



Fig 1: The Centre for development Studies, Trivandrum

AN ALTERNATE ROUTE

The Centre for development Studies, Trivandrum — Kerala, India
Architect — Laurie Baker

A Nehruvian vision, a humanist-communist leadership and a Gandhian architecture; the formation of CDS laid ground for the confluence of India's conflicting political views. The southern state of Kerala in 1970 was a communist led coalition government headed by Chief Minister Achutha Menon, who strongly believed in the newly formed nation-state called 'India' and its development. Menon's Nehruvian communist consensus was unusual and equally rewarding for the welfare of the state. The Centre of Development Studies in Trivandrum was the brainchild of the economist K.N Raj established in his native state, Kerala, with the support of Menon. The institution was the first of its kind in South India focusing on research and training in Economic development and social change. Raj's Nehruvian vision of modernising Kerala diverted from Nehru's idea of implanting a universal modern architecture in the Indian soil. CDS was not only an institute for research, but it was also a prototype for low-cost and low-waste building construction to set an example for the state to build consciously.¹ When modernist monuments were built across the nation, spending people's money, it was important for Raj to prove his point of a bottom-up approach of an alternate development method by using the available resources. It is utopian to think of a fair use of government fund in the current Kerala context where even the Chief Minister's Disaster Relief fund is embezzled. During the establishment of CDS, the cost for construction was saved and the government grant was utilised for buying books for library.²

In order to materialise Raj's vision, another radical visionary had to be brought on board. Laurie Baker was an English architect who came to India as part of the Quaker Friends Ambulance Unit to work for the injured soldiers in the war in Asia. His chance encounter with Mahatma Gandhi changed his life and with his decision to come back to India over the needs in the war-torn Birmingham, he also instigated a change in Pithoragarh and South India where he built for the poor. He later worked in the villages of India with his Gandhian principles and practiced his ethical orientation to Quakerism through architecture. The colonial British architects saw India as a project. Their gaze was external, of curiosity and of possession. Baker, however, was no comparison to the Britishers India was familiar with. He saw India as an Indian, unlearned the architecture he studied and went to the villages to learn the vernacular construction. By 1970, not only did Baker adapt to the vernacular, but also adapted the vernacular to the functionality of modernity. K.N Raj's discourse of "Development Economics" adhered to Baker's approach of building by generating local employment, using locally supplied materials and saving on transport.³

A 10-acre barren land was to be the site for CDS. The paddy fields surrounding the hillside are now levelled and encroached. Plants and trees were grown, around which Baker planned his buildings. The administrative block, auditorium, computer centre, hostels and staff quarters are designed organically along the contours of the site. The meandering pathways navigate across slopes connecting buildings that are placed hierarchically from the core to the periphery. The residential blocks were zoned away from the centre for privacy. The ancillary buildings are organised close to the core complex which includes the administrative block, classrooms, researcher's area and library. The core of the campus is strategically placed

¹ A V JOSE, 'Early Days of the Centre for Development Studies', *Economic and Political Weekly* 45, no. 11 (2010): 71—73.

² JOSE.

³ Mohsen Mostafavi, 'Centre for Development Studies', *Architecture and Urbanism* 2000: 12, no. 363 (n.d.): 30—41.

