

# architecture institutions and change

---

## Proceedings of the Society of Architectural Historians Australia and New Zealand Vol. 32

Edited by Paul Hogben and Judith O'Callaghan

Published in Sydney, Australia, by SAHANZ, 2015  
ISBN: 978 0 646 94298 8

The bibliographic citation for this paper is:

Guedes, Pedro. "Ecstasies of Global Reach: Catholic Missionary Building and Settlements before 1750." In *Proceedings of the Society of Architectural Historians, Australia and New Zealand: 32, Architecture, Institutions and Change*, edited by Paul Hogben and Judith O'Callaghan, 231-242. Sydney: SAHANZ, 2015.

All efforts have been undertaken to ensure that authors have secured appropriate permissions to reproduce the images illustrating individual contributions. Interested parties may contact the editors.

## **Ecstasies of Global Reach: Catholic Missionary Building and Settlements before 1750**

*In 1702, Jesuit polymath Heinrich Scherer completed his multi-volume Atlas combining innovations in cartography, advanced mapping and intricate allegorical tableaux with information gathered from the worldwide network of cultivated Christian missionaries.<sup>1</sup> The work anticipated that the whole world, despite odd setbacks, would soon come under the folds of the Catholic Mother-Church.*

*The paper will take Scherer's vantage point, looking at the work of missionaries, as founders of settlements and institutions designed to graft new social and spiritual order onto the lives of Asians, Africans and Americans. Two main areas will be highlighted, one in Southern India, the other, in deep hinterlands of South America. In these two vastly different contexts doctrinal rigidities shaped environments and buildings, responding to prevailing social and climatic conditions.*

*In South India Catholic missionaries found cosmopolitan societies, tolerant of religious diversity while observing the highly structured social stratification of caste systems. Here, in areas outside European fortified enclaves, church buildings and the ways in which they were used evolved to embrace different religious expectations, with formal solutions adapted to local building practices, creating rich hybrid architectural solutions beyond conventional norms.*

*In South America, the 'Spiritual conquest' involved comprehensive restructuring of indigenous societies by settling hitherto nomadic populations in paternalistic Reducciones outside the influence of Spanish or Portuguese administrative control. The theory was that people brought into these villages would be Christianised away from the bad influences and exploitation of unscrupulous settlers. The missionaries' ambition was to create a self-sufficient new order based upon common ownership and lives regulated by religious observance and ritual, resistant to outside pressures.*

Two centuries before Scherer compiled his Atlas, the Portuguese and Spanish had begun the process of European Global expansion with the ‘discovery’ of the Americas and the sea route to India (Figure 1). In addition to the promise of untold riches from exotic lands, the prospect of gaining converts to Christianity was a major motivation for the two pious Iberian kingdoms.<sup>2</sup>



**Fig. 1** Pages from Heinrich Scherer SJ Atlas Novus showing the light of Faith banishing darkness at the global and continental scale. Scherer, *Geographia Hierarchica*, 1737. Frontispiece and plates opposite 34 and 112, <http://bdh-rd.bne.es/viewer.vm?id=0000001059>.

Papal Bulls, formalised in the Treaty of Tordesillas (1494) divided the non-Christian world between Spain and Portugal, charging their monarchs to convert infidels and heathens and to bring wayward Christians back to the Church of Rome. As these outward-looking initiatives were taking place, Europe was convulsed by ruptures within the Church brought about by Protestant dissent, making the task of defending and promoting orthodoxy and dogma all the more urgent for Catholics. As part of the Counter-Reformation's fervor of renewal, existing Religious Orders were given added impetus to proselytise in new lands, the Inquisition was reinforced, and the Society of Jesus founded, creating an elite, militant evangelising force of highly educated intellectuals responsible directly to the Pope. Thus enabled, the Jesuits were ‘in the field’ in the Portugal's Asian enclaves and in the Spanish Empire of the Americas by the mid-1500s.

Decades before the Jesuits entered the arena in the 1540s, clergy had ventured deep into territories beyond the jurisdiction of Spanish and Portuguese lay authorities. In Mexico mendicant orders established missions, overthrowing accepted beliefs and building gigantic ecclesiastical establishments to replace the institutions of previous cultures.<sup>3</sup> In Africa, the Portuguese helped establish the short-lived Christian Kingdom of Congo, while Vasco da Gama's son, Cristóvão, crusaded against Muslim invaders in Ethiopia, believing that he was building lasting links with the long-lost Christian Empire of Prester John.<sup>4</sup>

## India

In India, beyond small fortified trading outposts, Franciscan and other early missionaries had converted some local ‘St Thomas’ or Syrio-Malabar Christians, an ancient community in Southern India owing allegiance to the Patriarch of Antioch. Missionaries had also

evangelised among lower-caste fishermen along the Coromandel and Malabar coasts, living in these communities and building modest churches that were progressively made into permanent structures of stone.

