Creative Outposts: Treatises, Texts and Other Influences on the Colonial Architecture of Vila Rica, Brazil

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In the last half of the eighteenth century, Vila Rica, Brazil, now known as Ouro Preto, in the state of Minas Gerais, colonial architects, builders, and artisans were creating a unique architecture. It marked the end of a building boom that lasted throughout the century, as part of the population expansion due to the discovery of gold in the region. The magnet of opportunity for wealth, or as the eighteenth century monk, Antonil (Giovanni Antonio Andreoni) phrased it during his travels in colonial Brazil, "the insatiable search for gold,"1 attracted all sorts of people to Minas Gerais with Vila Rica was its center. There is still much to explore to uncover the complex reasons behind the architectural developments made by these settlers that are significant enough for Ouro Preto to merit UNESCO World Heritage status. To that end, this investigation seeks to contribute to the greater understanding of such endeavors.

The buildings of Ouro Preto noted for their uniqueness are all churches, built by various lay religious organizations as their own houses of worship. They include two elite Third Orders (lay orders), the lay order Franciscan church (Sao Francisco de Assis), and a church for the lay Carmelite order, Our Lady of Carmel (Nossa Senhora do Carmo) and they also include a church for the Brotherhood of Our Lady of the Rosary of the Blacks (Nossa Senhora do Rosario dos Pretos). While previous churches in Brazil are static, have unintegrated details, and are rectilinear in plan and elevation, the Franciscan church is noted for its dynamic dramatically torqued, highly integrated front facade, with one pediment broken to reveal a second one behind, and twin cylindrical towers set back from the facade. The Rosario church is known for its double oval plan, tortiseshell roof formation, and sleek, stripped-down ornamentation within a highly integrated composition. Of the three, the Carmo church is the least innovative, but through its gently curving convex front facade and curved facades of its twin towers. the church begins to break from the rectilinear and static norm of earlier constructions.

One of the research questions that guided this investigation of colonial Brazilian architecture is: does physical isolation from the settlers' countries of origin contribute to creativity? In this case, the physical remoteness of the inland region of Minas Gerais was marked not only by a transatlantic voyage to the Brazilian coast but also an additional hardship-the long trek through a forbidding land required to access this hilly site. Some historians have speculated that without Portugal's introduction to Neoclassicism from other parts of Europe, and without the institution of a stripped down, utilitarian architecture in the mid 1700s in the attempt to rebuild its capital city, devastated by an earthquake in 1755, the architecture in Portugal would have developed permutations of the Portuguese Baroque quite similar to those of Vila Rica.²

This implies not only that circumstances (the earthquake) as well as access to ideas from the rest of Europe caused Portugal's architecture to evolve in a different way than the architecture of Vila Rica, but also, that Vila Rica and the gold region of Minas Gerais in general, did not have such ready access to information. While these inland colonial settlements of Minas Gerais were physically remote from the homelands of the settlers, as well as far from the coastal settlements of Brazil, it is questionable whether these settlers were cut off or distanced in any significant way from their homelands' architectural developments. Although it is possible to contend that the lack of contact with Neoclassical developments was the significant factor in the development of new architectural forms, it is important to note that the isolation was relative, not absolute.

Prospectors to Minas Gerais came by the thousands. Even if contact occurred in no other way, the influx of new people must have brought news of the latest ideas, and skilled workers to train the locals. Not only were they in touch with the latest trends in Europe, but also, through the importation of many thousands of slaves, they had an influx of artists and artisans, as

well as other cultural influences, from Africa. The influx from both Portugal and West Africa of new talent, ideas, and literature was constant. During the first half of the eighteenth century, eight to ten thousand people arrived every year. Accordingly, this paper seeks to identify how connected this artistic outpost really was. It is part of a larger research agenda examining Vila Rica as a case study of the transcultural exchange of architectural ideas and skills, hypothesizing that there is a correlation between environments where different cultural traditions are combined and the production of original, creative architecture.

