# Amateur Naturalist and "Professional" Orientalist Paulinus a S. Bartholomaeo in Kerala and Rome (18<sup>th</sup>-19<sup>th</sup> c.)

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# FROM EXPERTS TO PROFESSIONALS

Early modern travellers who ventured into exotic and bewildering places on the edge of the world faced two overarching problems. One was a problem of meaning and understanding, as well as reporting on, foreign countries, peoples and objects. The other problem, shared by all the actors in overseas colonial enterprise, was possessing, appropriating, exploiting and mastering nature and the "natives".<sup>1</sup> The bulk of colonial writing and literature, from the early 16<sup>th</sup> century onwards, is nothing more than a way of dealing with these two epistemic and material difficulties through language and narrative.<sup>2</sup>

An urgent need for a certain kind of practical expertise and of a certain kind of experts regarding the non-European world was thus rapidly created. Serge Gruzinski studied a whole range of such *praticos das coisas* or *passeurs*, required by the Catholic (Iberian) monarchy, all of whom belonged to a globalized and extremely mobile elite that circulated around and through the "four corners" of the early modern world and who wrote treatises, letters, opinions (*pareceres*), histories and accounts.<sup>3</sup> They were mostly ambitious and freewheeling commoners practicing useful *métiers* such as trade, medicine, pharmacy, law and other "mechanical" crafts.<sup>4</sup>

Soldiers and missionaries belonged to another subcategory of experts bound more closely, in different ways and in different times, to governing institutions and specialized political, mercantile and "spiritual" corporations such as colonial administration, trade companies and the Catholic Church. These mobile experts of the 16th and 17th centuries, especially those profiting from the Iberian Catholic (Portuguese and Spanish) overseas networks, operated in the frontier regions as veritable pioneers, at the forefront of new conquests and discoveries. They were partly clients of the colonial and metropolitan administration, and partly on their own, risking their lives, their money and their reputation in order to gain personal or corporate treasures beyond imagination. What they acquired and brought back to display, sell or give away were objects and stories with unmistakably local flavour. It was specific and locally "rooted" phenomena that stuck to their feet and made it into their portfolio of expertise. Their practical, expert knowledge of the world, which gave them a sense of personal pride, and which they used as currency for the acquisition of privileges and benefits distributed by the Catholic monarchies, was thus based on empirical, positivist, secular, discrete sense data. If one really wanted to define their role in the advancement and theory of knowledge, it more closely resembled "filling gaps" and "bricolage" than radical innovation.5

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In a word, early modern experts, travelling through a wilderness of foreign lands, were obsessed with visible, possibly tactile information. They collected natural objects or man-made artefacts, or reproduced them, such as paintings, sculptures, stuffed animals, and horti sicchi.6 Like other collectors in Europe, in the 16<sup>th</sup> and the 17<sup>th</sup> centuries, their eyes were set on curiosities, on the one hand, and useful and commercial valuables on the other. In this respect they were opposed to the savants and scholars in Europe for whom curiosity amounted to vulgarity. For Michel de Montaigne curiosity was "vicious"; for Blaise Pascal it was "vanity". Even later on, in the world of collectors and collections, in the 18th century a dichotomy was established and remained between vrais connoisseurs and simples curieux.7

After a few centuries of accumulating "curious" and "useful" objects from the colonies and distant places-some of which, for example, became staple foods on the tables of European consumers, while others found their way into museums, laboratories and libraries-by the end of the 18th century, it was classification and synthesis, rather than accumulation, that became the order of the day, at least in the scientific community dealing with natural history.8 Visible things (natural objects, artefacts, bodies, even languages and sociability) came to be considered parts of some "invisible" but universal rationality, detectable through morphological resemblances and common origins (stems, roots).9 This rationality also generated means, within its own explanatory system, to order and classify the irrational and the random.

On the threshold of the modern period, travellerexperts, who collected, interpreted and disseminated information, came increasingly to occupy the roles of "amateurs", "research technicians", interpreters, political advisors and spies. Some of these also belonged to a new type of humanist gentlemen-travellers, who often sold their services to rich patrons and entertained connections to learned societies rather than universities.<sup>10</sup> In the long run, however, empirical and practical competence became insufficient for establishing one's scientific credentials and professional authority. Those who joined the modern scientific sect were specialists with ever-narrowing professional expertise validated by "centres of calculation" (laboratories, museums, libraries, etc.), buttressed by learned societies and journals, and located, mostly, in the metropolitan or

colonial capitals.<sup>11</sup> The question of patronage (by the king, by the state or through private endowments) and the question of location (in a stable and rich part of the world, preferably) made all the difference in the further development of any line of scientific research. In the late 18<sup>th</sup> and early 19<sup>th</sup> centuries, categories such as amateur/professional, competence/authority, local/universal, and mobile/immobile, emerged as lines of demarcation in a gigantic effort to write a universal history of the world, believed to be grounded in universal scientific principles. What these principles were was about to be decided.

The central question addressed in this paper is how the lines between expert traveller-cummissionary, professional scholar, and curator of a museum near Rome were uneasily negotiated in the life and work of a Discalced Carmelite, Paulinus a Sancto Bartholomaeo, who was sent to India by the Congregation of the Propagation of Faith (Propaganda *Fide*) in the latter part of the 18<sup>th</sup> century.<sup>12</sup> As many missionaries before him, he was a polyglot with eclectic and erudite antiquarian interests, from philology to ethnobotany. However, upon returning from his mission in Kerala, he made a career of his linguistic and ethnographic research and became one of the most famous Orientalist (Indianist) writers of his time in Italy and southern European Catholic circles. His choice to become a "professional" Orientalist implied a sacrifice of the other fields of knowledge he had cultivated during his stay in India, such as his passion for natural history, botany, pharmacology and medicine. The qualification "professional" needs to be nuanced, since technically Paulinus continued to work for the Propaganda Fide and even his learned books on the Sanskrit language and Brahmanical culture were connected to the project of teaching future missionaries.<sup>13</sup>The incentive and funding provided by this important Roman institution for learning foreign, non-European languages and for printing language manuals was crucial. Equally important was the fact that he became Curator of the Indological Section of the Museum in Velletri, owned by Stefano Borgia, a rich aristocrat, the Cardinal, and the Prefect of the Propaganda Fide.14

Paulinus was first and foremost a professional missionary. Nevertheless, there is no doubt that he aspired to dialogue with other Orientalist scholars of his time and tried to earn their admiration and

respect. Moreover, Paulinus very proudly displayed his membership in learned academies and the various honours he acquired as a scholar.<sup>15</sup> It is surprising then, at first sight, that he did not employ his knowledge of the "natural" history of India with more fanfare to enhance his scholarly prestige. In this article I will show that for Paulinus, the natural world of India was inextricably linked with culture and language. Understanding the "system" of the natural world in India was simply a smaller element in his ambitious project of grasping the "Brahmanical system", the origin of human history and possibly the logic of the Creation.<sup>16</sup> Paulinus shared the conviction, with most of the British and French Orientalists of the late 18th and the early 19th century, that it was Sanskrit that pointed a way back into the cradle of human civilization.<sup>17</sup> The tension between antiquarian research into the "ancient" wisdom of the Brahmans and direct observation and experimentation was often resolved in favour of the former, in spite of Paulinus' professed empirical touch.

Another, equally crucial reason for leaving aside his naturalist collections and writings was the lack of an institutional framework and the absence of encouragement upon his return to Rome, while at the same time he was given every opportunity to publish his Orientalist works. That is not to say that there were no naturalists working in Rome; it was rather that the Propaganda Fide required Paulinus' linguistic and missionary expertise. He was appointed to oversee the publication of multilingual books and to teach oriental languages. On the other hand, among the Discalced Carmelites there were quite a few amateur naturalists, especially botanists and pharmacologists. The most famous speziera (pharmacy) in Rome in the late 18th century was a secular annex to the Church of Santa Maria della Scala that belonged to the Discalced Carmelites. Fra Basilio della Concezione was a famous pharmacist as well as teacher and writer. In his only book in Italian, Viaggio alle Indie Orientali, Paulinus in fact paid his respects to Fra Basilio by quoting his work on the healing effects of canary eggs.<sup>18</sup> Alchemy, phantasm and faith worked in tandem in the secular temples that were the pharmacies of the religious orders.

As for fundamental research on the natural history of India, as Paulinus probably realized himself, it required the presence on the ground of scientists and technicians backed by powerful and interested patrons. Clearly, what was needed was an empire. Paulinus, however, left India too early to see the ramifications of the British colonial momentum. "The English in the second volume of the Asiatic Researches promised to give Europe Indian Botany, but I expect little or nothing [of that], because you need subjects (*Soggetti*) who know the language, time and a lot of money to make engravings of so many types of plants and simples (*vegetabili semplici*)".<sup>19</sup> Paulinus was, of course, wrong in underestimating the British, but was certainly right about the high costs of producing illustrated botanical books. He tried to compensate his own inability to raise money for the enterprise in his naturalist chapters in the *Viaggio*. With mixed success.

# MISSIONARY TASKS: ACTING AND COLLECTING

During Paulinus' stay in Malabar (a northern region of today's Kerala), where he was sent by the Propaganda Fide to minister to the community of the St. Thomas Christians from 1776 to 1789, he assembled a huge archive of documents in various languages. Some of them were collected by his predecessors in the field, Discalced Carmelite friars who were assigned the task of reviving the mission among St. Thomas Christians after almost a century of Jesuit monopoly under Portuguese royal patronage, the Padroado.20 Efforts at reforming, along the lines of Tridentine Catholicism, these "ancient" Christians in India, who prided themselves on having been converted by St. Thomas the Apostle and who survived and thrived among non-Christians in Kerala for more than a thousand years before the arrival of the Portuguese and the missionaries, were continuously unsettled and thwarted.<sup>21</sup> As a result of the Synod of Diamper [Udayamperur] in 1599, which enforced the Romanization of the St. Thomas Christian Chaldean liturgy and rites, the community started to splinter into smaller Christian sects, some of which continued as Catholic factions, while others sought religious leadership among West Syrian nonuniate patriarchs, and later among the Protestants.<sup>22</sup> The Discalced Carmelites were sent in by the Papacy and the Propaganda Fide when the Portuguese Estado da Índia lost Kochi (Cochin) to the Dutch in 1663 and were unable to exercise their Padroado rights and duties in the region. Moreover, the Dutch banned from the territories under their control all Portuguese missionaries, while they tolerated those sent by the Papacy, preferably from non-Iberian countries.

When the Discalced Carmelites officially took over the mission in 1678, they inherited all the problems regarding the jurisdiction of the *Padroado* vs. the *Propaganda Fide*, the uneasily applied principle of religious accommodation, the simmering dissent by native clergy, and the dependence on favours and patronage of the local political structures, from the small local rulers to the Dutch East India Company and the king of Travancore.

To be able to navigate successfully in this kind of ever-changing and complicated social and political landscape, the Discalced Carmelites had to develop a particular kind of missionary expertise that encompassed a wide range of knowledge and skills. They were, of course, all ordained priests qualified to perform sacraments and to hear confessions, but they also had to be accomplished linguists, talented ethnopsychologists, perceptive ethnologists and insightful, though vigilant, theologians. Obviously, these were difficult tasks and not all missionaries were equally competent.

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Just like the Jesuit missionaries before them, the Discalced Carmelites understood the importance of medical and pharmacological expertise. Missionaries were required to familiarize themselves with the local medical lore and healing practices for missionary purposes, but also to be able to cure themselves and survive in the much-dreaded tropical environment. Conversion and healing were inextricably entwined in missionary literature, in both the metaphorical and literal senses. Hence, while one had to know a great deal about the local society in order to proselytize successfully, knowledge of nature was equally important.

The Indian natural world, in general, had been a source of awe and wonder early on for European travellers, colonial officials and missionaries. Exuberant, fast-growing vegetation and an excess of fertility were ambiguously interpreted as so many signs of special divine blessing or of diabolical curse. The beauty and plenty turned rapidly into rot, excrement and famine. Women were seen as rapidly aging after marriage in spite of their voluptuous desirability when young and virginal. According to classical humoral theory, in the torrid (tropical) zone, human bodies were adapted to and composed of certain kinds of humoral qualities. This is why Garcia da Orta, a physician in 16<sup>th</sup>-century Goa, considered it imperative for the Portuguese to adopt the native diet and pharmacy in order to thrive in the difficult climatic circumstances.

The comparison between Greco-Roman classical medical texts and Indian Muslim (*unani*) and Ayurvedic medical systems (the authoritative texts of which the Portuguese tried to procure with great difficulty) showed both similarities between these systems and the superior effects of local Indian remedies. Therefore, humoral theory initially facilitated the encounter between European and Indian medical systems. Until the demise of humoral medicine in Europe from around 1800, physicians and missionaries in India relied to a great extent on local medical knowledge and therapeutics.

It is no wonder that upon returning to Europe, missionaries usually brought with them manuscripts and notes on natural history with the intention of giving them to the institutions interested in collecting them—such the royal libraries and museums—or to transcribe, translate and publish them themselves. At times, these publications were intended to counter exaggerations and falsifications by merchant-travellers and colonial officials who often plagiarized missionary documents and research.<sup>23</sup>

When Paulinus a S. Bartholomaeo returned to Rome, he brought with him chests full of personal notes, diaries, letters and manuscripts in various European and Oriental languages. In fact, not many missionaries returned, but when they did, they brought back to Europe manuscripts and archives to be sifted through and used for teaching and preparing a new batch of missionaries. This is exactly what Paulinus did

after almost 14 years of missionary travel and work in India: he brought with him a pile of documents, some of which he rearranged and prepared for publication during the next 17 years of his life.