Arriving on the West coast of India in 1498, the Portuguese found many small principalities with shifting alliances and, exploiting these differences, gained permission to set up trading posts. In some situations, like Cochin's, they were allowed to fortify their commercial settlement, which then became their first vice-regal capital (before Goa). These enclaves provided bases for missionaries to work outside areas of immediate political and military control, often with the support of local rulers tolerant of religious diversity and seeking Portuguese military help for their countless internal conflicts. In some cases land was made available for churches and occasionally, revenues from settlements were attached to the land grant. A penumbra of influence slowly developed, reinforced by funds from the Portuguese Crown under the *Padroado* system that gave Portuguese monarchs the responsibility of appointing and funding clergy throughout their wide, hemispheric 'dominions' in Africa and Asia.<sup>5</sup> In areas beyond these enclaves, permanent churches replacing temporary structures initially followed the form and arrangement commonly found within the fortified settlements. Sadly, the Dutch and British bombardments destroyed those in Cochin, by all accounts different to those of Goa and the 'Provinces of the North'.<sup>6</sup> However, some sixteenth-century churches do survive and can be taken to represent the original type.<sup>7</sup>

Invariably churches built under Portuguese influence were conceived of as plastered masonry structures, even in areas such as Kerala where timber architecture predominated. Typically, they had crude versions of conventional Renaissance façades with three doors, fronting a simple nave, with timber roof-trusses spanning between masonry walls covered in Mediterranean-style, semi-cylindrical roofing tiles. The central door was significantly larger than the two on either side and in two existing cases have Manueline mouldings suggesting early sixteenth-century foundation.<sup>8</sup> The three-bay façades have formal architectural treatments with engaged columns or pilasters, sometimes paired, arranged in tiers. Each side-bay terminates in a scrolled volute masking the roof slope. A symmetrical central gable, in tune with the lower tiers, crowns the composition. In some churches an arch separates the nave from a barrel-vaulted chancel, volumetrically articulated with its own recognisable separate roof. Sacristies and other ancillary accommodation are often added to the sides of the nave. Bell-towers are generally separate structures, seldom integrated into the composition. From the mid-sixteenth-century accommodation for priests was provided in two-storied buildings with verandahs close to the church.<sup>9</sup>

Outside Cochin's walls, but under its close influence, two churches fit this type, Our Lady of Hope, Vypeen and Our Lady of Life, off Bazar Road in Mattacherry. The first, at Vypeen, had an urban arrangement similar to contemporary churches in Portugal. Its façade dominates an open, rectangular public space that was part of the small fishing village facing the city across a wide and busy waterway. On axis with the central doorway of the church there is an octagonal *cruzeiro*, a domed stone monument surmounted by a cross. This feature is typical of the great majority of early churches in Kerala and possibly derived from pre-Portuguese

religious precincts in the area. It migrated to other parts of Portuguese India and can also be found in Brazil.<sup>10</sup> The whitewashed and bright Vypeen church façade was clearly intended to be visible from the city of Cochin as a beacon on the opposite shore (Figure 2).



**Fig. 2** Our Lady of Hope, Vypeen (top l). Our Lady of Light, Mattacherry (top r). St. Thomas, Thumpoly (bottom l). St. Sebastian, Paluruthy (bottom r). Note the evolution of the five bay façade from the conventional Renaissance schema. Dating is difficult, but the church in the top right has a Manueline doorway suggesting that part of the façade was completed in the sixteenth century. Photographs by Pedro Guedes.

In Mattacherry the church building and its relationship to its *cruzeiro* is similar to Vypeen, but its urban setting is treated entirely differently. The church is within a compound similar to that of a Hindu temple, with a gateway to the street. This intensely commercial part of Cochin was never under direct Portuguese rule so it is not surprising that its morphology conformed to local usage.