CONTACT WITH EUROPE AND AFRICA

In colonial Vila Rica, people in the building trades were at first immigrants primarily from the north of Portugal. In addition, the education of Brazil-born elite in Portugal, at the University of Coimbra and elsewhere, provided external input, and reduced the isolation that one might assume to be the case in a remote, mountainous, inland region. Further infusions of skilled individuals came from the slave trade, where shiploads of African slaves, primarily from the gold coast of West Africa, kept coming to the Brazilian shores and were then transported to this inland region. We know that some African immigrants were highly skilled at ironwork, metalsmithing, goldmining, sculpture, and painting.

By the second generation however, many of the people in the building trades were the offspring of African slave immigrants and Portuguese immigrants born in Brazil who never saw Portugal, Africa or their built form. By then, a syncretic culture was developing in Vila Rica. In addition, not only were European architectural treatises, illustrations, paintings, and furnishings of a contemporary design available for artisans to use as references, but also training programs by Europeantrained members of the building professions were available.3 Added to these factors, because of the harsh working and living conditions of the thousands of slaves, the death rate was high, and the supply of new immigrant slaves from Africa was constant. This continued the cultural connection between West Africa and Minas Gerais. These three developments, the constant influx of artisans and information from Portugal and the rest of Europe, the influx of culture and artisans from Africa, and the development of a new syncretic culture, were combined in Vila Rica.

AFRICAN INFLUENCES

The architecture of Vila Rica depended heavily on a European vocabulary based on reinterpretations of the Renaissance adoption of classical elements. Even so, there are hints of elements with African origin within the art and architecture. An

elephant appears in the faux tile (faux azulejo) genre paintings in the African brotherhood church of Santa Efigênia in Vila Rica. In the same church, Saint Gregory is depicted as an African.4 Both churches built by African religious brothers in Ouro Preto have African saints carved from Jacaranda wood, as well as paintings of Afro-Brazilian putti. Afro-Brazilians are used as models for saints even in the all-white Third Order churches. For example, the Portuguese artist Manoel da Costa Ataide depicted Mary as an Afro-Brazilian in the ceiling mural in the church of Sao Francisco de Assis. Saints and putti in the religious and genre paintings throughout Vila Rica's colonial church painting and sculpture are depicted with African features and hair. As Brazilian sculpture, painting, dance, and language were affected by the influx of Africans, the rhythm, vocabulary, and syntax of the architecture and its ornamentation was also affected. Uncovered in the Rosario church, during its latest historic preservation effort are elements of wall decoration clearly from African sources.

European Catholic imagery that referred to events in the bible was infused with added meaning that spoke of the life of slaves, their collective history of the middle passage, and the desire for freedom. Jonah being thrown to the whale can be reinterpreted as the middle passage, when slaves were shipped to America. Syncretic meaning was applied to various saints. For example, Our Lady of the Rosary was also the African Goddess Yemanja. The cultural and spiritual world brought by members of various African nations was renewed with each new ship crowded with slaves from the gold coast of Africa.

EUROPEAN INFLUENCES

Architects and engineers born in Brazil were quite knowledgeable about European architecture. This was due in part to eighteenth-century drawing books by and for architects and engineers in Brazil, military engineering schools and apprenticeship programs in Brazil, and quite likely due to the importation of drawing books and treatises used in Portuguese schools of the period. By 1786, there were twelve sons of the elite in Minas Gerais among the twenty seven Brazilians attending the University of Coimbra.⁵ These and other literate settlers had their own libraries in this outpost. An inventory of a large private donation to the library in Mariana in 1832, provides a glimpse of what was available to the literati in Vila Rica and Mariana in their own private collections: It included bibles and books on theology as well as an extensive collection of books on science, math, geography, and philosophy. including books in many languages and multi-volume works. By 1850, a merchant in Vila Rica was able to provide books published in Europe with a turn-around time of only a year. Luis Vieira's private library may have been typical of the upper class man of letters in the region, with 612 volumes in his private collection. The input from different cultures and the influx of information

created an environment where ideas could flourish and new forms could be created.⁶

