

DATED: 19/03/2023

Class – Second Year B. Arch, Third Year B. Arch, Final Year B. Arch

Subject – National Architectural Study Tour to Tamil Nadu

PO Mapped – PO – 7, PO – 9

A one-week national architectural study tour to Tamil Nadu was organized by School of Architecture, D. Y. Patil College of Engineering and Technology, Kasaba Bawada, Kolhapur from 1st March 2023 to 7th March 2023.

OBJECTIVE:

- To acquaint the students the temple architecture of South India.
- To learn the tools and techniques of bamboo construction
- To relate different architectural styles evolved in Tamil Nadu.

**Day 1 (02/03/2023) Jambukeshwar Temple, Srirangam, and
Brihadeeshwara Temple, Thanjavur, Tamil Nadu**

**Place – Jambukeshwar Temple, Srirangam,
Tamil Nadu**

This famous historic Shiva temple is situated in the Srirangam Island, Tiruchirapalli (Trichy). It is also known as Thiruvanaikaval, Jambukeswaram. This temple is one of the earliest built Chola temple in around 145 acres of land. This is one amongst the Pancha Bhoota Sthalam where Pancha indicates “five”, Bhoota means “elements” and Sthalam means “place”– refers to five temples dedicated to Lord Shiva. This temple consists of five massive enclosures having carvings on them. The temple also has a 900 – year old optical illusion which is also considered as the world’s oldest optical illusion.



Image 1 View of Jambukeshwar Temple, Srirangam, Tamil Nadu.

PC: Prathamesh Patil (Final Year B. Arch, SoA, DYP CET)



Image 1 Guide explaining the history of temple to students.



Image 3 Vellayi Gopuram in the Jambukeshwaram Temple Complex.



Image 4 Group Photo at Jambukeshwar Temple, Srirangam, Tamil Nadu
 PC: Prathamesh Patil (Final Year B. Arch, SoA, DYP CET)

Place – Brihadeeshwara Temple, Thanjavur, Tamil Nadu

The temple is one of the living 11th Century Chola temples, built by the Chola emperor Rajaraja I, which is dedicated to Lord Shiva, situated in Thanjavur, Tamil Nadu. The temple is built from granite and has been built by interlocking the granite blocks. It has a big Nandi statue carved out of a single rock which is 16 feet long and 13 feet high. The roof of the Nandi temple was painted during the Maratha empire rule.



Image 5 Brihadeeshwara Temple, Thanjavur, Tamil Nadu

The temple of Ganpati as well was constructed during the Maratha empire by the Maratha rulers. It also comprises of other deity temples – Parvati, Ganpati and Kartikeya. There are several inscriptions inscribed on the external walls of the temple that states the names of the people who have contributed during the construction of the temple. There is a bulbous structure on the top of the temple carved out of a single rock which weighs around 80 tons. The temple complex was built to signify the power and strength of the Chola reign and is enlisted in the UNESCO World Heritage Site known as the “Great Living Chola Temple”.



Image 6 Guide explaining the history and construction techniques used in the construction of temple

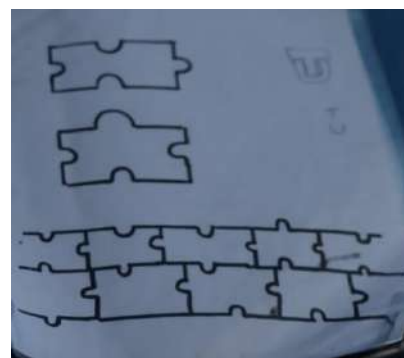


Image 7 Puzzle Technique used in the construction of temple



Image 8 Pyramidal construction of Brihadeeshwara Temple – A typical style of Dravidian Architecture

