Redefining Cultural Identity Through Architecture

Understanding the influence of culture on house forms in different community settlements in Fort Cochin, Kerala

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Abstract— The culture and architecture are two interlinked concepts that help man to evoke identity as an individual and a social being. Existing studies reveal that a person's or a community's identity in a particular setting can be expressed through architecture. It is possible to create spaces with differences in spatial organization, street pattern, landscaping features, etc., according to the lifestyles, beliefs, rituals and customs of the inhabitants which finally becomes the identity of that particular place. But what happens to the identity of a place when all the inhabitants are migrants who left their homeland for better education or job opportunities and settled in a location where all social -cultural aspects are different from theirs? This paper explores how the Architecture evokes the identity of five different migrant communities in Fort Cochin and Mattancherry, Kerala, without affecting the indigenous style of the location and the character of the total setting.

Keywords— culture; Architecture; Settlements; Identity

I. INTRODUCTION

Culture and built spaces are two interlinked concepts which help man to create meaningful environments with unique identity which is expressed through its elements and features. These concepts help man to enjoy his living environment and also evoke a sense of belongingness among the members of a particular community. But in the present scenario, due to several reasons like urbanization, uncontrolled population growth, etc., many people migrate from their homeland to an urban area for better living conditions and job opportunities which lead to a loss of identity of the community and their settlement. These migrants adjust to the available conditions of the new location and are least concerned about this identity loss. They are more concerned about the job, education, economical status etc. which causes to lose of our valuable traditions and culture that our forefathers left with us. It is true that the change is inevitable in the modern era, but it has to be in a healthy way so that the harmony between the man and his environment has to be maintained. Many studies have been carried out on this topic which reveals that the architecture can be used as a good medium to represent people in any area if properly planned and designed. This paper examines the relationship between culture and built form of migrant communities in Kerala, with particular focus on the settlements and house forms in Fort Cochin and Mattancherry. The main aim is to identify those elements and features of a particular settlement which evokes or enhances the identity of its inhabitants.

II. THE CULTURE AND BUILT FORM

It is very clear that the planning and design of any built space require an idea about the activities and requirements of people who are going to perform there. These requirements are always derived from their lifestyles, thought patterns and social needs based on their culture, traditions, and customs. So the spaces where people live must be a reflection of their culture. In this manner, the architecture and the cultural aspects can be correlated.
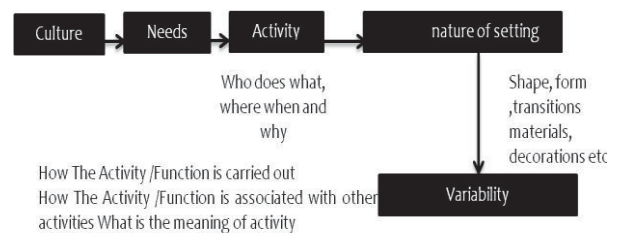

Fig. 1. Relation between culture and built form

III. Fort Cochin And Mattancherry: A Composition Of Culture And Architecture

Fig. 2: Location Map of Fort Cochin

Fort Cochin is a small township in Ernakulum District of Kerala state which has a unique and rich cultural background evolved from foreign influence in its earlier periods. The rise of Fort Cochin had started with a flood in Kodungallur which caused to develop a new port in Cochin for the trade purpose. This township is considered to be the first European colony in India which grew rapidly into a large trade centre by attracting many trading communities, including Muslims, Jews, Jains, Hindus, and Christians. The identity of the city is enhanced by the presence of these 13 ethnic communities and the architectural style of their settlement.

The analysis of the city as a whole and each settlement in particular (based on socio- cultural aspects) has been made to find out the influence of architecture in creating a cultural identity of this area. A comparison of the spatial structure in distinct settlements has been made to understand and describe much regarding the spatial character of Cochin which further helped to draw conclusions.

