

## **Definition of basic terms used in the thesis:**

**Haplotype:** The combination of allelic states of a set of polymorphic markers lying on the same DNA molecule, e.g a chromosome or region of a chromosome.

**Haplogroup:** Usually applied to a set of mtDNA or Y-chromosomal haplotypes that is defined by relatively slowly mutation markers, and that has more phylogenetic stability than other 'haplotypes'. For the Y-chromosome, haplogroups are defined by binary markers such as SNPs, while 'haplotypes' are usually defined by microsatellites.

**Founder haplotype:** Haplotype to which all sequences under concern coalesce to

**Phylogeny:** A tree- like structure that represents evolutionary relationships among a set of taxa.

**Phylogeography:** Analysis of the geographical distributions of different clads within a phylogeny.

**Star like phylogeny:** A special topology of a phylogeny in which each extant taxon is derived independently from the common ancestor of all taxa or A set of sequences is said to have a pattern of star-like phylogeny if most (ideally all of them) coalesce to one and the same haplotype (that has not necessarily been observed in the sample).

**Clade:** Monophyletic unit or an evolutionary branch

**Cladogram:** An evolutionary tree that encapsulates the relative ancestries of different taxa.

**Cluster:** A more relaxed term for clad.

**Coalescent time:** The time taken (going backwards in time) for two or more lineages to coalesce (join) into their ancestral lineage.

**Time depth (=age):** Time calculated to the MRCA of a group of sequences.

**Expansion time:** Time calculated to the founder that displays star-like phylogeny.

**Lineage:** A group of taxa sharing a common ancestor to the exclusion of other taxa or in other words any array of characters/mutations shared by more than one haplotype.

**Nomenclature:** A naming system used to classify diversity for facilitating communication.

**Race:** A local geographic or global human population distinguished as a more or less distinct group by genetically transmitted physical characteristics.

**Caucasian/Caucasoids:** An old racial definition based on a skull from the Caucasus Mountain, and including the peoples of Western Europe. Commonly used to mean European, or European descent.

**Mongoloids:** One of the morphological types of human identified by early Anthropologists, typified by population of East Asia.

**Adivasi:** Ādivāsīs, literally "original inhabitants", comprise a substantial indigenous minority of the population of India.

**Ethnic group/population:** An ethnic group is a human population whose members identify with each other, usually on the basis of a presumed common genealogy or ancestry. Ethnic groups are also usually united by common cultural, behavioral, linguistic, or religious practices.

**Tribal population:** Any aggregate of people united by ties of descent from a common ancestor, community of customs and traditions, adherence to the same leaders, etc. The term is often loosely used to refer to any non-Western or indigenous society. Many anthropologists use the term to refer to societies organized largely on the basis of kinship, especially corporate descent groups

**Caste population:** Any of the hereditary, endogamous social classes or subclasses of traditional Hindu society, stratified according to Hindu ritual purity, especially the Brahman, Kshatriya, Vaisya, and Sudra castes.

**Indigenous peoples or Autochthonous peoples:** The term indigenous peoples or autochthonous peoples can be used to describe any ethnic group who inhabit the geographic region with which they have the earliest historical connection.

**Ethnicity:** Identity with or membership in a particular racial, national, or cultural group and observance of that group's customs, beliefs, and language.

**Ethnogenesis:** Ethnogenesis is the process by which a group of human beings comes to be understood or to understand themselves as ethnically distinct from the wider social landscape from which their grouping emerges.