From the 1540s onwards, the Jesuits began to take the lead in advancing Catholicism in India.<sup>11</sup> They were very successful, particularly among low-caste coastal dwellers, exemplified by Francis Xavier's efforts among the pearl-fishermen of the Coromandel Coast. However, the relationship between the Catholic Church and the *Cristãos da Serra* – (Christians of the mountain), was more complicated. Syrio-Malabar Christian communities owed allegiance to the Patriarch of Antioch and although relations were amicable in the early days, with Jesuits being asked to help design their churches, this relationship deteriorated. Complex forces were in play, brought to a head by the heavy-handed enforcement of Roman dogma upon the local Christians. The Synod of Diamper in 1599, presided over by the forceful Archbishop of Goa, Dom Aleixo de Menezes, brought the local church strictly under the Portuguese *Padroado*, assuming rights to appoint clergy, imposing many far-reaching doctrinal changes and severing contact with Antioch.<sup>12</sup> Church records and literature were burnt as heretical. Resentment against this zealotry of Catholic priests, some of them Jesuits, resulted in the *Cristãos da Serra* seizing control of their own affairs in 1653 at the church in Mattacherry and reinstating clergy in contact with the Patriarch of Antioch. After the Dutch expelled the Portuguese from Cochin in 1663, affairs were further complicated by negotiations with Rome for Carmelite priests to come to India to help heal rifts in the churches.<sup>13</sup>

During this period of changing leadership and allegiance, churches fell into several groupings with discernable and distinct characteristics. Some, built along the coasts followed the established Portuguese pattern with minor variations. In many cases they had their principal façades facing a formal, rectangular public space or *terreiro* with one side open to the sea to provide a beacon to fishermen. In these churches, doctrinal issues and ritual demands were probably not influenced by the memory of forms of worship different from the Latin rite.<sup>14</sup> Good examples include Our Lady of Hope, Vypeen, St Thomas, Thumpoly, and St Lawrence, Edacochin.



**Fig. 3** Interior, St Mary's Syrio-Malabar Catholic Church, Chamapakulam, Alappuzha (top l). Note the lack of pews and the Chancel arch with vestiges of murals. Verandah, St. Sebastian, Paluruthy (top r). Church of the Blessed Virgin, Ramapuram (bottom l). St. Mary's Church, Cheripally (bottom centre & r). Here one side has a verandah with typical Kerala timberwork. The church has a prominent and separate roof over its barrel-vaulted chancel. It shares characteristics with Hindu temples with its 'temple wall' and brass flagpole. Photographs by Pedro Guedes.

An innovation, present even in coastal churches, possibly adapted from earlier Christian buildings in Kerala was the introduction of extra bays to the façade as terminations to verandahs on one or both sides of the nave, creating covered spaces for informal gatherings close to the church with secure cross-ventilation even during monsoonal downpours (Figure 3). This innovation is claimed by some Portuguese scholars to have been introduced by Padre Giacome Finicio SJ, a celebrated mathematician and cosmographer, who turned his skills to building in the early seventeenth-century. An early example of his work could be St Thomas, Thumpoly south of Cochin.<sup>15</sup> Here, the extra bays are less fully integrated into the composition as are later seen at St Sebastian, Paluruthy, where the five bays form a well-considered hierarchical arrangement. The idea was so effective in the hot-humid climate that it spread beyond Kerala to Ceylon (Sri Lanka), inaugurating formal arrangements well-adapted to tropical conditions and in tune with Hindu ideas of using the external parts of buildings within sanctuaries as social spaces.

Several churches that may have originated or returned to the Syrio-Malabar rite are set in precincts surrounded by walls, detailed exactly as those in Hindu temples, including regularly spaced stone oil lamps to illuminate the sacred perimeter. Gateways to these precincts are often gabled with architectural features of European origin while some of the roof forms and their distinctive elaborate carpentry and detailing are clearly based on local

building traditions. A good example of such a church fusing disparate traditions would be St Mary's Orthodox Church, Kottayam, Cherrypally, dated 1579. These precincts appear to have been planned to allow worshippers to circumambulate the free-standing church, an arrangement probably also borrowed from Hindu practice.

Many churches betray traces of complex adjustments to changing doctrinal and ritual practices. The uses of external space in celebrations and feast days blend ideas from sixteenth-century Europe, like the staging of educative pageants and enactments employed by the Jesuits, to processions that share characteristics with Hindu festivals.