The only published work in which he included reflections on and descriptions of the Indian natural world is his Viaggio alle Indie Orientali. Written as a travelogue in Italian and aimed at a larger public, Viaggio is a compendium of materials that Paulinus also used in his numerous Indological and museological books in scholarly Latin. However, as glimpsed from the documents used for his "natural history", most of which are preserved today in the department of rare manuscripts in the Biblioteca Nazionale Vittorio Emanuele III Library in Rome, Paulinus invested a great deal of energy in collecting various data on the subject. Most of the documents are nothing but a chaos of sedimented voices in various European and Indian languages and scripts. On the pages of the Viaggio, however, they appear tamed into classification and order and become, at times, useful information. Let us start from the beginning, which is also the beginning of the Viaggio.

# BUILDING EXPERTISE IN NATURAL HISTORY AND MEDICINE

When Paulinus arrived in 1776 in Pondicherry, a French outpost on the Coromandel coast in India, he was hardly a pioneer on the frontier of heathenism and an unexplored world. Missionaries and other "Franks", as Indians continued to call what they saw as generic Europeans or western Christians, were well settled in certain regions, especially along the east and the west coasts.<sup>24</sup>Uneasily embedded in the narrative of the Viaggio-as landscapes and objects move before the eyes of the reader-is Paulinus' continuous dialogue with his various interlocutors, European and Indian, contemporary and ancient. In fact, from the boxes in the Roman archives filled with notes of all sorts, it is evident that Paulinus kept a diary and obsessively wrote about everything that happened in the mission.<sup>25</sup> This he did in at least five European languages: Italian, Latin, Portuguese, German and French. In addition, his archives are replete with texts in Tamil and Malayalam, some in his own hand, and various other scribbles he made in ancient Greek, Chaldean (old Syrian), Arabic and Sanskrit (in Grantha script).

Paulinus also collected manuscripts written or collected by his predecessors in the Verapoly mission where the Discalced Carmelites resided for almost a century before Paulinus arrived. Of course, documents kept in mission residences in India proved to be volatile and fragile, subject to climate, fires, floods, shipwrecks and other destructive forces.<sup>26</sup> At least once during his lifetime, Paulinus saw the archives in the Verapoly mission disappear, thanks to one calamity or another.

Some "archives" were relatively permanent, although not entirely reliable. These were accounts printed in Rome by other missionaries that he most probably consulted before arriving in India in 1776 and upon returning in 1789 while he prepared his own texts for publication. In fact, even the title of his Viaggio pays homage to a genre of travel literature in which the Discalced Carmelites, who were sent before him, excelled. The first was Philippe de la Très Sainte-Trinité's Itinerarium Orientale, printed in Latin in 1649.<sup>27</sup> He was a General of the Order who personally sent a second reconnaissance mission to Malabar in 1656, consisting of Giuseppe di Santa Maria Sebastiani and Vincenzo Maria di Santa Caterina da Siena.<sup>28</sup> The Discalced Carmelites were commissioned by the Propaganda Fide and the Pope to remedy the explosive situation in the mission among the St. Thomas or Syrian Christians in Malabar.<sup>29</sup>Sebastiani went to India two times and wrote two separate travelogues, but it was Vincenzo Maria di Santa Caterina da Siena's Viaggio alle Indie Orientali, first published in Rome in 1672, that in many ways became a model for Paulinus' travelogue. Besides describing customs, religion and history, he also reported on natural history, including south Indian plants and animals and local remedies.<sup>30</sup>

Matteo di San Giuseppe, another Italian Discalced Carmelite who actually joined the two fathers in India, and who was proficient in Arabic and skilled in medicine, became notable more for his collaboration with the famous Dutch "amateur" botanist Hendrik Adriaan van Rheede tot Drakenstein than for his own work, *Viridarium Orientale.*<sup>31</sup>Pietro Foglia, alias Matteo di San Giuseppe, studied medicine in Naples and entered the Carmelite Order in 1639. He travelled extensively through the Middle East before being sent to the Malabar mission where he died in 1691, the same year in which van Rheede died at sea near Bombay before reaching the port of Surat. It seems

that this Neapolitan friar who kept his own collection of drawings of plants from the Mediterranean region, Mozambique and India gave van Rheede the idea of inaugurating his own botanical work, which was ultimately published as Hortus Indicus Malabaricus.32 In the course of the collection of plants, and the identification, description, sketching and painting (in ink-and-wash) of the specimens, van Rheede gathered a whole team of local experts, including Ayurvedic physicians, learned Brahmans, Dutch draftsmen, and a translator into Latin. As is clear from the preface to the first volume published in Holland in 1678, Matteo di San Giuseppe withdrew willingly from the enterprise in order to consecrate himself more to his missionary duties. In fact, his sketches were judged unprofessional by van Rheede's rival, Paul Herman, a botanist who resided in Sri Lanka and who published his own botanical book, Flora Zeylanica, in 1747.33

Amateur botanizing was one of the affinities that bound together a Discalced Carmelite and a Dutch official in Kochi, an important pepper and spice market in Kerala seized by the Dutch from the Portuguese in 1663. Another affinity was larger than any personal relationship and was a direct result of the simmering hostility between the Portuguese Padroado institutions and the Roman Propaganda Fide. Since enemies of the Portuguese were considered "friends", and since the Portuguese tried in vain to expel Roman missionaries from the territory, the Dutch judged it convenient to extend their support to the Romans. Personal and political rapprochement with the Dutch authorities in Cochin enabled the Discalced Carmelites to strengthen their place in the local political theatre in which they found themselves opposed at times both to the Portuguese priests and prelates sent from Goa and to the St. Thomas Christians who continued to resist both Portuguese and Roman religious and temporal overlordship. For his help in preparing the Hortus Indicus Malabaricus, Matteo di San Giuseppe earned protection from the Dutch and even acquired land to build a church in Chethiah (today in Ernakualam), near Cochin. As for the Dutch, who made it a rule not to allow Catholic priests of Portuguese origin, over the next century they accepted the Propaganda Fide missionaries, recruited from Italy, Belgium and the Austro-Hungarian regions. Paulinus himself was born in Hof am Leithagebirge (Cimov) in Austria, to a diasporic Croat family.

The principal residence of the Discalced Carmelites from the time of Matteo di San Giuseppe was in Verapoly, established in 1673, a few months after he had built a church in Chethiah. Verapoly was a much more convenient place, located north of Kochi, closer to the St. Thomas Christian settlements, protected from possible Portuguese harassment and at a safe distance from Dutch control.<sup>34</sup> It rapidly expanded into a seminary for the religious instruction of young boys, following the precepts of the Propaganda Fide that favoured the instruction and formation of indigenous clergy. The missionaries were, therefore, before anything else, "religious" experts and specialists with exhausting working hours. In addition to that, they imposed on themselves, some more enthusiastically than others, a regime of daily bookkeeping, recording all that went on in the residence and the seminary. From Paulinus' daily diary entries in Portuguese, preserved in manuscript form for certain periods of time, we can glimpse the busy life of the mission in which every decision, big or small, had to be calculated and negotiated. For example, each and every person who entered the seminary or visited the fathers was mentioned by name, and the purpose of his visit was briefly noted. At times, even the number of chickens bought at the market to be cooked for food was listed, with prices included, in the diary. In addition to this, the missionaries kept corresponding with Rome, with other religious men elsewhere, and with many people in India-everyone from a Portuguese archbishop to the king of Travancore.<sup>35</sup>

The missionaries, obviously, lived in the thick of social relations. They nurtured friendships and provoked enmities. Local missionary culture (and this is also true of Jesuits and other missionaries in India) was built on efforts at creating ever-expanding networks of friendly bonds and alliances. This is why studying languages, crucial in establishing communication, was a priority. In the second place, but a matter of great importance, was the exchange of services, especially those that were perceived as beneficial to the wider local community. Since, unlike other European experts and colonial actors, they were neither able nor allowed to rely on monetary exchange, the missionaries' medical practice and free-of-charge consultations were an important asset. They presented themselves as "doctors of the soul" right from the beginning, but they also continued to improve their medical knowledge and techniques.36

# CIRCULATION OF MEDICINAL PLANTS AND REMEDIES

Health, medicine and cures were, on the whole, one of the obsessions of all Europeans in Asia, and anywhere in foreign lands, for that matter. Especially in tropical climates where European mortality visibly escalated due to various endemic diseases such as malaria and yellow fever, medical practitioners were valued and recruited from local medical communities. Just like interpreters were needed to teach languages, Indian ayurvedic, unani and siddha specialists were required to help Europeans become fully acclimatized to the exhausting environment. From the 16th to the 19th centuries, European and Indian medical traditions closely resembled, and were both based on, humoral theories. Humors had to be kept in equilibrium inside the body and between the body and its physical surroundings. Local physicians and herbalists by definition had a better grasp of the most efficient substances and could read better the symptoms of particular ailments.

For the Discalced Carmelites, as for all other Europeans, knowledge of local *materia medica* was seen as crucial for survival in India. From a collection of documents found in Paulinus' archives in Rome, we get a sense of the importance of sharing infor mation with friends, acquaintances, patrons and clients. Not only was the exchange of recipes a confirmation of a bond of trust and alliance, it was also a way of crossvalidating personal experience or a new experiment, and of confirming the efficacy of certain remedies while rejecting others.

A great deal was already known by the time Paulinus came to Malabar. From the middle of the 16<sup>th</sup> century, books such as Garcia da Orta's *Colóquios dos simples* and Cristóvão da Costa's *Tractado* had been published providing some general pharmaceutical instructions. The exact quantities and measures were rarely provided. These were, of course, partly the wellguarded secrets of the trade of various doctors and apothecaries. Among Paulinus' documents, across a half a page of a torn notebook somebody wrote, in Portuguese, *Varios segredos de Medicina*. What follows is a text in French entitled *Recueil de curiosités* and written by an anonymous hand with fanciful recipes closer to black magic than medicine. "To cure a fistula, a marvellous thing. Take a live frog and put it in an earthen vessel placed over a fire and cover it so that it cannot escape and reduce it to ash. Put this powder on the fistula, which you already have washed in hot wine or in the urine of a male child".<sup>37</sup> To what extent these kinds of remedies were practiced by the missionaries may not be ascertained, since generic fistulas or ulcers were, according to other preserved documents, cured in innumerable ways. Many cures, however, were equally extravagant, either because of the content of the remedies or because of the illness itself.

Ailments produced by demonic forces were taken seriously. Against witches and demons, a mixture of pepino-de-S. Gregorio with the fava de S. Ignacio was recommended in Botanica Malabar, an anonymous manuscript manual of simples and remedies, written in Portuguese and found among Paulinus' papers.<sup>38</sup> Another medicine against witches was Manungal oil which had to be smeared on the skin. The Portuguese author was unable to identify this remedy and presumed that it was made of the root of the wild Drumstick tree. On the other hand, the root of the Cheese tree (raiz de queijo) was excellent for those who were haunted or possessed by demons. The technique was to cut and dissolve it in lemon juice or canja (a light lentil soup) or some other liquid, and then throw it into the patient's eyes. "And the Demon will not wait for you to throw it a fourth time". For less demonic, but equally vicious attacks, such as erotic dreams (sonhos venereos), the author recommends Nymphea or white lotus. The choice of remedies was, therefore, copious, because the humoral theory of health supposed that what worked for one patient may not work for another. Each person was unique in his humoral constitutions, and each moment in his life brought invisible changes often difficult to notice. If we add to that the changing climatic constitutions outside the body, one can understand the difficulties and polyvalence of diagnoses and cures within the humoral medical system. Balancing the humors in a body was therefore based on the joint action of ingestion and expurgation. The basic effects of all herbal medication prescribed in Botanica Malabar were to retain or to expel substances in human body. Some plants were good for cleaning the uterus, others to prevent miscarriages; some were diuretic, while others retained water in the body.

Of course, one could also be poisoned, either from malice or accidentally, and—very importantly in tropical environment—one could be bitten by

venomous snakes and other animals. Garcia da Orta, Cristóvão da Costa and numerous travellers and missionaries in the 16th and 17th centuries in India never failed to provide their own often miraculous stories of poisonings and snake bites. Paulinus' first encounter with the dangers of animal world in India is told with a touch of comedy at the very beginning of his Viaggio. The scene is set in the evening at the house of the procurator of the Missions Étrangères in Pondicherry, Signor Jallabert, during a friendly discussion about methods for converting the gentiles. One of the servants sleeping on the porch stood up screaming and showing his ear. It was immediately decided that an earwig had entered his ear and was trying to bite its way inside. Without a moment to lose, Mr. Jallabert applied to the servant's ear a spoonful of droga amara which killed the bestia and caused it to slide out of the ear. Paulinus profited immediately from the opportunity to provide a recipe for this medicinal liquid: "For 24 French bottles it is necessary to take 24 ounces of resina, or calafonia, 12 ounces of incense, 4 ounces of mastico, 4 ounces of aloe, 4 ounces of mirra, and 4 ounces of calumba." The mixture is then dissolved in *aquavite* and exposed to the sun for a month during the dry season. He also gives three sure addresses where this potion can be bought: in Pondicherry at the Speziaria of the Jesuits, in Verapoli from the Discalced Carmelites, and in Surat from the Capuchins.39

This remedy was obviously a missionary concoction, rather then a purely local formula. What is interesting is that in the manuscript in Rome, there is a slightly different recipe written in Portuguese in Paulinus' hand. The spirit used is the "country wine with 20 degrees of alcohol (*vinte puntos*)"; some simples, like *resina*, are followed by two local Malayalam names; and there is an additional ingredient, *açafrão de Europa*.<sup>40</sup> We can only speculate about the reasons for the modification of this recipe that was printed in the *Viaggio*: was it due to the results of more testing and experiments, was it a simplified version, or was it a cunning way to avoid disclosing all the ingredients to the European audience?