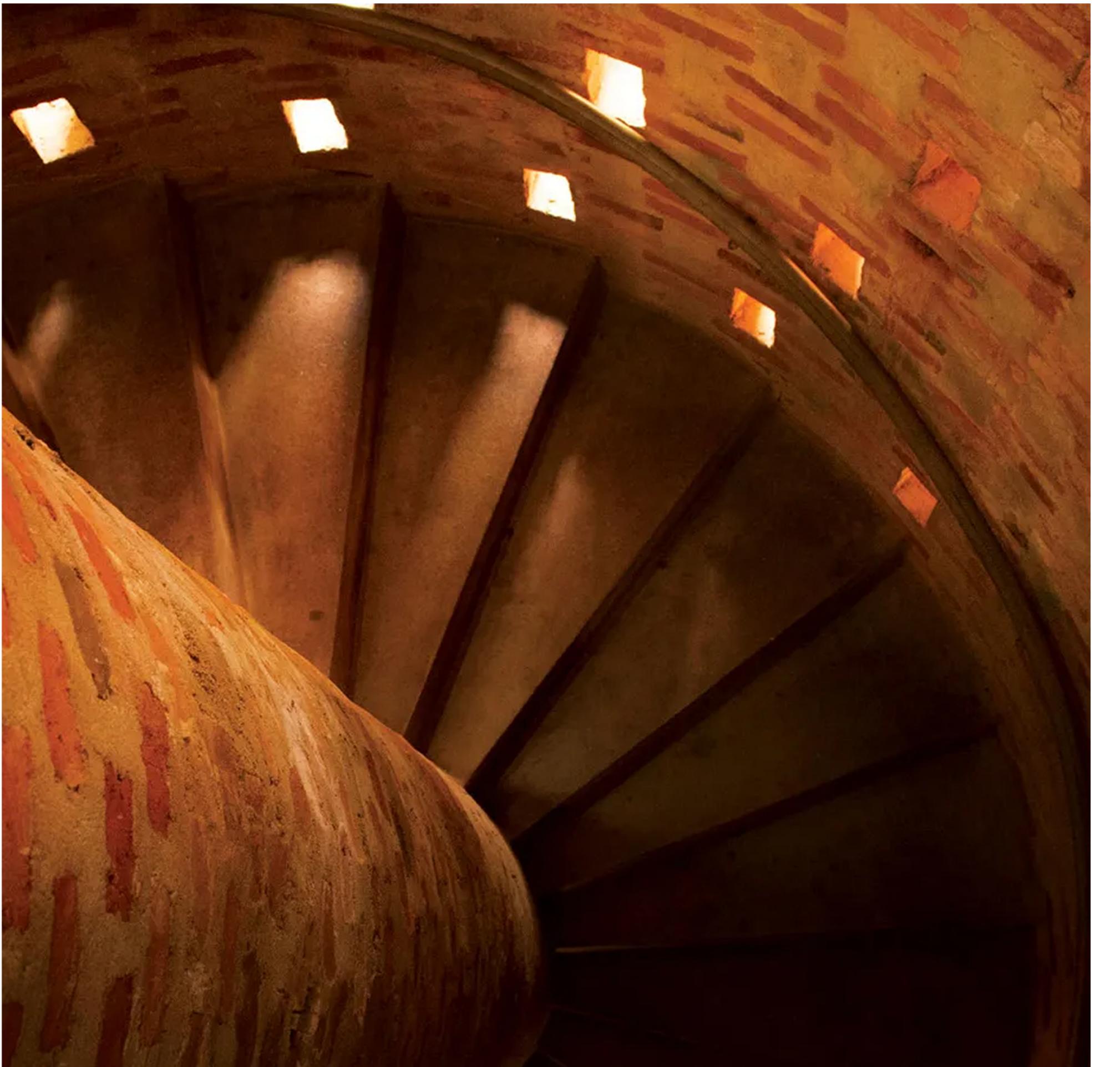


Fig 2: The spiral stairway of the library

at the top of the hill for ease of access. Baker's conscience for the earth was such at the top of the hill for ease of access. Baker's conscience for the earth was such that he manipulated the built around trees and terrain. The similarity in the architectural plan of each building is in the absence of rigidity. This organic approach demanded no negotiation on the site conditions. In an interview, Baker mentions that architecture is music (and not frozen music)⁴. The sense of movement in what he calls music is reflective in the flow of spaces in the CDS. There is constant movement of light and shadow, creating choreographic sequences at all times of day. Large overhangs keep the exposed walls away from moisture and scorching sun, which is a reason why the walls last without moss or fungus for more than 15 years. Baker devised folded walls for load bearing structures. In the computer centre, a double wall insulates the building from heat and conceals the services. The reinforced concrete slab uses exposed Mangalore tiles as fillers to reduce the use of concrete and to keep the interiors cool. A combination of clay tiles and red oxide are used for flooring. Red oxide is a sustainable flooring material made of natural substances, used traditionally in the tropical region for cooler interiors in summer. The wastage of bricks on the wall edges are creatively avoided by making a pattern out of the protruding bricks. This opportunism in site is a skill that is farfetched in studio-based design learning. Even when a context driven approach is preached, the architecture education system around the world is more or less focussed on technical details of the drawings, as a result of which, the buildings often misfit in the particular climate and context. Baker was critical towards modern architecture. He believed in the truth of the material and opposed the idea of facadism. The contemporary architects in Kerala are in awe of his work. Ironically, the textures of laterite and clay bricks