A. Culture as a Determinant of Urban Form: Spatial Structure

In any urban area, it is necessary to have some driving force for the development of both space and society. In Fort Cochin, the trade and the different community migrants were the driving force for its overall development. The most striking feature of this town is its built environment with its unique identity. Each and every settlement of this area has certain architectural elements/ features which imparts to this uniqueness. Even though the settlement pattern and its architectural characteristics in this area are highly influenced by the colonial rule and the lifestyle of different migrant communities, it maintained its identity with proper integration of the indigenous style of Kerala. An architectural analysis of this area brings out many common features which bind them as a single unit without losing the uniqueness of each community settlement and reflect the lifestyle and culture of its inhabitants. A few of them are mentioned below:

- Built from-street relationship: The ratio of street width to building height has been maintained at 1: 1 or 1: 2 which ensures a sense of spaciousness and

compactness. This arrangement evokes a sense of safety and security for the users by which the city developed as a cultural composition.

Fig.3: Pristine road as a symbol of colonial rule

- Mixed land uses: Most of the people are engaged in trading activities and they preferred to live in a group near to their activity area for safety and security reasons. Depending on the occupation and activity pattern, each settlement is composed with mixed land uses which make it more active and alive.

- Architectural Typology: Four types of house forms have been found here; all derived from the basic traditional house form of Kerala- Nalukettu–which has a courtyard in the centre which is used for various purposes. They are Street Forms (row houses arranged linearly along the street), Bungalow Forms (individual bungalows with landscaped area and sea view), Row House Forms (away from the street, but connected through inner streets), Court Yard Forms (Many Houses arranged around a courtyard). This courtyard form is common in Industrial buildings also.

- Height of Building: All the buildings are single or double storied. In the Raw house for the labourers, it has been kept single storied while those accommodating traders have two storied structure with commercial space on the ground floor. The administrative Buildings are also two storied, but the floor height is slightly higher compared to other buildings which expresses status and power. A few buildings go up to three stories in this city.

Fig.4 : Building Typology at Fort Cochin

IV. Cultural Identity Of Different Settlements In Fort Cochin:

Fort Cochin is probably the only area in Kerala which shows a social culture mix of 13 ethnic groups with their own

traditions, customs, lifestyles etc. They are mainly migrant communities who came for trade and commerce. In this paper five different settlements are analysed, including Tamil Brahmin's, Jews', Gujarati's, Konkani's and The Kutchy Memons' settlements.

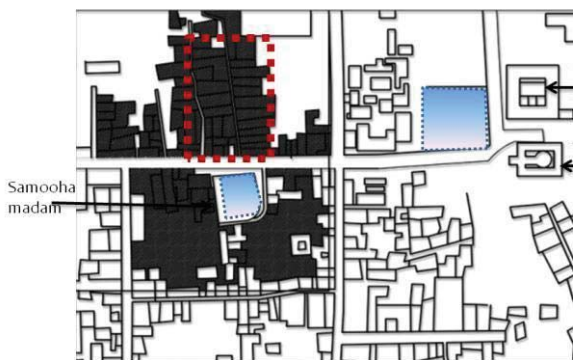*A. Tamil Brahmin' settlement (Agraharam): -*

Fig 5 : Settlement Pattern -Agraharam

Tamil Brahmins are one of the most influential of the non – indigenous communities that migrated to Cochin when the king invited them for conducting royal religious functions. So they settled near to the temple and their daily ritual starts with a visit to the temple. This settlement is a multiple family settlement with linear house pattern .The design and layout are guided by the parameters like status in the community, association with the temple and their patronage of the royals. Main controlling element in settlement pattern is the religion and their customs. They give more importance for interactions within the community and prefer to live in groups for safety and security reasons. The water body is an important element in the overall setting of the Agraharam as the inhabitants follow the Vedic life with a belief of spiritual and physical purity. This street is strictly pedestrian and bounded by a compound wall with an entrance gate to prevent the entry of non- Brahmins. Most of the interactions and functions occur in these streets. So this street acts as an extension of their living space.