The politics behind identifying, collecting and transporting medicinal plants and spices were often not "clean", and colonial authorities (Portuguese, Dutch, French and British) often censured accounts that gave away strategic information. This is what Everardus Rumphius, a German, discovered when the Dutch East-India Company praised his Herbarium Amboinense (Amboinische Kruid-boek), promoted his son to the rank of merchant, but refused to print it as a book lest their competitors be able to profit from it.<sup>41</sup> The Dutch had every reason to be paranoid, since just about everybody interested in the spice trade was trying to snatch away and acclimate some of the most lucrative spice trees that were under their control. French travellers of the period such as Pierre Poivre, Sonnerat and Le Gentil were all keen on procuring and smuggling out of Asia both plants and curious manuscripts.<sup>42</sup> At times, pressure was also brought to bear on missionaries to act as spies and smugglers. Such was the case with the Brahman Catholic priests of the Oratorio de Santa Cruz dos Milagres in Sri Lanka at the end of the 17th century. Among other things, they were asked to steal a cinnamon tree (a seed or a small live plant) and send it to Goa. Nothing came of it, partly because the Dutch efficiently controlled all the ports connecting the island with the Indian subcontinent—and perhaps the Oratorians did not try hard enough.43

There were cinnamon trees on the Malabar Coast as well, but they were not considered to be as good as Sri Lankan trees. For botanists, this was no surprise since they knew very well that certain kinds of plants grew better in certain climates and territories. Of course, acclimatization worked as well, and this has been proven by the spread of plants and trees from Brazil and the New World in Asia. Some, such as tomatoes and chilli peppers, entered Indian cuisine and became such staple items that their "foreign" origin disappeared into oblivion. Within a generation the same happened with tobacco, to which many became addicted.<sup>44</sup> Thus Oratorian missionaries in Sri Lanka complained that the stipend given to them by the Portuguese king was not enough to enjoy their daily ration of tobacco.<sup>45</sup>

The circulation of commodities, including medicinal plants, was therefore dependent on networks established for their distribution. The more commercial value they had, the more pressure there was from the colonial authorities or trading companies to control and monopolize them. More difficult, although possible to a certain extent, as the case of Rumphius shows, was to stop information "leaks". One of the reasons was that information networks were not easily controlled. For example, Catholic missionaries always managed to send and receive correspondence in the most hostile social environments.

However, the "facts" themselves were often not easily decipherable and needed additional interpretations and interpreters. For Garcia da Orta, one of the major tasks was to fit classical pharmaceutical names to the plants and substances that he managed to get hold of or, at least, acquire detailed descriptions of. To his dismay and elation, he discovered myriads of linguistic misappropriations by which one name meant different things to different people, at different times. At the same time, botanical linguistic relativism allowed him to launch an attack on the Ancients, Greek and Roman naturalists and physicians-Dioscorides, Galen and Hippocrates among the most famous-and to rebel against textual authorities in general, from medieval Arabic and Jewish scholars such as Avicenna, Razi, Averroës, to his contemporaries Pietro Andrea Mattioli, Andrés de Laguna, Leonardus Fuchius and others.46

For Paulinus, the task may not have been easier. He clearly tried to fit Malayalam and Sanskrit phytonyms onto plants "identified" by his predecessors (Portuguese, Dutch, German and French) who did not by any means agree on classifications. Besides the anonymous *Botanica Malabar*, there are, among the manuscripts in the Biblioteca Nazionale Vittorio Emanuele III, at least two more separate lists of phytonyms (*Termini botanici*) as well as individual sheets of paper with names scribbled on them.

# FROM MANUSCRIPT SECRETS TO PRINTED DISPLAYS

Some of these recipes, botanical and pharmaceutical names and descriptions of Indian illnesses and remedies occupy Chapter XI (Volume 2) of the Viaggio. "With incredible trouble and pain I gathered all these Indian Malabar names, and united them with the Latin and Portuguese names of so many Indian simples in order to give the keys of Malabar Botany to the *amatori* of this science."47 Three orders of names-Indian Malabar, Latin, and Portuguese-had to be cross-linked to create an intelligible whole for the European enthusiasts and experts in the science of botany. In fact, Paulinus would add a fourth, Sanskrit, which was in many ways the most crucial order, in his opinion, not just for botany and medicine, but in order to grasp the whole of Indian civilization. For Paulinus, it was names rather than things that needed to be analyzed

first if one were looking for (and believed in) originary and universal meanings and taxonomies. It takes few pages in any of Paulinus' books to understand that he was obsessed with foreign, exotic names, even more than the exotic commodities themselves. In his work, one cannot but sense a certain detachment of names from things, an advanced symptom of a broken relation between the sign and the world that created, in the long run, an open-ended network of significations based on probability and playing with uncertainty.<sup>48</sup>However, for a man of religion such as Paulinus, this potentially tragic situation in which the language of God ceased to speak through natural forms had to be sublimated at all costs. If the divine ceased to inhabit nature by way of visible marks, hints, miracles and prodigies, it was reintroduced into history as a rational "sacred" history. In the same move, the demonic was expelled from natural history in order to become irrational and ridiculous, and by the late 18th century it was driven out of the locations of knowledge and truth.

For the Discalced Carmelites, as for all other Europeans, knowledge of local materia medica was seen as crucial for survival in India.

When discussing the convulsions and hysterical ills to which Malabar women were especially prone, Paulinus rejected all supernatural influence. "I saw many times in the church at the time of the Mass some women springing up as the church bell rang and they ran and jumped as if they were crazy (come tante disperate od energumene), so that some thought that they were possessed by the devil (*indiavolate*)".<sup>49</sup> These were all superstitious beliefs, concluded the missionary. Such behaviour was simply a humoral disequilibrium that occurred in women who "do not work" and lead a sedentary life. The best way to cure these "tremors and leaping which is called *tullel*" was to make women husk rice, wash in cold water, take some China (tamarind), and "avoid all passions that arouse imagination, nerves and senses". Thus, Paulinus reinterpreted a particular south Indian cultural phenomenon, spirit or divine possession, as the consequence of climate and bodily constitution. With this move he obliterated two hundred years of speculation about south Indian demonology, of which the missionaries and European travellers in the region produced ample "evidence".<sup>50</sup>

In the divine silence, the names of plants, illnesses and remedies become random choices and without any particular order inherent in them. Garcia da Orta may have experienced the same problem in finding "keys" in order to create a taxonomy for his simples and remedies. He finally chose to organize them in alphabetical order, which, combined with an imaginary dialogue, created a sense of spontaneous direction for his "scientific" sub-narrative. Moreover, as a physician and a merchant in pharmaceuticals and precious stones, Orta celebrated material things. He also owned and enjoyed his possessions, such as fresh mangoes from his Bombaim island estate. Paulinus, on the other hand, was not allowed to possess anything. Even the books, manuscripts and curious objects he brought back to Europe were not his personal belongings. They were the common property of his order and most of them were destined for the collections of the Propaganda Fide or the Museo Borgiano in Velletri.

Although Paulinus played the game of gifting and exchanges in order to secure and consolidate the status of the Discalced Carmelites in the local social hierarchies, ownership did not mean possessing material objects. For example, he was given a white hat by the British resident in Anjengo, for which he wrote a letter of thanks in broken English.<sup>51</sup> A king of Travancore gave him a gold stylus for writing on palm leaves in exchange for Paulinus' manuscript on the basic grammar of English language with explanations in Portuguese (and Malayalam). He also organized gifts of paintings and portraits exchanged between the Pope and the king Martanda Varma.

It is only by taking a look at his "printed" archives, that is his *Viaggio* and other books, that we understand what it was that Paulinus passionately collected. He collected both words/names and languages. In his chapter on Indian Medicine and Botany, he claimed that he "[took] many names from Father Hanxleden's Dictionary, from Biscoping, from Monsignor Pimentel, from the Herbal by Father Feraz, and from manuscripts by Father Giovanni Alvarez, Father Antonio Gomes, Mr. Queiros, Mr. Ambrosio Lopes and Vapu; all these are native Malabar botanists and doctors".<sup>52</sup> Except for the Jesuits, Johann Ernest Hanxleden, Bernhard Bischopinck and Dom Antonio Pimentel, the Archbishop of Cranganore in the first half of the 18th century, little is known about the other medical and botanical authorities Paulinus mentions here.53 Giovanni Alvarez, a native priest, according to Paulinus, was also a translator of a Sanskrit text on Brahmanical Medicine (Medicina Brahmanica), which was later expanded by Hanxleden.<sup>54</sup> A few pages later he also boasted of actually owning various palm leaf manuscripts (olai) and drawings of plants made by a Malabar physician and annotated by a certain Countess of Salms.<sup>55</sup> Those that he did not possess, he consulted in the libraries in Paris, where he stayed in 1789 on his return to Europe from Malabar, and in Rome. The biggest collections of palm leaf manuscripts with Ayurvedic texts, or "those that teach the conservation of individual lives" were, according to Viaggio, in the library of the King of France, of the Propaganda Fide, of the Museo Borgiano in Velletri and in the collection of Samuel Guise.56

So evident was his passion for words that one of the Orientalists who certainly shared Paulinus' linguistic enthusiasm felt compelled to denounce it. This was Anquetil-Duperron. He was asked, and agreed, to annotate the French translation of the Viaggio, which he did very conscientiously. However, he died before the work was completed and was replaced by Antoine-Isaac Silvestre de Sacy (1758-1838). Curiously, in the printed French version the comments by J. R. Forster, who translated the Viaggio into German, were also included. The result of this international collaboration of Orientalists is that the three-volume Voyage aux Indes orientales resembles a libretto for four voices, each pulling in different direction and quarrelling over the smallest disagreements in form or meaning.<sup>57</sup> There is no doubt that Anquetil-Duperron was as possessive and vain about his own knowledge of India as was Paulinus.<sup>58</sup> Hence, his major complaint about Paulinus' chapter on botany and medicine was that it was all taken from the dictionaries: "The names of all illnesses, as well as recipes given by the missionary in this chapter, appear to be taken from the dictionary and other writings by the Jesuit Hanxleden, and from the works of different missionaries, Carmelites, Capucins, that the author had in front of his eyes: little did he observe, practice himself (lui-même a peu observé, pratiqué)."59

It is certain that Paulinus had not cross-tested all the drugs, cures and antidotes he described in detail. There are some elaborate recipes among his unpublished documents that were not included in the Viaggio, such as the one for curing syphilis and gonorrhea, which were probably deliberately left out so as not to display what could be considered an exaggerated interest on the part of the missionaries in curing venereal diseases.<sup>60</sup> On the other hand, the accusations ranging from excessive reliance on written accounts by other travellers and missionaries to downright plagiarism were most common among ambitious Orientalists and experts on India. Paulinus' Viaggio is filled with tirades against and castigations of all disciplines and their practitioners who dared to write about India or disagreed with him, starting from geographers and ending with the philologists.

In fact, a jumbled travelogue such as the Viaggio was a perfect literary genre for showing off the author's erudition without the obligation to construct rigorous taxonomies, and for enticing readers with curiosities that did not require immediate proof or validation. Needless to say, Paulinus did not shy away from providing ample-at times excessive-evidence when he wanted to press his point. The lists of plants and illness in the Viaggio may have been taken from dictionaries, but they do not follow any visible alphabetical order, neither Latin nor Sanskrit. The names of some thirty illnesses are strung along one after another, separated by commas, with their non-European names in italics. "The diseases that afflict the inhabitants of the southern part of India, that is, of Malabar, Kanara, Mysore, Madurai, Tanjore, Marava and the Parava are the following: shralanòva wind colic, sanivali convulsions and nervous cramps, adisàram diarrhea or a simple dissolution of stomach, calladapa the stone, grahanni dysentery with spasms, iluca disclocation of members, mujali a kind of gout, kaszalapani St. Anthony's fire with fever, pani in Malabar language [Malayalam], giurti and gioram in Sanskrit, called fever, tridoshagioram, that is a fever with three bad properties, which we call malignant fever, malapani a one-day fever caused by a certain wind from the Ghats, called in Portuguese fever of the Mountain."61 Although the names in Malayalam and occasionally in Sanskrit may appear opaque in their graphical and phonetic representation, the cultural authority vested in them, or so Paulinus wants us to

believe, gives them an aura of trustworthiness. On the other hand, the translation he provides attached to each term is disconcertingly vague. A wind from the Ghat Mountains could refer to anything and was subject to individual interpretation. Moreover, it is not clear whether these names in Italian translation represented symptoms or illnesses, or both mixed together.

Some diseases, identified as endemic in India and often referred to by other writers, acquired names that became notorious in Europe. One of them was mort-dechien, a name based on a French misunderstanding of the Portuguese word mordexim taken from Konkani, a language spoken by the majority of Goans, which meant a deadly intestinal colic similar to cholera.<sup>62</sup>Paulinus provides it with Sanskrit appellation—Viszùciga—and defines its etiology in the particular topology of the south Indian region.<sup>63</sup> The causes of cholera were the cold winds of the western Ghats that blew in Malabar during October, November and December, which were "loaded with nitrate particles of the mountains". This particular affliction was known and identified in the early 16th century because the Portuguese felt its deadly effects early on.64

After this first list of illnesses, Paulinus focused on a chosen few, writing in more detail about their etiologies and therapeutics as well as including a veritable jungle of translations of words from Malayalam and Portuguese.