Typically façades are austere, abstract compositions without sculptural embellishment, only some use sculpture in low relief. It has been suggested that the Catholic Church deliberately discouraged stone sculpture in the round to avoid confusion with idolatry of Hindu temples.<sup>16</sup> However, in the interiors, elaborate, classically composed altars of painted timber, enriched with stucco and gilding, were often populated by polychrome figures of important saints, angels and putti. Traces of elaborate murals exist in some churches, particularly on the walls of chancels.

As in other religious precincts, shoes are removed before entering churches. Congregations sit on the floor or stand during services. Tall oil lamps similar to those in Hindu temples occupy prominent positions and worshippers use the oil for personal devotional rituals. Another distinctive feature in South Indian churches is the prominent placement of tall, brass clad flag-poles, many of them recently erected in exact mimicry of such elements in Hindu temples. Less fortunate is the expansion and rebuilding of many churches in jarring, concrete-Gothic or flamboyant jazz-modern styles, seen on a recent visit to Kerala.

After the first fifty years of self-assured zeal, curiosity about other religions, cultures and languages grew among Jesuits and, by 1600, subtle thinkers like Roberto de Nobili were pushing the Church's boundaries. De Nobili adopted vegetarianism, joined Hindu Brahmins in theological debates, wore the garb of a Sannyasin and mastered Sanskrit and Tamil. He thus alarmed ecclesiastical authorities in Goa, where the Inquisition held sway. However Pope Gregory XV, who concluded that his practices did not imply any adoption of superstitious ritual, endorsed his methods.

Later, from the vantage point of 1700, our cartographer Scherer shows western coastal India fringed in hopeful light, with little hint of the setbacks encountered by his fellow Jesuits by then excluded from any territories controlled by the Dutch, but even they eventually tolerated Catholicism if it came without the influence of the Portuguese *padroado* or the Jesuits.

## Americas

In the New World, Spanish conquistadores and the infectious diseases they brought with them overwhelmed existing civilisations. The advanced infrastructures of the Aztec, Mayan and Inca Empires were coopted to facilitate movement across vast distances, allowing the Spanish to establish an integrated territorial empire stretching along the Pacific Ocean and

inland in a remarkably short time. Whereas the Portuguese, established in Brazil under the Treaty of Tordesillas (1494), controlled the Atlantic coast of South America and built only a few coastal settlements to service their very profitable sugar plantations worked by West African slaves.

Early Spanish brutality against indigenous populations in Mexico provoked the Dominican friar Bartolomé de las Casas to denounce both enslavement of indigenous peoples and abuses in the *encomienda* system of tribute labour. In heated debates and writings he claimed that, like other humans, they had souls and therefore rights as subjects of the Crown. Charles V, Holy Roman Emperor and King of Spain, heeded his arguments, enacting legislation to protect indigenous populations from the worst abuses, giving missionaries added responsibilities for their care.<sup>17</sup>

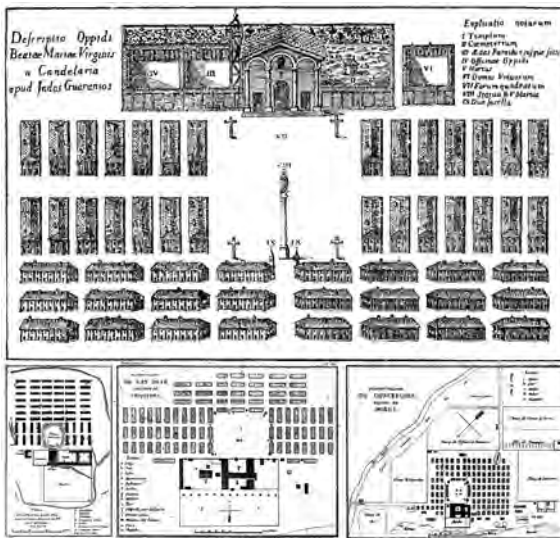
In the 1540s, enormous deposits of silver were discovered at Potosí (Bolivia). The mines established there soon became a major financial engine of the Spanish American Empire. Renegade Portuguese settlers, (*Bandeirantes* from São Paulo and other centres) used rivers from the mountains feeding the Rio de la Plata basin to raid indigenous populations in the interior, searching for slaves and minerals. These incursions, extending Portuguese influence into Spanish dominions, were seen as a threat to the mining wealth of Potosí.

