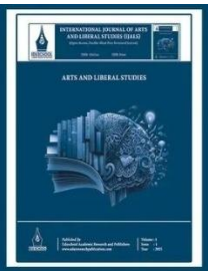
INTERNATIONAL JOURNAL OF ARTS AND LIBERAL STUDIES (IJALS)
(Open Access, Double-Blind Peer Reviewed Journal)
ISSN Online: 3108-1673 ISSN Print:



Peopling of India as Disclosed by Genetic Data

Anton Perdih

Faculty of Chemistry and Chemical Technology, University of Ljubljana, Slovenia

Article information

Received: 26th February 2026
Received in revised form: 2nd March 2026
Accepted: 21st March 2026
Available online: 23rd April 2026

Volume: 2
Issue: 2
DOI: https://doi.org/10.63090/IJALS/3108.1673.0016

Abstract

To India, there arrived people in several waves. Those having the Y chromosome and mitochondrial haplogroups Y- D + mt- M, N, R arrived India about 65,000 years ago. Those having the haplogroups Y- F, H, K + mt- U2 arrived India about 40,000 years ago; Those having the haplogroups Y- L + mt- ?? arrived India about 30,000 years ago. Those having the haplogroups Y- G + mt- H, V, K, J, T arrived India about 8,300 years ago bringing the agriculture. The Aryans, having the haplogroups Y- R1a-Z93 + mt- U5 arrived India about 3,500 years ago. There is still open the question, whether the Y chromosome haplogroup O formed in India and expanded east.

Keywords: - Haplogroup, Time of arrival, Language, Vedic, Sanskrit.

Introduction

The origin and development of the peoples in India is still an open question, as several conflicting explanations do exist. The two main explanations are that the people spread out of India (OIT) and that the Aryans came into India (AIT). When there appear different, usually conflicting explanations of a phenomenon, it is likely that none of them is entirely right. Each of them may contain some truth about what it is trying to explain. In such cases, it is important to compare data from as many different perspectives as possible. The stress is on data, not on existing explanations. The basic rule in science is that explanations are based on data, and the data are not censored by explanations. Therefore, one cannot expect that an explanation would be eternal. The explanations should undergo modifications, when there appear new data that do not support them. In this way, the science can progress. If "eternal" explanations prevail, then it is often no longer science, but an ossified doctrine.

For this reason, let us look at the question about peopling of India also from the point of view of some geological and "genetic" (DNA Genealogy) data.

Geological data, DNA data, Explanations

To clarify how it really was, it would first be necessary to get information how the cosmogenic mega-tsunami (Yurkovets 2011-2013, 2017), the eruption of the Toba volcano and possibly other volcanic activity during the MIS 4 (71,000-57,000) event, influenced India. The question is whether the people of India survived this, and if so, who were they. At present, we have no such information.

On the other hand, there is still open the question, whether the celestial body, which caused the cosmogenic mega-tsunami, induced the MIS 4 event. If so, then it would hit the Earth around 71,000 years ago.

The shock it caused would also induce cracks in nearby volcanoes, including Toba. Then, the huge wave would penetrate the cracks causing massive explosions and eruptions.

The novel data [e.g. compiled in Perdih (2018, 2022) from publications by Yurkovets, Klyosov, YFull] indicate that people having the Y chromosome haplogroup D formed about 65,200 years ago in Europe or Near East, then they migrated to India and from India they spread to Tibet and as far as Japanese islands (Perdih 2022, Fig. 6, p. 46). Later, there settled in India people having the Y chromosome haplogroup H, which formed about 48,500 years ago (Perdih 2022, Fig. 8, p. 47). People having the Y chromosome haplogroup K, which formed about 47,200 years ago, and the Y chromosome haplogroup L, which formed about 42,600 years ago, also settled in India (Perdih 2022, Fig. 10, p. 49). There remains open the question, whether the Y chromosome haplogroup O formed in India in the sequence K → NO → O and expanded from India to the South-Eastern Asia, or it formed in the South-Eastern Asia and later expanded to India. This should be studied taking into account its subgroups and haplotypes.

Combining these data with those of Palanchany et al. (2004) about the mitochondrial haplogroups, it gives that there arrived to India people having the haplogroups:

- Y- D + mt- M, N, R about 65,000 years ago;
- Y- F, H, K + mt- U2 about 40,000 years ago;
- Y- L + mt- ?? about 30,000 years ago;
- Y- G + mt- H, V, K, J, T about 8,300 years ago;
- Y- R1a + mt- U5 about 3,500 years ago.

