

Chapter 4

Issues of Best Historiographical Practice: Garcia da Orta's *Colóquios dos simples e drogas e cousas medicinais da India* (Goa, 1563) and Their Conflicting Interpretation

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Garcia da Orta (d. 1568), until the 1930s mostly known among botanists and a small group of Portuguese academics, has since become something akin to a cult icon for historians and historians of science interested in a broad variety of issues.¹ These issues include scientific and medical progress, the Portuguese colonial empire, the Inquisition, cross-cultural exchange of knowledge and ethnobotany, to name the themes most often presented. Orta has been hailed as the first European writer on Asian medicinal plants and simple drugs, as well as the first natural historian who privileged observation and experiment over books and thus brought on progress. He has been presented as the first ethnobotanist, as someone, who rejected the “Arabs” and “Brahmanic” medical teaching, while relying predominantly on local “empirical epistemology” brought to him by his “Konkani” slave,

¹ Given the methodological and technical problems that impact the interpretation of Orta's work, life and identities, I wish to state clearly that I approached Orta's book and the secondary literature written about it as an outsider to the debate. I do not claim to be or to have become an expert of Portuguese India, the Portuguese Inquisition and medical practices in western India between Diu and Kochi, or Goa and Ahmadnagar, nor am I an expert on the entirety of Indian languages referred to by Orta. My expertise lies within the history of science for Islamicate societies, with a focus on Egypt and western Asia, but also includes some basic knowledge of Islamicate societies in India and Central Asia. Moreover while at university I took classes in both Sanskrit and Indian history. Although this linguistic knowledge of Sanskrit, since never used, has diminished considerably by now, it still enables me to do some elementary groundwork with respect to the botanical and pharmaceutical names presented by Orta in addition to Arabic, Persian, Malay and the occasional Turkish and Ethiopian in languages that he called Gujarati, Bengali, Deccani, Canarin and Malabar. I read Orta's Portuguese text with great effort and a dictionary, based on my knowledge of Latin, French and some Spanish, and in comparison with the recent French and the older, at times problematic English translations. Occasionally I asked colleagues for help. Endowed with this certainly insufficient set of elementary skills, I will describe some of my observations and results, which I achieved by cautiously applying simple methods such as counting frequencies of medical prescriptions or botanical names, checking foreign words and expressions in dictionaries and grammars, controlling dates, inquiring about the distribution and properties of local Indian languages, registering silences and absences, or comparing the structural features of Inquisitorial testimonies as described by Cunha and analyzed by Saraiva with properties of Orta's exposition.

Antónia. A third position views him as a representative of centuries-old Jewish social mobility and cooperation with the ruling Christian military elites on the Iberian Peninsula. An anthropologist describes him as a free spirit who cherished male and female bodies and their sexuality, multicultural cooperation and equality, as well as the free flow of ideas and goods. He also has been seen as an eclectic writer and a bad doctor.²

In this paper, I approach the Portuguese physician's book and personality as represented in it from the perspective of a historian of science specialized in Islamic societies. I ask what this perspective may change in our perception of the work and the man. I will argue that focusing on Orta's book as a product of his Iberian scholarly and religious identities prevents us from understanding its entanglement with local practices embedded in different intellectual, political, religious, cultural, dietary and healing traditions and moral economies. Exploring catalogues of Persian medical manuscripts as a case for this argument I show that there is material with close affinity to Orta's book available from the sultanates that Orta visited. Using modern dictionaries of languages spoken and/or written in western India during the sixteenth century for analyzing Orta's multilingual botanical and medical terminology in comparison to his own statements about his language acquisition and proficiency, I offer arguments for their narrow limits and origins in the market sphere rather than the scholarly environment. A further methodological argument which I raise concerns Orta's narrative strategies. Applying simple methods, I suggest that the properties of Orta's text highlighted by other historians isolate expressions and emphases relevant to our own scholarly concerns and values. A comprehensive investigation of the narrative features and the semantic fields of privileged terms and phrases reveals, however, their link to forms of arguing, narrating, and thus evaluating things, people and knowledge much more in tune with Orta's own times and the literature he studied at Spanish universities. Such an investigation also yields the surprising discovery that Orta intentionally painted an irenic image of his time, military campaigns and life in Goa and beyond. For this purpose he constructed a bricolage of events violating their chronology and of knowledge practices in conflict with those that a study of western Indian material offers to us. Hence, the thread linking the different parts of my paper is a discussion of historiographical approaches to the study of Orta and his book by historians of science and medicine, students of Judaism and representatives of other academic fields contributing to this research.