In the early colonial period, Brazil's military engineers were all immigrants, formally trained in engineering schools established in Portugal and in other parts of Europe. By the mid 1700s, there were several such schools established in Brazil. There is even evidence that training in engineering was available to residents of Brazil in Pernambuco as early as 1696. In 1699, a military engineering school, the Aula de Fortifiçao, was created in Rio de Janeiro by Dom Pedro II. In addition, a similar school was active in Salvador throughout the eighteenth century. The instruction in Salvador was provided by a number of engineers, including Pedro Gomes Chaves, who later worked in Vila Rica.⁷ The architect/engineer Manuel Saldanha (who lived and worked in Salvador from 1749 to 1767), was responsible for the design of the Salvador church of Nossa Senhora do Conceição da Praia, and taught civil architecture in the engineering school before he died in 1767.8 In Rio, Brazilian engineering and design teachers in the new military schools were masters such as Brigadeiro Engenheiro Jacques Funck (an Austrian engineer) and the Pportuguese Brigadeiro José da Silva Pais. They produced buildings based on Italian Mannerism, traditional Portuguese vocabulary, and their classically based training from Portuguese engineering and architecture schools. The architectural historian Carlos Lemos writes: "The Portuguese military engineers that were in Brazil in the eighteenth century ignored the Baroque, preferring in their compositions, an emulation of the Renaissance."

Surviving documents provide an understanding of the nature of this engineering education. One example is the drawing book from 1778-1779 by Joao de Souza, a military engineer in Bahia. His book begins with geometric shapes, and continues with drawings of whipping posts (pelhourinhos), chapels, and towers, the architectural orders, including a twisted solomonic column (coluna torsida) and the mechanics of how to design one. It concludes with plans of fortified towns in Europe, and the basic elements of fortification design. De Souza's book may not have been widely published or distributed, but it demonstrates knowledge of the information disseminated in European treatises as well as textbooks from the engineering schools. For example, it is quite similar to the 1578 text by the architect and Portuguese architecture teacher Filipo Terzi, as well as books depicting the architecture of Recife (1631-3) and Portuguese architecture (1663). All or some of these precedents may have been available to the immigrant designers, as is demonstrated by de Souza's drawings.¹⁰

Some of the Portuguese military engineers working on the coast moved to Vila Rica. The Portuguese Engineer, José Fernandes Pinto Alpoim, was first sent by the Crown to Rio, to teach engineering. While there he wrote *Exame de Artilheiros* (Exam of Artilery).¹¹ He was then assigned to Vila Rica, where there was already an impact by the military engineers Joseph Rodrigues de Oliveira and Pedro Gomes Chaves. The Portuguese, Oliveira, designed military residences in Vila Rica in 1722. (Fig. 3) After the appointment in Salvador, the Portuguese Engineer Chaves *engenheiro sargento-mor* (military engineer) is thought to have been in charge of the major



Fig. 1. Governor's Mansion. Ouro Preto. Minas Gerais. Brazil.

rebuilding of Nossa Senhora do Pilar church (in the parish of Ouro Preto, Vila Rica) in 1741.¹² This church was rebuilt with a polygonal nave that may have been an inspiration for the interior of the Franciscan church as well as the double oval plan of the church of the Rosary.

Alpoim's move to Vila Rica, was probably due to his friend, the governor Gomes Freire de Andrade. While in Vila Rica, he designed the governor's palace, situating it prominently on the main plaza in town, and using Portuguese fortification vocabulary in the design. Accordingly, his work should be looked at as a product of the schooling in military engineering he received in Viana do Castelo, in Northern Portugal (Fig. 1). The palace is still in use as the School of Mines of the University of Minas Gerais. 13 A local mason, Miguel Moreira Maia, and the Portuguese immigrant architect/contractor Manuel Francisco Lisboa, executed Alpoim's plans. He also designed the early prison and town hall building on the main plaza eventually replaced by the current one. In addition to the overall design of the Governor's Palace in Vila Rica and the court palace in Rio, Alpoim is credited with designing the row house/commercial buildings off the main plaza of Vila Rica. The current town plan of the neighboring city of Mariana still has remnants of Alpoim's original design from 1745, a rectilinear design with large squares, it presages the regularized plan for the rebuilding of Lisbon's center by Pombal's team of engineers more than ten years later.

