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Reconsidering Shophouse Architecture for Contemporary Times

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Abstract: The shophouses were the elegant buildings that lined along the Sri Lankan streets from the past. The very fact that the shophouses and their proportions contribute to the growth of the evolution of tropical architecture is phenomenal feature. The shophouse is a development of the basic house from in Sri Lanka, it is not a new, alienated concept, and instead the basic house form has evolved to cater needs of the society during the different periods of history. These buildings are used for both the commercial and residential purposes. However, in the contemporary world these shophouses are diminishing in number and there need to be efforts done to preserve this beautiful historic building. This research investigates on the manner in which the evolution of the shophouse architecture is appreciated-the traditional and the modern variant of the shophouse is examined through a typo-morphological architectural analysis, as they justify the new urbanism principles when designing cities. Thus, proving that the shophouses can be reconsidered as it has evolved for contemporary times in creating sustainable townships.

Keywords: shophouses, sustainable, new urbanism

Introduction

"The shophouse were usually two storey structures with shops, ateliers and stores at the ground level with living accommodation above and were usually fronted by verandas and balconies under overhanging roofs" (Anjalendran, 2016). These were the beautiful yet simple buildings that lined the streets of Sri Lanka from the past, especially along the old Galle Road.

In the contemporary world. these shophouses tend to be threatened due to rising land prices and widening of roads. The need to retain these shophouses should be looked into as we are rapidly losing our traditional buildings - the rate of change of society in the contemporary world is very quick- material commerce has taken over. "There is more than just the architecture to preserve in the community. If these old buildings are demolished, the people will go, so will the lifestyle and culture" (Sirisrisak, 2013).

The shophouse typology in Sri Lanka is not a very new concept- it is an evolved version of the basic, simple house unit, through the periods of history, starting from the Anuradhapura Period, where, "the houses were "rectangular and entered at one end. Inside there is a simple open volume divided into two by a thin screen" (Lewcock, Sansoni, Sennanayake 1998). According to (Bandaranayake, 2012), there were not much of evidence of the urban domestic buildings during the Anuraphapura Period, due to the use of perishable organic building materials such as timber and clay . " The only confirmatory evidence of an early street architecture that resembles at least in principle the traditional terrace housing of the 18th,19th centuries which can be broadly related to urban descriptions in literature is the poorly built foundations of row houses unearthed in early excavations at Anuradhapura" as shown in Figure 1.

This evidence portrays that the row houses



Figure 6: Foundation of Row houses, Citadel, A'Pura, Senake Bandaranayake, 2012

of Anuradhapura is a reflection of 18th, 19th century colonial period street architecture, which constituted of shophouse architecture.

It could be attributed that with time, during the colonial period the economic structure of Sri Lanka constituted high levels of tradeduring this time the shophouse was put into full potential in terms of social and economic context. "Busy sea-junction compromised of a single mainstreet where the storehouses and Bangasals were located "(Brohier, Raheem, 1984). According to (Maharoof, 1986), the present days Bankshall Street gets its name from Bangasals and indicates the location of the old Muslims trading settlements. The Muslims lived in compact communities, the merchant quarters, the market place and the mosques were clustered around these Bangasalas" (Azzez. 1986). The present day Colombo- Kandy road was constructed in 1825 by the British. These "roads were built to serve the transport needs of the plantation areas" (Javawardene, 2007). According to (Perera 1998) the Singhalese used bullocarts which took six to eight days to transfer goods in the 1850s. (Perera 1998) states that "British did not have more efficient means of transport in Ceylon than did the Ceylonese. This advantage was immediately captured by the Ceylonese as a means of becoming entrepreneurs". Perera further states that the locals then began to invest this system of transport, hence making them rich over the years. This similar idea is expressed in the book by Kumari Jayawardene, Nobodies to Somebodies- in short, these quick rich class of people were first nobody then they eventually became somebody.

Within these changed services in the economy, a new building typology called the shophouses emerged, places where the traders broke their journey. With the setting up of these shophouses the system of trade became efficient and they became centers where people could buy and sell cash crops and other goods. The traders ended up residing in these shophouses. These aspects are noted by (Wijethunge, 2016).