I start with a discussion in two sections on when and why Orta possibly compiled his *Colloquies* and whom he might have addressed. In the third and fourth sections (p. 100), I discuss new approaches to the study of this book as published

²See Roddis (1931); Boxer (1963); Fischel (1974); Mathew (1997); Grove (1991); Pearson (2001); Cook (2007); Županov (2002, 2009, 2010); Costa and T. Carvalho (2013); Pimentel and Soler (2014).

by Palmira Fontes da Costa in 2015. The fifth section (p. 104) offers information about Persian doctors at the Nizam Shahi court, who so far no modern researcher tried to identify, although Orta's visits in Ahmadnagar are a prominent feature of his narrative. The sixth section (p. 105) deals with methodological issues posed by approaches to Inquisition studies and their impact on studies on Orta and his work. In sections seven and eight (p. 107), I discuss general historiographical problems contained in studies of the *Colloquies*. In the second half of this paper, encompassing sections nine to seventeen (p. 111–133), I present my views on the structure, programmatics, narrative strategies and mistakes of Orta's book and discuss the character and quality of his advertised language skills as well as his cross-cultural outlook. The final section contains my conclusions about the state of the art and how to proceed in future.

When Did Orta Write His Book?

For various issues related to Orta's *Colóquios*, an effort to determine its possible date *post quem* would be very helpful. To achieve this is no easy task since Orta claims in his book's dedication to his benefactor Sousa that he "could very well have composed the treatise in Latin" adding "as I had composed it many years before" (Orta 1891, 5; Pimentel and Soler 2014, 109; Iken 2009, 78). Dimas Bosque modifies this claim in his letter to the reader at the beginning of Orta's book by saying that his colleague had first started out to write it in Latin, before choosing Portuguese in order to be closer to his subject matter and to allow his friends and acquaintances to profit from his work (Orta 1891, 11). The Portuguese text contains only a few Latinisms, none of which are strong enough to make this claim irrefutable (Iken 2009, 84–85). Thus, it could well be one of Orta's numerous rhetorical strategies to remind his readers of his status as a well-educated, well-connected doctor. Iken pointed out several purely linguistic choices that contribute to precisely this end (Iken 2009, 79–80, 85–87). The datable references in Orta's text concern mostly the early years of his stay in Portuguese India: Bahadur Shah died in 1537; Sousa's military campaigns took place between 1534 and 1538; he returned as governor in 1542 and left in 1545; Miguel Vaz Coutinho died in 1547; Francis Xavier died in 1552, but was in Goa only in 1542 and 1548–1549; Burhan al-Din Nizam Shah died in 1553.

Orta mentions with pride and satisfaction a lease he had received, in the name of the king, in Mumbai and its island (Orta 1891, 326; 1913, 193).³ There are different opinions as to when and for how long he was in possession of it. Fischel believes that the viceroy João da Castro accorded it to him in 1548. He

³Mumbai is situated, however,—at least today—on a peninsula.

speculates that the lease ran out in 1554, but provides neither argument nor evidence (Fischel 1974, 417). Markham, the translator of Orta's book into English, claims, also without evidence, that it was the later viceroy Pedro de Mascarenhas (1554–1555) who granted the lease (Orta 1913, ix). Orta describes the lease as “long-term” (Orta 1891, 326; 1913, 193).

Two other references are more difficult to date, but point to a period in the 1550s: the treatment of Burhan al-Din Nizam Shah's heir designate, when he was about 30 years of age and Orta's presence in Junnar, the first capital of the Nizam Shahi dynasty, while Burhan al-Din was still alive and his sons were still with him. Shyam, in his history of Ahmadnagar, based on local historians of the sixteenth century, reports only two withdrawals to Junnar during Orta's life in India: that of Burhan al-Din in 1528, which is obviously too early for a visit by Orta and that of Burhan's son Husayn Nizam Shah (d. 1565) in 1558 (Shyam 1966, 114). The latter visit is possible, since Husayn Nizam Shah also had several sons (four). But it would mean that Orta used the dynastic designation as well as the name of honor (*laqab*) indiscriminately for both rulers without specifying them otherwise. Orta's references to Nizam Shah and Nizam al-Mulk until the very end of his book seem to support such a reading of his practice (Orta 1895, 306, 332, 343, 364, 388, 390). A visit in Junnar in 1558 would also mean that Orta traveled to the sultanate in times of intense warfare.