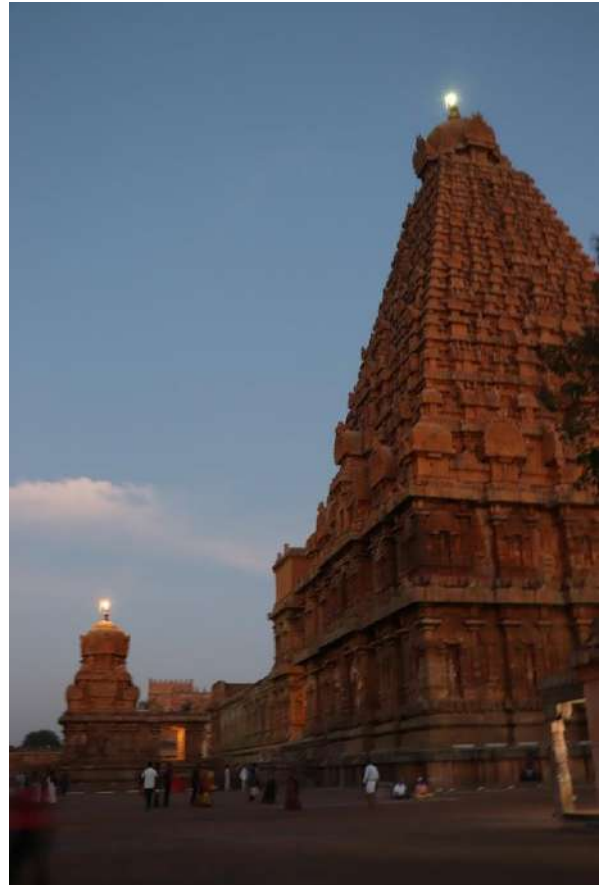


Image 10 View of the temple



Image 9 Entrance of the temple



Image 11 Group Photo at Brihadeeshwara Temple, Thanjavur, Tamil Nadu
PC: Prathamesh Patil (Final Year B. Arch, SoA, DYP CET)

Outcome:

The students got acquainted with the Dravidian style of architecture in the temples of Tamil Nadu which is the prominent style of architecture in the state. They also came to know about the unique ways of construction that were used in these historical temples and varied philosophical interpretations derived from the mythologies, relationship between the elements of nature and its derivation in design of these temples, the scale not only in terms of construction but the users who will be using the temples during the festivities hosted by the temples and lastly the materials used for the construction of these temples. They also learnt that how while planning the temple complex, the cultural beliefs play an important role in designing and shaping the internal spaces of these temples, hence the overall planning.

Day 2 (03/03/2023) - Pondicherry, Tamil Nadu (Heritage Walk, Sri Aurobindo Ashram, Our Lady of Angels Church)

Pondicherry is a post – colonial city. This city is divided into two parts by a canal – 1) The French Quarter and 2) The Tamil Quarter. The city’s culture is majorly influenced by the colonial rule.

Place – Bharathi Park

It is also known as the government park. It is named after the great poet of Tamil Nadu – Bharathisadan. It is located at the centre of the Old Colonial region at Rue Saint Gilles Street, White Town, Pondicherry and is surrounded by lush green trees. The park is known as government park because it is surrounded by some of the most prominent government buildings like the Legislative Assembly, Lt. Governor’s Palace and many more. The park has an iconic monument – the Aayi Mandapam dedicated to the famous lady courtesan who had demolished her own house to build a water reservoir for the city. This park has remained one of the popular attractions in the city since the French colonialism.



Image 12 The Aayi Mandapam at Bharathi Park, Pondicherry

Place – Golconde Pondicherry

This is the first reinforced – concrete structure in India, predating Chandigarh’s and Ahmedabad’s modern architecture. This structure is completed in 1945 and was built as a dormitory for members of ashramites, as they are called – of the Sri Aurobindo Ashram. This structure is built by a Tokyo based American architect Antonin Raymond. Instead of adopting the stylized French colonial architecture, he found a modern solution by considering the effects of weather in Pondicherry. The most



Image 13 Golconde

remarkable feature of the building is that the entire length, on the front facade and back wall, is fitted with horizontal louvers that can be opened and shut as per the weather. This structure is a complete contrast to the French architecture that is prominently seen in Pondicherry.



Image 14 Group Photo at Golconde, Pondicherry, Tamil Nadu
PC: Prathamesh Patil (Final Year B. Arch, SoA, DYP CET)

Place – Sri Aurobindo Ashram, Pondicherry

A spiritual community located in Pondicherry; this ashram grew out of a small community of disciples under the guidance of Sri Aurobindo. He, after a major spiritual realization, in order to continue with the spiritual work, withdrew from public, settled in Pondicherry, practised meditation and after some years handed over the full responsibility to his spiritual collaborator, “The Mother”, and since then the community is growing till date. As this ashram has grown around him he himself has wrote, “ It has less been created than grown around him at its centre”. This was earlier the residence of Sri Aurobindo, then Mirra Alfassa (The Mother). This ashram is a typical example of a French house which consists of a tree in the centre, a single entry and exit and



Image 15 Visit to Sri Aurobindo Ashram.

