

# Study Of Indo - Portuguese Architecture On The East And West Coast Of India

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**Abstract:** The Portuguese were the lead explorers in maritime trading and colonization during the fifteenth and sixteenth centuries. They colonized many areas along the coasts of Brazil, Africa, India, Sri Lanka, China and the Far East. The colonial architecture of Portuguese reflects the cross-cultural aspects of both Portuguese culture and the local culture of the colonies. The Portuguese gained knowledge and experience as they travelled from one place to another but preserved their traditional building typology. The resultant architecture is an amalgamation of both traditional building prototype and the addition of local cultural influences to it. In India, the Portuguese left their mark in many cities through their religion, language, lifestyle, art and architecture. Indo-Portuguese architecture is a perfect example of the cross-cultural miscegenation of Portuguese culture and Indian culture. This paper aims at understanding the degree of cross-cultural composition in Indo Portuguese Architecture through case examples

**Index Terms:** Cross-cultural composition, Colonial architecture, Goa, Indo-Portuguese architecture, Local culture, Manapad, Portuguese colonization.

## 1 INTRODUCTION

Culture may be defined as the entire way of life of a society. It is a complex set of beliefs, values, traditions and customs of that social group (Cambridge Dictionary, 2008). Culture is reflected in the art, and architecture of a society. Hence it can be construed that architecture is an expression of culture. It responds to the needs and values of the society thereby creating a unique style which differs from one society to another (Stephen, 1994). This unique architectural style thus establishes a new cultural identity.

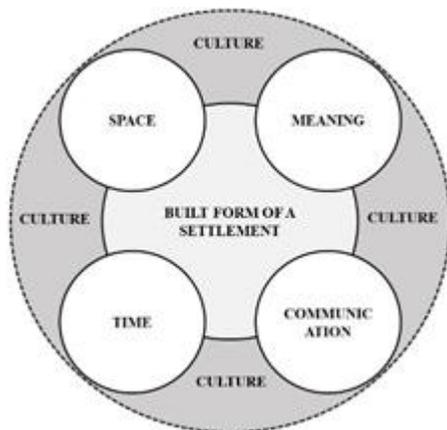


Fig.1. The relationship between Culture and Built Form.

In certain places, one society might consist of one or more cultures reflecting different styles of art and architecture within the same area. While in certain places there may be a fusion of two different cultures due to various reasons predominantly influenced by colonisation, resulting in the creation of a new culture. This new culture will reflect the aspects of both cultures but in differing shades, depending on the dominant culture. Thus we can concur that culture is dynamic and can accommodate itself to the changes over time (Amos, 1969). Portuguese empire initially concentrated on discovering places. The conquest of Ceuta, Morocco in 1415 marked the beginning of overseas Portuguese expansion. They wanted to get hold of trading gold and slaves in the regions of Sahara. Incidentally, Brazil was colonized by the Portuguese on their way to discover India. Around 1480, their focus was turned towards India and its spice trade. Trade in spice was initially governed by the Muslim merchants who then sold it to the European merchants for a profit. Portuguese wanted to have a hold on this spice trade from the Muslim merchants (Pearson, 2008). Vasco da Gama was the first Portuguese to reach Calicut, India in 1498. They started creating many trading stations or factories along the coasts of Arabia and Africa as they sailed towards India. These places helped them to protect and monitor the sea routes. They colonised and set up trading posts or factories and forts in many places along both the East and West Coasts of India. Through this, they were able to have an effective monopoly of trade routes towards other Asian and European countries. They also started spreading Christianity to the discovered places (Jeyaseela, 2009). These trading stations or forts slowly started getting converted into Portugal colonies (Manuel, 1990). Portuguese people by nature were able to easily mingle with other culture as their ultimate goal was to get hold of spice trade and spread Christianity. This led to the creation of an impeccable cross-cultural mix between the Indians and the Portuguese. These cross cultures were clearly reflected in Indo-Portuguese architecture creating a unique built environment. One of the major characteristic features of Traditional Portuguese architecture and its colonial architecture is the perfect adaptation and amalgamation to its surroundings (Inês, 2015), and the resultant Indo-Portuguese architecture stands as an epitome confluence. Thus, the emerging multi-cultural architecture was indeed acknowledged and accepted by the natives as a neo-typology revolutionising their traditional architecture.