As for Orta's treatment of a thirty-year-old crown prince, this must have been Husayn Nizam Shah, since his father appointed him heir designate some time after 1534 when the whole family except one son (‘Abd al-Qadir) converted to Shi‘ism (Shyam 1966, 81). ‘Abd al-Qadir, previously Burhan al-Din's favorite, had to leave court and city. But when did Husayn turn 30? This is not easy to determine, because neither Shyam nor those of his sources I could check give the man's age at his death nor do they provide information when Burhan al-Din married Husayn's mother Amina, a dancing girl. All that is known is that he did so some time before 1523, when he was still very young, and that Amina gave birth to her third son between 1523 and 1526 (Shyam 1966, 66–67). This suggests that Husayn might have been born around 1520 or even a few years earlier, but probably not before 1515, since Burhan al-Din was seven or nine years old in 1510 (Shyam 1966, 61).

In chapter 54, in addition to the date of Orta's arrival in India, two further dates are given: 1539 and 1546. Both refer to two major sieges leveled by Ottoman and Gujarati forces against the Portuguese fortress on the island of Diu, which ended with Portuguese victories (Orta 1895, 339–340, 342; 1913, 442–443, 445). A relatively continuous reference to time intervals is to be found in Orta's little reports about Goa's governors and viceroys. Beginning with Sousa to Francisco Coutinho (1561–1564), he names six out of nine. Two are missing

for the period from 1548 to 1550 and one for the months from September 1554 until June 1555.

Early in his book, in chapter 12, Orta speaks of himself as being already of old age (Orta 1891, 87). Although I do not know what this might have precisely meant to Orta, he most likely did not mean to say that he started compiling a notebook immediately after his arrival in 1534, when he was about thirty-four years old. If we assume with some hesitation that of old age meant to be closer to sixty than to fifty, we find ourselves in the later 1550s.

Considering these various references and their location in time, it is possible that Orta began working on his book in the first half of the 1550s. He certainly did not finish all of it, since the parts referring to Dimas Bosque cannot have been composed before 1558/1559, the arrival of the Spanish physician in Goa and his participation in a campaign against Jafnapattam on Sri Lanka. Some historians speculate that it was Bosque who motivated Orta to compile his book (Walter 1963, 263). The fact, however, that the various events and names are not narrated chronologically, but are reported with regard to the alphabetically presented plants, drugs and diseases, makes any further conclusion about the period of writing impossible.

For Whom and Why Did Orta Write His Book?

In the dedication to Martim Afonso de Sousa and the letter to the reader, defending Orta's choice of Portuguese rather than Latin, Orta and Bosque claim that the author's goal had been to provide access to his knowledge and experience for "all who live in those Indian regions," in particular his family, friends and acquaintances in Goa (Orta 1891, 5, 11). This suggests that Orta's intended audience were the Portuguese inhabitants of Goa. Such an understanding of the introductory claims seems to be supported by the choice to print the work in Goa, even when the little print shop at the Jesuit College St. Paul and its two printers, a Portuguese (who is said to have been absent during the work) and a German, did not produce high-quality work. Bosque points explicitly to this shortcoming of the book in his letter (Orta 1891, 11). This decision involved asking the leading men in power, e. g. the viceroy Francisco Coutinho, the Inquisitor General Alexei Dias Falcão and the archbishop Gaspar Jorge de Leão Pereira (1558–1567, 1571–1576), for the privilege (viceroy), the Imprimatur (Falcão) and the permission to use the print shop of the Jesuit College (Pereira). Whatever suspicions the Inquisition might have harbored against Orta and his family in 1562, all three men approved of Orta's work and supported its publication as the second book printed in town. They obviously considered it a suitable enterprise for the physician and for Goa's inhabitants. Hence, Županov interprets Orta's choice of language and

place of printing as carefully made and the city's inhabitants as his intended audience (Županov 2002, 11).