are romanticised to a point that cement walls are cladded with compressed brick tiles

The Centre for Development Studies was strategically designed to enable passive cooling. The Jali is a brise-soleil that reduces heat gain by deflecting sunlight. It is an element of the vernacular architecture. Baker has developed brick bonds to create jali to minimise materials and save the expense on windows. Over the years, windows were installed in CDS for air conditioning, obstructing the natural ventilation through the jali. CDS was built before the oil crisis of 1973 when climate chaos was not in discussion. The ecological consciousness of the architecture of CDS was way advanced for its time.

In the very core of the site, on the pinnacle of the hill, a circular brick tower rises above the gabled roof of the administrative building. The library of the CDS is a 7 storeyed 12-sided polygon in a circular plan that utilises the space to the maximum. The book racks extending from the vertices of the polygon, rests on inverted beams transferring the load into the structure. The library is accessed through a spiral staircase that winds around a circular shaft bearing the load of the structure. The hollow shaft is also a lift well to transfer books. The topmost floor of the tower is the highest point of the campus with a 360-degree view of the entire site. In 2007, an additional 4 storeyed library tower with a loft was erected on the eastern side of the main block. Both the towers are connected by a footbridge lined with jali walls creating a play of light. The pond in the building helps in microclimatic control through evaporative cooling and the water reflects patterns of sunlight on the bricks. The CDS is not merely functional, it is experiential. The rain and sunlight are not only tackled but also celebrated.

⁴ Laurie Baker Documentary - About a Profile of an Architect, video, 1987, <https://youtu.be/3F53tw3q2Go>.



Fig 3: "Types of houses" as taught in preschool

Different Types of House

Consider the larger picture. The picture of the CDS in the capital city of the most literate state in the post-colonial India. In the city of Trivandrum with a considerable population of government employees, the aesthetics of the 'Baker style' spread simultaneously from the poor to the elite. India was set on its mission of modernisation, a mission that saw concrete jungles perpetrating the urban and the rural alike. Like in the war stricken west, the economy was at its worst. Yet, the image of the country was prioritised over fending for the needs. The misfortune of the deprived is the desire. The independent India sought for modern architecture to attain modernity. Parallelly in the south, an alternate route to modernity was being paved.

In 1983, when Kenneth Frampton's essay shed light on the idea of being modern and returning to sources⁵, the notion of Critical Regionalism as an extension of modern architecture influenced modern architects to ground their principles from the universal to the local. In the long run, associating regionalism to modern architecture, however, has led to a crisis of extinction of vernacular architecture. The vernacular construction techniques in India differ in every district based on the topography, climate and culture. These methods are tested and proven in over thousands of years. Post- independence, an invasion of the desire for modern architecture biased people towards the Kutcha house. The problem of the prejudice starts from the pre-school with a mandatory lesson on Kutcha house and Pukka house. Conventionally, a temporary house was called a Kutcha house and a permanent house built of stronger materials was called a Pucca house. The Kutcha house now is defined as a temporary house made of mud, stones, wood and dry leaves whereas Pucca house is a strong permanent house made of bricks, iron rods, cement etc.⁶ The bias is thus embedded in our very

culturing. It is in this context where the rich, the poor and the middle class sought for concrete homes, that the 'Baker phenomena' set a radical 'trend'. The fact that Baker style was embraced by stakeholders of institutions and public buildings influenced the mob psychology. The inception of the CDS was crucial to the change in the people's mentality to have accepted vernacular materials amid an RCC boom. The architecture of Centre of Development Studies is still relevant in Development Economics. CDS is also a reminder that a radical decision can break a chain and start another.

