Abstract

In buildings, various functional spaces are organised as per the behavioural patterns of users. These behavioural patterns are, in turn, governed by the cultural and social norms, which get 'ingrained' in the spatial organisation of buildings. Discursive statements about these cultural and social factors have enough scope of personal biasing, individual understanding and interpretation of meanings. The present work attempts to develop a methodology for systematically analysing the spatial organisation to avoid these biases. This methodology primarily uses 'Space Syntax' as a tool, that leads to the development of 'genotype strings', which incorporates the information about accessibility, adjacency and orientation of spaces along with the assessing the 'integrating' and segregating' nature of various functional spaces. These descriptions are imperative for fully understanding the social and cultural factors that influence spatial organisation in Indian context.

For the present study, colonial and modern houses of eastern India are selected. The analyses show that the spatial organisation of colonial houses with courtyard suited the lifestyle of the orthodox Hindu community. In these houses, the spatial organisations are asymmetric, and spaces for family members are segregated from spaces frequented by outsiders, with circulation spaces playing important role in the integration and segregation of spaces. Functionally incompatible spaces are not adjacent and similar spaces are agglomerated. The spatial organisation of the colonial houses without courtyard show that they are more symmetric, having less segregation among visitors' spaces and family spaces. The spatial organisation of these houses suited the then lifestyles of the Europeans and the 'anglicised' Indians. The modern houses are smaller, asymmetric and show an amalgamation of spatial organisation of both the colonial house-types. The spaces in these houses show multiple activities but the space labels are functionally more differentiated. Temporal analyses show that the syntactical differences between the two types of colonial houses were narrowing down during the late colonial period. The modern houses show a continuity of the late colonial houses with certain modifications, transformations, and adaptations as required by the present society.