The choice of Portuguese over Latin leaves no doubt, I believe, that Orta was not writing for the scholarly communities in Catholic and Protestant countries of Europe. His sharp attacks against leading medical and botanical authors of the sixteenth century, coupled with his remark that he could not write such a book in Spain, supports such an interpretation. But if Orta really meant to provide Portuguese inhabitants of Goa with easy access to medicinal plants and remedies, why did he not provide more detailed descriptions of how to produce the drugs and how to apply them? The title of the original print is much longer than the standard title given in twentieth-century bibliographies. It suggests that Orta intended to offer such information only for a limited number of cases: “Coloquios dos simples, e drogas he cousas mediçinais da India, e assi dalgũas frutas achadas nella onde se tratam algũas cousas tocantes a mediçinas, practica, e outras cousas boas, pera saber cõpostos pello Doutor garçia dorta: [...]” (Orta 1891, title page).

His representation of people, events and his own person raises further doubts about what he had in mind when writing his book and whom he wrote it for. The men in power in Goa, along with Orta's family, friends and acquaintances were capable of perceiving all gaps and contradictions in both the text and Orta's self-representation. Even though I saw no reference to information sent by the Portuguese Inquisition to Goa, this does not mean that the men in power who approved of Orta's book were ill-informed about his family's bad experiences in Lisbon in 1547, the military conflicts with the rulers of Gujarat, Ahmadnagar, Golconda or Vijayanagara or the persecution of 35 women and men from Kochi and Goa in the years immediately before the introduction of the Inquisition to Goa. Orta's rhetorical strategies of irenic depiction of western India, promotion of Portugal, emphasis on high-ranking social connections, glorious self-representation as a successful and educated physician and silences of all kinds would not have convinced these men to correct their image of the Portuguese doctor and merchant. If Orta could not hope to change with these narrative forms the prevailing attitude among the Portuguese elite in Goa, did he mean to address through them the Portuguese court? Was Orta looking for additional patrons and hence stronger protection? Such questions cannot be answered without further investigations in Portuguese and Goan archives.

New Approaches to the Study of Orta's *Colloquies*

In late 2015, a newly edited book on Orta and his *Colloquies* appeared (Costa 2015). Among the twelve contributions, the most valuable one—in my view—comes from its editor. Under the header “Identity and the Construction of Mem-

ory in Representations of Garcia de Orta,” Costa discusses the various efforts to glorify Orta as the “founding father,” “the pioneer,” the “first European” writer on Asian drugs, a central rallying point for “national identity” and a hero (Costa 2015, 237–264). She emphasizes that many writers about the Portuguese physician and merchant represent the content of his book often literally and with uncritical admiration, leading to hyperbole and magnification, a situation made worse by a lack of historical knowledge and sophisticated methodology, compounded by the also otherwise widespread inclination of academics to repeat the mistakes and judgments of previous authors (Costa 2015, 264). Costa is one of the first writers about Orta who admits that such research and writing practices carry with them political, ideological and scientific legitimation strategies (Costa 2015, 255, 258). In the case of Orta, such value statements are closely linked to positions towards Portuguese colonialism, the Portuguese Inquisition, Catholicism and Judaism, scientific progress and the importance of ancient Greek, Islamic, Indian and modern Western contributions to the sciences and medicine (Costa 2015, 255–62). Understandably, she overlooks the very same tendencies in some of the papers included in her new book. But given the substantial shortcomings of previous papers and books on Orta along the lines described by Costa, her analysis as well as the book as a whole are an important step forward to a more balanced and reliable historical evaluation of the man and his work.

Costa’s article builds in its substance on positions on Orta’s book expressed in an earlier paper (Costa 2012). In contrast to other researchers, her views remain closely related to the structure, the emphasis, the locality and the language of Orta’s book. She recognizes Orta’s intense effort of self-representation, acknowledges his preference of medieval Arabic doctrines and pharmaceutical knowledge, points to the central role of Orta’s house in Goa for his ways of story-telling and discusses the different manners in which he talks about books (Costa 2012, 75–78). Her effort to include positions of other recent authors like Grove, Cook or Arrizabalaga in her report, without investigating the reliability or appropriateness of their interpretations, mar the overall outcome of her analysis (Costa 2012, 78).

