
BK2AC1 Bouwkunde als Wetenschappelijke Discipline
BSc Bouwkunde, Technische Universiteit Delft

Paul Varghese
4472152
p.varghese-1@student.tudelft.nl
3rd June 2016

Koloniale architectuur en stedenbouw
Name supervisor: dr. Pauline K.M. van Roosmalen

Abstract – The bungalow dwelling seen in many of the English speaking countries and British colonies originates in British colonial India, and is a hybrid of western and eastern architecture. This article answers the following research questions “What is the bungalow typology?” “What influence did the British architectural style have on the regional variants of the bungalow?” “How has the bungalow adapted to the climatic conditions of India?” “What has been the social impact of this housing type on the middle class in India and Britain? This study shows that the bungalow is able to adapt to various climatic conditions and architecture styles. Another important finding of this article is that the bungalow in the colonial landscape of British India was set to create a social divide and perception of “white supremacy and elitism.” It also unintentionally turned out to be the most favored house typology amongst the rising middle class in India and Britain, and so had a positive social effect on these populations.

Key words – Bungalow, Typology, Colonial, Anglo-Indian, Social Impact, British Raj

1. Introduction

Early seventeenth century onwards, the British East India Company had been in India and had chosen the Bengali peasant hut as their dwelling (Scriver, 1994). These were called “bangala” (“out of Bengal”). The early form was a single storied brick structure with a bent thatched roof and a veranda (Scriver, 1994). It had a large central room for sitting and eating where the corners were for sleeping. The British enclosed the corners, and sometimes also the side section of the verandahs to form bedrooms and bathrooms, while the main central room/hall functioned as the drawing (living) and
dining room (Scriver, 1994). This was the basic form from which two types of bungalows developed: the sloping roofed, and the flat-roofed.

For this study, I characterized the bungalows into distinct periods and regions based on important historical events of British colonialism of India (see appendix). I have then compared the architectural styles of the bungalows during these periods to the architectural style present then in Britain. This article studies the adaptations of the Anglo-Indian bungalow in civil stations (for administrative controls such as Calcutta and New-Delhi), the cantonment (army base, for example such as in Bangalore), and hill stations (example, Shimla). It also looks at what social effect this colonial architecture had in Britain, and among the native Indians. For this research article, I have used several available literatures on the topic, cartography, and the photographic documentation of British colonialism in India.

2.1 Mid eighteenth to early nineteenth century colonial bungalows of Calcutta.

The spatial organization (figure 1) showed vast open spaces called “the Maidan”, gardens, golf/race course, club, cricket club, and the St. Paul's church (Davies, 1985). To the periphery of this were the British bungalows extending to the South region forming the “white town” (Chattopadhyay, 2000). The region around the Delhousie square formed the region for administrative/public buildings. Northern Calcutta was dense with temporary “Kutcha” housing and formed the “black town” (Chattopadhyay, 2000).

In Britain from 1750 through the early 1800s, the neoclassical architecture was popular (Palmer, 2011). Thus, the bungalows in the “white town” were built in this style and were adapted to face the hot and humid climate of Calcutta. They contained the following features (Davies, 1985; King, 1976). They were symmetrical, massive in size, contained columns and pediments. Hence, were clearly based on Classical Greek temple architecture. They were always painted with white “chunum” that helped in radiating heat. They had a roof and ceiling that was usually high and flat. The walls were thick and had ventilators close to the ceiling. There were several windows and doors for natural

Fig 1: Map of Calcutta between the years 1847-1849. Inset showing a British bungalow from the white town in Calcutta (Davies, 1985).
lighting and cross-ventilation. Porticos were exceptionally tall, and gave a grand scale to the bungalow. Verandah had bamboo mats hanging on the exterior walls to keep the sun out while allowing the breeze in. The orientation of the bungalows were mostly with their long axes along the north-south direction, where the drawing rooms were in the north and was out of the direct rays of the sun.

2.2 Nineteenth century colonial bungalows of Bangalore cantonment.

The Bangalore cantonment was established in 1809 and was separated from the city (King, 1976). It had bungalows, gardens, race courses, clubs, and parade grounds etc (fig 2). There were three types of bungalows present here, the flat roofed in neo-classical style, the sloping roofed in gothic revival style (fig 2, inset), and some that showed a combination of both styles (Pott, 1977). This is because, around the same time gothic revival was emerging in Britain, and by the second half of the nineteenth century it was very prominent there (Germann, 1972).

Pott, 1977 gives a detailed documentation of the bungalows in Bangalore cantonment that can be summarised as follows. The bungalows of gothic revival were less symmetrical. The most noticeable feature in them was the monkey top (fig 2, inset) which was a pointed tiled covering over a window that was made of vertical wooden rods. It was suited for Bangalore climate as it kept away the sun and rainwater from entering the house. Other important borrowed features from local architecture were balustrade parapets, portico having an intricate floral stone work, and roofing that was pitched and consisting of painted tiles. Verandahs were present between the portico and the interior of the bungalow. Kitchen and servants quarters were separate and at the rear of the bungalow.

