broach the topic that is more extensively discussed in the author's monograph.

The study by Luca Pagani, Vincenza Colonna, Chris Tyler-Smith and قاسم ایوب Qasim Ayub on the Brahui population attempts to clarify the case of the Brahui as a special case of linguistic retention after a major population replacement in the wake of the Indo-Aryan incursion. This would not be the only

case of a mismatch between the genetic and the linguistic profile of a population in Pakistan, for other studies by Ayub and his colleagues have shown that the Kalasha appear genetically to be Palaeo-Siberians who have adopted an Indo-Aryan language (Ayub *et al.* 2015), whilst the Burushaski do not diverge markedly from their Indo-Aryan neighbours (Ayub *et al.* 2003, Li *et al.* 2008), marking them as a potential candidate for the type of linguistic retention which Brahui is here argued to exemplify. The identification of such mismatches is the first step, as in the case of the Hungarians who lack the particular subclade of the Y-chromosomal haplogroup N which predominates in the paternal ancestry of so many Uralic populations. The second step, however, will be to reconstruct and unravel precisely which social processes took place that may have led to the observed mismatch.

A possible clarification which I advanced in another context attempts to understand the Brahui case on the basis of the Father Tongue correlation and an assumed correlation of the geographical spread of Dravidian with Y-chromosomal haplogroup L, or perhaps with particular subclades thereof (van Driem 2015: 324-325). If we assume this identification for the sake of argument, then a striking feature of previous studies is that the Beluch display the haplogroup L at greater frequencies than any other group in Pakistan, far more so even than the Brahui (Qamar *et al.*, 2002; Haber *et al.*, 2012). What we may not overlook in this context is the unique and complex relationship and extensive bilingualism which have historically characterised the Brahui-Baluchi commensality, as voluminously documented and described by Bray (1909, 1934), Emeneau (1962) and Elfenbein (1982, 1983, 1987). These two language communities essentially formed one close-knit society with intimate ties on a daily basis whilst maintaining distinct languages, ethnic identities and strikingly different cultural dynamics. The finding of the high frequency of L in the Beluchi would therefore represent a paradoxical finding, which, in light of the intricate sociolinguistic realities documented by Bray, Emeneau and Elfenbein, enables us to advance inferences about the possible historical sociolinguistic situation in the aftermath of the Indo-Aryan incursion into the territory of the Indus civilisation.

Just as the Hungarian language unequivocally demonstrates that bearers of a Uralic language must have entered and settled in Pannonia, even though their probable Y-chromosomal haplogroup did not survive as a significant feature of the present genetic landscape, by the same token the presence of the Brahui language in Pakistan attests to the erstwhile presence of a Dravidian population in the Indus basin. If we entertain the assumption for the sake of argument that Dravidian or perhaps Elamo-Dravidian was associated principally with a paternal haplogroup L, then the Beluch would appear to represent the *in situ* descendants of the ancient Dravidians who peopled the Indus civilisation. Whilst the ancestors of the Beluch opted to assimilate linguistically to the incursive Indo-

Europeans and therefore were able to retain the originally predominant Elamo-Dravidian haplogroup L at the highest frequency, the Brahui on the other hand chose to hold on to the original Dravidian language of their ancestors and consequently acquired the lower social status associated with being the subjugated Indus population. As we may infer based on the detailed documentation provided by Bray, Emeneau and Elfenbein, the lower status of the group opting to retain the ancestral language rendered the Brahui language community prone to male-biased genetic contributions from incursive Indo-European groups through hypergamy practised by succeeding generations of Brahui women. This argument once again recapitulated here, of course, transparently hinges upon the assumed identification of the haplogroup L with Dravidian or Elamo-Dravidian, an assumption which may turn out to be either borne out or dismantled by future research.