The book newly edited by Costa continues her search for a more reliable, less ideologically distorted interpretation of Orta’s life and work. Accordingly, the group of academics invited to a conference in 2013 in Portugal was broadly construed, including historians of medicine, science, Portugal and her empire, Portuguese literature and culture, Asia, gender, as well as an anthropologist and a cultural historian. Thus, it does not come as a surprise that this new book broadens the array of previous perspectives and questions. Its authors pay particular attention to literary devices, food and smells, Portuguese historiography and the place of Orta in the world of the Indian Ocean (Županov, Castro, Arrizabalaga,

Pearson). Some even distance themselves from the previous progressivist reading of Orta's book and strongly suggest its contextualization within the Goan, as well as the Indian Ocean cultural spheres (Cagle, Pearson). In addition, there are comparisons with contemporary and later writings on *materia medica* elsewhere in Europe and the New World (Andrade, Egmond, Pardo). As a result, Orta's work is now read among historians of science and medicine in a more complex and variegated manner.

Visible Lacunas in Costa's Book

Despite Costa's broad choice of contributors, her book gravitates overwhelmingly toward matters related to Portugal, whether history, medicine, science, language or culture. Asia is represented only once in it. Absent are scholars working on issues that shaped the analysis of Orta's life and continue to act as givens: the Inquisition; early modern religious communities and cultures in western India, the Ottoman Empire (in particular Cairo), the Iberian Peninsula or the Low Countries; medicine, botany and languages in societies of western India. Hence, claims about these topics continue to essentialize Orta as a person for whom two identities alone explain most of his book, his claims about knowledge, relationships, events and objects, as well as his choices of language, authorities and models for self-representation: his identity as a scholar and the identity as a Jew attributed to him by the Inquisition and modern historians.

The consequence of such absences left its mark within the individual articles. A reader looks in vain for medical, botanical and historical primary sources from western India. Material from the Goan archive is underrepresented, if at all discussed. Although several authors use historical research texts on Goa, the Indian Ocean or history of medicine in Islamicate and other South Asian cultures, their texts indicate either an insufficient familiarity with local or regional conditions or an abstention from discussing the gaps in sources or evidence for Orta's reflections and claims. The reference to Pormann and Savage-Smith's survey on the history of medicine in Islamicate societies, for instance, contributes nothing to an understanding of the specific conditions in Goa, Ahmadnagar or Gujarat between 1534 and 1567 (Costa 2015, 123). Medieval physicians quoted by Orta like Ibn Sina or Abu Bakr al-Razi did not use the expression *yunani* medicine, which seems to have been coined only in the British Raj (Costa 2015, 78). Neither was this medical system created as a new school "when the Arabs conquered Persia" (Costa 2015, 78). The visit of Hindu physicians in Baghdad who translated Sanskrit medical texts into Arabic was exceptional, as far as we know and Muslim physicians did not study in the same time, that is, in the late eighth century, in India. When they later traveled to India their destinations were overwhelmingly

part of Muslim expansion in South Asia, and their goal was to profit from the growing opportunities for Muslim patronage (Costa 2015, 78).