Fig 6 : Internal Street in Agraharam

Each individual space is marked by floor pattern and Kolam
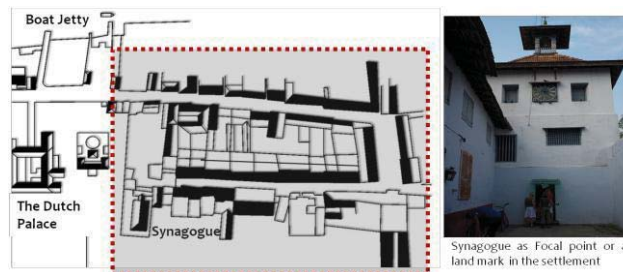
B. Jews Settlement: -

Fig 7 A : Jew's Street Plan   Fig 7 B Synagogue View

The history of Kerala's Jews goes back to 10th century BC, when trade of various items like peacocks, ivory, sandalwood and spices etc. flourished in India. Many believe that Jews arrived in Kerala after the destruction of the Second Church of Jerusalem in 70 CE. The main cause for the growth and development of this settlement was the occupation which created many spaces for their trading activities which includes shops, warehouses etc. The house form also derived from these cultural needs which have shops at ground floor and houses at first floor. The buildings are arranged linearly in a staggered manner to break the monotony in movement of people. The Jews are more social compared to Tamil Brahmin's; hence there is no physical separation from other communities. Most of the social activities of Jews are related to the Synagogue and hence very few houses have a social gathering space inside the house.

C. Gujarati Settlement: -

Gujarati people are basically traders who migrated to Cochin in the 17th century and settled here. According to historical evidences, this migration was caused by the Muslim attack on Somnath Temple took over the control of Gujarat. The major social factors like Religion, Safety, security, the need for privacy and occupation influenced house form and settlement pattern in this community. They give more importance for social gatherings. So the houses are arranged around a courtyard which is used for getting together and common activities. The thulasi platform at the centre of courtyard also binds the community together. The Gujarati houses in Mattancherry are a reflection of their culture which has many similarities with a typical Gujarati house.
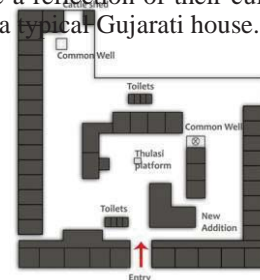

Fig 8 : Gujarati settlement Pattern

D. Gouda Saraswat Brahmins' Settlement: -

Fig. 9 (a, b, c): Street act as an extension to the house in Konkani Settlement

The migration of GSBs to Kerala were mainly in two phases – in the 13th century (the exodus of 1294 AD) and subsequently in the 16th century (1560 AD) followed by an attack by Arabs. The Brahmins of Kerala never allowed these Konkani's to enter inside the temple as they came to Cochin by crossing the sea which is a sin in their tradition. They established a temple in the late half of 16th century with the help of Raja of Cochin. The major development occurred around this Konkani temple and this is the main social space in their settlement where they meet for common functions. The locations of all houses are based on the position of this temple. As in Tamil Agraharam, here the street is a major living space. In this settlement also, religion plays a wide role in determining the form and character of each space.

E. The Kutchy Muslims:-

Kutchy Muslims, better known as Kutchy Memons, who migrated to Cochin in the 19th century that has contributed much to the social and economic life of Fort Cochin and Mattancherry,. The community has its origin in the Lohana community of Hindus, who converted to Islam In 13th century. Quran laws and principles have profound influence on overall planning aspects of this settlement. The public places like mosques, shops etc. are located in the outer boundary and the houses at the centre of the settlement to ensure the privacy of women which is a major concern in Islam .The features like narrow streets, Small window openings, and two separate living areas for men and women etc. are developed from these cultural beliefs of the people.

Fig. 10 (a&b,): Streets are narrow and have high compound wall to ensure internal and external privacy

Fig. 10 c: Convention mosque style is also changed to maintain with the continuity with the setting

V. FINDINGS

A. Relationship between Culture and Built Form in Fort Cochin

Comparative analysis of all these five settlements has been made to draw conclusions. The social, cultural parameters like occupation, religion, Privacy, Safety, Position of women, Family structures etc. are considered in this evaluation. After that the relationship between culture and built form has been established with following Findings.