The last study in the set of three dealing with the Indian subcontinent is based on a genetic study conducted by ज्ञानेश्वर चौबे Gyaneshwer Chaubey and his associates. The Bhil are categorised as a scheduled caste and represent a sizeable population in central western India. Our findings are twofold in showing that the many Bhil communities do indeed appear to constitute a population and that the Bhil and the Nihali are so closely allied as to genetically constitute a single larger population. Nihali is a language isolate, unrelated to any known language family, and the most complete description of the language has recently been provided by नागराज केरलपुर श्रीनिवासಯ್ಯ Keralapura Shreevinasaiah Nagaraja (2014). It is not rare, in fact, that the findings of molecular genetics today often turn out to corroborate the old insights, hunches and hypotheses of ethnographers, linguists and even local lay people. The finding about ten years ago by Rootsi *et al.* (2007) showed a migration sweeping across the north of Eurasia westward and reaching as far as Lappland being correlated with the spread of Uralic or perhaps Uralo-Siberian is a case in point, to which I have already alluded above. In the case of a possible relationship between Bhil and Nihali, James Campbell (1880) recorded that the Bhil considered the Nihali as a type of Bhil, but that the linguistically assimilated Bhil considered themselves superior to the Nihali language community. Robert Shafer (1954) likewise believed that the language isolate Nihali might represent the only surviving remnant of the original linguistic stock of the linguistically Aryanised Bhil. Now we have provided molecular genetic evidence in support of these earlier ethnographical and linguistic insights.

The third and last set of three papers take us to Southeast Asia and from there across the seas. The first contribution by Tom Hoogervorst in Leiden is written very much in the Leiden Indological tradition, which in days of yore used to focus as much on the East Indies as on the Indian subcontinent. Hoogervorst professes to follow in the footsteps of Jan Gonda, Hendrik Kern and Johannes Gijssbertus de Casparis, whose studies he states were more exhaustive. However,



the novel contribution of Hoogervorst is to study phonological tendencies in the borrowings and thereby to document the different features and changes which can be expected in certain types of borrowings from Sanskrit loans or later Indo-Aryan loans into various languages of maritime Southeast Asia. The type of loans borrowed also reflect sociolinguistic or cultural emphases which obtained during the periods in which the borrowings were effectuated.

The fascinating study by Cristina Cobo Castillo deals with the chronology and the processes whereby rice agriculture spread into mainland Southeast Asia from the region that today is China. Her work builds upon the archaeological evidence that the Middle and Lower Yangtze were important ancient areas of rice cultivation. Castillo points out that the rice domestication in the lower Yangtze basin involved the *japonica* cultivar. Noted for her pioneering work on vegetation in Southeast Asia, Castillo couches her palaeobotanical work with a heightened sense of epistemological sensitivity when she concludes that the emerging picture of the adoption of rice agriculture in Southeast Asia appears complex and in fact 'that there probably was not an overall sweep of cereal diffusion'. Instead Castillo asserts that we shall have to work harder in order to gain a full understanding of the introduction of cereal cultivation. She intimates that the transition from *japonica* to *indica* rice and from dryland to wetland rice agriculture may have been more intricate than hitherto assumed by some scholars. Then she ends with a brilliant concluding observation.

Last but not least, our special issue of *Man In India* is crowned by the wonderful study on *Coloscasia esculenta* or taro by Peter J. Matthews, Peter J. Lockhart and Ibrar Ahmed. As those who have cultivated taro themselves know from experience, this wonderful cultigen can propagate itself vegetatively and will tend to go feral again from cultivated plots. Wild taro of course flowers, fruits and bears seed. The three authors present the results of their investigations on the diversity of chloroplast DNA in taro and in closely related species. In consonance with earlier linguistic and botanical studies, they present an important milestone in our understanding of taro that takes us to the regions skirting the Bay of Bengal from northeastern India to mainland Southeast Asia. In their discussion, the authors provide important molecular genetic corroboration of received botanical wisdom with regard to the provenance of this important cultigen. Future genetic researchers on taro are encouraged by the authors to collaborate with specialists in the fields of ethnobotany, historical linguistics and palaeobotany in order to gain an even more detailed understanding of the possible ethnolinguistic identity and erstwhile whereabouts of the first cultivators of taro.

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