

## Twitter Thread by Razib ■ Khan



**Razib ■ Khan**

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**a higher and higher % of DMs, emails, etc. to me are from indians asking about their genetics. since there are 700 million indians on the internet. makes sense**

**i'll be publishing my 6K-word essay in indian genetics <https://t.co/ycMGoZh13z>**

**but some general points 1/n**

- there's a lot of structure. which means you can look at an indian's genome and get an immediate sense of things and a little digging get's granularity very quickly

eg i guessed [@suryasays](#) family's jati after about 15 minutes (he was vague about this and had to ask mom)

- a lot of the variation is not partitioned geographically. very different from europe & china where geography is the dominant predictive variable.

indians have lots of structure which means non-geographical (jati) matter a lot. tamil brahmins more like UPites than other tamils

- the 'india-cline' pioneered by reich patterson is pretty explanatory. on one end you have west eurasian adjacent groups. jatts ppl in the NW and upper caste. and other end something away from them (more toward andamese). dalits, southerners etc.

- some groups are off the cline. that means they are not well modeled by the distribution. e.g.,

\* parsies (75% iranian)

\* bengalis (5-20% east asian)

- brahmins across india are 'steppe-enriched.' they are more indo-aryan than most other groups (jatts are even more steppe-enriched fwiw). those in the south and east mixed with natives

the rough formula is 75% UP brahmin + 25% "native" (works for bengalis & south brahmins)

- some of the dalit groups seem to have been isolated genetically (no intermarriage) for a long time. also they tend to be more 'inbred' than other isolated groups like brahmins. basically very delimited marriage networks. even though these groups are 15% of india's population

- muslim groups are pretty much like non-muslim groups in their area. lots of ashraf ('foreign') muslims are actually more upper caste hindu in ancestry than west asian (though they may have some of that). the average muslim has no detectable foreign ancestry

- a little bit of outbreeding would probably reduce recessive disease load. it doesn't matter that your 'community' does not do cousin marriage when it's been marrying amongst 3 villages for 500 years

- the distant ancestry of indians is very distinct. one of us some us brown ppl look 'iranian' or even semi-european while others look like africans with straight hair (a term used by a haitian friend). like europeans indians are recent mixes (5-4000 years) but distinct threads

- the indian mix is widespread across most communities and regions with proportions differing. this means that there is no real 'ancient' indian aboriginal group left. the adivasis are social constructions not reflective of anthropological indigeneity

- i suspect indo-aryan and dravidian language is intrusive to most of the subcontinent (s center and east) over the last 5000 years. munda speech certainly is

- i don't want to get bogged down in the 'aryan invasion theory' argument but i would like to see an anthropological case where male-mediated genetic replacement/displacement doesn't have to involve exploitations and subjugation :-)

- indians are very diverse. but if you look at someone from the subcontinent's genomes you can tell they are subcontinental cuz there are some unique aspects