

Ancient architecture in Sri Lanka: The concept of *vaasthu*

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Introduction

The indigenous architecture of Sri Lanka has its origins in the pre-historic period, dating back over 6000 years. There is evidence from archaeological excavations in Sri Lanka that the 'homo-sapiens Balangodensis' dwelled in rock caves. However, the transition from hunting to agriculture, the cave dwelling did not prove very practical. Instead, people started to build permanent houses or shelters in areas they selected for agriculture purposes. This is the origin of *vaasthu* culture in Sri Lanka.

Vaasthu is a broad field of science, which includes the construction of houses, public and religious buildings, as well as their direct surroundings. *Vaasthu* not only encompasses the design and construction of the buildings, but also the design of home gardens, household utensils and agricultural implements. It takes into account the energy flows, human health aspects and colour combinations that have the best effects on the residents of the house.

A significant turning point in Sri Lankan traditional *vaasthu* culture came during the reign of King Devanampiya Tissa and was the introduction of Buddhism in 247 BC by Arahata Mahinda, the son of Emperor Asoka of India. It is believed that after the introduction of Buddhism to Sri Lanka, many groups of artisans moved to Sri Lanka. This influx made a permanent impact on architectural creations. Thus, traditional *vaasthu* culture in Sri Lanka has to be understood as a combination of Sri Lankan indigenous architecture with Indian architecture and is to be identified with religious and public buildings. The *dagobas* or *stupas* (pagodas), which are the main religious structures remaining today, are distinctive for many reasons. They are probably the largest brick structures known to the pre-modern world. *Dagobas* were built to enshrine relics of Lord Buddha. The construction of a *dagoba* was considered an act of great merit and built according to strict specifications.

Cave temples with basic living facilities have been found all over the island. The earliest are at Anuradhapura and Mihintale. These caves had a drip ledge or *katarama* carved along the top edge of the rock ceiling to stop rain water running into the cave. This drip ledge is unique to Sri Lanka. Buddhist monks preferred forest dwellings to village monasteries, so the use of caves with improved protective measures fitted well for the purpose. At the same time, large caves were also converted to temples and shrine rooms.

Studying *vaasthu* culture

For a period of three years the Bio-Diversity Research Information & Training Centre (BRIT) has been instrumental in a study of indigenous *vaasthu* culture in a province in Sri Lanka, with the cooperation of the Faculty of Architecture in the University of Moratuwa and supported by the COMPAS programme.

The BRIT team visits villages in the area and invited people with traditional knowledge of whatever form (architecture, medicine, handicrafts, food technology) to informal gatherings. During these open discussions, it became clear that a vast wealth of traditional knowledge was still alive among the people. Over two months, 48 resource persons were identified and invited to come to the BRIT training centre for further discussions. Some of these *vaasthu* resource persons, though holders of knowledge, were not actively using it and they were enthusiastic that renewed attention was being paid to their experience.

Creating a vaasthu resource group

The group decided to meet once a month at the BRIT training centre for two days, with the purpose of sharing and documenting knowledge. Several topics related to *vaasthu* are discussed at each meeting and decided in advance so that each resource person can prepare him/herself before coming to the workshop. The information shared is thoroughly debated, after which the group decides what should be documented. In this way, the group hopes to compile an inventory of their collective knowledge of *vaasthu*. They hope the document will not only be a way of conserving this knowledge, but also a means of popularizing it. The group has sought formal registration with the local authorities and is now known as the Uva Traditional Experts Forum. There are over 50 members in the group, with an executive committee consisting of a president, secretary and treasurer.

Activities of the resource group

The *vaasthu* resource persons helped BRIT in preparing a checklist of aspects to be covered in a study on *vaasthu* through house-to-house visits. Though many of these old houses have now been demolished, several can still be studied. It was decided to identify these houses in the district and to make a short inventory. BRIT's staff and social mobilizers were given training in how to use this checklist to make descriptions of the houses. In total 230 houses were identified and recorded.

The *vaasthu* group also discussed with BRIT the gradual disappearance of *vaasthu* knowledge and the fact that few of the resource persons still had a pupil to teach. In traditional Sri Lankan society, transfer of knowledge usually took place in the form of teacher–pupil transfer or *guru-gola parampara*. The student was an apprentice under the teacher, and learned by watching, listening and doing. A teacher selected a student using a list of criteria that included the time of birth and constellation of stars at birth, attitude, life style and habits. Often it was a child from within the family. Due to the lack of interest of the younger generation, this transfer has dwindled, leading to a loss of knowledge whenever a teacher dies without grooming a pupil. Through BRIT's involvement in the villages and the efforts of the *vaasthu* group, a number of young people who were interested in becoming pupils were identified. Members of the

forum willing to be teachers were also identified, and one or two students were assigned to each teacher. The whole process was inaugurated with a ceremony in which the teachers pledged to teach their pupils without withholding any knowledge. The pupils promised to do their best to learn and respect their teachers. Although the pupils will not live with their teachers, as was done traditionally, they will meet regularly. In addition, the pupils will join the monthly meetings of the forum.