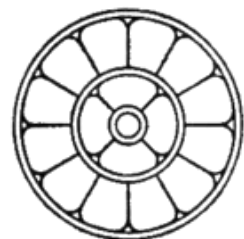


Image 16 The Mother's Symbol

all other habitable spaces planned around the tree. The symbol that we seen on the balcony is “The Mother’s symbol”.

Place – Our Lady of Angels Church, Pondicherry

This church is built in Greco – Roman architecture. It was originally painted in white colour both from inside and outside which gave it a name – the White Chapel. It was painted by a special mixture of paint, egg and limestone. Later, the colours of both the interiors and exteriors were changed. The church is locally called the Dumas church since it is located in the Dumas Street in White Town.



Image 17 Street Views of Pondicherry during Heritage Walk



Figure 20 Street Views of Pondicherry during Heritage Walk



Image 18 Our Lady of Angels Church, White Town, Pondicherry



Image 19 Interiors of Our Lady of Angels Church, White Town, Pondicherry

Outcome:

From the Heritage walk in Pondicherry, students explored the city streets of Pondicherry and its unique names derived from the French style. They also learnt about the French architectural style and the modernist architectural style, the unique colours and the meaning behind these

colours, wherein the colours explain the timeline of the building constructed. They also explored the lively markets of the colonial city while on walk. Students here also observed the influence of the history, culture and lifestyle of the people that impacts in shaping the overall style of architecture at that place and that which gives the uniqueness to that place.

Day 3 (04/03/2023) Visit to Matrimandir from the Visitor's Point and Bamboo Workshop by Earthweavers at Auroville

Auroville: Also known as the City of Dawn (“Aurore” meaning “dawn” and “ville” meaning “village/ city”); is an experimental township in Viluppuram district, mostly in the state of Tamil Nadu and with some parts in the Union Territory of Pondicherry in India. It was founded by Mirra Alfassa (known as “The Mother”) and designed by architect Roger Anger. Additionally, it is named after Sri Aurobindo.

Place – Matrimandir

Matrimandir is an assembly of spiritual significance for practitioners of integral yoga. It is constructed at the centre of Auroville and is surrounded by large open space called “Peace”. It is a place for silent concentration for peace of mind. It can be viewed as a large golden sphere which has a geodesic geometry formed from the amalgamation of multiple golden discs that reflect sunlight and give the structure a distinctive radiance. These golden discs are gold plated made of stainless steel. The spherical structure is surrounded by twelve petals, which makes it look like a lotus in full bloom. This structure was being observed from the visitors viewing point as the entry to this structure is restricted for all. Before visiting to this structure a detailed documentary explaining the philosophy behind the construction of this structure, its construction process, materials used, its interiors, the elements used and its meaning, all was explained in the documentary, which helped the students connect with the structure more closely.



Image 20 Matrimandir from Viewer's point



Image 21 Model of Matrimandir



Image 22 Group Photo at Matrimandir, Auroville
PC: Prathamesh Patil (Final Year B. Arch, SoA, DYPCET)

Place – Earthweavers Institute – A one – day Hands on Bamboo Workshop

A one – day hands on bamboo workshop was organised by the Earthweavers Institute. 61 students with two faculty members Prof. Shailesh B. Kadolkar and Prof. Nirali K. Gilbile attended the workshop.

Objective:

- To learn bamboo applications and its possibilities.
- To know about different bamboo treatments.
- To make the students learn different joineries used in bamboo construction.
- To learn different bamboo techniques for product/ furniture like splitting, cutting, bending and lashing.

Process:

The students were first oriented with different types of bamboo and its properties. This was required for them to understand the different methods used in the construction of bamboo and its preservation. Also, it was necessary for them to understand that why this is a sustainable material and used as an alternative to steel in certain construction projects. After that, the students were demonstrated and introduced to the tools, its uses and their handling methods used during the making of different bamboo joints. They were shown techniques like bamboo cutting, splitting, lashing and bending while also asking them to perform it during the demonstration. After completing this demonstration, students were made to form four groups according to their choice and asked them to either make a product or a furniture. The process

started with first designing the product/ furniture which was being checked by the team headed by Ar. Meera to confirm the workability and practicality of the same. After the confirmation of design, the students started with the execution part, where they, on their own explored different techniques of bamboo joineries and performed them in groups. At the end, there were two products and two furniture pieces which were designed, developed, executed and presented by the students.