1) Location & Orientation: The strategic location of the settlement was decided by the religion and occupation. For example, the location of Agraharam and Konkani settlement is based on the temple position. But Gujarati Jain, Jews and Kutchy Memon settlements are located on the basis of their occupation- Trading.

2) Form & Typology: this is determined by the social need of the inhabitants. In Gujarati settlement, the houses are arranged around the courtyard for safety and privacy from the busy street. According to the Islamic laws the women are not allowed in public, hence narrow streets and, small openings and less social spaces in a house in a Muslim settlement.

3) Housing Pattern: The housing pattern has been decided by various factors like the position of the temple, the direction of Mecca, Climatic considerations etc. Group living has been preferred for safety and security which determined the settlement pattern with group housing. Social interaction among the community members is of prime importance and hence street plays a vital role in social living in this community. The street pattern is also determined by considering these social needs.

4) House form: House forms are mostly rectangular with a small inner courtyard. This form is derived from the basic Nalukettu form of Kerala. Spatial arrangements are based on the cultural needs of people in different communities.

5) Social interactive Spaces: Street is a major social space in many settlements except Kutchy Memon's. In Agraharam and Konkinisettlement, internal street is an extension of living space while in Gujarati settlement, the courtyard is the major interactive space. The privacy of women is well maintained in every settlement, especially in Kutchy Memon's settlement where the shops and such public places are located away from the main housing area.

6) Visual connectivity: Each settlement of different community is an isolated urban unit with proper physical integration between each other. The streets are slightly distorted at an angle to maintain visual privacy of two different community settlements. Within a particular settlement, the streets are straight and visually connected. In the Muslim settlement, the streets are narrow and segregated from public space. In Agraharam and GSB settlement, inner street is wide and main functions occur at the street level.

7) Symbolic significance: Each Settlement has its own

symbols to represent their culture. Use of Symbols like Star of David and candle stand etc. for ornamentation is very common in Jew houses. Thulasi platform is another symbol which is common in Agraharam and Gujarati settlement. The Crescent and star symbol is visible in all mosques of Memon's settlement.

8) Integration and Continuity with the setting: Most of the inhabitants are engaged in similar occupations like trade and commerce or temple related jobs which binds them together and creates a sense of community and a sense of belongingness. There is no dominance of any community.. They used common features like rectangular plan, sloping roof with deep over hangings, same height of the building, street – built ratio 1:1 or 1:2, common building materials, similar ornamentation and detailing like wooden brackets, eave boards etc. to maintain homogeneity.

B. Transformation In To Modern Setting

The study brought out the idea that even though there are many similarities between different community settlements, they maintain a unique identity both in city level and settlement level. These similarities are mainly due to the effect of environmental factors like climate, topography etc. This township,located in a back water region of Kerala, has used similar kind of materials and techniques which also make all buildings and structures integrated to the total setting.

TABLE I.   CONTINUITY AND CHANGE AT CITY LEVEL

Continuity	— Mixed land use and cluster housing depending on different cultural needs has to be continued
	— Visual connectivity within the similar community settlements
	— Visual privacy between two different community settlements
	— No setback between road and built space an ensure the creation of more intimate spaces
	— Pedestrianised pathways on commercial streets with no entry to vehicles.
	— Distorted straight lines of movement to break monotony in street layout.
	— Location of important buildings at prominent positions to form Landmarks
	— Restrictions in the height of buildings depending on its use
	— Maintain the scale and proportion in each part of the city to maintain the same skyline of the city
	— Use of common materials and technology for constructions to maintain homogeneity.
	— High pitched roof with deep over hangings and attic space can be used to control microclimate.
	— Interactive areas and transition spaces in many communities has to be maintained
	— Space integration among the rooms is very carefully done which we can follow in modern times also
	— Maximum built space with back yards, inner courtyards, water bodies etc can bring more intimacy among people
	— Street as an extension of living space enhances more interactions among people.
Change	— Introvert type housing among certain communities has to be discontinued
	— Same areas have been used for same trade for many years which should need a change in use.
	— Use of new Materials has to be introduced with change in time to achieve economical balance.
	— Rules and byelaws have to be revised to conserve the existing heritage structures.