The absence of expertise with regard to South Asian, Islamicate, Jewish or “converso” communities, societies and intellectual histories is also reflected in a number of false statements or evaluations in Costa’s book. They encompass misspellings of Arabic, Persian or Sanskrit names of people, religious or social groups and cities, the misidentification of the ethnic identity of the Nizam Shahi and the Ottoman dynasties, or the appropriation of Orta’s (false) geographical designation of unnamed physicians whom he allegedly met either in Gujarat or the Sultanate of Ahmadnagar.⁴ The acceptance at face-value of Orta’s identification of people, regions, distances, diseases, plants, foodstuff or names without cross-checking or contextualizing his “facts” is a repeated feature of writings by researchers specializing in different domains of European history when matters of India or her Islamicate neighbors are discussed. These modern mistakes highlight another problem, which undergirds studies of local knowledge cultures outside Europe by Europeanists. When Orta speaks, for instance, of physicians from “Persia, Turkey, and Arabia,” whom he pretends to have met at the court of the Nizam Shahi rulers, he speaks of the Ottoman and the Safavid Empires in the geographical languages of antiquity, as well as the Crusades, which shaped most of the written discourse of Catholic and Protestant Europe and of the world maps produced in Venice in the first half of the sixteenth century. The geographical languages of the portolan charts (fourteenth–seventeenth centuries), however, often differed through the makers’ usage of local names learned from merchants, foreign books and visual material (Brentjes 2012). Orta most likely will not have had access to the new maps of Asia produced by Giacomo Gastaldi (d. 1567) in 1559 and 1561 and their incorporation of localized names of regions and places (Brentjes 2013). Hence, when he talks of “Persia, Turkey, and Arabia” it is unclear whether he indeed talks of real people whose places of origin he could only identify within his own cultural frame or whether he instead translated the languages they used as medical experts into geographical markers of his own knowledge culture.

Furthermore, the focus on individual aspects of Orta’s book without paying serious attention to their relationship to any of the book’s other components, while understandable in the context of a conference, creates methodologically important obstacles. Unsurprisingly, several contributors to the volume disagree profoundly in the reading of Orta’s book. A conversation about the meaning of these conflicts of interpretation unfortunately does not take place (Costa 2015, 109–11, 128–30). Neither is there a debate about the veracity or reliability of Orta’s de-

⁴Costa (2015): p. 15 [Turkish sultans], p. 18 [Brahmanists], p. 25 [Nizam Shahis are Turcomans], p. 102 [Razhes, Buhran, Persian, Arab and Turkish physicians], p. 105 [Razhes].

pictions or claims. Although errors are discussed as a new and important theme, the focus is on Orta's attitudes towards errors and their different classes (Pimentel and Soler 2014). Orta's own, multiple errors, in contrast, are neither analyzed nor mentioned as a feature of his book. Their identification and analysis is, however, an important key to understanding Orta's modes of narration and representation, as well as of the reliability and soundness of his knowledge.

Persian Physicians at the Nizam Shahi Court

In order to know which physicians worked between 1534 and 1567 at the Nizam Shahi court, research of Persian, Arabic, Marathi and possibly other texts on history, medicine, *materia medica* and administration need to be included in the study of Orta's book. In some instances, such a search is easy to conduct. Keshavarz's catalogue of Persian manuscripts of the Wellcome Institute for the History of Medicine in London, for instance, mentions Rustam Jurjani, a Persian physician, who moved from Iran to India, arriving in 951/1544 in the Deccan, and translated and annotated in 954/1547 Ibn al-Baytar's (d. 646/1248) pharmacopeia of simple and compound medicines for Burhan al-Din Nizam Shah (r. 914–961/1508–1553), whom Orta visited repeatedly (Keshavarz 1986, 56, 274–5). A copy of this work is extant at the Wellcome Institute [Wellcome Pers. 217] and thus can be studied in comparison with Orta's book. Jurjani also wrote at least two other medical works in Arabic and Persian, one of them treating fevers. Its analysis can help to check Orta's surprising claims about how Muslim physicians treated feverish diseases in the realm of the Nizam Shahi and perhaps even those that Orta makes about Gujarati physicians. A further possibility to acquire a more precise understanding about medical practices among Muslim physicians in early modern India is provided by another Persian manuscript held by the Wellcome Institute. The author of this *Handbook for Physicians* was the Persian physician and historian Muhammad Qasim Hindu Shah Astarabadi, called Firishtah (d. after 1033/1623). He compiled it in the late sixteenth or early seventeenth centuries (Keshavarz 1986, 109–110). The *Handbook* is not merely of interest because it contains the traditional topics of simple and compound medicines, but because it discusses tastes and smells, which Castro celebrates in Costa's book as Orta's innovative writing (Keshavarz 1986, 110; Costa 2015, 67–88). Born in Astarabad at the Caspian Sea, Firishtah grew up at the Nizam Shahi court of Ahmadnagar and is famous for his history of India, which also includes long passages on the Nizam Shahis, including Burhan al-Din. Thus, his father was in all likelihood another of the courtiers in Ahmadnagar whom Orta will have met during his visits there.