There were other influential references in addition to Military Engineering texts. John Bury makes a strong case for the influence of architectural treatises on seventeenth and eighteenth century architecture in coastal Brazil as well as eighteenth century architecture from Minas Gerais. There are similarities between examples of Brazilian architecture and the buildings drawn in treatises of Fray Lorenzo de San Nicolás (published in parts, one in 1633 and two in 1664), Sabastiano Serlio (whose treatise was published in several separate volumes, beginning in 1547), Guarino Guarini (whose posthumously published treatise from 1737 included an image of the cathedral plan in Lisbon), Ottavio Scamozzi (whose treatise was published in 1615), and Johann Bernard Fischer von Erlach (whose treatise was published in 1721, soon thereafter translated and published in both English and Spanish).14

Coastal architecture used ideas from European treatises, and these in turn may have influenced the inland architecture. In Salvador, Bahia, the eighteenth century interior of the church of Nossa Senhora da Conceição da Praia (Our Lady of Conception on the Beach) was probably influenced by the Italian Father Andrea Pozzo's treatise on Perspective. This in turn may have influenced the interior of the parish church of Nossa Senhora do Pilar (Our Lady of the Pillar) in Vila Rica. While the Conceiçao has basically a rectilinear interior, its deeply chamfered corners create an octagonal nave. The Pilar church goes further: The exterior of Pilar is rectilinear, defined

by the exterior bearing walls, originally built without a hint of what lies within. Inside, a wooden screen-wall defines an elongated decagonal nave within the rectangle defined by the exterior walls. Opening to a long, narrow chancel at one end, the polygonal screen creates corridors between the nave and the exterior walls. It is this almost-oval partition that makes the plan of the church of Pilar distinctive. 15 The Pilar church may not have been influenced by the Salvador church, but could instead have been derived directly from precedents and ideas from treatises. Claims were made by the early nineteenthcentury chronicler José Fereira Bretas that the Corinthian columns of Nossa Senhora do Pilar, which are on high plinths, were derived from Scamozzi's treatise. 16 Indeed, several of the architects and artisans who worked on this church were schooled or apprenticed in their native Portugal, including the engineer Chaves and the master carpenter Antonio Francisco Pombal.

Also, not to be discounted are the images in books such as religious works and history texts that could have been used as references for frontispieces, details of altars, and other design elements.17 The treatises of Fischer von Erlach and Guarini were widely distributed throughout Europe, By comparing Vila Rica's African brotherhood church of Nossa Senhora do Rosário, largely completed in the latter half of the eighteenth century, with two of the images in the Erlach treatise, the evidence is quite strong that in some way, images from this treatise in particular, reached Minas Gerais. According to Hanno-Walter Kruft, Fischer von Erlach's work was the best known treatise of the period.18 It is quite possible that the preferences of the African brotherhood, which by all evidence chose a construction and design team that would provide a very different type of building, from the norm in the region, and the recent arrival of this treatise, contributed to a unique iteration of the standard church building type that was present all over the region. That the African brotherhood, as poor as they were, had the autonomy to decide upon the design parameters for their church can be inferred from various documents which indicate that they had not only some political capital because they had done favors for the elite, but also some financial independence from the church authority.19

Perhaps the best known artist/architect of that period in Brazil, the Brazil-born Mineiro Antonio Francisco Lisboa, is thought to have used images from Europe in his work. One church attributed to him, the Sao Francisco de Assis, has clear references from Portuguese high altars in the front façade design (Fig. 4). The sophistication of Lisboa's compositions, reminiscent of European masterpieces, has sparked speculation that he had traveled to Europe for some of his training like his contemporary, the Afro-Brazilian from Rio de Janeiro known as Mestre Valentim.²⁰ No evidence however, of such a trip exists. However, European inspiration and sources may have been available to him locally through the extensive holdings in private libraries in Vila Rica, Mariana, and Sao Joao del Rei, and most probably through his father, the Portuguese architect