He excused himself for not adding Sanskrit names and proposed that his learned readers check them through their Malayalam names in the Vocabulario Amarasinha Brahmanico, the most famous Sanskrit dictionary, "which [the Indians] read in school by way of the Malabar language, just as we interpret a Greek author by way of Latin language."<sup>65</sup> Under the heading Auszadhivargga or "classes of medicinal simples", there were the names of three hundred or more medicinal plants.<sup>66</sup>In the years following the Viaggio, Paulinus also printed the first part of this Sanskrit dictionary, which he called by the name of its author (Amarasinha) instead of by its title, amarakosa.<sup>67</sup> The crown of his botanical possessions was, however, the palm leaf manuscripts inscribed with Sanskrit "Sloga [sloka]" or verses. These were, according to Paulinus, very ancient Brahman texts written by the "Samanei", Indian philosophers who "philosophized in short sentences according to Diogenes Laertius".68 He then went on and included three Sanskrit sloka, transliterated and translated into Italian.

Ancient and contemporary are inextricably mixed in the *Viaggio*'s narrative present. It is only through Paulinus' intervention, either in footnotes or right in the middle of the text, usually cutting through a long list of enumeration, that we are sporadically given some notion of the chronological layers. One of the reasons for this, insisted Paulinus, was because medicine and botany had been cultivated in India for the past three thousand years, more than any other science. Moreover, no other country possessed so many books on medicine.

However, although he witnessed successful cures by Indian doctors, since they often managed to heal patients abandoned as hopeless by European physicians,

he doubted that Indian medicine would "make any progress". The prohibitions imposed by the Indian legal and religious system on killing animals prevented the study of anatomy.<sup>69</sup> The Brahmanical system that ruled Indian social and religious life was also more than three thousand years old and, implied Paulinus, completely unchanged. In that respect, it was a living history of the European past and, therefore, ancient Egypt and Greece were comparable in every way to contemporary India.



Plate 1

In this kind of ancient, immutable system, plants were botanical specimens, remedies and religious objects. "The *Villapatti*, or *Kùvalam* in the Malabar language, *Marmoleira* in Portuguese, is a kind of quince (*Cotogno*) dedicated to the God *Lingam* or *Priapo*...On Greek vases published by *Hamilton* you can often see some people, or a husband presenting his wife with a quince in an act of consecrating it in her hands. This rite is considered to signify a type of sacrifice to the *Lingam* or the *Fallus* (*Fallo*) of the Greeks."<sup>70</sup> Paulinus provided a few samples of the religious use of certain plants such as the lotus, tulsi basil, the banana and some others, but refused to "develop" further "the symbols and the follies of the Gentiles".<sup>71</sup> In fact, he did develop these in minute detail in other parts of the *Viaggio* and in his *Systema Brahmanicum*. Paulinus' effort at translation endlessly reshuffles names, things and practices. It is as if one name beckons another, as if each name is in search of another name and when no exact translation is possible, Paulinus comes up with analogies and metonymies that lead to other analogies. The translation usually proceeds from an Indian name or phenomenon towards a name in any of the European languages.

However, sometimes certain concepts are discussed the other way around: "Indian Trinity is called *Trimùrti* in Sanskrit. *Tri* three, *murti* body, *punya mùrti* holy body *Vishu mùrti* idol, body of *Vishu*. This is the significance of the word *mùrti* in Father Hanxleden's

> Sanskrit Dictionary (Dizionario Granthamico), in Monsigneur Pimentel's and in the Mahabharada book. Therefore Trimurti does not mean three gods, or three potencies, but three visible bodies, created by the goddess [of Nature] *Bhavani*, in one body."<sup>72</sup> As if words failed him, Paulinus invites the reader to look at the picture on the same page of the Trimurti as it "figures" (*essa è figurata*) in the very ancient (antichissimo) temple on the island of Elefanta (near Mumbai).

[Plate 1].73 As Paulinus' Trimurti moves from one erudite statement to another with dozens of references and other types of learned quotations, the reader is lost in the details. In spite of the chaos of information, we can discern a specific point that Paulinus is trying to make. In fact, we cannot miss this point, because it is repeated throughout his work whenever he writes about Indian theogony or religion. He is trying to persuade the reader by way of various proofs (material, linguistic or literary) that Indian civilization is as old as Egyptian, if not older. "The temple in Elefanta is ancient (antichissimo) and it should be seen whether the monument in Caylus and the Egyptian pyramids surpass the antiquity of this underground temple".74 If, for Athanasius Kircher, Egypt was the home of the Trinity, Paulinus was pressing for a radical revision of sacred geography.75

His ultimate argument about the antiquity and cultural supremacy of the Brahmans compared to the Egyptians and the other classical peoples was based on Sanskrit.

# FROM ZOOLOGY TO DIVINE PROVIDENCE

Paulinus' trust in Sanskrit did not blind him to the direct observation of nature. It is just that nature appeared to the missionary as infinitely easier to describe and understand than culture, especially an ancient pagan culture. If for a natural scientist it was crucial to cut things open and see what was inside, and how various parts worked and produced the harmonious whole, an equivalent procedure for an Orientalist was to break through the grammatical forms in order to get to the smallest elements of language. Early in the 19th century, Friedrich Schlegel, a German Orientalist, likened comparative grammar to comparative anatomy.<sup>76</sup>Other Orientalists defined their philological studies as very similar to "botanizing". In fact, many British Orientalists were amateur botanists in their own leisure time, and the botanical metaphor only confirms that the methods applied to one field were also helpful in the other. Paulinus seemed to have "botanized" too, mostly in his Sanskrit dictionaries, and that is why he was unable to keep his subject within one particular order, the order of natural history, but kept slipping back into philology or comparative mythology.

In the two chapters that deal primarily with the description and enumeration of Indian animals, Paulinus gets as close to the ground and the material world as he possibly can on the pages of the Viaggio. As if filling up a storehouse, the author piles up names one after another, in a procedure similar to that applied to plants and illnesses. The principle of semantic identity and phonological difference helped the accumulation of names ad infinitum. The movement of signification can move either from a known European name to various Indian names, or vice versa, in case of a "new" or unusual animal. "The elephant in the Malabar language is called aana, in Sanskrit dandi, dandavala, hasti, gagia, naga, cugnara, cari, duiba, madamghegia, these are all words that express some of its qualities."77 There is no explanation provided as to exactly what those qualities were, as if the reader could easily check those words in a Sanskrit dictionary. Paulinus,

of course, recommended just that in the botanicomedical section of his work, and earned an instant sneer in Anquetil-Duperron's footnote.<sup>78</sup> The reason Paulinus did not restrain his erudition even when it meant providing catalogues of foreign words without proper translations was the fact that storing knowledge in this manner was a common antiquarian practice, and that the editorial authorities in Rome were not interested in censuring "secular" details. The *Viaggio* obviously targeted a wide readership, but also provided condensed "scientific" information for experts and professionals. The thick folds of specialized facts and knowledge are responsible for the *Viaggio*'s heavy and, at times, indigestible narrative.

The politics behind identifying, collecting and transporting medicinal plants and spices were often not "clean", and colonial authorities (Portuguese, Dutch, French and British) often censured accounts that gave away strategic information.

It gets more complicated for an average reader when Paulinus comes up with his own zoological observations. "In Vaypur, in Puttenpalli, in Mohatushe I saw a flying cat, which is the Lemur caudatus, or Vespertilio admirabili of the naturalists, or Chat Volant of the French. In Malabar language it is called *parraciatten*, and is surely a species of squirrel, as big as a cat with a thick, long tail, which serves as a rudder when it flies, and with two cartilage wings like a bat. Its skin is of silver colour with delicate fur. It lives on the mava tree or mangueira (mango tree), the fruit of which it eats. This animal is different from the Malabar Marpatti or Serval of the naturalists...which is a species of stone marten".<sup>79</sup> In this labyrinthine description, the animal in question is just as its name suggests - "flying". It is high up over our heads and flying from one tree of signification to

another. Its morphological characteristics are defined in terms of analogies with otherwise very different animals—a bat, a cat and a squirrel—and in terms of difference from "a species of stone marten". This is a typical method by which Paulinus creates his own "new" objects, which he endows with mixed, fluid and confusing identities.

A way to add another layer of legitimation to his discoveries was to conjure up textual authorities. For the flying cat he summons German zoologist Eberhard August Wilhelm von Zimmermann's Specimen Zoologiae geographicae ... (1777), as well as Buffon and Johann Gottlob Theaenus Schneider, another German classicist and naturalist.<sup>80</sup> In the course of the Viaggio, naturalist writers such as Ulisse Aldrovandi, Walter Carleton, Carl Linnaeus, and many others are invited to play a background part for his own musings on natural history. Sometimes, they confirm the facts he presents, but mostly they appear at points where he disagrees with them. His blanket accusation is that "they all write without monuments [material documents] and experience".81 The flying cat and the "species of stone marten" provoked Paulinus to castigate Zimmermann, Buffon and Schneider for many errors by which they "attribute an animal to a neighbouring country... and confound their species".82

These citations are in fact revealing of how Paulinus advanced in constructing his animal classificatory passages. Since at the very beginning of the chapter, the missionary divided all animals according to the Linnaean method into six classes, the reader may expect that he would stick to this framework. He manages to do that for the quadrupeds (quadrupedi), birds (volatili) and amphibians (amfibi). For the next three classes, of fish, insects and vermin, Paulinus breaks out of the purely zoological bounds and the chapter discusses many other topics such as rivers and ships, and a whole treatise on serpents and their various cultural uses in India. It is in the details that we get a sense of Paulinus' difficult choices in putting together and naming the elements in his collection. We can almost picture Paulinus with his fieldwork notes in front of him, his various dictionaries and grammars of Indian languages on one side and the learned naturalist works of the Europeans on the other. Fitting the three of them together seamlessly and unambiguously required concentration, skill and motivation. A suspicion lingers, however, that his fieldwork notes on animals

were meagre compared with his thick dictionaries and natural histories. Unfortunately, unlike for botany, Paulinus' archives in Rome contain very few traces of his zoological documents, if there ever were any.

Another, more indirect indication that Paulinus' animal world was mostly constructed from zoological books is the author's overemphasis on his first-hand observation. For example, he disagrees with Pliny, Zimmermann and Linnaeus about the Malabar leopard, and immediately includes a witness story that seals off any possible further discussion. "In 1776 I was in Vaipur in the church and examined the accounts with the managers (economi). In the middle of the day 15, just steps from the church, into the town came a puli or leopard, and carried away a dog that was playing there in front of 200 people".<sup>83</sup> His bone of contention with the European authorities was the leopard's "form", since according to them it was white with black spots, while the Malabar variety seen by Paulinus was yellow with black spots. Paulinus made the point on a few occasions that what he saw was closer to truth than what others wrote about it; but as if that were not enough, he also wrote about other acts of witnessing. One of them was that he had hunted some of these animals himself. With two Englishmen, Messrs. Hutchinson and Crozier, he killed a few civet cats, which enabled him to prove that the musk was in their testicles, contrary to the opinions of some other naturalists in Europe.<sup>84</sup> In addition to seeing and shooting them, Paulinus also tasted the flesh of certain animals such as bats: "They had a flavour of roasted hares".85And finally, he admitted his desire to collect certain objects and bring them back to Rome, and his inability to do so because of the space they took in his luggage. What he collected were nests of the weaver bird, called *olamari* in Malabar, baya in Indostani and berbera in Sanskrit. This bird was famous for its elaborate hanging nests woven out of grass and strips of leaves. Obviously, Paulinus had held those nests in his hands, but it did not prevent from him weaving curiously anthropomorphic elements into the story of the building of the nest. The nest that resembles a family house with rooms for each member is also decorated with a dead firefly in order to serve as a "light in the night".86 This penchant for anthropomorphizing animal behaviour was not yet sociobiology, of course, but rather a sense of awe and admiration at divine creation. Thus when a small, non-venomous snake (tevi) is killed, "many other of

the same [snake] race come to see it" and stay for two to three days in the area. Although it sounds incredible, Paulinus assures his readers that this had happened in Ambalacati (in a Catholic college) in front of thirty students and professors. He ascribed this zoological curiosity to some instinct or smell of the dead snake that attracts the others to its burial place. Paulinus was even more impressed with sea urchins and the way they protect themselves from predators. Moreover, it is in different "small things (minime cose)", such as insects and starfish, all of which live in "a sort of society" which is "regulated, pacifist and political", that the missionary saw the true "Wisdom of God" and the "Providence of the Supreme Being".<sup>87</sup> These were the "invincible arguments of nature... against our insane philosophical spirits".88A well-organized society was closer to the insect world for this staunch opponent of revolutionary ideas. He had the chance to experience first-hand what he saw as their devastating effects while passing through France in 1789 on his way back to Rome from the Malabar coast.