In the early 1600s, even though the crowns of Spain and Portugal were united (from 1580-1640), *Bandeirante* raids became seriously unsettling. To allay this threat, these interior border territories became the focus of a complex and remarkable missionary endeavor. The Catholic Church established a 'buffer-state' exclusively under Jesuit control, answerable to their General in Rome. To protect the interests of the Spanish crown (insofar as indigenous populations were seen as its subjects) Jesuit priests in this area would persuade the nomadic Tupi, Guarani and other Amerindian tribes to settle in towns, under Jesuit control that would eventually form an interlinked cordon as a frontier.<sup>18</sup>

The Jesuit settlements, known as *Reducciones*, conformed to layouts loosely based on standardised Spanish towns designed according to the *Leyes de las Indias*.<sup>19</sup> They did however have their own unique features. Here vibrant economies were established based on the cultivation of export crops such as cotton as well as horse and cattle ranching. Industries such as spinning and weaving, ceramics, iron smelting, brass-founding, wood-carving and the production of devotional objects for the church flourished and the production of building materials such as tiles and bricks transformed ephemeral settlements into permanent towns.<sup>20</sup> Outsiders were forbidden to remain in these territories for any length of time and were obliged to report to the Jesuits running the *Reducciones*. Traditional chieftains were given status with respect and civil powers. Native languages were taught and transliterated, with printing presses set up to preserve them. These artificially created societies were based upon Utopian ideas derived from the writings of Thomas More and other radical thinkers.

The Jesuits sought to meld tribal customs and beliefs with a regime of all-encompassing Christian observance (Figure 4). Communal aspects of tribal traditions were translated into





**Fig. 4** Plans of Jesuit *Reducciones*. Note the similarity and regularity of the layouts investing the Square in front of the Church with a powerful presence providing a public space for elaborate baroque pageants, processions and musical performances. Candelaria, from Pablo Hernandez, *Organizacion Social de las Doctrinas Guaranies* (Barcelona: Gili, 1913), Plates after 106 (top). San Ignacio Mini, Hernandez 1913 (bottom l). San José, Chiquitos (bottom centre). Concepcion, Moxos, Centre and Right from Alcide d'Orbigny, *Amérique Méridionale*, vol. 9, Atlas (Paris: Pitois-Levrault, c. 1842), "Vues", Plate 24 (bottom r).

economies of sharing, taken by some to have been early examples of a communistic or even dystopian ideal.<sup>21</sup> The settlements had their own laws and police and were among the first to abandon the death penalty. Militias were organised to defend them from *Bandeirante* raids and drilled in the use of firearms, cavalry, artillery and armed river-craft. At first these militias raised concerns in nearby Spanish settlements but proved loyal defenders of Spanish interests in the defense of Buenos Aires.

The standardised layouts of each settlement focused on a prominent church with its principal façade facing a large empty rectangle with dwellings arranged in regular rows on the three other sides. To one side of the church a cemetery, a hospital and accommodation for widows and the disabled were situated and on the other were the priests' house or college, school-rooms and stores for provisions and merchandise.<sup>22</sup>



**Fig. 5** View of life in the Guarani settlement of Moxos 70 years after the expulsion of the Jesuits. The church is on the left with its Salomonic column. People are conducting a religious celebration combining Amerindian dress, dance and musical instruments with Catholic ritual. D'Orbigny, *Amérique Méridionale*, vol. 9 (c. 1842), "Coutumes et usages", Plate 10.

Permanent buildings had wooden structures of posts, beams and sloping rafters with partition walls in adobe protected from the rains by generous verandahs and overhangs. The churches were larger, more adorned buildings with enormous timber columns carved into Solomonic spiral forms (Figure 5). They were richly ornamented with the principal polychrome façade set back under the protective overhang of an open gable. Some have

argued that Jesuit designers deliberately chose to make the buildings of the *Reducciones* resonate with the large communal buildings made by Amerindians in their forest clearings.<sup>23</sup> Surrounding the settlements were carefully laid out, irrigated fields as well as paddocks and accommodation for cattle, sheep, pigs and horses. The total population of each settlement was often larger than Spanish towns in the region.<sup>24</sup>



**Fig. 6** View and plan of Estancia Santa Catalina, one of the agricultural establishments that helped finance the University in Córdoba and other Jesuit enterprises in *Paraquaria* (l). *Manzana Jesuitica* in Córdoba. View of the church front, left unfinished after the expulsion of the Jesuits (r). Both plans from Juan Kronfuss, *Arquitectura Colonial en Argentina* (1920). Photographs by Pedro Guedes.