University research to validate vaasthu

Realizing the role that validation by Western science can play in reviving *vaasthu* knowledge, BRIT approached Professor Nimal de Silva at the University of Moratuwa's Department of Architecture, to discuss possible collaboration. The request was received very positively and a group of postgraduate students from the university visited BRIT to further document *vaasthu* practices under the guidance of Professor de Silva. The students lived for several days in the villages with selected families and did a detailed study of 30 households selected from the 230 houses identified by BRIT. Design of houses, instruments and implements, spiritual aspects, traditional furniture, clothing and jewellery were aspects included in the study. The students, *vaasthu* resource persons and BRIT staff jointly discussed and analysed the data.

The outcome

For the Sri Lankans the house is the place of living and reflects the identity of a family. The house is always identified with the family, at the same time the family is also identified with the house. The family names of most Sri Lankans have this identity. A place of living in a traditional house provided shelter, comfort, prosperity, happiness, health, dignity, identity and protection.

Many studies have been conducted in Sri Lanka to understand the provincial and cultural variations found in traditional households throughout the country. These reveal that people were sensitive to their living environment and understood the behaviour of nature. Physical adaptations created simple solutions to the problems they faced in satisfying their requirements. The resulting structures of different forms and shapes exhibit provincial identities, however, a study of individual houses shows many similarities in the final product due to the influence of traditional practices and beliefs.

Regardless of social standing, many Sri Lankans are very conscious and concerned about traditional *vaasthu* practices when they come to construct their houses. The practices include avoiding *bumidosa* (land/soil qualities that will make the construction faulty); comparing horoscope and the designs; placing doors and windows according to the correct natural direction; placing the house to get the maximum sunlight and air; placing the rooms according to correct directions; and placing the kitchen correctly.

As a result, the Sri Lankan home has become a product of modern architecture synthesized with tradition and beliefs. Efforts have been made to maintain the essence of the traditions, but these has resulted in a departure from the overall simplicity

found in the traditional house. The development of modern cities and towns have created scarcity of land for housing and some of the widely known traditional *vaasthu* concepts, such as big open spaces, are no longer practicable. Modern-day architects have been inspired by tradition but have not directly copied it. The context for the designing of houses has changed and traditions can be properly adapted for modern use only with a correct understanding of the philosophy and the spirit behind them. People have learnt from tradition to satisfy their daily needs in the modern world.

Rules for vaasthu architecture and building

The wealth of knowledge accumulated among the *vaasthu* practitioners has within it solutions that would fit any kind of land/house design situation. This means that the design of the house has to follow the rules laid down in *vaasthu* in order to avoid disastrous results. These rules include the following:

- Respecting the concept of *Bhoomi* (earth, soil) – traditional beliefs of the invisible powers of earth, sun and other natural forces influenced the house construction. The house itself is an additional burden (weight) to the god earth (Bhoomi devatha) so there were many rituals and ways of pleasing the god earth. The main ritual is *bahirawa Pooja* (offering to the god earth). In other words, this practise aims to avoid the faults that can happen when using land for the construction of a house. It is widely believed that if placed wrongly on the land, the house can be weak and be harmful for the dwellers. The impact might be that the inhabitants would frequently become sick, they would not prosper economically, and the general appearance of the house could be unpleasant. The inhabitants in the final analysis would not get pleasant feelings and satisfaction from living in the house.
- Use auspicious timing (*neketh*) – a horoscope of a person is prepared according to the birth time and positioning of planets at that particular time. It is believed by many that this horoscope decides the destiny of a life and the horoscope of the owner of the house continues to play an important role. All important milestones in the construction of a house, such as laying the foundation, installing the main door, starting the construction of the roof, or stepping into the new house are all done at the auspicious time given by an astrologer to bring good luck to the occupants of the house. Further ceremonies are also carried out to obtain religious and spiritual blessings to nullify any possible evil effects on the house and the land. These practices and beliefs bring mental satisfaction, confidence and hope to the household.

With the introduction of Buddhism in Sri Lanka the concepts of gods and rituals changed considerably. Instead of taking the earth, trees and other natural forces as ones that they should be feared, they were considered with loving kindness and compassion. Sacrifices of animals (chicken) were not promoted and instead the chanting of *pirith* (discourses of Lord Buddha that are used in order to invoke blessings to the listeners) is practised. The meaning of this change can be interpreted as peaceful coexistence with the harmony of the nature.