More than culture, therefore, nature for Paulinus clearly worked within a divinely ordained system. Environment and climate were, for the missionary, a direct result of divine intervention. It was God, the Creator of the World, who made the water around the equator more salty and made the winds, storms and movement of air stronger and more frequent in order to preserve the Torrid Zone from putrefaction and corruption. This is why the coasts of India were inhabitable and salubrious.<sup>89</sup>It was also Divine Providence that brought the annual rain that made the rivers flowing down the Ghat mountains wash away and "purge" the Malabar region of poisonous snakes.<sup>90</sup>

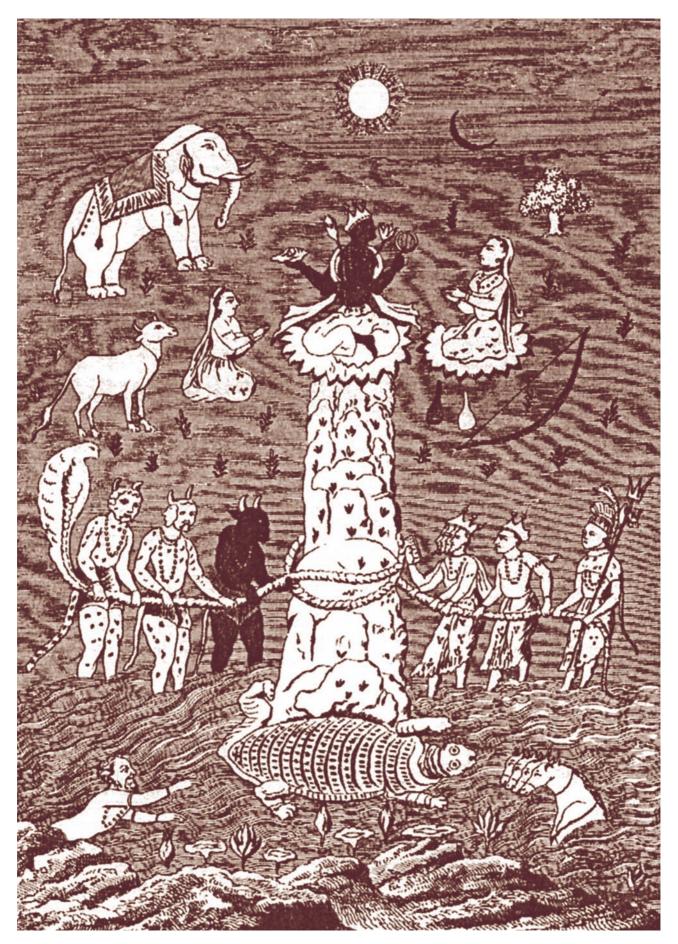
Paulinus did not hide his admiration and marvel at the natural world and the phenomena that he had experienced in India. Everywhere around him he saw fertility. The abundance of rice made the population grow. The poorest among the inhabitants, on the other hand, ate fish. There were so many good fish in the sea that they fed them to their pigs or used them as compost for coconut trees.<sup>91</sup> At the same time, scores of dangerous creatures, such as snakes, were everywhere and he was even ready to believe in the existence of dragons.<sup>92</sup> He betrays a spectacular credulity when he admits that, although he did not see the dragon himself, he knew the nephew of the person who actually killed it for the king of Travancore. This nephew "was still living when I left Malabar".<sup>93</sup> All kinds of marvellous stories, employed by Paulinus as an opening into the opacity of Brahmanical culture—which he admired as philosophical, and despised as heathen—grew ultimately over his recklessly disordered naturalist taxonomies.

Perhaps aware of the errancy of language, Paulinus takes Sanskrit names—denoting animals or plants or medicines—as signs, marks and entry points for something else: a chance to glimpse the social and cultural system ordained by Divine Providence. He called it a "Brahmanical system".

#### SANSKRIT: BEYOND ZOOLATRY

European naturalists who failed to understand this point were discredited with one powerful stroke: "they write without [knowledge of Indian] languages and without Indian books".94 Paulinus therefore situated himself in the company of a distinguished few, even though he never lost an opportunity to criticize them for ignorance and misinterpretation. These were the British Orientalists, his contemporaries connected with William Jones and the Asiatic Society in Calcutta (established in 1784) and its journal Asiatic Researches (published from 1789-1839). Within a decade, the most talented linguists among the Calcutta Orientalists inaugurated an era of rapid professionalization that emphasized a new type of exclusive authority based on exceptional philological competence. Bound to the Christian Orientalist paradigm, their methods and their immediate research goals corresponded to that of Paulinus and his French Jesuit predecessors: to confirm the Mosaic account of human history and the chronology of Christian revelation, and to determine the antiquity of the ancient nations (Greek, Egyptian, Sumerian, etc.) and their "sciences".95

Being an eye-witness traveller ceased to be a measure for truthful representation, while profound knowledge of Indian classical and vernacular languages, Sanskrit above all, became the key to understanding all that was considered worthwhile in Indian civilization. The close association between language and ethnology was partly a result of the Orientalists' early fixation on "the science of (Sanskrit) grammar or Vyakarana".<sup>96</sup> Indian linguistic tradition led them to believe in the "unity of all languages as corruptions of the eternal and incorruptible Sanskrit language."<sup>97</sup>



This obsession with Sanskrit grammar was something Paulinus shared with British Sanskritists, although they thought at the time that his knowledge of Sanskrit was insufficient and mistaken. Alexander Hamilton, the first Sanskrit professor in Britain who taught Friedrich Schlegel in Paris as well as a whole new generation of French metropolitan Orientalists, snubbed Paulinus, writing that "[Paulinus] betrays a complete ignorance of that language, and quotes books for facts that are not to be found in them. His Sanskrit dictionary (which we have in vain endeavoured to procure) is, we will venture to assert, a dictionary of the Malabar idiom, which bears the same relation to the Sanskrit that Italian does to Latin".<sup>98</sup>

This judgment, from an otherwise excellent Sanskritist, betrays a typical misunderstanding among Orientalist scholars. Principally, it concerns geographical location. Paulinus transcribed Sanskrit sounds from their southern transcription into Grantha script and was taught by Brahman teachers whose native tongue was Malayalam and Tamil, while British Orientalists in Calcutta had access to Sanskrit texts in the Devanagari script and followed the pronunciation of their Bengali pundits. In addition, in transcribing Sanskrit into Latin script, Paulinus adjusted it to Italian phonetics, while the British obviously adjusted it to English sounds.99 The second problem was that Paulinus' various books on Sanskrit, printed in Latin in Rome (Sidharubam seu Grammatica Samscrdamica (1791), Amarasinha, Sectio prima, de Coelo (1789), and Vyàcarana seu locupletissima samscrdamicae linguae institutio (1804), never reached the British Orientalists, as can be sensed from Hamilton's remark. Taken as fanatical and cunning instruments for conversion to the Popish religion, Catholic missionaries who often spoke vernacular languages fluently were called on by the British only when they needed them as "native" informants and, consequently, they were equally mistrusted.100

One of the paradoxes of Orientalist scholarship is its double bind to Indian sources that have to be authenticated by Indian scholars, and its simultaneous emphatic distrust of Indian scholarship and epistemic cognition. Thus Paulinus was able to underline, in his chapter on Malabar Zoology, that "Europe will never understand the bases of religion and natural philosophy of the Brahmans until the Brahmanical [dictionary] *Amarasinha* is published together with a clear and perfect translation".<sup>101</sup> He had translated a small part of it into Latin, mostly those entries dealing with theological questions. In spite of all this "indigenous" knowledge that he so avidly excavated from the authentic manuscripts,102 Paulinus was convinced that both Indian classical texts and the contemporary Indian physicians had a very imperfect understanding of natural phenomena and their origins. He shared this opinion with his predecessor, a Discalced Carmelite traveller to Malabar, Vincenzo de Santa Caterina da Siena.<sup>103</sup> Similar ideas were expressed by William Jones and other British Orientalists who also thought that "on the whole, we cannot expect to acquire many valuable truths from an examination of eastern books on the science of medicine; but examine them we must, if we wish to complete the history of universal philosophy and to supply the scholars of Europe with authentic materials for an account of the opinions anciently formed on this head by the philosophers of Asia."104

Studying natural history was, therefore, only a way to get at the philosophy and theology of the Brahmans. The reason they considered this a worthwhile project was their common conviction that the Brahmans had preserved the oldest language as well as the oldest culture (in terms of liturgy, rites, customs, and literature) that existed anywhere in the world. This also brought them to suspect that India was the cradle of the world, rather than Egypt, as was commonly believed by their contemporaries in Europe at the end of the 18th century. However, even if only learned Brahmans were able to teach and explain the fine points of the Sanskrit language, all the Orientalists agreed that it did not mean that they were able to understand the deeper meanings of the words. The Brahman penchant for exaggeration, fables and fantasy, moreover, led them to transform events and facts into allegories.

A professional Sanskritist was, therefore, called on not only to decipher the language and its grammar, but also to erect a solid scaffolding of sacred history in order to trim down these Brahmanical delusions, such as the exaggerated chronologies that surpassed the Mosaic chronology by millions of years. At stake was the oldest history of the world, according to Paulinus, buried in fables, allegories and symbols. By translating these Indian fables into a secular register, the truth of the Mosaic sacred history could be proven beyond doubt. More importantly, Indians had not only preserved their ancient books just like the Jews, but also their ancient way of life, customs, and thinking.<sup>105</sup> Therefore, India as a whole was an ancient book that could help Europeans and Christians understand and authenticate their own history.

Parallel to his study of empirical nature, therefore, Paulinus passionately observed nature in Sanskrit texts and dictionaries, where he thought that the truth of Creation may be discernable at the end of the line. For example, he clearly identified the "sacred animals" and "plants" that were connected with gods and sacrifice.106 The tortoise, the elephant, the cow, and the serpent all had names that denoted the empirical beings as well as elements in Brahmanical theogony. To understand that, one had to go back to Sanskrit, "a mother language, sacred and literal" in which one animal may have had dozens of different names.<sup>107</sup> At least one of these names would immediately refer to a fable or a divine being. Zoolatry and phytolatry, so prominent in the cosmogony of the Brahmans, was nothing else but the use of "symbols, emblems and enigmas" to teach divine and moral precepts.<sup>108</sup> Point by point and with numerous repetitions throughout the Viaggio, and in other printed works, Paulinus stripped these various allegories of all the fabulous veneers added by the Brahmans. "The sarparagia, also called vasughi, is a serpent which, in the opinion of the Brahmans, encompasses the whole world and is a symbol of life and death, of generation and corruption, because everything is born and dies and comes back to be reborn again. This is a Platonic idea which Pythagoras learnt from the Indian Magi."109

Studying Indian mythology was obviously a way to deepen Judeo-Christian sacred history, and to rechannel it away from the reigning Egyptophilia in Europe. When moving further backwards in time from the Indian Magi or the gymnosophists, as they were also known in history, an antiquarian such as Paulinus necessarily arrived at the period of fables. In his Dissertation on the Sanskrit Language, he defended fables because, as he wrote, they are "generally more ancient than real history".<sup>110</sup> He was certainly not the first, nor the only one, to ponder over comparative mythology. Moreover, from Lorenzo Pignoria to Athanasius Kircher, a tradition of reflecting on history and society in terms of cultural diffusionism was a major line of research for Catholic scholars, especially in the Jesuit and other religious circles in Rome. The Kircherian scientific method of connecting all different kinds of knowledge and then displaying them in one printed book after another later gave way to, as Paula Findlen has shown, "increasingly specialized and jealously guarded expertise".<sup>111</sup>Paulinus was heir to the Kircherian obsession with "assemblages" of facts and with finding connections at all costs. The *Viaggio*, especially, fell victim to the excess of erudition of its author and his overenthusiastic religious convictions, and to the lack of editorial advice or professional censure.

Just like Kircher, Paulinus wanted to explain everything about India; and the cadence of his published texts from the day of his return to Rome is impressive in spite of the fact that he had to take refuge in Vienna and Padua during the revolutionary upheavals.<sup>112</sup> The Printing Press of the Propaganda Fide and Paulinus' powerful mentor, the Cardinal Stefano Borgia, provided the best possible logistical support for the publication and dissemination of his books and ideas. In fact, after the suppression of the Society of Jesus, oriental manuscripts and objects were dispersed through various Roman ecclesiastical institutions. Some may have found their way into Stefano Borgia's collections and from there into Paulinus' books. A painting of the second incarnation of Visnu in the form of a tortoise, printed in the Viaggio and annotated as belonging to Borgia's Museum in Velletri, may have been in Kircher's possession at one point [Plate 2].<sup>113</sup> It was Heinrich Roth, a Jesuit missionary at the Mughal court in Agra, who brought to Rome the ten paintings of Visnu's incarnations and the Sanskrit grammar in the Devanagari script, all of which were reproduced in Kircher's China Illustrata.114

The advantageous printing conditions provided to Kircher by his publisher Joannes Jansson van Waesberghe in Amsterdam, in addition to the generous funding given by the Habsburgs, were no longer possible in Paulinus' time. One of the biggest attractions of Kircher's books was that the incredibly vivid illustrations made the imaginary look so real, it was claimed, that they tricked the eye into feeling the movement of objects. The illustrations in Paulinus' books were, on the other hand, no more than static, benumbed and poorly executed engravings. The fact that his pages on natural history are densely descriptive, but without a single botanical or zoological drawing, reveals, after all, that natural history was not Paulinus' primary discipline. In fact, when he chose to represent, for example, a tortoise or a lotus tree, he borrowed pictures and monuments found in the Museo Borgiano in Veletri [Plate 3]. These were neither "realist" nor

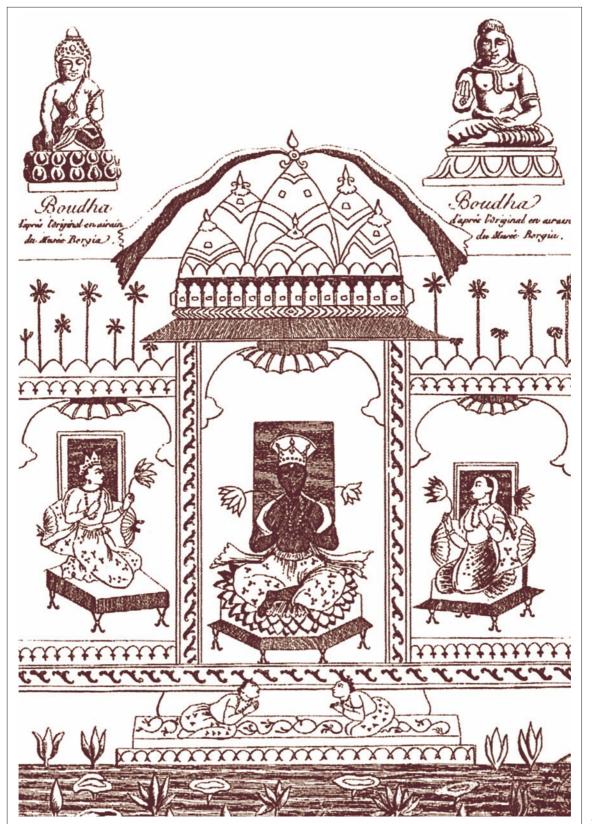


Plate 3

"naturalist" illustrations of the objects in question, and the viewer was instantly transported to the religious and mythological level of signification.