Most of the shophouses in Sri Lanka have been demolished as they have been acquired by the merchant class who does not place a great store by traditional values since they enterprise quantity over quality. The UDA in Sri Lanka has decided that the De Soysa building(a shophouse) in Slave Island will be brought down and a new one with the same façade would be erected a distant over, this is done due to the road expansion. Architect Ismeth Raheem had stated and this was published in the Sunday times that the building is a "remarkable gem of colonial architecture and a century old building". The Sunday times newspaper mentions that "It is one of the earliest examples of shophouses in Sri Lanka; shops at the bottom, homes in top". The newspaper further states this-"Last year, the same was said of the salmonhued, chipper Castle Hotel...But the gleaming white structure that rose there- and which now houses the Tata project office is nothing like the Castle Hotel". However The Ena De Silva House had a positive ending- the property was sold to Durdans Hospital, the management of which intended demolishing it to create a modern car park. Fortunately aesthetic conservatives and local architects dismantled the building brick by brick and reassembled it in Lunugaga in order to preserve it for posterity. This same level of effort needs to be taken when restoring the Colonial period shophouses.

Although the shophouses have been demolished, there are sights of its evolution of it into the contemporary world- such as in the New Town of Digana and the Mellenium City Shophouses, to name a few. These shophouses yield a sustainable way of building town dwellings with relation to the urban fabric. When people start experiencing the built environment to the fullest they develop an understanding of the meaning of the space according to (Rapaport 1982).

Methodology

The case studies are done under two parts-

- An architectural appreciation of the Traditional Shophouse- Two case studies are taken from Ambalangoda, a costal town and Hingula, which is along the Colombo-Kandy Road.
- An architectural appreciation of the contemporary Shophouse- The case study of the Digana Town is taken and a shophouse which is converted to a Lodge in the Galle Fort is taken.

A typo- morphological analysis is done to study the shophouse architecture, ie- a study that details the physical and the spatial structure based on architectural form and elements.

These are the aspects which are analysed in the case studies- Space Formulations, Walls, Other Architectural Elements- columns, doors and windows.

The case studies chosen reflect on the traditional shophouse and how it has led to the evolution of the contemporary shophouse. Thus, these case studies prove that the shophouses could be considered for contemporary times.

The final part if the research points out the sustainable path of creating our streets using the shophouse concept. The shophouses in the case studies are justified with the New Urbansim Principle to provide a sustainable approach to build town dwellings.

Results

The Architectural appreciation of the Traditional Shophouse

For the architectural appreciation of the traditional shophouses, three shophouses from Ambalangoda and one shophouse from Hingula. The shophouses are the ones that still retain their colonial identity in terms of their architecture, however several of these shophouses have undergone minute changes with the passage of time. All these constitute shophouses of similar architectural qualities and vary very little in terms of from, space formulation, ornamentation and sense of place.

<u>Space Formulation-</u> The plan form and the section form of all these shophouses are very simple and it adheres to the golden proportions in terms of measurements. There is a verandah, living area and towards the rear there is a kitchen space. As Figure 2 indicates, a timber staircase is niched in a limited space which corresponds to more of a ladder than a conventional stairway as the



Figure 2: The ladder- like Figure 3: Upper Floor, staircase, Source- Author Source- Author

ground floor provides a more prominent space for business activities and storage to take place. The upper floor is a solar which opens into the balcony (Figure 3).

<u>Walls</u>- The walls of these shophouse are all load bearing with a thicknesses varying

between 20"-25". These walls stand on rubble foundations which were of two and a half feet in width and depths up to one and half feet. The Dutch constructed these walls out of coral stones with lime mortar which provided coolness into the interiors. Most of the wall plasters have been exposed in the present state of this shophouse. The walls also symbolizes a form of ornamentationornamentation in terms of flat surfaces such as paintings, wall color- the exterior walls of this shophouse are of orange and pink, in the present day the colors have peeled off (Figure 3,4). It is evident that bright colors would have been used during the colonial period for the walls as they become beacons for attracting vendees to carry out commerce.