TABLE II.   CONTINUITY AND CHANGE AT SETTLEMENT LEVEL

	Tamil Brahmin	Jews	Gujarati	Konkani	Kutchy Memons
Continuity	Mass housing within a limited size plot is possible	Mixed land use ensures maximum utilization of spaces	Mass housing Arrangement around a courtyard is Most suitable for low cost housing.	Similar pattern of spaces	Raw housing pattern for linear plot.
	Similar pattern is following since they are maintaining strong beliefs and customs of religion.	Pitch roof and attic space are to be maintained due to heavy climatic considerations		Low wall height Minimum number of rooms with maximum utility	Privacy is main concern even today Two living rooms
	Maximum utilization of site.	Use of symbols to represent their religion. Position of a wooden strip with holy inscriptions above door.	More importance for social interactions. House form also not changed much. They prefer court yard form or street form with two storied house blocks.	Less number of windows on east west side to get protected from heavy sunlight. Suitable for Affordable housing. Attic space and pitched roof to control micro climate.	Less windows on street side thatched roof with clay tiles
	Use of courtyard for maximum light and ventilation.				
	Women area still required in modern houses also.	Should continue with the court yards inside for climate control.			
Change	Materials and technology must change with time	Materials and technology must change with time Very limited houses have court yard inside the house	Verandah or Otla has been changed to a small plat form Dutch arches are changed to modern forms	Room sizes should be increased Wooden doors are replaced by new materials.	Rear verandah has been changed to work area or utility area
	Small scale industries must need more attention Introvert type housing with less interaction with outsiders Internal privacy level. Reduce door numbers to one for each room Women area needs more consideration. In Agraharam , that area should be connected to the main block with minimum separation	Use of material Wooden doors are replaced by new materials.	Use of wood has been changed to new materials like concrete , Cement, steel etc Rooms have been changed to large size		Introduced compound walls with a front yard. No court yards Wooden doors are replaced by new materials. Flooring using new materials

VI. CONCLUSION

This paper unfolds various architectural aspects in the context of different cultural beliefs and practices which helps in the creation of identity of the society. Even though there are cultural differences among communities which reflected in each settlement, the integration at the city level is very high in Fort Cochin. Each and every element are planned very carefully that it maintains the homogeneity in every aspect which creates a new visual experience to its visitors. It is clear that family structure, the position of women in the family, religious beliefs and practices, and ways of making a living all contribute to the urban context and creates an identity of its own, without losing the integrity of setting whether it is in the homeland or in migrated land. It shows how the spatial-cultural aspects can be incorporated in architecture to maintain the ethnicity of our land. This study contributes to the further scope of research related to the relationship between culture and architecture by giving insight into the knowledge of the influence of socio-cultural values of different communities on urban morphology. This article contributes to a better understanding of the relationship between culture and architecture which may help in future development with proper social integration between different communities without losing their identity and achieve long term sustainability.

References

[1] Al Sayyad, Nezar, The End Of Tradition? , 3rd Ed., Taylor & Francis Group, 2003.

[2] Bronowski, Jacob, The Ascent Of Man, Back Bay Books, USA.2nd Ed., 1968.

[3] Correa, Charles, Culture And Identity- Exploring Culture In
Islamic Cultures. 2nd Ed., 1983.

[4] Ayiran, Nezih, The role of metaphors in the formation of architectural identity, Volume: 9, p. 1-21. , 2012.

[5] Memarian, Introduction to Iranian Architecture, Tehran, University Of Science and Technology, pp. 129-134, 2001

[6] Crouch, Dora, Traditions In Architecture, McGraw Hill, 3rd Ed., 2001.

[7] Dawson, Peter, The relationship between house form and culture in northern Canada" 2006. Unpublished.

[8] Rapoport, Amos, Culture And House Form, 4th Ed., 1960

[9] Carsten Harries, "The Dream Of The Incomplete Building," In Perspecta, The Yale Architectural Journal pp. 17 , 1980.

[10] . M. Kasmaei, Climate And Architecture, Springer publications. , 2004.

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