Paulinus was obviously following the "missionary" directives that guided the output of the *Propaganda Fide* press. Foreign and arcane languages and alphabets of both Christian and non-Christian peoples were privileged topics. These books were supposed to prepare and accompany the "native" clergy when they returned to their countries after studying in Rome. They are thus very unlike Kircher's published works, which were intended for the consumption of learned and curious native Europeans who desired to travel in space and time, but not necessarily in body. Kircher's books combined expertise and charlatanism to create an admirable degree of poetic sublimation, and his work inspired the real professionals of his time to start their own serious scientific research.<sup>115</sup>

The decisive Orientalist-cum-museological turn in Paulinus' Roman career came when Cardinal Stefano Borgia employed him as the "professional" curator of his Asian collection of objects and manuscripts, most of which were on display in his Museum in Velletri. Paulinus' choice of this particular secular profession was therefore also partly a response to an institutional demand. Under his curatorship, Rome became, at least for two decades, a centre of Indological knowledge in Europe. Although Stefano Borgia's museum is known for its antiquarian materials, there may have been a project of collecting natural specimens, perhaps even employing scientists or curators to organize it. Paulinus did mention various natural objects, such as shells, that were also stored in the museum. However, political upheaval and the death of Borgia in 1804 put a stop to such projects, if they ever existed. What remained were hints and marks that the learned Cardinal had been interested. A letter from Burma written by Giuseppe d'Amato and containing an exquisitely executed watercolour painting of a lotus flower, accompanied by a minutely detailed description, can be found today in the Borgia Latin collection in the Vatican Apostolic Library, along with other short descriptions of animals.<sup>116</sup> Among the scattered notes in the same manuscript folder, there is a description of an antelope's antlers, written in Paulinus' hand, with a commentary that noted that the actual object was brought from India by Paulinus and deposited in the Velletri Museum.117

For Paulinus, just as for the British Orientalists in Calcutta who published naturalist and Orientalist pieces side by side in their *Asiatic Researches*, there was no firm border line between studying nature and studying culture. Indian nature and Brahmanical ancient culture were a constant source of awe and wonder at the mysterious ways of Divine Creation. Studying either one led towards the same goal—insufflating a whiff of sacred history into the secular, scientific fields that were about to break out of the clasp of Christian religion. By the end of the 1830s, the tension between scientific approaches (such as geology and botany) and the religion/culture-based Orientalist idiom came to an apogee, and contributed to the demise of *Asiatic Researches*.

By that time, Paulinus' name had sunk into oblivion, and most of his archives, after his death, remained untouched in a forgotten chest in the Biblioteca Nazionale Vittorio Emanuele III. Angelo de Gubernatis, according to his own words, discovered these texts and manuscripts in the middle of the 19th century.<sup>118</sup> From his point of view, it went without saying that Paulinus was no naturalist; but even his Orientalist claims were weak. "In everything Paulinus writes we can, on the contrary, admire his erudition and sometimes even his talent, and always a certain independence of judgment; but rarely did he provide a clear, exact and complete notion of the question he posed."<sup>119</sup> With these words de Gubernatis condemned Paulinus to further anonymity in the newly established "scientific" and professional Orientalist studies. As just another "antiquarian" with a penchant for embedding misplaced philosophical and missionary opinions in his work, Paulinus' manuscripts remained in their boxes, and his books on library shelves, for another two centuries without attracting much interest from Indologists or Indian studies scholars. However, during the two decades in Rome, he published around twenty books and wrote hundreds of articles on various topics, from Indology and Sanskrit to comparative linguistics and museology. What he lacked was neither knowledge nor method, but a community of Orientalists, a scientific laboratory, and a learned society to belong to. In a touching passage in his Dissertation on the Sanskrit Language, Paulinus invited his European colleagues to come to Rome and check his Sanskrit manuscripts and sources.<sup>120</sup> Instead, they all went to London and Paris, which according

to Trautmann "became a hub of new Orientalism" in the first decades of the 19<sup>th</sup> century. Paulinus was, therefore, left behind in the "older", missionary Orientalism, in which philology and natural sciences supplemented each other seamlessly and, according to its critics, confusingly.<sup>121</sup>In late-Enlightenment Europe, professional scientists and professional philologists parted ways. Paulinus belonged to the last generation of Catholic missionary Orientalists still willing to believe in the Kircherian dream of the intrinsic connectivity of all knowledge.

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#### NOTES

- 1 On different types of ownership, possession and mobility in the early modern world, see the inspiring statement by Stephen Greenblatt, *Marvellous Possessions, The Wonder of the New World,* Chicago: University of Chicago Press, 1991.
- 2 Joan-Pau Rubiés, *Travel and Ethnology in the Renaissance; South India through European Eyes, 1250-1625*, Cambridge: Cambridge University Press, 2000.
- 3 Serge Gurzinski, *Les quatre parties du monde: histoire d'une mondialisation*, Paris: Editions de La Martinière, 2004.
- 4 See, for example, Tomé Pires, The Suma Oriental of Tomé Pires, an account of the East... written in 1512-1515. And the book of Francisco Rodrigues, rutter of a voyage, ed. and trans. by A. Cortesão, London: Hakluyt Society, 2<sup>nd</sup> series, 2 vols., 1944; Jean-Baptiste Taverniet, Les Six voyages de Jean-Baptiste Tavernier, Escuyer Baron d'Aubonne, Qu'il A Fait en Turqui, en Perse, Et Aux Indes, Pendant l'espace de quarante ans, & par toutes les routes que l'on peut tenir [...], 2 vols. (Paris: Chez Gervais Clouzier & Claude Barbin, & au Palais, 1676); Francesco Carletti, Ragionamento del mio viaggio intorno al mondo, ed. G. Silvestro, Turin, 1958; and Jean Mocquet, Voyage à Mozambique & Goa: la relation de Jean Mocquet (1607-1610), texte établi et annoté par Xavier de Castro, Paris: Editions Chandeigne, Paris, 1996.
- 5 On "filling gaps," see Richard Rorty, *Philosophy and the Mirror of Nature*, Princeton, NJ: Princeton University Press, 1979.
- 6 Hortus siccus literally means "dry garden", and refers to albums of pressed-and-dried plants: a herbarium.
- 7 On collecting and collectors, see works by Krzysztof Pomian, Collectionneurs, amateur et curieux: Paris, Venise, XVI<sup>e</sup> - XVIII<sup>e</sup> siècle, Paris: Gallimard, 1987.
- 8 The scientific culture that emerged in the early modern period, especially in the domain of the natural sciences, was connected in important ways with the culture of collecting. According to Paula Findlen's admirable study of the late Renaissance naturalists, sciencia flourished in "civil" spaces, private and public, studies and museums, well-provided with specimens from all over the world. Through friendship networks, these early scientist-collectors exchanged both objects and samples, and reflections on their meanings and position in the order of Nature. The sites of knowledge and the scholars themselves were usually immobile, while objects and information moved in and out of their laboratories. See Paula Findlen, Possessing Nature: Museums, Collecting and Scientific Culture in Early Modern Italy, Berkeley: University of California Press, 1994. Of course, some scholars travelled or at least dreamt of travelling, while some "experts" dreamt of laboratories. Garcia da Orta, a famous New Christian physician (botanist and pharmacist) in 16th-century Goa, desired both to travel as a "prático" and to be allowed to pursue his

studies in *otium* and in peaceful freedom. Unfortunately for him, he was allowed neither. His fascinating book *Colóquios dos simples e drogas*, printed in Goa in 1563 and burnt during the *auto-de-fé* in 1680, remained a hybrid between expert and scholarly intentions. Cristóvão da Costa, another physician of New Christian origin from Castille, whose *Tractado* was inspired by Orta's book, may have had a chance to become a studious naturalist upon his return to Europe. At that point he chose, however, another type of *otium*, a "spiritual retreat". See Garcia de Orta, *Colóquios dos simples e drogas he cousas medicinais da India* [Goa, 1563], edited by Conde de Ficalho, facsimile of the 1891 edition, Lisboa: Imprensa Nacional-Casa da Moeda, 1987; Cristóvão da Costa, *Tractado delas drogas, y medicinas de las Indias Orientales, con sus Plantas debucadas ai biuo por Christoual Acosta medico y cirujano que las vio ocularmente*, Burgos, 1578.

- 9 On connections between botany and linguistics in the early 19<sup>th</sup> century, see Paul B. Salmon, "The Beginnings of Morphology: Linguistic Botanizing in the 18<sup>th</sup> century", *Historiographia Linguistica*, 1974, 1:3, pp. 313-339.
- 10 Arnaldo Momigliano, "Ancient History and the Antiquarian", *Journal of the Warburg and Courtauld Institute*, vol. 13, No. 3/4, 1950, p. 285.
- 11 Bruno Latour has convincingly showed that "scientific" authority is established and uneasily dependent on a myriad of socio-political considerations and inside controversies. Bruno Latour, Science in Action: How to Follow Scientists and Engineers through Society, Cambridge: Harvard University Press, 1987.
- 12 The Sacred Congregation for the Propagation of the Faith (*Sacra Congregatio de Propaganda Fide*) was established in 1622. Through this institution, the Papacy tried to recapture the global missionary movement, which was in hands of religious orders and the Iberian Catholic monarchies (Spanish and Portuguese). The "patronage" rights conferred to the kings of Spain and Portugal in the late 15<sup>th</sup> and early 16<sup>th</sup> century were increasingly seen as obsolete and detrimental to world evangelization. See the articles in *Sacrae Congregationis de Propaganda Fide Memoria Rerum*, Rome, Freiburg, Wien: Herder, vol. 1/1, 1972.
- 13 On the Propaganda Fide's missionary and linguistic strategies, see two excellent articles by Giovanni Pizzorusso, "Agli antipode di Babele: Propaganda Fide tra imagine cosmopolita e orizzonti romani (XVII-XIX secolo)", Storia d'Italia, Annali 16, Roma, la città del papa, eds. Luigi Fiorani and Adriano Prosperi, Torino: Giulio Einaudi editore, 2000, pp. 481-518 ; and "I satellite di Propaganda Fide: Il Collegio Urbano e la tipografia poliglotta; note di ricerca su due institutzioni culturali Roman en el XVII secolo", Mélanges de l'École française de Rome, Italie et Méditerranée, tome 116, 2, 2004, pp. 471-498.

- 14 See my article "Rescuing Indian Arts and Sciences, Saving Indian Souls: Paulinus a S. Bartholomaeo, The Last Missionary Orientalist (18<sup>th</sup> c.)", in *Religion, Power, Community*, Ishita Banerjee-Dube and Saurabh Dube, eds., New Delhi: Oxford University Press, 2007 (in press). Paulinus catalogued all manuscripts and objects in the Museum. See his *Musei Borgiani Velitris codices avenses, peguani, siamici, malabarici, indostani, animadvesionibus historico-criticis castigati et illustrati. Accedunt monumenta inedita et Cosmogonia indico-tibetana*, auctore P. P. XVII+266, 3 figures, Romae, 1793, in -4°. See also Paulinus' notes in the Biblioteca Apostolica Vaticana, Rome, Borg. Lat. 895, f. 65-76.
- 15 He was a member of the Academies in Naples and Velletri (Socio Academico di Velletri e di Napoli).
- 16 The most systematic book on the topic is Paulinus' Systema Brahmanicum Liturgicum, Mythologicum, Civile, ex Monumentis Indicis Musei Borgiani Velitris, Dissertationibus historico-criticis illustravit Fr. Paulinus a S. Batholomaeo, Carmelita discalceatus, Romae, 1791, XII + 326, 32 figures.
- 17 Raymond Schwab, La renaissance orientale, Paris: Payot, 1950.
- 18 Viaggio alle Indie Orientali, umiliato alla Santita di N. S. Papa Pio Sesto Pontefice Massimo, da Fra Paolino da S. Bartolomeo, Carmelito scalzo, Roma 1796, XX, 404 pp., in -4°, with 12 copper plates, p. 153 (henceforth referred to as Viaggio; all translations are mine).
- Viaggio, p. 365. "The English have promised ... that they would 19 give us Indian Botany, but I do not have much confidence in these promises, because to do it, one needs men who know local languages, time and money". [Paulinus quoted from Asiatic Research, vol. II]. Anquetil-Duperron added his own gloss to this statement in the French edition of the Viaggio. "Father Paulinus' remark is easily refuted. The English have the time and the money necessary for such an enterprise: and when they will want to choose their subjects, they will have no lack of their own to learn the languages of India". Anquetil-Duperron, Voyage aux Indes orientales par le P. Paulin de S. Bathélemy, Missionnaire; traduit de l'Italiane par M\*\*\*[Marchesan]; Avec les observations de MM. Anquetil du Perron, J. R. Forster et Silvestre de Sacy; et une dissertation de M. Anquetil sur la propriété individuelle et foncière dans l'Inde et en Égypte, tome troisième, A Paris, Chez Tourneisen fils, Libraire, Rue de Seine, No. 12, 1808, [henceforth, Paulin], vol. 3, p. 486 [commenting on p. 462, line 23]. William Carey posthumously edited and published Dr. William Roxburgh's Flora Indica; or Descriptions of Indian Plants, through Serampore Press in 1820 (vol. 1) and 1824 (vol. 2).
- 20 Until the 17<sup>th</sup> century, all Catholic missions in India were part of the Portuguese royal patronage network (*Padroado*) of ecclesiastical institutions overseas. With the establishment of the Congregation for the Propagation of Faith (*Propaganda Fide*) in 1622, the Papacy took under its own wing all the territories *in paritibus infidelium* not covered by the Portuguese *Padroado*. Since the missionaries sent by the *Propaganda Fide* were recruited in Rome, from missionary orders that had no allegiance to the Portuguese king, the Estado da Índia and the Portuguese authorities in Goa often treated them as enemies. See Francisco Bethencourt, "A Igreja", in *História da Expansão Portuguesa*, F. Bethencourt and K. Chaudhuri (eds), Lisboa: Circulo de Leitores, 1998, vol. 1, pp. 369-386.
- 21 See my article "One Civility, but Multiple Religions": Jesuit Missions among St. Thomas Christians in India (16<sup>th</sup>-17<sup>th</sup> centuries)", in *Journal of Early Modern History*, 9.3-4, 2005, pp. 284-325.
- 22 See Leslie Brown, *The Indian Christians of St. Thomas*, (first ed. 1956) Cambridge: Cambridge University Press, 1982; and Susan Visvanathan, *The Christians of Kerala: History, Belief and Ritual among the Yakuba*, New Delhi: Oxford University Press, 1999.
- 23 Plagiarism or omitting to disclose one's sources were more the rule than the exception among early modern European travellers in Asia. Learned missionaries in the region, who themselves often exchanged