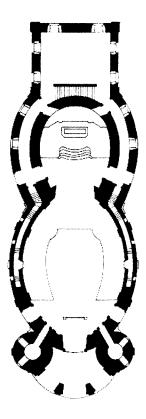


Fig. 2. Nossa Senhora do Rosário dos Pretos, (Church of Our Lady of the Rosary of the Blacks) plan. Ouro Preto. Minas Gerais. Brazil. After a drawing by Paulo F. Santos. in Subsidios para o estudo da arquitetura religiosa em Ouro Preto (Rio de Janeiro: Kosmos. 1951).



Fig. 3. Nossa Senhora do Rosário dos Pretos. (Church of Our Lady of the Rosary of the Blacks) front façade, Ouro Preto. Minas Gerais. Begun before 1760.

Manuel Francisco Lisboa, and his tutor, the Portuguese sculptor, Joao Gomes Batista. When comparing printed images, such as etchings from Antwerp and Florence and illustrations found in religious books, art historians have found striking similarities in poses, clothing, and composition.²¹



Fig. 4. Sao Francisco de Assis. Ouro Preto. front façade, Ouro Preto, Minas Gerais. begun circa 1766.

From the beginning of Portuguese colonization, the governors of the captaincies saw architecture as a device to create a cultured and civilized society. In 1768, Luis António de Souza, the governor of Sao Paulo wrote:

One of the things that the most cultivated nations are accustomed to tak[ing] care of in the present time is the symmetry and harmony of buildings which are newly arising in cities and towns, so that from their appearance will result not only public comfort, but also the pleasure with which populations are made most appealing and competent, immediately knowing from the good order, with which they are disposed, the lawfulness and culture of their inhabitants.²²

The importance to which officials regarded architecture explains the influx of military engineers and the establishment of schools to learn architectural practice (the military engineering



Fig. 5. Nossa Senhora do Carmo (Our Lady of Carmel), begun circa 1766

schools). But the ingenuity of such buildings as Our Lady of the Rosary (Rosario) in Vila Rica, that looks like no other building in the Americas or Europe, as well as the inventive Franciscan church (Sao Francisco) in the same town, can be explained not by the knowledge obtained from Europe, but in part, from the lack of pressure to conform to a particular norm, as well as the mixing of different knowledge and taste preferences from such far-flung locals as West Africa and Bavaria. Where the isolation may have been most important was in the lessened control the Crown and the Church had in the design and production process. The evidence here suggests that more research needs to be done, not only in this case, but also in compiling other case studies to investigate correlations between the mixing of cultures and architectural creativity.

NOTES

- ¹ "The insatiable thirst for gold made them leave their lands and enter by roads very rugged, uneven and harsh." "A sêde insaciavel do ouro estimulou a tantos a deixarem suas terras, e a meterem-se por caminhos tao asperos" Antonil. "Cultura e Opulencia do Brasil," Revista Arquivo Publico Mineiro, vol. 4 (1899): 514.
- ² The term Pombaline refers to the Portuguese architecture built under the direction of the Marquis de Pombal after the earthquake of 1755. The journey from Sao Paulo to Minas Gerais took months in the early 1700s. "There was no easy route to the interior of Brazil. High mountain ranges, densely wooded valleys, and swift-flowing rivers proved substantial barriers." A. J. R. Russell-Wood. "The Gold Cycle" in Cambridge History of Latin America, ed. Leslie Bethell (Cambridge: Cambridge University Press, 1984), 555. A new route to the region was created around 1725 to replace the original route from the late seventeenth century. Both the new and old routes were primarily land routes. "Whereas travelers to the 'general mines' may have used river routes for part of their journeys, by and large overland travel predominated." A. J. R. Russell-Wood. "The Gold Cycle," 557. This was so in the nineteenth century as well, when many travelers came to the region. Although Sir Richard Burton, for