Some descendants of the Y chromosome haplogroup K subsequently spread from India to the Southeast Asia and Oceania as indicated by the sequences of haplogroups K → NO → N + O, as well as K → M + S, (Perdih 2022, Fig. 10, p. 49). The people having the Y chromosome haplogroup L are living in India, in the Middle East and the Near East. Since trade contacts are known to have existed between Anatolia and Afghanistan since about 11,000 years ago (Košak 1994), such contacts would be obvious also between India, South-Eastern Asia, Arabia and Mediterranean. Agriculture reached India about 8,300 years ago (Zohary and Hopf, 2004), brought by the people having the Y chromosome haplogroup G, as into Europe. People having the Y chromosome haplogroups H, K, L, and G developed the cultures of India prior to the arrival of Aryans.

Another question is the origin of the Indic Aryans. The data known at present suggest that the Aryans, i.e. the people having the Y chromosome haplogroup R1a-Z645 formed in Europe around 6,000 years ago, and their descendants of the Y chromosome haplogroup R1a-Z645-Z93 began to migrate from the North-Eastern Europe (present northern European part of Russia) eastwards to northern China and southwards to Arabia around 4,500 years ago.

The explanation that the beginning of this migration is described in the Indic epic about the battle at Kurukshetra, which would take place in the Kursk area in the present Russia, needs independent verification. However, the Kursk area was at that time the contact area between the Corded Ware Culture, where the Aryans having mainly the Y chromosome haplogroup R1a-Z645-Z93 lived, and the Yamna Culture, where there lived mainly the inhabitants having the Y chromosome haplogroup R1b-Z2103. Since about 4,300 years ago the Yamna people expanded south, as well as the Aryans, the possibility of a Kursk event of that time is not to be dismissed regardless which event really describes the Indic epic.

On the way east, the Aryans can be followed in the archaeological cultures Fatyanovo (4,500 years ago, R1a-Z645-Z93), Abashevo (4,200 years ago, R1a-Z645-Z93-Z94), Potapovo (4,100 years ago, R1a-Z645-Z93-Z94-Z2123), Sintashta (4,000 years ago, R1a-Z645-Z93-Z94-Z2123), and further east in the archaeological cultures Karasuk, Tagar, Tashtik, with later subgroups. Into India, they migrated via Sintashta (4,000 years ago), Bactria (3,800-3,600 years ago), as they did into Iran as well, arriving there about 3,500 years ago. In India, there formed in them later the subgroups R1a-Z645 > Z93 > Z2123 > Z934 > Z15121 > FGC23228 > Z34161, etc. The sequence of subgroups indicates the migration of Aryans into India and not out of India. On the way south, there formed the Aryan subgroup R1a-Z645-Z93-L657, which arrived India via Syria (Mitanni) and Arabia (Klyosov 2023: 1004, 1126).

Linguistic traces (Skulj et al. 2001, 2004, 2006, 2008) suggest that the Aryans brought into India their Slavic language, as well as that they were cattle-keepers rather than agriculturists, which seems consistent with the duration of migration. How they then evolved in contact with the earlier inhabitants of India, as well as how and in what ways they influenced each other, remains open. In any case, the younger is an Aryan (Indo-European) language in India, the less it resembles the Slovene language, Vedic > Sanskrit >> present Indo-European languages in India.For how and when formed the present Indo-European languages in Europe, see Perdih (2025).

The events presented above should serve as a frame within which the Vedic studies would be performed.

Conclusion

There is open the question, whether the aboriginal people in India survived the consequences of the cosmogenic mega-tsunami, the eruption of the volcano Toba and of other volcanos about 71,000 years ago.

Later, there arrived to India people having the haplogroups: Y- D + mt- M, N, R about 65,000 years ago; Y- F, H, K + mt- U2 about 40,000 years ago; Y- L + mt- ?? about 30,000 years ago; Y- G + mt- H, V, K, J, T about 8,300 years ago; as well as the Aryans having Y- R1a-Z93 + mt- U5 about 3,500 years ago.

The people having the Y chromosome haplogroups F, H, K, L, G, and their descendants developed in India the pre-Aryan cultures, which had trade contacts far around, from East Asia to Mediterranean. The Aryans, having the Y chromosome haplogroup R1a-Z93, developed in Eastern Europe. They arrived India about 3,500 years ago via the trade routes, bringing with themselves their Slavic, which gradually merged with previous languages of India to form subsequent and present Indo-European languages of India.

This is the frame, within which the Vedic studies should be performed.