Image 23 Introductory session with Ar. Meera



Image 24 Different tools used in bamboo construction process.



Image 25 Experts performing and explaining joineries to students



Image 26 Demonstration of Bamboo bending technique



Image 27 Students performing the joineries required to make their product/ furniture



Image 28 Students working on the final stage of product/ furniture



Image 29 Experts using grinder for finishing the joint



Image 30 Final product of Group work



Image 31 Group photo with the team of Earthweavers Institute, Auroville and final model of students work
PC: Prathamesh Patil (Final Year B. Arch, SoA, DYPCET)

Outcome:

Visit to Auroville made students understand the experimental architectural works that are being carried out at Auroville. The also experienced unity in diversity in true sense and an altogether a different kind of lifestyle of a place that comprises of different people staying together at one

place. Also, they observed a different style of architecture and execution. Also, at the end of workshop they learnt different joineries used in bamboo construction. They got acquainted with different bamboo treatments. They learnt tools used and techniques followed like splitting, cutting, bending and lashing. They performed all these techniques under the guidance of experienced persons in the field of bamboo construction and designed, developed, executed and presented their products/ furniture. While doing all the above activities they also experienced the effectiveness as an individual and acquired leadership qualities while working as a member or leader in multi – disciplinary settings.

Day 4 (05/03/2023) Shore Temple and Dakshin Chitra Museum

Place – Shore Temple, Mahabalipuram

The progression of Indian architecture demonstrates the structure of wood and timber to rock cut structures and eventually freestanding temples constructed out of stone and mortar. The Shore Temple at Mahabalipuram is an example of both a rock cut and a free-standing structural temple. It was built in the 7th century and is one of the oldest South Indian temples. The whole temple stands on a naturally occurring granite boulder. This temple showcases the culmination of the two architectural phases – 1) Pallava Architecture and 2) the mature elements of Dravidian Architecture. Unlike most of its neighbouring structures, it is built of cut stones rather than carved out of caves. Its style is characterised by a pyramidal kutina – type tower that consists of stepped stories topped by a cupola and finial. It is a UNESCO World Heritage Site.



Image 32 Shore Temple, Mahabalipuram

Place – Dakshina Chitra Museum

This museum is a heritage museum of art, architecture, lifestyle, crafts and performing arts of South India. The museum is built with an objective to promote and preserve the broader aspects related with the cultural diversities of South India by making public participation and making it more public friendly by connecting them through real scale objects and activities of day to day life, construction materials of vernacular style and showcasing their culture through models. The museum has a collection of 18 authentic historical houses with each house having a contextual exhibition. It encompasses traditional houses of Tamil Nadu, Kerala, Karnataka and Andhra Pradesh.

Outcome:

The students observed and learnt the progression of the history of the two political dynasties namely Pallava and Chola and how they impacted on the architectural aspect. They also observed the change in the technique of construction/ erection of the temple with the

evolution in the dynasties. The students got acquainted with different traditional/ vernacular styles of houses associated with the places of South India namely Tamil Nadu, Kerala, Karnataka and Andhra Pradesh and the activities, culture, lifestyle and with the architectural details they adopted at these places.

Day 5 (06/03/2023) Cholamandal Artist Village

The Cholamandal Artist's Village is the India's largest self – supporting artists village. It is a great work of contemporary architecture. It is equipped with an art gallery, exhibition space and residential areas for the senior artists and sculptors for their residence. The community has over 20 resident painters and sculptors, who live as a community and pool their skills. They run the Artists Handicrafts Association which makes the village a self – supporting entity. There are many international works of sculptures and artworks that are exhibited in the premises. The Cholamandal Artist Village was founded by K. C. S. Paniker who himself was a painter with a motive to encourage the artists retain their originality and give them an open space to mature at their own pace and provide a platform which will allow them to experiment, experience and exchange ideas.

Outcome:

The students observed different artworks of artists from the globe. They also experienced a style of contemporary architecture. They tried to understand the importance of retaining the personal ideas, need to experiment and interact with people having similar aims that enhances ones own skills and to live in community for better progress.



Image 33 Group photo at Cholamandal Centre for Contemporary Art, Artist Village
PC: Prathamesh Patil (Final Year B. Arch, SoA, DYP CET)