Did the Dravidian speakers originate in Africa?*

Dear Sir,

Chaubey et al. "Peopling of South Asia", argue that most Indians are autochthonous and originated shortly after the African migration to India 50–60,000 ybp, given the diversity of M haplogroups in India. Molecular, archaeological, linguistic and osteological studies of Dravidian-speaking people, however, suggest a more-recent origin for people speaking these languages.

According to Sergent,[1] the Dravidian populations are not autochthonous to India. Using osteological data, researchers have made it clear that the Dravidian speakers of South India and the Indus valley were primarily related to the ancient Capsian population, which originated in Africa.[2–9] Lahovary[5] and Sastri[6] maintains that this population was unified over an extensive zone from Africa, to South India. Some researchers maintain that the Capsian civilization originated in East Africa.[5,10]

Researchers have proven that the Dravidians are related to the C-group of Nubia, given the fact that both groups used (1) a common black-and-red ware (BRW),[6] (2) a common burial complex incorporating megaliths and circular rock enclosures[5,6] and (3) a common type of rock-cut sepulcher.[5] The BRW industry diffused from Nubia, across West Asia into Rajastan, and thence to East Central and South India.[11] Singh made it clear that he believes that the BRW radiated from Nubia through Mesopotamia and Iran southward into India.[12]

Many linguists claim that the Dravidian languages are genetically related to the Niger-Congo group especially languages spoken today in the Niger Valley and Senegambia region.[5,13–21] The Niger-Congo speakers originated in Nubia.

Winters has reconstructed the Paleo-African-Dravidian terms for the hoe, millet, cattle, sheep and goats.[5,18–24] R. Balakrishnan claims that Onomastics indicate an African "root" for the Dravidian-speaking tribes.[25] He presents data that the names for rivers and hills in Koraput, for example, are identical to the names for rivers and hills in Africa.[25]

The diversity of M HGs in India has led many researchers besides Chaubey et al. to suggest that the M clades have an in-situ origin.[26,27] These researchers speculate that, although L3 originated in Africa, the M1 HG is only found in Ethiopia and Egypt and may be the result of a back migration to Africa from India.[26,27]

The M lineages are not found only in East Africa. Rosa et al. found a low frequency of the M1 HG among West Africans who speak the Niger-Congo languages, such as the Balanta-Djola.[28] Gonzalez et al. found N, M and M1 HGs among Niger-Congo speakers living in Cameroon, Senegambia and Guinea Bissau.[29] Gonder et al. has also found N, M and M1 in Tanzania.[30] The molecular data make it clear that haplogroups M and M1 are spread across Africa from East to West, not just Ethiopia.[28–30,32]

Anna Oliviera et al. argue that M1 must have originated in West Asia, because none of the Asian M haplogroups harbor any distinguishing East African root mutations.[30] They claim that the presence of any East African M1 root mutations in Asian-specific clades suggest a recent arrival of M1; and that the absence of M1 root mutations among Eurasian sister clades indicate a back migration into East Africa of HG M1.[30]

Oliviera et al. claim that East African M1 root mutations are absent in Eurasian M sister clades is not supported by the evidence.[36] For example, Gondar et al. make it clear that the Tanzanian M1 haplogroup cluster with people from Oceania. In addition, Roychoudhury et al. noted nucleolides shared by East African M1, and Indian M haplogroups include HG M4 at 16311; HG M5 at 16,129; and HG M34 at 16,249.

It is also not true that HG M1 is absent in India. Kivisild et al. noted that 26 of the subjects in his study belonged to the M1 haplogroup.[31] In this study, it was discovered that subcluster M1 was found mainly in Kerala and Karnataka.[31]

Kivisild et al. found 5 major haplogroup M subclusters in India: M1, M2, M3, M4, and M5.[31] Kivisild et al. make it clear that each Indian M lineage has its own unique star features.[31] A cursory examination of Kivisild et al.'s Fig. 3, makes it clear that they found different transitions at nps for Indian haplogroups.[31]

Indian M subclusters have mutations common to the East African M1 HG.[33,35] In Fig. 3, Kivisild et al. identify transitions for Indian M1 at 16,311,16,129 and 16,189.[31] Other Indian nodes that agree with East African M1, according to Fig. 3, include: HG M5a 16,311, HG M5 16,189, and HG M2a 16,189.[31]