Figure 4- Bright coloured walls- Source- Author

Figure 5- Interior walls in pink, Source-Author

<u>Doors-</u> A row of doors each four sashed align at the entrance in the verandah. Two of these doors had an arched fanlight with several bars introduced on the top.These fanlights originated during the Dutch period and were carried through into the British period,



Figure 6: The arched fanlight above the doors, Source- Author



Figure 7: Iron door hinges, Source-Author

providing light and ventilation into the interiors. Since shophouses were the houses of the poor there was not much decoration on the fanlights. Massive door hinges, a Dutch feature are visible in some of the doors of the shophouses.

Other Architectural Elements- There are continuous columns from the ground floor to the first floor. The columns are attached onto a pole plate to bare the weight.Out of the three case studies, one shophouse had some exquisitely crafted columns. Basically these are two columns joined together. There is a wider bottom part and then there is a tapering with moldings. Then the column head of the first column acts as the base for the extension of the upper column. In this way these columns do not have bases, this aspect highlights the roof (Fig8). There is a pilakottae, on one side wall embedding a part of the column in the verandah which creates an in-built seat. (Fig 9). These features enhance social actions of people.





Figure 8- the beautifully carved column, Source Author

Figure 9- Pila kotuwa in the verandah-Source-Author

Doors in the interior have ornamentation on their fanlights, these decorations portray traditional Sinhalese designs in the form of timber carvings such as Liyawal (Fig 10). There is a decorative valence board which



Figure 10- windows with liyawal designs on the fanlights-Source Author



Figure 11- Liyawal designs on the valence boards Source- Author



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depicts the cravings of the traditional Sinhalese designs of Liyawal (Fig 11).

There is a shop already in existent in the verandah of one of the shiophouses. However for the purpose of collecting information for this research this shophouse was visited thrice and during the course of time changes could be visible. During the last visit the shop in front was being re-built. Changes such as the earlier lattice grills were replaced by glass could be seen (Fig 12,13).



Figure 12- the lattice grills of the shop is visible Source- Author



Figure 13 the grills have been replaced with glass Source- Author

The Architectural appreciation of the Modern Variant of the Shophouse

The next phase of this essay presents a case study of a shophouse in Galle Fort which validates how an existing shophouse has been put into new use in the modern day. However in the earlier days in the Galle Fort the verandahs of these houses were not used as shops.

As the form is retained the spatial organization is very similar to an original shophouse. It is simple and linear. It consists of a verandah, living area, courtyard, bedroom, dining, and a rear kitchen. The spaces are in the same progression as the earlier case studies.

These are very thick walls (20"-25") constructed of lime mortar and cement by the Dutch.There is a 20 inch niche created which is being used hold ornaments, the size of the niche indicates the massive thickness of the walls back then. (Fig 12). The use of coral stone and then the thickness of the

walls provides a very good level of thermal comfort. The plastered surface of one wall has degenerated, however the rubble brown texture underneath the plaster is very striking and this wall has been used as a feature wall. (Fig 13). These features go on to show that the novelty of colonial architectural never fades off. There is a seating, resembling a pilla kottae which allows to comprehend with the narrow street.





Figure 12: Niche created within the wall-.Source-Author

Figure 13: the rubble textured wall. Source-Author

The final case study is done on the shophouses of Digana- this a town in the contemporary times which was inspired by the shophouse concept, designed by Ulkrik Plesener and Nihal Perera, with simplistic zoning of spaces for their functions. As mentioned earlier the upper floors were manipulated by the owners themselves.

The edges of the roofs of these shophouses were not clearly defined whereas in the Ambalangoda and Hingula shophouses the gable edges were very well defined. In the Digana shophouses the rafters can be seen and there is something unfinished as the eave is extended and it is propped up with timber struts (Fig 14). This extension of the eave creates an awning to cut off the glare and also it shelters the walkway.These shophouses prove that the designers understood the principle of the colonial shophouses in terms of the roof and used it intelligently in a modern concept, effectively creating an arcade for people





Figure 14-undefined gable ends Source-Author

Figure 15-there is no balcony, props used, Source-Author

Unlike the Ambalangoda and Hingula shophouses where there a few columns on the verandah these shophouses have just two enormous standing columns on the two edges supporting the structure above. These shophouses don't have a balcony in particular, however the props are fixed at an angle as it supports the extended eave of the roof. So if the trellised window is open there is a sense of feeling that corresponds to a feeling at a balcony(Fig 15).