texts and opinions without keeping track of individual authorship, were often targets of such intellectual pillaging. Thus among the famous cases is Jacopo Fenicio's text on Indian cosmology and mythology, which was appropriated by many authors who never acknowledged their debt to his text. See, for example, Philip Baldaeus, A True and Exact Description of the Most Celebrated East-India Coasts of Malabar and Coromandel and also of the Isle of Ceylon, translated from the Dutch and printed at Amsterdam, 1672 (reprint: New Delhi: Asian Educational Services, 1996); and Manuel Faria y Sousa, Asia Portuguesa, vol. 3 (Lisboa, 1666-1675). Fenicio's descriptions are also taken almost verbatim by Paulinus, especially in the passage on the creation of the world according to the Brahmans. See his Sidharubam seu Grammatica Samscrdamica, cui accedit Dissertatio historio-critica in linguam samscrdamicam, vulgo Sanscret dictam, in qua hujus linguae existentia, origo, praestantia, antiquitas, extensio, maternitas ostenditur, libri aliqui ea exarati recensentur, et simul aliquae antiquissimae gentilium orationes liturgicae paucis attinguntur et explicantur, 188 pp., typis S. C. de Prop. Fide, 1790 [1791], p. 25-27.

- 24 Sanjay Subrahmanyam, "Taking stock of the Franks: South Asian Views of Europeans and Europe, 1500-1800", *Indian Economic and Social History Review*, vol. XLII, no. 1, Jan.-March 2005, pp. 49-100.
- 25 In fact, Paulinus kept a diary in various languages (Portuguese, Latin and German) at various points during his travels and work in India. Zdravka Matisic, Professor of Sanskrit at the University of Zagreb, is preparing a study of his German diary, and Nikica Talan, professor of Portuguese literature at the University of Zagreb is working on Paulinus' Portuguese diary. It seems that from the time of Ildephonsus a Praesentatione, a Discalced Carmelite, missionaries maintained a collective diary of the important events between 1653 and 1740. Ambrosius a Santa Teresia, Bio-bibliographia Missionaria ordinis Carmelitarum Discalceatorum (1584-1940), Rome, 1940, p. 197. This text remained in a manuscript, entitled "Relazione Carmelitana delle vastissime Missioni dell'Imperio di Coccino, dall'Imperio di Samorino, e de'Regni di Gran Travancore, Poracata, Vaypura, Granganora, Magnapara, Mangata, Rapolino etc. che tutti sogetò nell'anno 1761 quel famoso Re grande Travanco: quivi aggiuntasi una revissima notizia del modo, con cui sieno diventute quelle missioni sotto la giurisdizione de'Padri Carmelitani Scalzi in che tempo, anno, ed occasione".
- 26 In the *Viaggio*, Paulinus recalls a moment when he discovered, in Pondicherry, before he arrived at his mission in Kerala, that the books he kept in the chest were half-eaten by white ants. *Viaggio*, p. 7.
- 27 Philippe de Très Sainte-Trinité (1603-71) published his *Itinerarium Orientale* in Lyon in 1649, and the French translation, *Voyage d'Orient*, was published in 1652. There were five editiions in Italian translation in the 17<sup>th</sup> century (1666, 1667, 1676, 1682 and 1672).
- 28 Giuseppe di Santa Maria Sebastiani (1623-89), Prima speditione alle Indie Orientali (Rome, 1666), Segunda speditione alle Indie Orientali (1672). See Donald F. Lach and Edwin J. Van Kley, Asia in the Making of Europe, Volume III: A Century of Advance, [henceforth referred to as Lach], Book 1, Chicago and London: University of Chicago Press, 1998, pp. 383-385.
- 29 See my article, "One Civility, but Multiple Religions": Jesuit Missions among St. Thomas Christians in India (16<sup>th</sup> -17<sup>th</sup> centuries)", *Journal* of Early Modern History, 9.3-4, 2005, pp. 284-325; and Sanjay Subrahmanyam, "Dom Frei Aleixo de Meneses (1559-1617) et l'échec des tentatives d'indigénisation du christianisme en Inde", Archives de sciences socials des religions, 103 (1998), pp. 21-42.
- 30 Vicenzo Maria di Santa Caterina da Siena (alias Vincenzo Maria Murchio), Il viaggio all'Indie Orientali del padre F. Vincenzo Maria di S. Caterina da Siena Procurator Gener. de' Carm. Scalzi, con le osseruationi, e successi nel medesimo, i costumi, e riti di varie nationi, et reconditissimi arcani de' gentili, cauati con somma diligenza da' loro scritti, con la descrittione degli Animali Quadrupedi, Serpenti, Uccelli, Piante di quel Mondo Nuovo, con le loro virtu singolary, Diuiso in

*cinque libri. Opera non meno Utile, che curiosa,* in Venetia: appresso Giacomo Zattoni, 1678. See Lach, vol. III, book 2, pp. 891-909.

- 31 One copy of the *Viridarium Orientale* is preserved in the Muséum de l'Histoire Naturelle in Paris. I have consulted the copy in the Biblioteca Nazionale Vittorio Emanuele III [henceforth, BNVE], Ms. Rari, Fondi Minori, Santa Maria della Scala, Varia, 178.
- 32 Ray Desmond, Great Natural History Books and their Creators, London: The British Library and Oak Knoll Press, 2003, p. 39 [henceforth Desmond]. See also H. A. van Reede tot Drakestein, Hortus Indicus Malabaricus, Amsterdam, 1678-1693, 12 vols.
- 33 This was the first book on tropical plants based on Linnaeus' system of classification. Desmond, p. 50.
- 34 See the articles in K. J. John, *Christian Heritage in Kerala*, Cochin, 1981.
- 35 The letters Paulinus left behind in his archives are in Latin, Italian, Portuguese, German, English and Malayalam. BNVE, Rari, Fondi Minori, Santa Maria della Scala, 22, 30, 33, 37, 38.
- 36 In the 16th century, the most prominent missionary order in India, the Society of Jesus, developed a number of "health care" institutions for both Christian and non-Christian populations in all Asian missions. These were supplements to Portuguese confraternities and to the Misericórdia, all of which catered exclusively to Christians. The Jesuits were, in fact, so efficient at organizing institutions based on and enforcing social discipline that they were invited to administer the most famous Portuguese hospital in Asia, the Hospital del-Rey in Goa. If the Jesuits were excellent at running institutions that contributed to hygiene and orderly behaviour-which were sometimes crucial for the recovery of patients-they were less interested in curing bodies. The goal was to cure souls and convert their patients to Catholicism. They often referred to themselves as medicos da alma, the "physicans of the soul". Some of the temporal coadjutors among the Jesuits were professional physicians. However, when ordained, they were not allowed to practice medicine, especially not surgery, without a special dispensation by the Pope. See Ines G. Županov, Missionary Tropics: The Catholic Frontier in India (16th-17th century), Ann Arbor: University of Michigan Press, 2005.
- 37 BNVE, Rari, Fondi Minori, Santa Maria della Scala 36/G, Botanica Malabar (no pagination) [CD-Rom, folder 01, p. 0120].
- 38 In English, the *pepino-de-S. Gregório* is called a squirting (exploding) cucumber or touch-me-not. In French, it is a *concombre sauvage*, or *concombre d'ane*; in Italian, a *schizzetto, cocomero asinine*, or *elaterio*. The bean of St. Ignatius or *Loganiaceæ ignatia amara* is a species of *strychos* native to the Philippine Islands. The tree bears a pear-shaped fruit, containing an intensely bitter seed, from which an alcoholic tincture is obtained.
- 39 Viaggio, p. 7-8.
- 40 BNVE, Rari, Fondi Minori, Santa Maria della Scala 36/G, Botanica Malabar (no pagination) [CD-rom, folder 01, p. 0144].
- 41 Georg Everhard Rumf (1627-1702). Desmond, pp. 44-47.
- 42 Pierre Sonnerat, Pierre Poivre and J.-B. Le Gentil were all in search of plants and manuscripts. Poivre succeeded in smuggling out of Asia certain precious spice plants, and he even sent Sonnerat to Manila and New Guinea in search of more botanical species. Le Gentil collected manuscripts and ideas, mostly from the Jesuits in Pondicherry. See Pierre Sonnerat's Voyage aux Indes orientales et à la Chine,... depuis 1774 jusqu'en 1781: dans lequel on traite de mours, de la religion, des sciences & des arts des Indiens, ... les Philippines & les Moluques, & de recherches sur l'histoire naturelle de ces pays. À Paris: Chez l'auteur, M.DCC.LXXXII. 2 vols. Plates. 4°, 1782. See also Pierre Poivre, Les mémoires d'un voyageur, L. Malleret ed., Paris: École Française d'Extrème-Orient, 1968 ; and J.-B. Le Gentil, Voyage dans les mers de l'Inde, fait par ordre du Roi de 1761 à 1769, Suisse, 1780.
- 43 See my article, "Goan Brahmans in the Land of Promise: Missionaries, Spies and Gentiles in 17<sup>th</sup>-18<sup>th</sup> century Sri Lanka" presented at the

conference *Portugal – Sri Lanka: 500 Years*, Centre Culturel Calouste Gulbenkian, Paris, December 15-17, 2005.

- 44 Rudi Mathee, "Exotic substances: The Introduction and Global Spread of Tobacco, Coffee, Cocoa, Tea, and Distilled Liquor, Sixteenth to Eighteenth Centuries", Roy Porter, and Mikuláš Teich, eds., *Drugs and Narcotics in History*, Cambridge: Cambridge University Press, 1998, pp. 24-51.
- 45 See my article, "Goan Brahmans".
- 46 The listing of all the authors cited in the *Colóquios* is provided in Conde de Ficalho, *Garcia da Orta e o Seu Tempo*, (reprodução fac-similada da 1.ª edição, Lisboa, 1886), Lisboa, 1983, pp. 284-297. On medieval Arabic medicine see, J. Christoph Bürgel, "Secular and Religious Features of Medieval Arabic Medicine", in Charles Leslie, *Asian Medical Systems: A Comparative Study* (1<sup>st</sup> ed. 1976), New Delhi, 1998.
- 47 Viaggio, p. 366.
- 48 Michel Foucault has identified and elaborated upon this point of rupture in his various books. See *Les mots et les choses*, Paris: Gallimard, 1966.
- 49 Viaggio, p. 351.
- 50 The persistence of these social and cultural phenomena continues to fascinate and perplex anthropologists. See J. Assayag, and Gilles Tarabout, *La Possession en Asie du Sud: Parole, Corps, Territoroire*, Paris: Collection Purusartha, 1999.
- 51 BNVE, Rari, Fondi Minori, Santa Maria della Scala 37, busta 47, letter no. 6.
- 52 Viaggio, p. 367.
- 53 Johann Ernest Hanxladen (b. 1681 in Germany, d. 1732 in Kerala) was the first European to write a Sanskrit Grammar, among other Christian liturgical texts he wrote in Malayalam and Sanskrit. He composed the "Dictionarium samscredamico-lusitanum" with the assistance of the two Jesuits Antonio Pimentel and Bernhard Bischopinck. Antonio Pimentel was the Archbishop of Cranganore from 1721-1752 and, being a Jesuit, was in fact hostile to the Propaganda Fide missionaries (the Discalced Carmelites). According to Paulinus, he was a very learned man, also known as Budhimetran. See India Orientalis Christiana, continens fundationes ecclesiarum, seriem episcoporum, missiones, schismata, persecutiones, reges, viros illustres. Auctore P. Paulino a S. Bartholomaeo, Romae, 1794, XXIII, 280 pp., in -4°, p. 67. It is not clear who Feraz, the author of Herbolario, was. It may have been François Ferraz, mentioned in Besse, La mission du Maduré, Trichinopoly, 1914, vol. 1, p. 206. According to Nair (who does not cite his sources!), Fares (1715-1789) was a Jesuit who wrote a small Malayalam grammar in Chatiath. See M. Purushothaman Nair, "Contribution of Christian Missionaries to the Grammatical Theories in Malayalam", in K. J. John, Christian Heritage of Kerala, Cochin, 1981, p. 136. Bernhard Bischopinck was born on January 31, 1690/92 at Borken/Westfalen and died ca. 1746 in Mangalore.
- 54 Viaggio, p. 355.
- 55 He adds that a certain Contessa Salms annotated this illustrated botanical manuscript with names from Carl Linnaeus (1707-1778), the Swedish botanist, physician and zoologist and the father of botanical classification. See Lisbet Koerner, "Linnaeus' Floral Transplants", *Representations*, Summer 1994, Vol. 49, pp. 144-169. *Viaggio*, p. 355.
- 56 Viaggio, p. 354-355. A Catalogue of Oriental Manuscripts, collected in Indoostan. By Mr. Samuel Guise, Surgeon to the General Hospital at Surat, from the Year 1777 till 1792 (printed) pp. 1-32. Borg. Lat 529, pp. 1-18.
- 57 For no apparent reason, in the last volume, the publisher also printed Anquetil-Duperron's treatise on "*la propriété individuelle et foncière dans l'Inde et en Égypte*".
- 58 Paulinus was a difficult character. This is why he was not sent back to Kerala, as he apparently hoped; this much is clear in the letter: "A