An African genesis for India's M haplogroups would explain the variant nucleolides East African M1 shares with Indian haplogroups: HG M4 at 16311, 16129 with HG M5 and 16249 with HG M34/.[31,33] This is interesting given Quintain-Murci et al.'s claim that the East African HG M1 HVS-I motif is characterized by four transitions at nt 16,129,16,189,16249 and 16,311.[32]

Researchers have made it clear that M1 and the M macrohaplogroup originated from an African background characterized by the ancestral state 10873C.[32,34,35] The presence of shared root mutations between East African M1, and Oceanic and Indian M haplogroups,[30,33,35] may indicate a recent arrival of Eurasian M clades from Africa.

A Proto-Dravidian migration event from Africa would explain the East African HVS-I signature motifs in the Indian

*http://en.wikipedia.org/wiki/Dravidian_languages

M haplogroup samples.[30,33,35] The geographical range of Indian M haplogroups is explained by the coalescent theory, i.e. the small Proto-Dravidian population that settled the Indus Valley expanded and spread over the subcontinent from Pakistan in the North to South India.

The Dravidian speakers are probably not autochthonous to India as claimed by Chaubey et al. It is clear that the Dravidians and Africans speak genetically related languages,[5,13–21] and share anthropological[2–9] and archaeological[5,6,11,12] features that unite both groups. The presence of M1 in India,[31] and the absence of Indian-specific clades in Africa, indicates that Indian M subclusters probably developed in India, after the migration of proto- Dravidian speakers from the Indus Valley down into South India. This path for Dravidian migration may be marked by the spread of (1) shared toponyms,[21,25] (2) genetically related languages,[5,13–21] (3) skeletal remains,[2–9] and (4) red-and-black pottery.[5,6,11,12]