- example, canoed from Sabará to the ocean in the 1840s, much of his journey through Minas Gerais was by land. Captain Richard F. Burton. The Highlands of the Brazil: with a full account of the Gold and Diamond Mines, also Canoeing down 1500 miles of the great River Sao Francisco from Sabará to the Sea. vol. 1 (London: Tinsley Brothers, 1869), 120-345.
- Minas Gerais had over 300,000 inhabitants in 1776 (excluding the native population). Kenneth R. Maxwell. Conflicts and Conspiracies: Brazil and Portugal. 1750-1808. ed. Malcom Deas, Cambridge Latin American Studies (Cambridge: Cambridge University Press, 1973), 86-87.
- ⁴Tania Costa Tribe, "The Mulatto as Artist and Image in Colonial Brazil" The Oxford Art Journal, vol. 19, 1 (1996):76.
- ⁵ Maxwell, Conflicts and Conspiracies, 95.
- ⁶ For more information about these libraries see Raimundo Trindade. Sao Francisco de Assis de Ouro Preto (Rio de Janeiro: P.H.A.N/Ministerio da Educação e Saude. 1951), 222-228. For a complete inventory of the Jesuit College library in Rio from 1775 see "Auto [legal document] de Inventario e Avaliação dos Livros Achados no Colegio dos Jesuits do Rio de Janeiro e Sequesrados em 1775." Transcribed in the Revista do Arquivo Instituto Historico e Geografico Brasileiro. documento 8. 58. See also Mark L. Grover. "The Book and the Conquest: Jesuit Libraries in Colonial Brazil," Libraries and Culture vol. 28. 3 (summer, 1993): 276. See also Revista do Instituto Historico e Geografico de Minas Gerais 6 (1959): 333-334.
- ⁷ Robert C. Smith, "Jesuit Buildings in Brazil," The Art Bulletin, vol. 30, (1948): 209.
- ⁸ Smith, "Jesuit Buildings in Brazil," 208-209. See also Robert C. Smith, "Nossa Senhora da Conceição da Praia and the Joanine Style in Brazil," Journal of the Society of Architectural Historians. vol. 15, 3 (Oct., 1956): 18. Simposio: 300 anos da criação da aula de Fortificação in Revista do Exercito Brasileiro, vol. 136 (1999). Smith. "Jesuit Buildings in Brazil," Appendix 1, 209.
- ⁹ "Dos engenheiros militares portugueses que atuaram no Brasil no século XVIII e que ignoram o barroco, preferindo em suas composiç oes, a contenção renascentista." Carlos Lemos "No Brazil, a Coexistencia do Maneirismo e do Barroco ate o Advento do Neoclássico Histórico," *Barroco* 15 (1990/2): 255.
- Published in the seventeenth century were the books Illustrated Designs and Plans of Recife, Pernambuco (Desenhos e plantas Illuminades do Recife de Pernambuco) (1631-1633), and Book of the Plazas of Portugal with its fortifications (Livro dos Praças de Portugal com suas fortificacoes) (1663). Carlos Lemos "No Brasilo a coexistencia do Maneirismo e do Barroco ate o Advento do Neoclássico Histórico," Barroco: Revista de Ensaio e Pesquisa. 15 (1990/2): page??. Joao de Souza, Parteduta. (Bahia. 1778), From the Aula da Militar da Bahia begun in 1719. AHU. Bahia-Aula Militar: Desenhos a Pena ENC.Nº 1512-1º Album-No 990/1028 Inventorio Cartografia Brasileira.
- 11 "Nessa Epoca, o Conselho Ultramarino estava empenhado em desenvolver o ensino da Aula de Fortificacao do Rio de Janeiro, que passou, entao a funcionar como curso regular, como objectivo de provar os elementos necessarios a defesa do nosso litoral, em face da situacao tensa entre Portugal e a Espanha." Tavores, Engenharia Militar Portuguesa, 183. Other information for this paragraph and the following one comes from Aurelio de Lyra Tavares, A Engenharia Militar Portuguesa na Construção do Brasil (São Paulo: SPEME, 1965), 183-184; and Judith Martins Dicionario de Artistas e Artifices dos Seculos XVIII e XIX em Minas Gerais, (Rio de Janeiro: IPHAN, 1974), 1: 23-27.
- ¹² AHU, MG-Caixa 3, doc. 45 (252) 12 October 1722, AHU Illus, "Quarteis" MG, Cap. 1151 and "Quarteis" MG, Cap. 1152.
- 13 Martins, $Dicionario\ de\ Artistas\ vol.$ 1, 23.
- John Bury "The Architecture and Art of Colonial Brazil," The Cambridge History of Latin America. ed. Leslie Bethel (Cambridge: Cambridge University Press, 1984), 751, 757, 759; See also John Bury. "Borrominesque Architecture." 35-36; and Johann Bernard Fischer von Erlach. A Plan of Civil and Historical Architecture. reprint (New York: Dover. 1922). #. English edition in 1737. translation of Entwurff einer Historischen Architectur). Frey Lorenzo de San Nicolá s's work may have been particularly helpful to builders in the Americas, since, as Kruft points out. "Frey Lorenzo lays special stress on the question of the materials to be used in building, taking his lead from statements found in Scamozzi. He is of the opinion that local materials should be used, whose properties the architect should be well aware of." Hanno-

