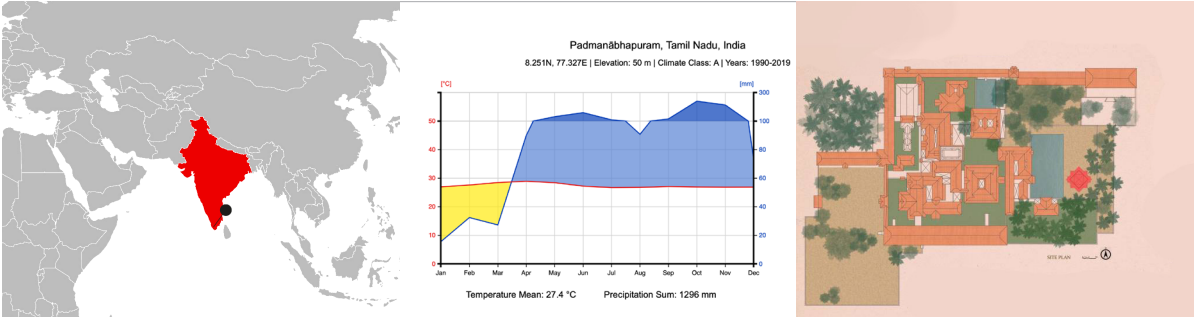


Padmanabhapuram Palace

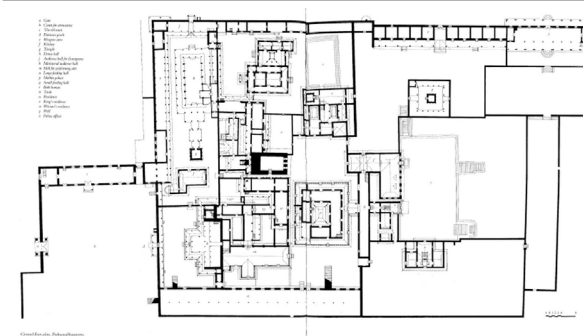
Padmanabhapuram | India
several architects



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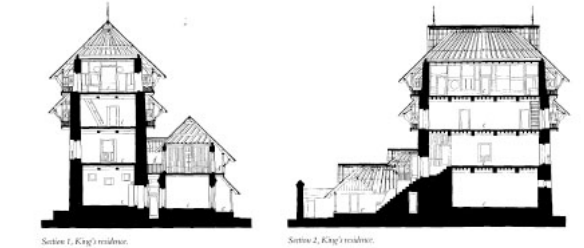
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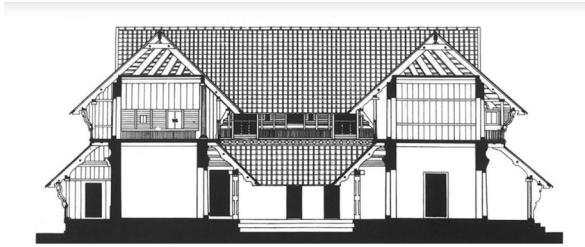
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Aspects geography | Topography | Vegetation

The city of Padmanabhapuram has warm climate with temperatures around 30°C all year and a high amount of humidity. There is a rainy season from april to december. The temple is located at 15 meters above sea level and surrounded by forest, fields and the town of Padmanbhapuram.

Building volume | Zoning

The palace complex is composed of many buildings from different periods that are connected by covered corridors and overhead walkways. The mother's palace or the 'Thai Kottaram' is the oldest building and core of complex. Other buildings like the „Mantrashala“ (used for the kings meetings) or the „Veppinmuttu Kottaram“ (used as residence) were added later and shape the complex structure. Usually the upper floors were used as the main living area. There are many external and internal courtyards on the complex that improve the lighting and ventilation in the interiors as well as two ponds.

Material | Construction

The Palace is constructed of wood, limeplaster and different bricks and stones.

Timber was used for the construction of the walls, the roof frame, beams and pillars. Some building's walls are made of laterite, granite or bricks or a combination of them and the main walls are coated with lime plaster and sea-shell lime. The Palace is secured by a stone fortification and the floor of some buildings consists of lime mixed with herbs that was polished.

Building shell | Shadow | Ventilation

The upper areas of some buildings are ventilated at the roof ridge by wooden screens called „jaalis“, that filter the light inside and allow air to flow through. They also provide privacy and create a special ambiance inside. In the Veppinmuttu Kottaram, small windows called „Kilivathil“ are combined with sliding shutters and create a pleasant atmosphere and ventilation. The hallways and courtyards also contribute to the ventilation and provide fresh air. The inside of the palace shelters one from the hot sun outside and creates a cool and comfortable climate. Even though the palace was built over 400 years ago, the climate inside of it is regulated really smartly by „low-tech“ means. These techniques were frequently used in traditional Kerala architecture that responds to the local climate conditions and creates a comfortable ambiance without the use of energy or modern technology.

Utilities

The palace complex served various purposes including residence for the king and his family, meeting place, residence for servants and has been extended over decades in the past. Today the complex can be visited by tourists.

Sustainability | Energy

Only regional materials were used in the construction of the Palace. Kerala is rich in clay, stones and timber and therefore provided all materials for this extraordinary building. The timber was processed in a very detailed and artistic way by local carpenters. Due to the smart ventilation system no additional air conditioning or ventilation system had to be installed to create a pleasant atmosphere inside.

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