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## 2 RESEARCH METHODOLOGY

The paper aims at comparing the degree of cross-cultural amalgamation of both Indian and Portuguese culture in Indo-Portuguese architecture in the East and West coasts of India by selecting, documenting and analysing two settlements, Fontainhas in Goa and Manapad in Tamil Nadu, from west and east coast respectively.

## 3 CHARACTERISTICS OF PORTUGUESE COLONIAL ARCHITECTURE

Portuguese settlements, on the whole, can be seen along the coasts of Brazil, Africa, Arabia, India, Sri Lanka, Myanmar, Malaysia, China and Japan. These settlements reflected both Portuguese cultures as well as the culture of the locales with which Portugal came into contact with. They kept traversing from one region to another and adapting to the climate and culture of that particular place. This is a very significant factor for the Portuguese to foot their step in many places creating sustainable settlements. However, they followed the architectural style of Lisbon as models of references and incorporated it with the current place. This adaptable nature led to the creation of unique architectural styles as a result of cross-cultural compositions.



**Fig.2.** Portuguese colonisation around the world in the Chronological order.

(Source: [https://commons.wikimedia.org/wiki/File:Descobrimentos\\_e\\_explora%C3%A7%C3%B5es\\_portuguesesV2.png](https://commons.wikimedia.org/wiki/File:Descobrimentos_e_explora%C3%A7%C3%B5es_portuguesesV2.png))

The Portuguese dominated the seas by locating colonial settlements in key coastal areas. These settlements were usually located in elevated grounds following the age-old defence technique of Pre Romans. The settlement was designed in such a way that their territory was well defined and defended. The settlement was divided into two parts, the uptown and downtown. The downtown consists of commercial centres and port while the uptown consists of administrative buildings and residential buildings. Other public buildings like hospitals, town halls etc. were also placed on the uptown. Churches were also considered superior and hence were centrally oriented on the uptown. The road connecting the two areas is the widest of all and will become the main street of the settlement. The overall planning of the settlement gave a sense of identity in the community.

## 4 PORTUGUESE IN INDIA AND THEIR INFLUENCE IN INDIAN CULTURE

The Portuguese influence in India can be understood by studying the arrival of Portuguese on the west and the east coasts and the response of the natives on both sides.

### 4.1 West Coast

Portuguese landed in Calicut, a coastal town on the west coast, in 1498, and started having trade links with the native fishermen, but were denied of the rights to trade by the local ruler. The Portuguese thus had to sail back to Portugal. In 1502, the Portuguese landed again in Cochin, a nearby port town on the west coast, and established a chain of links in Cochin, Cannanore and Pulicat. Forts were set up in Cannanore, Cochin and Quilon. All the trading stations (factories) originally set up were then converted into forts. The Portuguese then moved towards the north in search of horse trade and finally established a permanent settlement in Old Goa in 1510. In 1843, the capital was shifted to Panjim and became the official seat of the Portuguese. They also acquired several territories in Daman, Diu, Bombay and Salsette.



**Fig.3.** Portugal colonies in India in the Chronological order

(Source: [https://de.wikipedia.org/wiki/Portugiesische\\_Kolonialgeschichte#Portugiesisch-Indien](https://de.wikipedia.org/wiki/Portugiesische_Kolonialgeschichte#Portugiesisch-Indien))