Supporting these establishments was a complex administrative structure in direct communication with Rome, bypassing local bishops (Figure 6). New missionaries from the intellectual elites of Catholic North and Central Europe brought diversity. In their transition to the missions, the priests would pass through the city of Córdoba (now in Argentina) where the Jesuits had established a mother-house and University in the *manzana jesuitica*, covering a whole city block close to the *Plaza de Armas*.<sup>25</sup> Here aspirant seminarians were schooled in theology and the work of priests in the field, as well as in languages, botany and other sciences.

The University, its seminary and facilities included a large, well-stocked library and ongoing, ambitious programs of building work financed by earnings from their rural estates. These *Estancias Jesuíticas* in the Córdoba region had impressive ecclesiastical and industrial buildings. Important examples include Santa Catalina, Alta Gracia and Jesus Maria, where advanced, integrated industrial complexes could draw upon the labor of at least 500 African slaves. They manufactured iron products, bred mules for the mines in Peru and produced wool and cotton cloth, wine, oil and other marketable agricultural items. The *estancias'* magnificent architecture, similar to medieval Europe's Cistercian abbeys, was carried out on an optimistically large scale.<sup>26</sup>

The outlying Jesuit *Reducciones*, stretching along Spain's unmarked frontier with Brazil, depended heavily on links to Córdoba, which provided schooling, intellectual underpinning and support for their enterprise, not least in dealing with the Spanish inhabiting nearby towns who continually attempted to undermine their missions. They also depended on direct

communication with Rome, which provided dissemination of their reports and scientific work, recorded in carefully edited and published 'Yearly Letters' circulated throughout Europe in the seventeenth and eighteenth centuries.<sup>27</sup>

Our cartographer, Scherer, attached great importance to the example given by the Jesuit missionaries in *Paraquaria* – the vast territory of Paraguay many times the size of the current state that bears its name. In the blank ocean spaces around his map of South America, he shows Jesuit missionaries arriving from the Atlantic under divine protection to do their good work in forging a new society among Amerindians. His careful choice of a map projection showing all continents privileges the Americas with a prominent position and by far the largest areas of territory claimed as securely within the light of the Church.

However the Jesuits were vilified for holding too much power and concealing vast wealth, leading to their expulsion from various European countries and overseas possessions, starting in 1759 with Portugal, followed by France in 1762 and Spain in 1767. Their independence from Governmental authority also irked monarchs bent on absolute power. So, after their expulsion, the *Reducciones* went into decline. Their legacy was well grounded though, particularly in Bolivia where Hans Roth working in the late twentieth century, made enormous efforts to revive local crafts and industries, providing rebuilt settlements an economic future.

## Coda

The Jesuits in Kerala, working as missionaries in environments with vigorous cultures and established systems of belief, went through messy processes of combining and modifying local forms with imported ideas to evolve a unique architecture. Yet they had to deal with complex theological issues that they were unable to reconcile through adaptation, creating ruptures provoked by overzealous impositions of orthodoxy at the Synod of Diamper. Not only did they oppose what they regarded as heretical practices among Syrio-Malabar Christians, they also had to coexist and compete with 'idolatrous' Hindus as well as Muslims and Jews. This made it difficult to avoid clashes with the institution they represented, its cornerstone being a belief in a single, orthodox truth with obligations to confront and overcome those who held different views. In individual cases such as that of di Nobili, *accommodatio* offered prospects, but where Jesuits pursued their proselytising beyond limits acceptable to local populations, in places as far apart as Ethiopia and Japan, their initially promising expectations ended in rejection and even martyrdom. In India their ambitions of exclusivity stood little chance, but judging from the vigour with which Catholic congregations are expanding today, the seeds planted in the sixteenth century have certainly flourished and occupy roughly the area marked out for them by Scherer.

In the Jesuit Province of *Paraquaria* they created *Reducciones* crafted uniquely to an evangelising purpose. They did this through a revolutionary program of replacing tribal life with their highly structured and paternalistic 'Christian' culture. At their disposal was the full arsenal of baroque Art, honed and perfected by a Church that understood its potential

for conveying the Christian message. In Córdoba and Lima, paintings and sculptures were commissioned in which inoffensive stylistic drift was allowed but engravings from Europe provided iconographic control. Music was composed for voice and enriched by indigenous instruments.<sup>28</sup> All these arts were brought together in splendid pageants, processions and dramas enacted in the major public spaces of the *Reduções*, involving the populace not only as spectators but also as participants.