References

Klyosov A A, for his numerous books and papers see https://www.anatole-klyosov.com/ ; https://dna-academy.ru/

Klyosov A A, 2023. В очередной раз – о якобы «миграциях из Индии в Европу». *Вестник Академии ДНК-генеалогии*, 16 (7) 999-1006, https://dna-academy.ru/pic/userfile/files/16_7_2023.pdf

Klyosov A A, 2023. В очередной раз – о якобы «миграциях из Индии в Европу». *Вестник Академии ДНК-генеалогии*, 16 (8) 1123-1143, https://dna-academy.ru/pic/userfile/files/16_8_2023.pdf

Košak S, 1994. Klinopisni kulturni krog in Hetiti. *Raziskovalec*, 24 (2/3), 21-33

Palanichamy M g, Sun C, Agrawal S, Bandelt H-J, Kong Q-P, Khan F, ... Zhang Y-P, 2004. Phylogeny of Mitochondrial DNA Macrohaplogroup N in India, Based on Complete Sequencing: Implications for the Peopling of South Asia. *Am J Hum Genet*, 75(6): 966–978, doi: 10.1086/42587

Perdih A, 2018. Continuity of European Languages from the Point of View of DNA Genealogy. *International Journal of Social Science Studies*, 6, 18–32, https://doi.org/10.11114/ijsss.v6i1.2809

Perdih A, 2022. *Origin of Europeans*. Ljubljana: Založništvo Jutro, https://dna-academy.ru/books/ ; https://www.academia.edu/79050507/Origin_of_Europeans; https://www.researchgate.net/publication/360561835_Origin_of_Europeans

Perdih A, 2025. Formation of Iberic and Vasconic. *Estudios de Lenguas y Epigrafía Antiguas - ELEA*, 22, 35-54, https://www.academia.edu/128767917/; https://www.researchgate.net/publication/390729055

Skulj J, Sharda J C, 2001. Indo-Aryan and Slavic affinities. *Zbornik prve mednarodne konference Veneti v etnogenezi srednjeevropskega prebivalstva*. Ljubljana: Jutro, 112-121, https://www.korenine.si/zborniki/zbornik01/htm/skulj_indo.htm

Skulj J, Sharda J C, Sonina S, Jandaček P, 2004. Linguistic and genetic correspondences between Slavs and Indians (Indo-Aryans) provide insights into their pre-history. *Zbornik mednarodnega posveta Sledovi evropske preteklosti*. Ljubljana: Jutro, 43-73, https://www.korenine.si/zborniki/zbornik03/skulj_relationship.htm

Skulj J, Sharda J C, Narale R, Sonina S, 2006. 'Lexical Self –Dating' Evidence for a Common Agro-Pastoral Origin of Sanskrit 'Gopati', 'Gospati' and Slavic 'Gospod', 'Gospodin' Meaning Lord/Master/Gentleman more than 8,000 Years Ago. *Vedic Science*, 8 (1), 5-24; *Zbornik četrte mednarodne konference »Evropski staroselci«*. Ljubljana: Jutro, 40-58, https://www.korenine.si/zborniki/zbornik05/skulj_sanskrt06.pdf

Skulj J, Sharda J C, Sonina S, Narale R, 2008. Indo-Aryan and Slavic linguistic and genetic affinities predate the origin of cereal farming. *Zbornik šeste mednarodne konference Izvor Evropejcev*. Ljubljana: Jutro, 5-39, https://www.korenine.si/zborniki/zbornik07/indo_aryan.pdf

YFull, http://www.yfull.com/tree/; http://www.yfull.com/Mtree/

Yurkovets V P, 2011. Climatic correlations. *Вестник Российской Академии ДНК-генеалогии*, 4 (5):1051–1059, https://dna-academy.ru/pic/userfile/files/4_5_2011.pdf

Yurkovets V P, 2011. Climatic correlations. *Вестник Российской Академии ДНК-генеалогии*, 4 (6):1307–1316, https://dna-academy.ru/pic/userfile/files/4_6_2011.pdf

Yurkovets V P, 2011. Climatic correlations. *Вестник Российской Академии ДНК-генеалогии*, 4 (8) 1633-1695, https://dna-academy.ru/pic/userfile/files/4_8_2011.pdf

Юрковец В П, 2015. Климатическая катастрофа гаплогруппы «Бета». *Вестник Академии ДНК-генеалогии*, 8 (3) 376-432, https://dna-academy.ru/pic/userfile/files/8_3_2015.pdf

Юрковец В П, Василенко С И, 2017. ДНК-генеалогия, палеоклимат и геоморфология. Гидродинамический карст. *Вестник Академии ДНК-генеалогии*, 10 (3) 1412-1442, https://dna-academy.ru/pic/userfile/files/10_3_2017.pdf

Zohary D, Hopf M, 2004. *Domestication of plants in the Old World*. Oxford University Press