Discussion

The shophouses could be proved sustainable through its analysis with the new urbanism principles –

The first two principles are walkability and connectivity. The shop fronts are narrow with verandahs and there are many shophouse units along the street so this implies that the people walking could cover more units per stroll comfortably. The long verandahs of the shophouse units in diagna signify this and also the verandahs of the shophouses of Ambalangoda (if the original rows of shophouses were present)would justify the walkability. The comfortable experience is enhanced as the walkway provides protection from the rain the sun. The rear lanes of these shophouses are kept free of motor traffic creating paths for people to walk on. These rear lanes are independent from the main street on the front as seen in the case studies especially in Digana were the back lanes constitute of the drain lines. However the network of dual lanes provides

a sense of connectivity as their density is high.

The third and fourth principles are *mixed use and diversity* and *Mixed Housing*. These two principles could be justified by the function of a shophouse as traditionally the shop owners lived on the upper quarters. This shows the mixed uses of the shophouses. For successful housing flexibility is key as the internal space arrangements with column free interiors (case studies 1, 2, 3, 4) provide optimum flexibility of spaces for activities of many purposes to take place.

The fifth principle include Ouality Architecture and Urban design. The shophouses uses the natural lighting and ventilation system effectively. This done by its linear form allows light and ventilation in from openings such as doors and windows. The use of local materials for the walls and floors brings a sense of coolness. The overhanging roof also prevents the direct sunlight from hitting the walls and the lime wash coating on the walls further cools the walls and the interiors through evaporation. These houses are naturally ventilated compared to modern houses which achieve comfort through air conditioning. This proves that the quality of the architecture of the shophouse is adaptable to the tropical urban environment of Sri Lanka.

The sixth principle is a Traditional Neighborhood Structure. The shophouses in Sri Lanka are of the colonial period of our history. So these shophouses echoes a sense of colonial tradition in the modern streetscape. The seventh principle is increased density, with the walkways of these linear shophouses created for walking attracts people (more shophouses per unit stroll) and creates a very livable space. The eight principle is smart transport, with its walkable nature and the mixed use reduce the number of motors needed for transport. This is seen in Digana as the motor traffic is quite less compared to other towns without shophouses. The ninth principle is sustainability, the shophouses are built using traditional materials for all the shophouses, such as timber rather than modern construction materials. This creates naturally ventilated structures with carbonfree interiors which need low maintenance and are long lasting.

The final principle is the Quality of life, these shophouses in the past catered a traditional way of life with a quality of its own. In terms of thermal comfort these simple structures have very livable interiors due to the massive thickness of their walls and these finished off with a lime wash coating bringing coolness inside through evaporation. With natural ventilation prevailing through their inner courtyards, balconies (present in case studies 1, 2, 3, 4) and verandahs (present in all case studies) these shophouses combat the high humidity levels extremely well. The shophouses although small in scale could outclass modern interior which achieve these same comfort levels through

Conclusion

The very fact that the shophouses and their proportions contribute to the growth of the evolution of tropical architecture is phenomenal feature. Most of the shophouses in Ambalangoda, Hingula and the down South have been destroyed due to street widening as people cannot afford to live in a house at such an edge of the street due to sky rocketed land prices, people prefer modern buildings with concrete and glass as they believe that owning a traditional dwelling as being a symbol of poor these days. The shophouse is a development of the basic house form which was developed through the periods of history to cater the social and economic needs of the people. If these shophouses are completely destroyed we would not have a gene pool. We need an area in which these shophouses thrive, posterity would be understood, we need to reconsider these shophouses for the contemporary times. Thus there is a continuity from the past to the present. Although the shophouses have been` demolished there are sights of evolution of it into the contemporary worldtowns such as Digana has been inspired by the shophouse concept. These shophouses yield a sustainable way of building town dwellings with relation to the urban fabric.

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Biography

My name is Nathasha Kudasinghe and I completed my Bachelors in Architecture from the General Sir John Kotelawala Defence University in the year 2019.