References

1. Sergent B. 1992. Genèse de L'Inde. Paris: Payot.
2. Gates RR. 1961. Early Mediterranean traits in the leptorhine elements in the Kurumbas and other tribes of S. India. Mankind 1(4).
3. Guha GB. The Chalcolithic Races of India.
4. Guha GB. 1936–37. The racial affinities of the people of India. Rendus du Congress Intl d'Anthrop et Etnogr, Bruxelles.
5. Lahovary N. 1963. Dravidian Origins and the West, Madras: Longman.
6. Sastri N. 1954. History of South India. Cumberledge, Madras.
7. Shaffer R. 1954. Ethnography of ancient India. Harrasowitz, Wiesbaden.
8. Wheeler M. 1959. Early India and Pakistan. Thames and Hudson, London.
9. Winters CA. 1985. The Proto-Culture of the Dravidians, Manding and Sumerians, Tamil Civilization 3:1–9.
10. Cole S. 1954. The Prehistory of East Africa. London: Pelican.
11. Gururaja Rao BK. 1972. The Megalithic Culture in South India. Mysore.
12. Singh HN. 1982. History and archaeology of Black-and Red ware. Delhi.
13. Aravanan KP. 1976. "Physical and cultural similarities between Dravidians and Africans". Journal of Tamil Studies 10:23–27.
14. Aravanan KP. 1979. Dravidians and Africans, Madras.
15. Aravanan KP. 1980. Notable negroid elements in Dravidian India. J Tamil Studies 20–45.
16. Upadhyaya P, Upadhyaya SP. 1979. Les liens entre Kerala et l'Afrique tels qu'ils resosortent des survivances culturelles et linguistiques, Bulletin de L'IFAN, no. 1:100–132.
17. Upadhyaya P, Upadhyaya SP. 1977. Affinites ethno-linguistiques entre Dravidiens et les Negro-Africain, Bull.de L'IFAN, No.1:127–157.
18. Winters CA. 1981a. "The Unity of African and Indian Agriculture". J African Civilization 3:103–110.
19. Winters CA. 1980. "The genetic unity of Dravidian and African languages and culture", Proc First Interntl Symp on Asian Studies (PIISAS) 1979, Hong Kong: Asian Research Service.
20. Winters CA. 1981b. "Are Dravidians of African Origin", P. Second ISAS, 1980, (Hong Kong: Asian Research Service):789–807.
21. Winters CA. 1986. "The Dravidian Origin of the Mountain and Water Toponyms in central Asia". J Central Asia 9, 2:144–148.
22. Winters CA. 1999a. ProtoDravidian terms for cattle. Interntl J Dravidian Linguistics 28:91–98.
23. Winters CA. 1999b. Proto-Dravidian terms for sheep and goats. PILC J Dravidian Studies 9:183–187.
24. Winters CA. 2000. Proto-Dravidian agricultural terms. Interntl J Dravidian Linguistics 30:23–28.
25. Balakrishnan R. 2005. African roots of the Dravidian-speaking Tribes: A case in Onomastics, Interntl J Dravidian Linguistics 34:153–202.
26. Metspalu M, Kivisild T, Metspalu E, Parik J, Hudjashov G, et al. 2004. Most of the extant mtDNA boundaries in South and Southwest Asia were likely shaped during the initial settlement of Eurasia by anatomically modern humans. BMC Genetics 2004, 5:26. http://www.biomedcentral.com/1471-2156/5/26
27. Thangaraj K, Chaubey G, Kumar V, Vanniarajan SA, Ithanseem I, et al. 2006. In situ origin of deep rooting lineages of mitochondrial Macrohaplogroup 'M' in India. BMC Genomics 7:151. http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1534032
28. Rosa A, Brehm A, Kivisild T, Metspalu E, Villems R. 2004. MtDNA Profile of West Africa Guineans: Towards a Better Understanding of the Senegambia Region. Annals of Human Genetics 68:4 http://www.blackwell-synergy.com/links/doi/10.1046/j.1529-8817.2004.00100.x/enhancedabs/
29. González AM, Cabrera VM, Larruga JM, Tounkara A, Noumsi G, et al. 2006. Mitochondrial DNA Variation in Mauritania and Mali and their Genetic Relationship to Other Western Africa Populations. Annals of Human Genetics 70, 5. http://www.blackwell-synergy.com/doi/abs/10.1111/j.1469-1809.2006.00259.x?cookieSet=1&journalCode=ahg.
30. Gonder MK, Mortensen HM, Reed FA, de Sousa A, Tishkoff SA. 2006. Whole mtDNA Genome Sequence Analysis of Ancient African Lineages. Mol Biol Evol Dec 28.
31. Kivisild T, Kaldman K, Metspalu M, Parik J, Papiha S. 1999. In Genomic Diversity, (Ed.) R. Papiha Deka (pp. 135–152). S.S. Kluwer/Plenum Publishers http://evolutsioon.ut.ee/publications/Kivisild 1999b.pdf.
32. Quintana-Murci L, Semino O, Bandelt H-J, Passarino G, McElreavey K, Santachiara-Benerecetti AS. 1999. Genetic evidence of an early exit of Homo sapiens sapiens from Africa through eastern Africa. Nat Genet 23:437–441 [PubMed Abstract] [Publisher Full Text]
33. Roychoudhury S, Roy S, Basu A, Banerjee R, Vishwanathan H, et al. 2001. Genomic structures and population histories of linguistically distinct tribal groups of India. Hum Genet 109:339–350 First citation in article | PubMed | CrossRef
34. Rajkumar R, Banerjee J, Gunturi HB. Trivedi R, Kashyap VK. 2005. Phylogeny and antiquity of M haplogroup inferred from complete mtDNA sequence of Indian specific lineages. BMC Evol Biol, 5:26.
35. Sun C, Kong Q-P, Palanichamy MG, Agrawal S, Bandelt HJ, et al. 2005. The Dazzling array or Basal Branches in the mtDNA macrogroup M from India as inferred from complete Genomes. Molecular Biology and Evolution 10:1093.
36. Olivieri A, Achilli A, Pala M, Battaglia V, Fornarino S, et al. 2006. The mtDNA legacy of the Levantine early Upper Palaeolithic in Africa. Science 314:1767–1770.

Clyde Winters
Governors State University,
1 University Park,
University Park, Illinois 60466
E-mail: c-winters@govst.edu

DOI 10.1002/bies.20565
Published online in Wiley InterScience (www.interscience.wiley.com).