The arrival of Portuguese in India brought in along with it a new religion (Christianity) and acculturation. Mass conversion to Christianity took place in certain places, forcibly (Pandurang, 2003). Portuguese orphan girls were sent to their colonies in India and were asked to marry either Portuguese settlers or the natives with high status. On the contrary, the arrival of Portuguese missionaries paved way for the introduction of schools, hospitals and libraries. What initially started off as catechism classes gradually improved the social status of the natives, by guiding them with certain moral values. The Christian missionaries led to the abolishment of various superstitious beliefs and certain practices performed by the Hindus like Sati, widowhood, child marriage etc. Inter-marriages were encouraged and the Black Portuguese were also treated equal and enjoyed equal rights. This system led to the suppression of caste division to an extent and attracted more natives who belong to lower classes, towards Christianity. The people belonging to Indo-Portuguese were called Luso Indians, and their culture is clearly visible in their lifestyle which in turn is reflected in their architecture. The houses in the settlement were arranged in a clustered pattern and were connected by the religious structures. They left their windows open most of the time as they were closely knit and

were safe from theft and other mishaps. They were extroverted in planning having balcaoes and balconies, unlike the local traditional houses which were introverted. They also strictly adhered to certain Portuguese rules like following a strict colour code and name boards in white and blue tiles etc.

#### 4.2 East Coast

The Portuguese then moved Southwards in search of Ceylon (present Sri Lanka). They first arrived at Chennai Port along the East Coast, as they were aware of the fact that St. Thomas was buried somewhere in the East Coast stretch of Tamil Nadu. They also built two massive and elegant churches in Tamil Nadu in 1516 and 1522, during the course of their stay over there. They were also aware of the Pearl Fishing in the Coromandel Coast and this led them to move to South Tamil Nadu to establish settlements in Vedalai and Punnakayal in 1520 and 1544 respectively. The Portuguese then moved towards the port of Tuticorin in 1570. The colonisation on the coastal stretch of South Tamil Nadu helped them to monitor the pearl fishing and trade links between the east coast, west coast, Ceylon, Malacca and other eastern countries. The people of the coastal stretch of South Tamil Nadu welcomed the arrival of Portuguese, countering to the reactions of the people in the West Coast. The support of the paravas (natives) considerably strengthened the position of Portuguese in the Pearl fishery along the coastal villages. Mutual understanding existed between the locals and the Portuguese, as the natives were in need of external help in order to protect themselves from the agony created by the Muslim invaders. The native people, also willingly converted to Christianity unlike the people of the West Coast. However, they did stick to some of their native customs and traditions (Tony, 2016a). Religion played and plays a major role in this area as it acts as a binding element within society. The houses in the Tamil coast are a perfect blend of Tamil and Portuguese cultures, as the houses in these areas are modified to suit their privacy concerns. These houses also follow an extroverted type of planning principle, but the balconies and balcaoes of these houses are semi-covered with screens. This was mainly due to some of the paravas who moved to Ceylon for trading purpose. This trade relation with Ceylon is also reflected in the architecture of that area (Tony, 2016b). The Indo-Portuguese houses in the Tamil coast are massive structures situated in large plots and are highly ornamented as an expression of their status, economy and power. Thus it can be summed up as that the Portuguese rule was more forcefully dominating in the West coast adopting Portuguese culture as such, while on the contrary, though the rule was welcomed by the natives on the East Coast, they adapted the Portuguese culture into their native culture after incorporating their own perceptions.

### 5 INDO- PORTUGUESE ARCHITECTURE

Portuguese adapted well to the environment and culture of the locale, yet followed the same models of reference which led to the creation of Portuguese colonial architecture with certain specific local characteristics. They did not carry plans with them for reference but the models of reference were so powerful that it was imbibed. In spite of the differences between the local conditions and culture, the way the new settlements were designed paved way for a common identity to Portuguese colonial settlements. This rule applied to Indo-Portuguese settlements as a whole also. They followed the

basic principles which were adopted in their colonial architecture but adapted to the local conditions bringing in a new architectural style. Indo-Portuguese architecture can be studied by understanding their characteristic features at the settlement level, street level, individual built form level and element level.

#### 5.1 Settlement Level and Street Level

Indo-Portuguese settlements always had buildings on high-level land which was one of the defence techniques followed by the Portuguese right from the Pre- Roman period which was called the castrensian tradition. The settlements were designed in such a way that they adapted to the morphology of the land. Their main aim was to protect themselves during defence and to have control over their territory. They were usually divided into two levels. The port and the other commercial activities are situated on the lower level while the administration buildings, institution buildings and residential buildings were located at a higher level. Churches were placed at the centre of the uptown and acted as a connecting element. Placing the church at an intermediate level also paved way for visual connection when the settlement was viewed overall. The two levels were connected by the main road. Major activities like church chariot processions etc. also took part in these roads. The settlement planning of Goa is a clear replication of the settlement planning of Lisbon. The overall settlement looks like a semi-circular arch, with the main street connecting the uptown and the downtown.