⁵ Hal Foster, ed., 'Towards a Critical Regionalism: Six Points for an Architecture of Resistance', in *The Anti-Aesthetic: Essays on Post-modern Culture*, 1st ed (Port Townsend, Wash: Bay Press, 1983), 16–30.

⁶ Types of Houses, Video, n.d., <https://youtu.be/WTOppL9IEQs>.

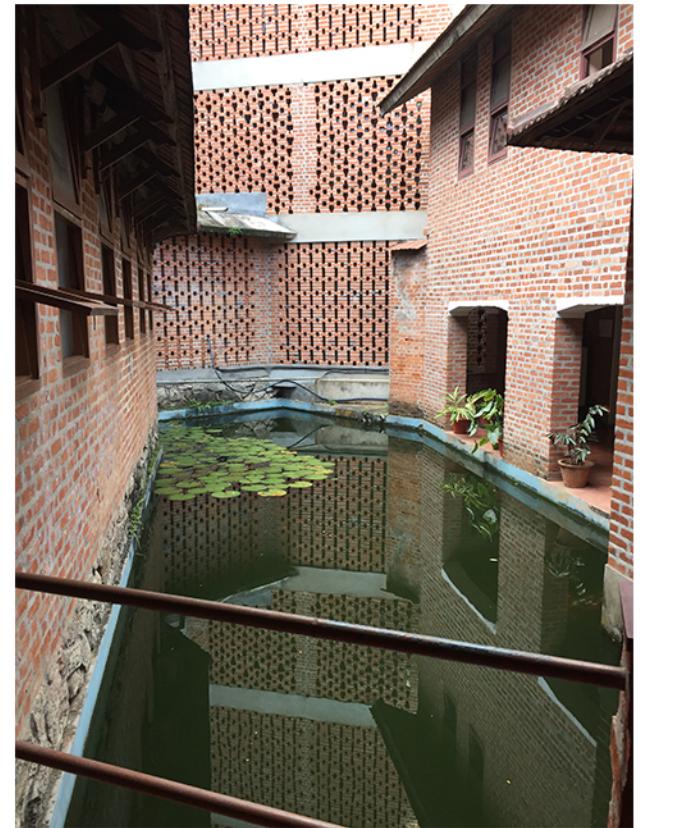


Fig 4: Pond in the administrative building



Fig 5: Library



Fig 6: Topmost floor of the library block



Fig 7: Laurie Baker at work



Fig 8: Jali walls



Fig 9: Red oxide and clay tile flooring

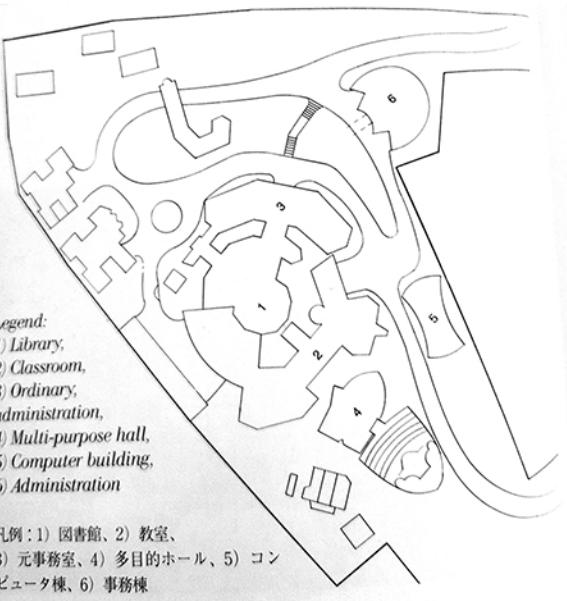


Fig 10: Site Plan

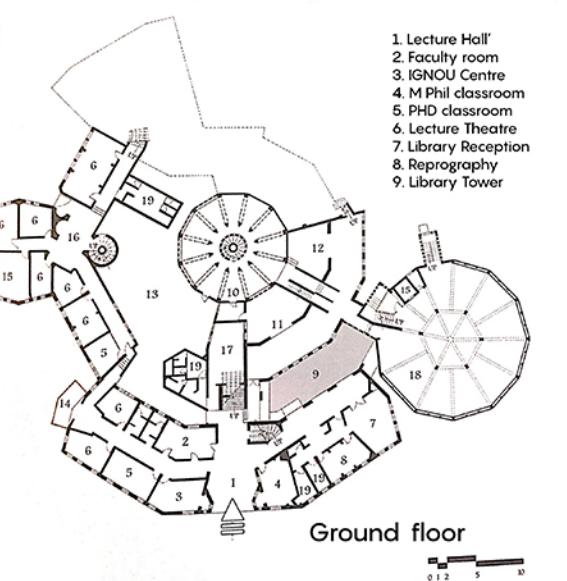
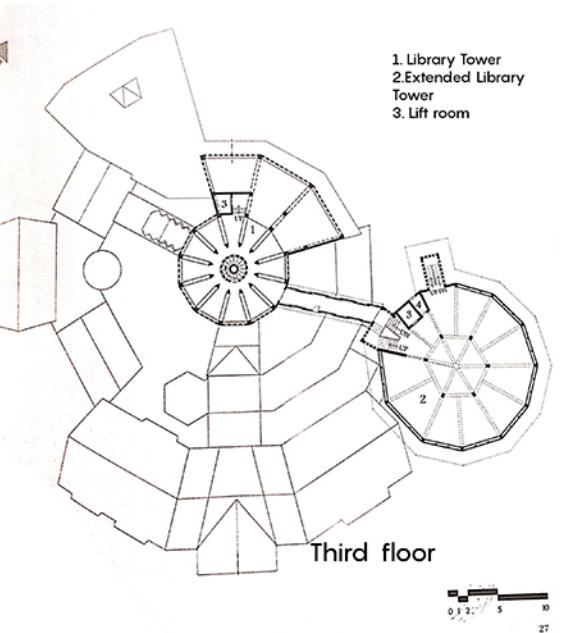


Fig 11: Floor Plans

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Types of Houses. Video, n.d. <https://youtu.be/WTOPpL9IEQs>.

List of Illustrations

Figure 1- Radhakrishnan, Vineeth. Centre for Development Studies, Trivandrum. n.d. Photograph. https://assets.architecturaldigest.in/photos/6008337251daf9662c148c37/master/w_1600,c_limit/Laurie-Baker-Library-Tower-Credit-Vineet-R.jpg.