Monsignor Luigi Mari di Gesù Vescovo Usuliense Vicario Apostolico del Malabar: Verapoli, 6 Ottobre 1790", in "Lettere della Sacra Congregazione dell'Anno 1790" (vol. 258, ff. 697b-699a), Historical Archives of the Congregation for the Evangelization of Peoples or "De Propaganda Fide", Rome. I owe this information to David Lorenzen Sbrega, who found this letter in the *Propaganda* archives. He presumed that the letter was written by Stefano Borgia. It seems unlikely, since Borgia must have been on good terms with Paulinus, while the letter shows quite a bit of personal animosity on the part of the writer.

- 59 Paulin, vol. III, p. 476.
- 60 BNVE, Rari, Fondi Minori, Santa Maria della Scala, 36, G. The text is written in Paulinus' hand.
- 61 Viaggio, p. 350. The original reads: "Shralanòva la colica ventosa, Sanivali convulsioni e spasmi de'nervi, Adisàram diarea o semplice sciolgimento di ventre, Calladapa il male di pietra, Grahanni dissenteria con tenesmo, Iluca dislocazione dei membri, Mujali una specie di podagra, Kaszalapani erisipola con febbre, Pani in lingua Malabarica, giurti e gioram in Samscrit, febbre callida, Tridoshagoram, cioè, febbre di tre cattive qualità, che tra noi chiamasi febre maligna, Malapani febbre d'unsolo giorno, procedente da qualche vento, che spira dale montagne di Ghattes, in Portoghese febre da Serrra."
- 62 According to Hobson-Jobson, mort de chien is a name for cholera that was used in India up to the end of the 18<sup>th</sup> century. The word in this form is a corruption of the Portuguese mordexim, shaped by a fanciful French etymology. The Portuguese word again represents the Konkani and Mahratti modachi, modshi, or modwashi, 'cholera,' from a Mahr. verb modnen, 'to break up, to sink' (due to infirmity, in fact 'to collapse'). H. Yule, and A. C. Burnell, Hobson-Jobson: A Glossary of Colloquial Anglo-Indian Words...reprinted New Delhi, 1979, pp. 586-589.
- 63 On cholera, see David Arnold, "The Indian Ocean as Disease Zone, 1500-1950", *South Asia*, 14 (1991), pp. 1-22.
- 64 On mordexim, see Garcia de Orta, Colóquios dos simples e drogas he cousas medicinais da India..., Goa, 1563 (facsimile edition by Academia das Ciências de Lisboa), Lisboa, 1963, annotated edition by Conde de Ficalho, published in 1891 and reprinted in 1987, vol. 1, pp. 261-267.
- 65 Viaggio, p. 367.
- 66 Viaggio, p. 355. Amarasinha. Sectio prima, de Coelo. Ex tribus ineditis codicibus indicis manuscriptis, XII+60, figures, Roma, 1789. According to M. Monier-Williams, A Sanskrit-English Dictionary (1st ed. 1872), New Delhi: Motilal Banarsidas Publishers, 1999, aushadha or oshadhi means medications, drugs, or herbs used in medicine. Aushadhavali is a medical work composed by Pranakrishna (p. 240). The same is said in William Jones, "The Design of a Treatise on the Plants of India", Asiatic Researches, or, Transactions of the Society Instituted in Bengal, for Inquiring into the History and Antiquities, the Arts, Sciences, and Literature of Asia, volume the Second, Printed verbatim from the Calcutta Edition, in Quarto. London: Printed for Vernor and Hood, in the Poultry, 1799." The Amarcosh, an excellent vocabulary of the Sanskrit language, contains in one chapter the names of about three hundred medicinal vegetables", ch. XXII, p. 345.
- 67 Amarasinha's Namalinganusasana, better known as the Amarakosa, is the most famous and the oldest extant lexicon of the Sanskrit language, written in the 6<sup>th</sup> century AD. Amarakosa: With the Commentary of Mahesvara/Ramakrishna Gopal Bhandarkar. Revised enlarged edition. New Delhi, Cosmo, 2004, p. 469.
- 68 Viaggio, p. 355. Diogenes Laertius was a biographer of the ancient Greek philosophers. His major work, *The Lives of the Philosophers* (in ten volumes), is an important source of information on the development of Greek philosophy.

- 69 Viaggio, p. 355.
- 70 Viaggio, p. 359. See Partha Mitter on the discovery of erotic gods in India in the 18<sup>th</sup> century. Partha Mitter, *Much Maligned Monsters:* A History of European Reactions to Indian Art, Chicago and London: University of Chicago Press, 1992.
- 71 Viaggio, p. 359.
- 72 Viaggio, p. 281.
- 73 Viaggio, p. 280 and 281.
- 74 Viaggio, p. 281. Caylus, Anne Clause Philippe de Tubieres de Grimoard de Pestels de Levis, Compte de, Marquis d'Esternay, baron de Bransac (1692-1765), was a French archaeologist and man of letters. He was an active member of the Academy of Painting and Sculpture and of the Academy of Inscriptions. Among his antiquarian works are *Recueil d'antiquités égyptiennes, étrusques, grecques, romaines, et gauloises* (6 vols.), Paris, 1752-1755.
- 75 Paula Findlen, ed., *Athanasius Kircher: The Last Man Who Knew Everything*, New York and London: Routledge, 2004, p. 33.
- 76 Paul B. Salmon, "The Beginnings of Morphology: Linguistic Botanizing in the 18<sup>th</sup> century", *Historiographia Linguistica*, 1:3, 1974, pp. 313-339. Maurice Olender, *Les langues du Paradis, Aryens et Sémites: un couple providentiel*, Paris: Gallimard/Le Seuil, 1989, p. 20.
- 77 Viaggio, p. 150.
- 78 "I had not given names because all those who know Malabar (Malayalam) can find Sanskrit words in the Amarisingha dictionary". To this laconic statement from the *Viaggio*, Anquetil-Duperron added a commentary: "I think the that the missionary, who writes in Europe and for Europe, should have included a Sanskrit name with the Malabar names; because we do not have here Malabar schools where they read Amarasingha by way of modern languages." *Paulin*, p. 487.
- 79 Viaggio, p. 152-153.
- 80 Georges-Louis Leclerc, Comte de Buffon (1707-1788), is author of the *Historie Naturelle (Natural History)*, 1749. Eberhard August Wilhelm von Zimmermann (August 17, 1743 – July 4, 1815) was a geographer and zoologist, professor of Natural Science at Brunswick. He wrote *Specimen Zoologiae Geographicae Quadrupedum* (1777), one of the first works on the geographical distribution of mammals. J. G. Schneider, ed., *Opiani Poetae Cilicis de veneratione et piscatione libri*, Argent, 1776. Walter Charleton (1617-1707) was a titular physician of Charles I and a writer on theology, natural history and antiquities. See also *Visions of Empire: Voyages, Botany, and Representations of Nature*, ed. David Philip Miller and Peter Hanns Reill, Cambridge: Cambridge University Press, 1996. For a remarkable work on Ulisse Aldrovandi, see Findlen, *Possessing Nature*.
- 81 Viaggio, p. 162.
- 82 Viaggio, p. 153.
- 83 Viaggio, p. 152.
- 84 Viaggio, p. 155.
- 85 Viaggio, p. 158.
- 86 Viaggio, p. 159.
- 87 Viaggio, p. 173.
- 88 Viaggio, p. 173.
- 89 Viaggio, p. 164.
- 90 Viaggio, p. 183.
- 91 Viaggio, p. 168.
- 92 Viaggio, p. 181.
- 93 Viaggio, p. 181.
- 94 *Viaggio*, p. 167.
- 95 Thomas Trautmann, Aryans and British India, Berkeley: University of California Press, 1997, and New Delhi: Vistaar Publications, 1997, p. 37 [henceforth Trautmann]; see also Sylvia Murr, L'Inde philosophique entre Bossuet et Voltaire, l'indologie du Père Coeurdoux: stratégies, apologétique et scientificité, 2 vols., Paris: EFEO, 1987.
- 96 Trautmann, p. 136.

- 97 Trautmann, p. 136.
- 98 Trautmann, p. 36.
- 99 Taking up William Jones' opinion that "[our] English alphabet and orthography are disgracefully, and almost ridiculously, imperfect", Paulinus adds his own more devastating appraisal. "The English alphabet is not only imperfect, but plainly ridiculous when it comes to expressing Indian nouns; they horribly corrupt them when writing them in that alphabet." But, of course, the way history unfolded, these linguistic decisions were not left to the Italians. See William Jones, "A dissertation on the Orthography of Asiatick Words in Roman Letters by the President", Asiatic Researches; or, Transactions of the Society Instituted in Bengal, for Inquiring into the History and Antiquities, the Arts, Sciences, and Literature of Asia, volume the First, Calcutta, Printed in 1788, (reprinted in London for Vernor and Hood), No. 1, "Poultry," 1798, p. 13. See Paulinus' Examen Historico-criticum Codicum Indicorum Bibliothecae Sacrae Congregationis de Propaganda Fide, Romae, 1792, in -4°, p. 6. See also Paulinus a S. Bartholomaeo, Dissertation on the Sanskrit Language, translation and introduction by Ludo Rocher, Amsterdam: John Benjamins B.V, 1977 p. 95. [henceforth, Dissertation].
- 100 Jean-Antoine Abbe Dubois, Mœurs, institutions et cérémonies des peuples de l'Inde, Paris, Imprimerie Royale, 1825 (2 vols.). David Lorenzen Sbrega, "Marco della Tomba and the Brahmin from Banaras: Missionaries, Orientalists and Indian Scholars", Journal of Asian Studies, Feb. 2006 (in press).
- 101 *Viaggio*, p. 162. He estimates that this Sanskrit dictionary was three thousand years old.
- 102 Viaggio, p. 165.
- 103 Lach, III, 2, 899.
- 104 William Jones, "Botanical Observations on Select Indian Plant", Asiatick Researches, no. 4, 1793-4, 239-140. Quoted in Mark Harris, "Medicine and Orientalism", in Biswamoy Pati and Mark Harris,

eds., *Health, Medicine and Empire, Perspectives on Colonial India*, Hyderabad: Orient Longman, 2001, p. 59.

- 105 Viaggio, p. 156.
- 106 Viaggio, p. 149.
- 107 Viaggio, p. 162.
- 108 Viaggio, p. 161.
- 109 Viaggio, p. 183.
- 110 Dissertation, p. 111, Viaggio, p. 71.
- 111 Findlen, Athanasius Kircher, p. 7.
- 112 During the troubled revolutionary years of 1798-1800 in Rome, Paulinus went into voluntary exile in Vienna, Venice and Padua.
- 113 Viaggio, between pp. 160-161.
- 114 For a complicated lineage of these iconographic representations see Mitter, *Much Maligned Monsters*, p. 57n and p. 298.
- 115 See Findlein, Athanasius Kircher, p. 9.
- 116 Biblioteca Apostolica Vaticana, Rome, Borg. Lat. 295, f. 277, 288.
- 117 Biblioteca Apostolica Vaticana, Rome, Borg. Lat, f. 288.
- 118 Angelo De Gubernatis, *Matériaux pour servir à l'histoire des études orientales en Italie*, Paris, 1876, p. 333.
- 119 De Gubernatis, Matériaux, p. 333.
- 120 Dissertation, p. 165.
- 121 For a French Jesuit, Father Pons, Sanskrit grammar was one of the most important "sciences". See, "Lettre du P. Pons, missionnaire de la Compagnie de Jésus, au P. du Halde de la même Compagnie. A Careical, sur la côte de Tajaour, aux Indes Orientales, ce 23 Novembre 1740", Lettres édifiantes et curieuses, écrites des missions étrangères, par les missionnaires de la Compagnie de Jesus. XXVI. Recueil. A Paris, rue S. Jacques. Chez P. G. Le Mercier, Imprimeur-Libraire, au Livre d'Or, près S. Yves. Et Chez Marc Bordelte, vis-à-vis le Collège de Louis le Grand. MDCCXLIII. Avec Approbation & Privilège du Roy [vol. XXVI, pp. 218-256, Paris, 1743]. Bibliothèque Mazarine, Paris, 23023W.