**Fig.4. a. Map of Old Goa b. Map of Lisbon**  
(Source: a.

[http://www.helmink.com/Antique\\_Map\\_Linschoten\\_Goa/index\\_hr.php](http://www.helmink.com/Antique_Map_Linschoten_Goa/index_hr.php), b. [http://historic-cities.huji.ac.il/portugal/lisbon/maps/braun\\_hogenberg\\_V\\_2.html](http://historic-cities.huji.ac.il/portugal/lisbon/maps/braun_hogenberg_V_2.html))

Portuguese architecture shows a few characteristics of Muslim architecture especially at settlement level, as the Moors were present in Portugal for a certain period. Unlike the other European countries which followed a Roman system of planning, where the street layouts are laid first and the houses were laid later, Muslim influence can also be seen in the settlement planning of Portugal. Accordingly, the houses were laid first and the streets were formed later by connecting them (Pearson, 2008). This nature also led to the creation of narrow winding streets and small alleys through which access was laid to a small cluster of houses. The narrow streets facilitated mutual shading which was responsive to their climatic condition. Settlements with the regular geometric pattern were also built in Portugal during the 14th century. This system was followed in certain parts of India. The primary street of the settlement forms the main structural unit with a small square at the centre of the settlement, where the Church and other important administrative and institutional buildings would be located. Secondary streets were laid perpendicular to the main primary street and encapsulated with residences on both

sides. However in certain places, especially in India, where the development took place rapidly, they did not follow any strict order. Traditional settlement pattern was not followed and a mix of both renaissance and medieval concepts were adopted. However, the settlement pattern whether regular or irregular, the main street was present and the church was placed in the centre. Houses were placed adjacent to the secondary streets and all street intersections had a grotto which acted as a communal gathering space for bonding. Manapad, a coastal village in South Tamil Nadu, India, is one of the best examples which follow a similar settlement pattern. Manapad is said to have had influence from the Portuguese settlements in Ceylon (Sri Lanka), which was once part of India.

## 5.2 Built Form and Element Level

The houses were initially built of mud walls with a thatched roof and later converted into permanent structures with stones. The size of the houses was also increased in due course of time. All the houses belong to Indo-Portuguese style had the same basic unit which was derived from the vernacular architecture of South Portugal. The houses reflect Portuguese architectural characters along with Indian and Muslim influences. The houses of Goa have a strong resemblance with the houses of Algarve, a village in South Portugal. The traditional houses of Goa were all introverted displaying their introverted nature. They had small openings which rarely opened on to streets. The rooms opened into the courtyard. On the contrary with the arrival of Portuguese, their cultural change also brought in a change in the traditional architecture of Goa, converting the introverted plan into an extroverted one. Balcoes, Balconies and verandas were all brought in to make it extroverted. These spaces were used by both men and women day and night and enjoyed their leisure time. The houses had high plinths and ornamental columns in the balcoes. The facades were proportionate and were decorated with lime plasters. Windows and door surrounds were painted in white and the corners were emphasized with pilaster strips. These were all some of the aspects that could be found in the houses of both Algarve and Goa.



*Fig.5.a. Houses in Algarve, b. Houses in Goa.*

(Source: a.

