The Impact of Socio-Cultural Factors on the Transformation of the Residential Architecture of Kerala

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Abstract:
The domestic architecture is the prime reflector of the culture of the people of that region. Many developing countries had witnessed a drastic change in architecture towards the middle of the 20th century. With the new development, the existing traditional design approaches were replaced rather than adapting. Thus, the local architectural forms, that have been responding to the cultural and physical needs of the people for years seems to be neglected. This paper discusses the impact of socio cultural factors on the transformation of traditional to contemporary residential architecture of Kerala.

Keywords: Traditional architecture, socio cultural factors, transformation, modern houses

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I. Introduction:
The culture, beliefs and traditions of the people are reflected through the architecture of that region. According to Oren (1996), socio-cultural characteristics and the lifestyle of the residents have a great effect on the design of the dwelling unit and the settlement. The identity of a society is gained through the socio-cultural values of the people. According to A. Rapoport (1969), the socio-cultural forces include religious beliefs, family and clan structure, social organization, way of gaining a livelihood and social relation between individuals.

II. The traditional versus modern houses
The traditional architecture of Kerala has its soul in Vastuvidya and the houses are usually built with local building materials, which are easily collected around the village. Houses are usually built by members of the household and craftsmen often with assistance from friends and neighbours. Both technology and tools used were simple. The change from traditional to modern building materials symbolizes transformation and cash economy because houses are built by industrially produced building materials like concrete blocks, steel members and concrete tiles that require financial resources to purchase. The nuclear family, the tendency of young people for living alone, high land and building cost, women working out and the fact that they do not spent much time in home have indirectly affected for not adopting traditional design strategies for new houses.

III. The transformation
Family structure and size:
In traditional time, extended family system prevailed and house was a symbol of the affluence. The higher classes with 15-20 members had big houses of eight blocks (double courtyard), twelve blocks (triple courtyard) etc. while the lower class people will be having a single block structure called Ekasala. The space requirements for these houses were limited and optimum.
At present, with the nuclear family trend, the need for separate house for young people increased and to accommodate modern facilities, the space requirements are much high and even though the family size is less, the tendency is to create big houses.

**Way of living:**
The means for gaining livelihood in traditional days was mainly agriculture and this brings the necessity for a safe and secure place for storing the grains. In traditional houses, the store room and the prayer room where the grains and valuables are stored, are combined together and positioned in the central part of the western block so that it faces the east, which is considered to be auspicious. With industrialization, the dependency on agriculture reduced and thus the importance of granaries also reduced. Also, the scarcity of laterite and timber caused in the focusing of factory made products for construction. With the beginning of industries and people working in towns, their choice of land remained in the town itself and since the land value is high, the size of the plot available for construction also reduced. These resulted in concrete jungles with less trees and open space.

**Religion:**
The traditional house is set in harmony with the nature. The positioning of trees in auspicious locations as instructed in Vastuvidya and serpent grove for protecting the biodiversity, positioned in the eastern side of the large plot are examples of their worshipping of nature. At present, the trend is towards landscaping the vacant space for improving the aesthetics rather than planting the trees according to their favorable positions.

**Safety:**
The houses had fencing along the site boundary with bamboos or coconut leaves and wooden gate with gate house for the access. With the availability of new materials, the fencing changed to more strong compound walls of brick, stone etc with gates of cast iron, stainless steel, etc. Since laterite, mud, palm leaves, rubble, timber etc. were the materials available,
strong and easily available laterite was mostly used for walls. In some houses, double layered laterite blocks with the space in between filled with soil and utensils, measuring to a width of 80cm were used for outer walls, which were good thermal insulators. Later brick which is more strong and cheap than laterite was used for walls. The timber frame and the Mangalore tile paving used for roofing, which was highly climate responsive, was replaced with concrete because of the strength and large spanning capabilities.

**Privacy:**
The arrangement of rooms around the courtyard avoids the direct visual contact into the rooms. Each and every functional spaces of the traditional house were enclosed with solid walls. In houses for higher class people, a sleeping room was intended for a small family, whereas in middle class families, the rooms were all interconnected with no or less privacy within the members.

At present, with the impact of western culture and new technology, openness or transparency took the place of enclosed spaces.

**Social interaction:**
Verandahs were the chatting and playing spaces for the men and the children respectively. The rear verandahs and courtyards were mostly used by the women of the family. The courtyards, ponds, etc were the means for interaction at the house level.

The busy nature of the people and the various other modes of interaction, may have influenced in the absence of verandahs in most of the modern houses.

**Life style:**
The lifestyle of the traditional people of Kerala was simple. They give much emphasis on health, hygiene and education. They are also particular in ensuring cleanliness, healthcare and physical quality of life. The brass utensil which is placed on the entry steps of the traditional house was meant for cleaning the foot of the people before entering the house. Absence of furniture was another important feature. The poomukaham or the sit out has got a reclining chair for the elder male member to sit and the half wall or the charupadi for the guests. The long dining hall was intended for facilitating the people to sit in rows on the floor for having food. In order to meet the habit of washing hand before and after having food, water will be kept on a utensil in the outside verandah. With the development of dining table, the size of the dining room reduced. The transparent nature of the modern culture eliminated the enclosures of the traditional culture and the concept of open dining came.

The concept of separate kitchen and rear verandah were meant to avoid the smoke and heat from the kitchen and also to provide a working space for the women of the family. With the development of technologies, the kitchens are smokeless and also the women do not want to be separated from the family, which led to the concept of open kitchen as a part of the house itself. In traditional houses, instead of cot, mat was used to spread on the floor for sleeping. The room size was also small to accommodate a small cot and a table. The combined
dressing area and space for urinal near the sleeping room of the traditional house is similar to the current toilet cum dressing space. Toilets were placed far away from the house because of hygienic reasons and due to the lack of proper drainage system. With the development of technology, plumbing lines and sewage lines could easily be installed through the walls and floors and this made an end to the detached toilet concept.

IV. Conclusion:
As time passes, and with change of lifestyle, the needs of the person also changes even though many physical and physiological needs such as the need for openness, airiness, privacy etc. remain unchanged. Even though some aspects of the traditional architecture were valuable and rich, the same system cannot be followed today because the conditions under which traditional architecture evolved have changed and no longer exist today. People always have the tendency to come back to their base culture which is visible in their adaptation of the traditional characteristics. So it is important that the architects and designers should try to incorporate the traditional wisdom into the modern houses, rather than adopting the new technologies as such.

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