

diversity. When one compares several biological communities along an environmental gradient, the number of new species added and old ones deleted is termed species turnover, a measure of β diversity. The number of traits which are not shared in common by two human communities, or trait dissimilarity would then be an analogous measure of diversity for the POI data. Finally the total number of species reported by a whole set of biological communities of any region is termed diversity. In the case of POI data this would correspond to the total number of traits reported by a group of human communities. This may be termed as trait accumulation.

The 32 different states and union territories show noteworthy differences in the number of traits reported on an average by communities belonging to that territory. North-eastern states of Nagaland (285) and Mizoram (256) report much higher and the north-western states of Gujarat (176) and Rajasthan (171) report a much lower number of traits than the bulk of other territories. This corresponds to the fact that the north-eastern hill states are not only more heterogeneous topographically, but harbour tribal populations which have few food taboos, rather fluid cultural practices and minimal occupational specialization. Indeed most communities reporting large number of traits from other states are also tribals or groups dependent much more directly on natural resources such as Khas of Himachal Pradesh or Gonds of Maharashtra. The rather arid territories of Rajasthan and Gujarat are topographically more homogeneous, and harbour caste populations with extensive food taboos, more rigid cultural practices and considerable caste based occupational specialization. Groups reporting very small number of traits from other states are eight little studied tribals of Andaman and Nicobar islands such as Sentinelese, Jarwas and Shompens or communities constituted out of normal endogamous groups through some special process like Frqirs (ascetics) of Maharashtra or Hijras (sexually abnormally developed individuals such as gynandromorphs) of Uttar Pradesh.

Differences between communities: β -diversity: The second component of diversity would then be trait dissimilarity, or the proportion of unshared traits amongst two communities. Of the 2753 POI communities, 791 occur in two or more states. These communities may be expected to exhibit lower levels of trait dissimilarity in comparison with two randomly picked communities.

In addition to territory, the 2753 POI communities can be classified on a variety of other bases, such as religion, scheduled caste or tribe, current occupation, rural or urban, nomadic or settled. Amongst such categories, the clearest trend with respect to dissimilarity obtains in case of religious categories. Followers of the ancient Jain religion overwhelmingly follow business/trade as an occupation and are concentrated in a contiguous geographical tract encompassing Rajasthan, Gujarat, Maharashtra and Madhya Pradesh. They exhibit the lowest levels of trait dissimilarity, 0.31 within a state and 0.36 across states. Followers of Christianity have converted much more recently, over a wide geographical tract and from very different cultural backgrounds. They follow an exceedingly wide range of traditional occupations. Trait dissimilarity is highest amongst them for any religious category, 0.38 within a state and 0.46 across states. Sikhs, Hindus, Muslims and Buddhists exhibit, in that order, increasing levels of trait