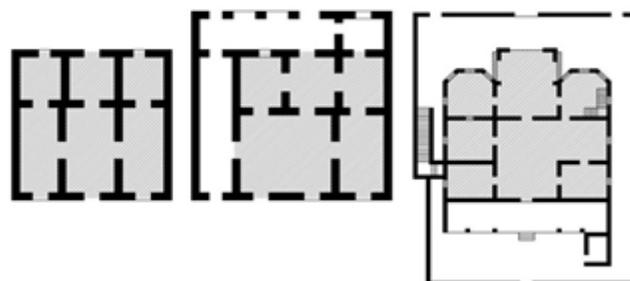
[https://en.wikipedia.org/wiki/File:Centro\\_de\\_Lagos.png](https://en.wikipedia.org/wiki/File:Centro_de_Lagos.png))

The height of the plinth and the detailed ornamentations in the façade displayed the wealth and status of the owner. Another character which is peculiar to Indo-Portuguese architecture in Goa is the usage of oyster shells in window shutters instead of glass. Diffused light enters the building when the light gets reflected in these shutters.



*Fig.6.Oyster shells in window shutters.*

Muslim influence in the decorative elements can be seen through floral and vegetative patterns. The houses also had certain decorative or ornamental elements which symbolically conveyed certain meanings. For example, the presence of a rooster in the roofs of houses, wells etc. was to represent that they belonged to the Portuguese origin, as roosters were the national bird of Portugal. Another element which is present in most houses is the statue of a soldier, which represents that a person from their family belongs to the army. Another distinctive character of Indo-Portuguese houses in Goa is the colour code followed in the buildings. The strict instruction was given that all the houses should be painted in bright colours except white, which was limited only to Church and administrative buildings. Azulejo (painted tin-glazed ceramic tiles panels) in white and blue, were present at the entrance of all houses and were used as name boards. The use of porcelain and ceramic tiles indicate the trade link between Goa, China and other Asian countries. Unlike the rest of the Indo-Portuguese colonies in India, the Indo-Portuguese houses in the Tamil coast were not built by the Portuguese people but by Luso-Indians or people belonging to the Tamil community itself (arrived at the field survey). The locals welcomed the Portuguese and looked upon them as Saviours, as the Portuguese promised to protect them from the Muslims. The locales were taken to Sri Lanka by the Portuguese and later even owned land in Sri Lanka. The locals then took imprints from Ceylon-Portuguese colonial architecture and replicated it in the Tamil coast. They were then modified slightly in order to achieve their level of privacy. The basic unit plan followed in Manapad is an exact replica of the traditional plan followed in Portugal and its colonial towns.



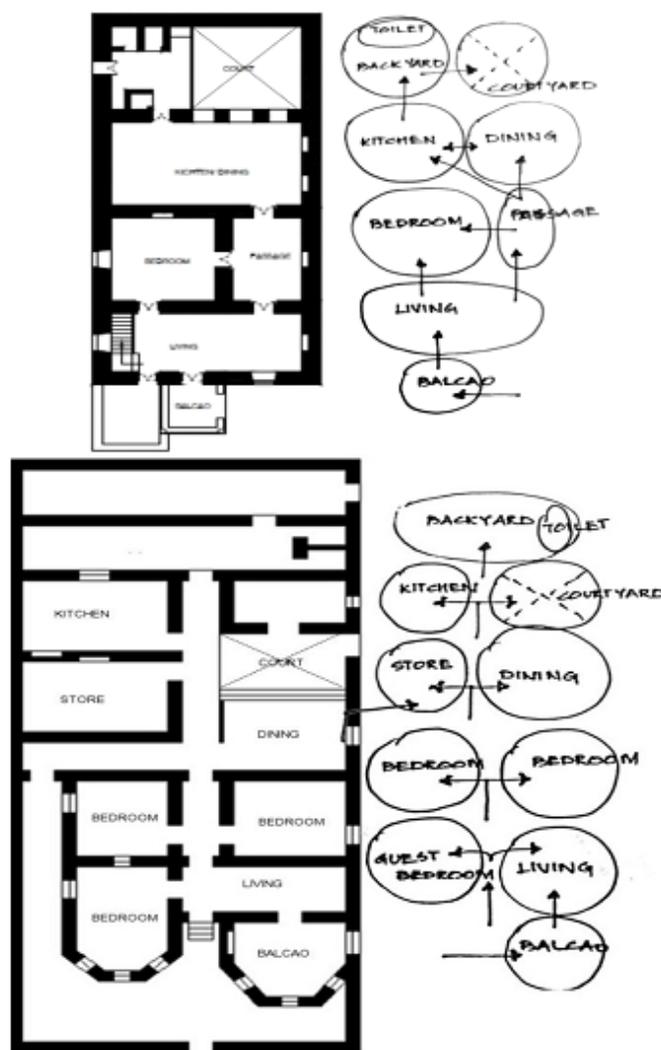
*Fig7. House plans of Ilha de Mocambique, Algarve and Manapad respectively from left to right*