2.3 Nineteenth century colonial bungalows of the hill station - Shimla.

The British developed several hill stations, of which Shimla was made the summer capital of the British Raj in 1864 (Davies, 1985). The bungalows built here were in gothic revival and Tudor revival style (Davis, 1985) (fig 3). Tudor revival architecture was the popular domestic architecture in Britain from mid to late nineteenth century (Malcom, 1998).
It has a simple appearance with steep roof and black wooden beams across the façade (which are only for show and has no structural purpose).

2.4 Early twentieth century colonial bungalows of New Delhi

Irving, 1981 provides an account of the planning of New-Delhi, which can be summarized as in (fig 4). There was no connection between Old and New Delhi. New-Delhi had a major ceremonial green stretch called the Central Vista (governmental complex) with Viceroy’s residence and the India gate at its either ends. Tree lined roads on either side of the central vista joined to form hexagonal nodes. This divided the area in the North and South of the central vista into triangular sectors. Each of these sectors had bungalows along the streets; and were close to Central Business District (commercial complex), the southern ridge (forest), club, race-course, gardens and Golf course. This formed the ‘green belt’, which also functioned as a barrier against dust and heat. About 640 bungalows had been built in the green belt which was twice the size of Old Delhi. Therefore, Old Delhi was overpopulated and had poor living conditions due to the destruction of the city by the British Raj. The large number of workers who came for the construction of New Delhi were also made to live in Old Delhi.

The bungalow architectural style of New Delhi was a hybrid architecture developed by the British Raj. This was called “Indo-sarcenic” where Buddhist, Hindu and Islamic elements were used along with Neo-classic and Gothic revival architecture (Irving, 1981; Davies, 1985). Some examples of the borrowed elements in Indo-sarcenic are “jaali” (pierced stone lattice screens that kept the sun out but allowed the breeze in),
“chhajja” (sunshade), onion dome, “chhatris” (domes on four columns), and minars (tall towers) (Irving, 1981; Davies, 1985).

New Delhi was the winter capital of the British Raj and Shimla the summer capital. Therefore, many of the government officials would move for six months from New Delhi to Shimla during the summer (Irving, 1981). The officials who stayed back in New Delhi could move into summer houses. Thus, there were two kind of bungalows built in New Delhi (Irving, 1981). The summer bungalow had high roof, verandah all around, and plenty of doors, windows and ventilators. The winter bungalows had low roof, no verandahs, little cross-ventilation, and fire-places. All bungalows were single storied, or sometimes one and half story tall. As a rule they were well below the tree height and remained hidden (Irving, 1981).

3. The Anglo-Indian bungalows in Britain and India built by Indians during the British Raj.

The bungalow was introduced in Britain in the nineteenth century 1885 (Ferry, 2014). In spite of the difference in climate, the verandah stayed, but over the years got covered. By 1920 there was a “bungalow backlash” that finally resulted in a movement against it and its decline. Before this, it was exported to America (Ferry, 2014). On the other hand, the rising middle class of the Indian society began to adapt the Anglo-Indian bungalow with more local architecture, thus making these architectural styles more Indian (Desai and Desai, 1995). More on this topic is discussed later.

Fig 5: Floor plan of traditional Bengali house of “Zamindars” (Das, 2014).

4. Floor Plans of traditional Bengali house, and the colonial Anglo-Indian Bungalows

Figure 5 shows the floor plan of a traditional Bengali house of “Zamindars”. Characteristic features included presence of a courtyard, separate public and private entrance, and a prayer room. Living room is separate from dining room, separate quarters for women and kitchen is present within the house (Das, 2015). In order to understand the common factors between the variants of Anglo-Indian bungalows their floor plans were compared (fig 6).
5. Conclusion:

From this study it is clear that the Anglo-Indian bungalow, irrespective of its architectural style and geographic location is a single to one and a half storied detached house typology. It is a common house typology today in several British colonies and English speaking countries (Scriver, 1994) because of its adaptable nature to local architectures and its ability to be prefabricated. Thus there are variants from India, Britain, America and several other countries. The common factor between these is the floor plan which remains the same as that of the early forms (Scriver, 1994) developed from the Bengali peasant hut (described in section 1). A major part of this article looks at how the British used the bungalow to portray to the Indians a “modern”, “western” and “culturally superior” British society, distinct from that of the Indian (King, 1976). Forceful segregation of Indians into overpopulated unhealthy areas in comparison to the lavish conditions in which the bungalows were located gave the bungalow a sense of “sophistication” and “elitism” (King, 1976). Besides this, the size of the compound with its walls, gate, guard, servant’s quarters, separate kitchen near the servant’s quarters, and long driveway also imposed power and social distance (King, 1976). The bungalow and its compound varied according to the position and ranking of the resident, showing hierarchy within the British establishments. The bungalow architectural styles was used to convey different social messages to the Indians. While the grandeur of neo-classism was useful in Calcutta to communicate power, the same was not suitable for New Delhi after the 1857 Sepoy’s mutiny (Davies, 1985). Here they had to develop a hybrid form of architecture called Indo- saracenic architecture (Irving, 1981), that could communicate the grandeur of Imperial power and also send out a message of friendliness to suppress any form of revolt. The cantonment bungalows contained a lot more of traditional house elements (Pott, 1977). The British army had divisions containing Indian soldiers (sepoys).
Hence, it was important for the cantonment to integrate better with the local culture (Pott, 1977). The hill station was developed to serve as “secluded private places for relaxation” (Davies, 1985). To feel at home, the British developed bungalows there with architectural style as close as possible to those in Britain (Davies, 1985). It was this Shimla typology of Tudor revival style that they took to Britain because of the similarity in the climate of Shimla and Britain (Ferry, 2014). Thus the British in India adapted both the bungalow typologies to all architectural styles present in Britain from 1750 to 1930, and were mixed with the Indian architectural elements to convey different social messages. This in turn depended on the region in which it was being built, and the sociopolitical intention of the British Raj there.

While the bungalow portrayed a modern, culturally superior, elite British society, that controlled power, position and authority over the Indian society (King, 1976), it also emerged as a sought after housing typology among the middle-class in India, Britain, and America (Desai and Desai, 1995; Ferry, 2014). As the middle class got richer in these countries, they could afford to live in a bungalow (Desai and Desai, 1995; Ferry, 2014). In Britain the modernization of the bungalow allowed it to function without the help of servants (Ferry, 2014). Late nineteenth century introduced a new concept of weekend. This led to bungalows becoming holiday homes or sea-side bungalows (Ferry, 2014). Unfortunately, its mass production because of prefabrication resulted in a movement that arose against the shabby structures leading to the decline of bungalows in Britain (Ferry, 2014). On the other hand, the popularity of the bungalow grew in India. The middle class preferred the bungalow for their dwelling because of the sense of “western”, “modern”, “status” associated with it (Desai and Desai, 1995). They began to prefer an outward looking house with a verandah to an inward looking house with a courtyard, as it gave them greater opportunity to interact with the external environment, Vernacular bungalows of various colonial architectural styles began to occupy the urban and rural landscape. As more and more number of people started building bungalows, its social meaning changed (Desai and Desai, 1995). It also grew smaller and more compact along with a diminishing plot size. With this, the social structure of the Indian family also began to change (Desai and Desai, 1995). With the combined drawing and dining rooms, women could come out of the isolation of women’s quarters (Desai and Desai, 1995). The large joint families (of at least three generations) started separating and moving out as smaller separate (nuclear) families (Desai and Desai, 1995). With this was born a new concept of individualization of the private property that displaced the earlier notion of family property, as in joint families (Desai and Desai, 1995).

My own experience as an Indian and who frequently travels to India tells me that the Anglo-Indian bungalow continues to be a sought after housing typology. The sense of "western", "modern", "status", "elite" is still associated with it, and now a sense of "wealth" also. The variation in the compound and bungalow size naturally results from the financial position of its residents. In a way, the bungalow broadens the division between the rich and the poor. But, its popularity continues to adapt it to different materials, technologies and regions within India. Hence, even after the end of colonialism in India, this colonial architecture continues to develop and evolve in modern India, while continuing to impact the Indian-society.
6. References


6.1 Reference for Maps:


2. Bangalore, India, circa 1924. This is a low-quality scan of a 1924 city map from "Murray's 1924 Handbook.


7. Appendix:

Fig 1: Map of British Colonial India
Source: Mr Gs AP World History
https://gibaulthistory.wordpress.com/chapter-24/
Important Events from 1757 to 1947 in the history of India:

a) 1757: British victory in the battle of Plassey, after which East India Company takes administrative control of Calcutta and through several military operations takes control of many other regions. Calcutta made the capital of British India in 1772.

b) 1799 Tipu Sultan, the ruler of the Kingdom of Mysore was finally defeated after four long battles. 1809- The British East India Company set up a military cantonment in Bangalore (a city adjacent to Mysore). It was a major military strategic point. It was also a major center for transit to Bombay, Madras, and Kerala. 1803 – British conquered Delhi (Shajhanabad) and set up their cantonment north of it.

c) 1857- Sepoy’s mutiny in Calcutta against the East India Company. 1858 - Decision to shift the colonial capital from Calcutta to New-Delhi.

d) 1864- The summer capital of British India was set up in Shimla, a hill station close to Delhi. 1876- The East India Company gave up it’s control and India came under the rule of the Imperial rule of Britain and Queen Victoria.

e) 1901- End of the Victorian era. In 1911 the British Raj of King George V starts to build New-Delhi (Lutyen's Delhi). It was inaugurated in 1931. On 15th August 1947-India got independence marking the end of British Raj (King George V1) in India.