The Methodological Impact of the Language of the Inquisition on Modern Representations of Orta

The continued usage of the language of the Inquisition and of the institution's documents without clarifying which position the modern academic takes in this regard is misguided and misleading. Orta was not a "New Christian" or a "Marrano," let alone a Jew as the Goan Inquisition claimed in 1580. He was born into a "converso" family and baptized as a newborn baby. This makes him a Christian. Having been born in Portugal, this ritual in all likelihood made him a member of the Catholic Church. In his book, Orta repeatedly emphasizes this membership as his religious identity. His contacts with Jews are legitimized as components of his scholarly identity, as well as the outcome of his connection with his patron Martim Afonso de Sousa. Insisting on a Jewish identity for Orta on the basis of Inquisition documents with information based on mental and physical torture of relatives produced immediately or many years after his death is methodologically questionable. It means on the one hand to accept the Inquisitorial verdicts as "truth" and to insist on the other hand on a shared single Jewish identity among Jews, "conversos" and other people accused by the Inquisition of "Judaizing" as motivating and explaining Orta's book in general and in some of its individual elements. One of the many problematic sentences of this kind in publications about Orta, which illuminates the deep-seated prejudices against baptized children born to "converso"-parents and their descendants, is found in a paper about food and smells in Orta's book: "Although Orta never expresses his beliefs, particularly in a medical treatise, a New Christian would find it difficult to ignore the precepts of Judaism" (Costa 2015, 79).

The indiscriminate use of the language of the Inquisition by historians and other academic writers transcends the boundaries of history of science.⁵ It is present even in the most recent works of highly praised writers on the Inquisition. Against this custom, I agree with Saraiva, who is dismissed by certain early modernists as a pariah of Inquisition studies, against using this language, a point also discussed clearly from a different perspective by García-Arenal.⁶ Numer-

⁵Saraiva's insistence to abstain from using the language of the Inquisition remains also valid, when in some cases the persecution was indeed caused by religious fervor. Given the very hostile reaction of the Portuguese reviewer towards my support for Saraiva's position in respect to the widespread use of the inquisitorial terminology by current authors, I wish to underline that I do not mean here to revive the discussion between Saraiva and Révah nor do I share the belief that a political conviction of an author, in this case Saraiva, necessarily invalidates any of his historiographical claims, Saraiva (2001, 235–341).

⁶García-Arenal (2013). Bethencourt, for instance, claims that Saraiva's main thesis (which is of no direct relevance to my paper) of the invention of the crime of "Judaizing" as a means to fight the emerging mercantile middle class was merely an assumption and a false one, Bethencourt (2009, 25). But all Bethencourt offers as a justification for his rejection of this thesis is that he cannot see a conflict

ous examples in Bethencourt's highly praised book on the Inquisition prove the only point I wish to repeat here in the interest of my arguments in this paper: the continued usage of the language of the Inquisition has a distorting impact on the academic evaluation of its activities, goals, moral and sources. One of the clearest expressions of this impact is Bethencourt's claim in his conclusions that "(i)n Portugal, Judaism almost monopolized inquisitorial activity" (Bethencourt 2009, 442). What he meant is that the tribunals persecuted men, women and children almost exclusively by accusing them of "Judaizing." The same kind of denigrating language can be found in Black's book on the Italian Inquisition (Black 2009).

The continued usage of the language of the Inquisition is entangled with two other historiographical and methodological issues. One issue concerns the interpretation of the purposes and goals of the different types of Inquisition. Historians of science and medicine writing about Orta often ignore the acknowledgment in other historical circles that the early modern Inquisitions were not only and often not even primarily directed towards establishing or maintaining the supposed purity of Catholic doctrines and behavioral standards, but served political, economic and social goals such as control, empire-building, destruction of alternative ways of living or exclusion of real, perceived and invented enemies.⁷ The second methodological problem concerns the documents produced by the Inquisition. It is of relevance to those who wish to maintain that the statements in the testimony of Orta's sister Catarina produced during her trial in Goa under torture deliver correct and reliable data about herself as well as her immediate and her larger family, including the beliefs and customs of her brother Garcia. It is equally of relevance for historians of Jewish history in Europe, North Africa, the Ottoman Empire and India and those of the so-called "conversos."