This work of missionaries, whose agendas differed vastly to those of military and merchant communities in new lands, has often been ignored in studies of European architectures beyond Europe. In some situations, the architectures that resulted from these unique contacts blended approaches to building that were fresh and innovative, often far beyond those made in the more homeward-looking trading settlements. In the case of the South American missions the Jesuits engaged audaciously with ideas that subverted administrative and social orders to create comprehensive institutions and built environments suffused with a new spiritual symbolism.<sup>29</sup>

- 
- 1 Heinrich Scherer, *Geographia Hierarchica sive status Ecclesiastici Romano-Catholici per Orbem Universum...* volume 2 of *Atlas Novus...* (Frankfurt: Joannem Casparum Bencard Bibliopolam, 1737).
  - 2 C. R. Boxer, *The Church Militant and Iberian Expansion, 1440-1770* (Baltimore: Johns Hopkins, 1978). See also C. R. Boxer, *The Portuguese Seaborne Empire, 1415-1825* (New York: A. A. Knopf, 1969).
  - 3 George Kubler, *Mexican Architecture of the Sixteenth Century* (New Haven: Yale University Press, 1948). See also John McAndrew, *The Open-Air Churches of Sixteenth Mexico: Atrios, Posas, Open Chapels, and Other Studies* (Cambridge, Mass.: Harvard University Press, 1965).
  - 4 The legendary kingdom of Prester John was imagined in remote parts of Africa or Asia. Eventually, its location condensed in the mountains of Ethiopia and emissaries were sent from Portugal to unite this Coptic Christian kingdom with the Mother Church. See Charles E. Nowell, "The Historical Prester John," *Speculum* 28 (1953): 435-445. See also Taddesse Tamrat, "Ethiopia, the Red Sea and the Horn," in *The Cambridge History of Africa Volume 3: From c.1050 to c.1600*, ed. Roland Oliver (Cambridge: Cambridge University Press, 1977), 98-182.
  - 5 Malyn Newitt, "Formal and Informal Empire in the History of Portuguese Expansion," *Portuguese Studies* 17 (2001): 1-21.
  - 6 Paulo Varela Gomes, *Whitewash, Red Stone: A History of Church Architecture in Goa* (Delhi: Yoda Press, 2011).
  - 7 Helder Carita, "Arquitectura indo-portuguesa na região de Cochim e Kerala: modelos e tipologias dos séculos XVI e XVII" (PhD thesis, Universidade do Algarve, 2006), 142-175.
  - 8 Dating churches is problematic. Most written records have been lost. They were built and substantially altered or renewed over long periods. Current names in English are used.
  - 9 Carita, "Arquitectura indo-portuguesa ...," 197-199. Carita argues that verandahs entered the vocabulary of European Colonial architecture adapting forms from vernacular South India in sixteenth-century Catholic parish buildings.
  - 10 Beyond Kerala, such elements are prominent at São Paulo in Diu, Gujarat and the Convento de São Francisco de Assis, Olinda, Brazil.
  - 11 Boxer, *The Church Militant and Iberian Expansion, 1440-1770*, 49-53.
  - 12 Sanjay Subrahmanyam, "Dom Frei Aleixo de Menezes (1559-1617) et l'échec des tentatives d'indigénisation du christianisme en Inde," *Archives de sciences sociales des religions* 43 (1998): 21-42.
  - 13 Joseph Mullens, *Missions in South India* (London: W. H. Dalton, 1854), 119-135.
  - 14 Paulo Varela Gomes and Rui Lobo, "Arquitectura de los jesuitas en Portugal y en las Regiones de Influencia Portuguesa," in *La arquitectura Jesuítica – Actas del Simposio...*, ed. Isabel Álvaro Zamora et al. (Zaragoza: Universidad de Zaragoza, 2010), 497-521.