- Walter Kruft A History of Architectural Theory (New York: Princeton Architectural Press, 1994), 73, 98, 225.
- ¹⁵ R. C. Smith suggested that the book on perspective by the Italian Father Pozzo and Bibena's stage sets were influential in the design of Conceiçao da Praia. R. C. Smith, "Conceiçao da Praia." 21. The first volume of Serlio's Libro Quarto de Architettura (actually book four) was published in 1537. Guarini's complete treatise was published posthumously in 1737. Components of this work, Modo di misurare le fabbriche, and Trattato di fortificazione, were published in 1674 and 1676, respectively. Scamozzi's was published in 1615, a French edition was published in 1685, a proof edition of Johann Bernard Fischer von Erlach's was produced in 1712, and it was first published in 1721, to be later translated into several languages. Kruft, Architectural Theory, 72-73, 105, 183.
- ¹⁶ Rodrigo Jose Ferreira Bretas. "Biographic Outline Relating to the Late Antônio Francisco Lisboa." in *Passos da Paixao: O Aleijadinho.* ed. Myriam Andrade Ribeiro de Oliveira. trans. Maria Cunha Brenner (Rio de Janeiro: Alumbramento, 1984), 26.
- ¹⁷ "Missals and religious tracts from the Plantin Press in Antwerp ... were sent to the Spanish and Portuguese colonies in Latin America from the seventeenth century until the early 19th century. 'Nancy Davenport, "European Sources for

- the Prophets at Congonhas do Campo," Barroco: Revista de Ensaio e Pesquisa, vol. 7 (1975): 18-19.
- ¹⁸ Kruft. Architectural Theory, 183.
- ^{1a} Ramos, "A Social History of Ouro Preto: Stresses of Dynamic Urbanization in Colonial Brazil, 1695-1726," (University of Florida, 1972), 265. Affonso Avila, ed. Triunfo Eucaristico, Series: Residuous seiscentistas em Minas, textos do seculo do ouro e as projecoes do mundo barroco, vol. 1 (Belo Horizonte: Arquivo Público Mineiro,). Francisco Curt Lange, Historia da música nas irmandades de Vila Rica, vol. 1 (Belo Horizonte: Arquivo Público Mineiro, 1979), 275.
- ²⁰ Anthony Blunt, Baroque and Rococo: Architecture and Decoration (London: Elek. 1978), 328.
- ²¹ Germain Bazin's hypothesis that Florentine engravings influenced Antônio Lisboa are explored in the article by Celso Teveira, "O Alcijadinho em Congonhas: As Hipoteses de Germain Bazin" RPHAN, vol. 13 (1984/5): 95-106. It also looks at other possible influences, such as Northern European art.
- ²² Luiz António de Souza, Governor of Sao Paulo, quoted in Roberta Marx Delson, "Planners and Reformers: Urban Architects of Late Eighteenth-Century Brazil," Eighteenth-Century Studies, vol. 10, 1–23 (1976): 48.