Figure 2- Radhakrishnan, Vineeth. The Spiral Staircase at CDS, Thiruvananthapuram, Kerala. n.d. Photograph. https://assets.architecturaldigest.in/photos/60083371f93542952b66503c/master/w_1600,c_limit/LB-CDS-Spiral-Stairway.jpg.

Figure 3- Types of House. n.d. Image. <https://www.aatoonskids.com/wp-content/uploads/2022/05/Slide3.jpg>.

Figure 4- Joan Williams, Kajol. Pond in the Administrative Block. 2018. Photograph.

Figure 5- Joan Williams, Kajol. Library Interior. n.d. Photograph.

Figure 6- Joan Williams, Kajol. Topmost Floor of the Library Block. n.d. Photograph.

Figure 7- Laurie Baker at Work. n.d. Photograph. https://cdn.ca.emap.com/wp-content/uploads/sites/12/2019/11/smallportrait_654.jpg.

Figure 8- Joan Williams, Kajol. Jali Walls. 2018. Photograph.

Figure 9- Joan Williams, Kajol. Red Oxide and Clay Tile Flooring. n.d. Photograph.

Figure 10- Site Plan, 'Architecture and Urbanism', Vol- 363. n.d. Drawing.

Figure 11- S Pillai, Jayesh. Floor Plans of Library Block- 'The Masterpiece of a Master Architect- CDS'. n.d. Drawing.