The balcoes in all houses were semi-covered with screens. Louvred shutters in the upper level and normal shutters in the lower level is a character which is native to that region.



**Fig.8.** Wooden screens in courtyards, balcoes and louvres in the window.

Indo-Portuguese houses in Manapad are all individually compounded, unlike other Portuguese houses (Tony, 2017). This might be because of the Colonial influence from Sri Lanka. All the houses were of massive structures and were heavily ornamented as the Paravas wanted to display their wealth and status and to prove that they are different and were higher in status from the rest of the Paravas. Houses were built with locally available materials with lime plastering (Tony, 2016c). Conch shells and even undersized pearls were grounded and used for plastering in order to achieve good quality lime. Wood, especially teak was used for the false ceiling in the Tamil coast as they were available in abundance to them from Sri Lanka. The houses of Manapad also have certain decorative elements which symbolically convey certain meanings. For example, decorative elements like elephants or horses symbolically indicate that they had trade links related to such items. Thus we can come to an understanding that, Portuguese influences among the natives of the West and East coasts of India are different from one another. The Portuguese were more dominant in the West coast and hence the architecture in Goa and other places in the West coast adhered to certain rules and regulations that were laid by the Portuguese Viceroy. While on the contrary, on the East coast especially in the Tamil coast, the Portuguese and the locales had a cordial relationship maintaining their identity to some extent. This nature is clearly reflected in their built forms. The people in the Tamil coast were too deeply influenced by the Portuguese that they were ready to even change their identity and hence adopted the Colonial Portuguese architecture and brought them to their native lands with slight variations. The traditional Colonial Portuguese architecture was modified to suit their privacy needs. These changes can be seen only by the introduction of certain elements like screens etc. The houses of Goa and Manapad display the same spatial layout and physical form, however, the striking difference between the architecture of the two Indo-Portuguese colonies can be seen only in the scale and the level of ornamentation done in the buildings.



**Fig.9.** House plans of Goa and Manapad.

## 6 RESULTS AND DISCUSSION

The Portuguese presence in India is still reflected in various walks of life like arts, lifestyle, language, religion and above all through their built structures. Many of the soaring Churches that are still famous are all reminiscence of the Portuguese rule in India. The monopoly of the Spice trade, spreading Christianity and having full control over the Indian Ocean where the prime aim of Portuguese arrival in India. In order to meet their objectives, they began colonising places on the West coast, which were of high potential. The culture of the natives of the west coast was very strong and their architecture was introverted which reflected their orthodox religion contradicting to Portuguese culture and architecture. The Portuguese hence interposed their culture and religion among the natives only by force. Intermarriages were the prime reasons for cultural miscegenation and this resulted in the creation of Indo-Portuguese architecture. On the contrary, the Portuguese came to the West coast only to have control over the sea, but later learned about Pearl fishing and settled in the Tamil coast. The Portuguese were welcomed by the Tamil people as they considered them as saviours, who will save them from the torments they had to undergo because of the Arab rulers. The Portuguese impact on the Tamil coast is very intense that the natives were ready to even change their

native identity. The Indo-Portuguese style of houses present in the Tamil coast was built by the Tamil people, taking imprints from the Indo-Portuguese houses in Sri Lanka with few changes in order to adapt to their culture. These houses were even accepted later as one of their vernacular architecture. Thus it can be said that the houses in the East coast are a perfect blend of both Indian and Portuguese culture, whereas the houses in the West coast reflect more of Portuguese culture than of Indian culture because the culture of the inmates itself reflects more of Portuguese than of Indian which is due to intermarriages.

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