- 15 Carita, "Arquitectura indo-portuguesa..." 195-6.
- 16 S. Jeyaseela Stephen, *Caste, Catholic Christianity and the Language of Conversion: Social Change and Cultural Translation in Tamil Country, 1519-1774* (Delhi: Kalpaz Publications, 2008), 331.
- 17 Bartolomé de las Casas, *Breuisima relacion de la destruycion de las Indias...* (Sevilla: en casa de Sebastian Trugillo, 1552). In this work, Las Casas outlined the atrocities committed by the Spanish against Amerindians. His agitation contributed to enlightened laws being enacted to protect these populations.
- 18 Philip Caraman, *The Lost Paradise: The Jesuit Republic in South America* (New York: Seabury Press, 1976).
- 19 *Leyes de las Indias*: A collection of laws promulgated by the Spanish Crown to regulate the social, political and economic life in their American Dominions. Included in the legislation (Book 4) were descriptions of how towns were to be laid out with precise instructions on the rectilinear layout of streets and city block arrangements and the position of the major public square. All the laws were collected and first published in Madrid in 1681. See Supremo Consejo de las Indias, *Recopilación de las Leyes de los Reynos de Indias* (Madrid: viuda de D. Joaquim Ibarra, 1791).
- 20 For a description of the economy and administration of the *Reducciones*, see Alicide d'Orbigny, *Voyage dans Amérique Méridionale*, 3.1 (Paris: Bertrand, 1844), 38-48.
- 21 Michel Foucault found the Jesuit project in *Paraquaria* worthy of note as a rare and complete example of a 'Utopian' imposition on a population whose traditional culture had been erased and replaced by their totalising vision:
 

... each family had its little cabin along these two axes and thus the sign of Christ was exactly reproduced... The daily life of individuals was regulated, not by the whistle, but by the bell. Everyone was awakened at the same time, everyone began work at the same time; meals were at noon and five o'clock, then came bedtime, and at midnight came what was called the marital wake-up, that is, at the chime of the churchbell, each person carried out her/his duty.

Foucault, Info, 2015, Michel Foucault, "Of Other Spaces, Heterotopias," *Architecture, Mouvement, Continuité* 5 (1984): 46-49, <http://foucault.info/documents/heterotopia/foucault.heterotopia.en.html> (accessed May 11, 2015).
- 22 Pedro Querejazu, ed., *Las Misiones jesuíticas de Chiquitos* (La Paz: La Papelera, 1995). See also Sandra Negro and Manuel Marzal, eds., *Un reino en la frontera: Las misiones jesuitas en América colonial* (Lima: Pontificia Universidad Católica del Peru, 2000); Miranda Neto, *A utopia possível: missões Jesuíticas em Guairá, Itatim e Tape, 1609-1767* (Brasília: Fundação Alexandre Gusmão, 2012); Ramón Gutierrez, *Arquitectura y urbanismo en Iberoamérica* (Madrid: Cátedra, 1983), 210-219 and 231-233.
- 23 Wilson Vladimir Rodríguez Trujillo, "Arquitectura de madera en las Misiones Jesuíticas de chiquitos (Bolivia) del siglo XVIII y sus orígenes prehispánicos y europeos" (PhD thesis, Universitat Politècnica de Catalunya, 2010), 125-168.
- 24 Ione Pereir, "Em tudo semelhante, em nada parecido: Uma análise comparativa dos planos urbanos das missões jesuíticas de Mojos Chiquitos, Guarani e Maynas (1607-1767)" (PhD thesis, Pontificia Universidade Católica do Rio Grande do Sul, 2014).
- 25 Spanish-American cities were composed of regular, square city blocks known as *manzanas*. Hence *manzana jesuítica* – the whole city block occupied by the Jesuit establishment in Córdoba.
- 26 Juan Kronfuss, *Arquitectura Colonial en Argentina* (Córdoba: Biffignandi, 1920), has well illustrated surveys of the *Manzana Jesuítica* of Córdoba as well as several of the estancias. See also Joaquín García, *Los Jesuitas en Córdoba* (Buenos Aires: Espasa, 1940).
- 27 For an understanding of Jesuit communications and propaganda in Europe during the seventeenth and eighteenth centuries, see Mordechai Feingold, ed., *Jesuit Science and the Republic of Letters* (Cambridge, Mass.: MIT Press, 2003). Ramón Gutierrez, *As Missões Jesuíticas dos Guaranis* (Rio de Janeiro: Fundação Pró-Memória, 1987).
- 28 Hans Roth, during his efforts to give the missions new life, discovered caches of manuscript sheet music that have since expanded the corpus of Andean Baroque compositions, particularly the work of Domenico Zipoli, who went out to *Paraquaria* having foresworn a promising career in Italy.
- 29 M. C. B. Guerreira, "Las misiones de Chiquitos: pervivencia y resistencia de un modelo de colonización," *Revista Complutense de Historia de América* 21 (1995): 29-55.