- *Vaasthu* principles of design – the tradition was to build a house on open spacious land so that it got plenty of sunlight and had cross ventilation and lush vegetation. The house is directed to catch invigorating morning sunlight and avoid evening sunlight, which is not soft. The windows and doors are placed so that the wind is allowed inside the house and trapped for cooling the interior. The open veranda

found along the façade and around the courtyards of traditional houses served as a buffer space between the inside and the outside space, both environmentally and socially. A veranda is usually incorporated and adapted in modern houses and is traditionally used as a sitting area for outsiders who were not to be directly entertained inside the house.

Traditional practices also ensured the main door faced the right direction, ensured an odd or even number of doors and windows, depending on what was required, determined that no walls crossed each other directly; that the kitchen was appropriately located and that the ridge rafter was positioned properly in relation to the centre of the door opening. These rules were adhered to strictly in order to prevent ill luck from falling on the household.

The open space in traditional *vaasthu* also included the designing of the garden surrounding the house. The planting of trees, plants, flowers and positioning of ponds, wells, cattle sheds and other structures were strictly done following *vaasthu* principles.

The *vaasthu* forum and spreading the message

BRIT and the *vaasthu* forum also publish a newsletter. Members of the forum contribute the articles and form the editorial board. One thousand copies of the first four-page issue have been distributed through various channels, which has increased public interest in the forum and its work. Some of the *vaasthu* practitioners have already been contacted by people for advice and consultation on house building. Sharing of experiences with *vaasthu* also takes place through local and national NGO networks.

Houses with verandas at their entrance

Most of the houses in the studied area had verandas and some have been converted to closed spaces that can serve as rooms. The veranda acts as a transitional space from the inside to the outside. In low-income houses, it connects with the kitchen or a bedroom and not with a living space. These houses have very few windows compared to other types.

On the veranda, the *Kotta Pila* was an important feature. It is a raised platform on the veranda, and is used as a place to sit, as well as to sleep by the male household members. In addition, there is usually a special space allocated for de-husking rice, usually near the kitchen. This type of house also had a gable roof in most cases.

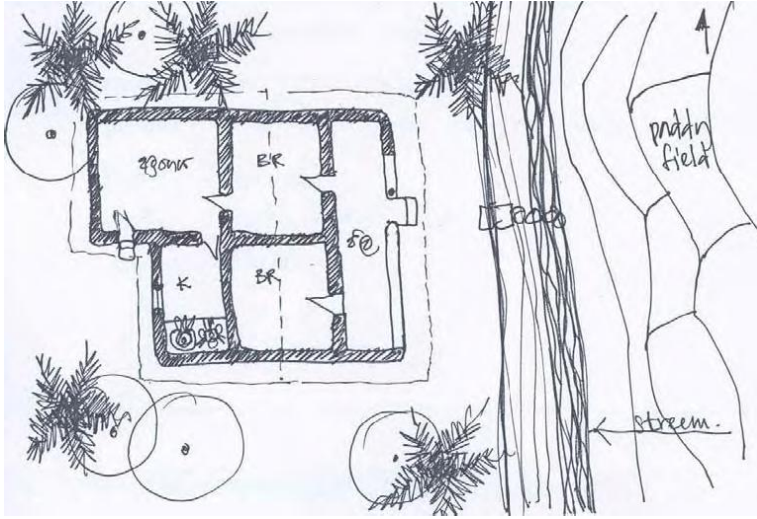


Figure 1 Plan of typical *vaasthu* house with veranda



Figure 2 Typical *vaasthu* house with a veranda



Figure 3 *Vaasthu* principles are also adopted in the immediate surroundings of the house

U-shaped houses

The general layout of U-shaped houses consists of an entrance at the centre, which leads to a living room through a veranda or an entrance lobby. The significant rooms, usually bedrooms or kitchens, are located on both sides of the entrance and are entered through the entrance lobby.

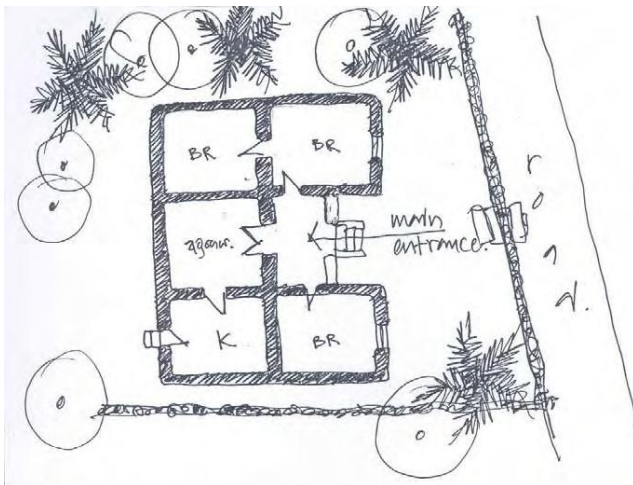


Figure 4 Plan of typical U-shaped *vaasthu* house



Figure 5 Examples of typical U-shaped *vaasthu* houses