Costa and her colleagues do not problematize this issue, but accept such documents as reliable sources for evaluating religious, dietary, political, commercial, sexual and other activities of the persecuted women and men and the (real or invented) people whom they spoke about (Costa 2015, 46, 11–31). It is, regrettably, only in his final remarks that Arrizabalaga points to several important issues that are in need of a more serious reflection than the overwhelmingly simplifying identification of Orta and other victims of the Inquisition according to the language of this institution (Costa 2015, 32). The essentialist identification of Jews and Christians in those discussions is one of them (Costa 2015, 32). A position of high relevance to my own view as an outsider on the ways how Orta's life and book has been treated by historians of science and medicine, as well as representatives of other academic fields is that of Gutwirth who already in 1981 expressed

of interest between the Portuguese aristocracy and this mercantile class, Bethencourt (2009, 25). He simply silences other studies supporting and modifying Saraiva's thesis (2001, XIII–XIV).

⁷Benassar (1981); Dedieu (1989); Cunha (1995); Saraiva (2001); Delgado (2011).

what I thought after reading the papers published before Costa's book. Gutwirth namely came to the conclusion "that historians had in fact been reproducing the categories used in their sources, following in the footsteps of the Inquisitors themselves in the way they accepted the definition of groups, the priorities among their activities and the very formulation of questions."⁸

Against the contributors to Costa's book, I do not believe that Catarina's testimonies produced under torture illuminate in any reliable sense the beliefs held by herself or her brother, nor can they be accepted as trustworthy with regard to the dietary and other customs of their larger family's daily life or the identities of the people named by Catarina. I am also astonished that in the literature only the second tribunal record against Catarina from Goa is used for arguing for or against her "Jewish identity" and that of her brother, while the first from Lisbon produced between May and October 1547 is—as far as I have seen—never discussed.⁹ In general, the study of non-printed primary sources is not often made visible in the articles I have read for this paper, including Costa's book.

Otherwise there are many different and dissonant voices with regard to the interpretation of the documents produced by the Portuguese and other Inquisitions.¹⁰ They are for the arguments of my paper of relevance only insofar as they show how important a new reflection on the Inquisition records on Catarina is.

The Fundamental Shortcoming of Previous and Current Research on Orta's Book

Keshavarz's information about Persian physicians at the Nizam Shahi court and their works supports my basic critique of previous studies on Orta and of several of the papers in Costa's book: Orta's book cannot be appropriately analyzed and evaluated by Europeanists alone. It has to be studied through teamwork. New methodological reflections are needed for identifying and interpreting the manifold layers that characterize it. For Europeanists and students of the Portuguese colonial empire, this applies in particular to the testimonies produced in Inquisition trials, to travel accounts and to surveys on "Asia" by early modern Portuguese, Spanish and Italian writers, to complaints by clerics and anonymous writers about the local conditions in Portuguese "India" and the behavior of the various groups of people living in the colonial enclaves; and finally, to letters of various kind by the colonial administration, the Portuguese crown and Catholic

⁸Quoted according to García-Arenal (2013, 12); García-Arenal makes the same point in a different context slightly earlier in her paper (2013, 7)

⁹See <http://digitarq.arquivos.pt/details?id=2304298:PT/TT/TSO-IL/028/04317>.

¹⁰Rivkin (1957); Saraiva (2001); Del Col (2006); Black (2009); García-Arenal (2013) and the literature listed there.

orders. In all these kinds of sources, multiple processes of intentional or subconscious mis- and re-interpretation are at work, which have to be excavated and contextualized.

In order to recognize them it is necessary to compare Orta's text on the one hand with earlier works on drugs, history or travels by Portuguese or Italian authors such as Tomé Pires, Duarte Barbosa or Ludovico Varthema and on the other with medical and historical texts by Muslim and Hindu scholars in Persian, Sanskrit, possibly other Indian languages, and Latin translations of those Arabic works, which Orta refers to time and again. In her contribution to Costa's book, Županov makes several interesting and at the same time surprising claims about Orta's medico-botanical knowledge (Costa 2015, 53). Against the majority of earlier voices, her own earlier papers included, she is now convinced that this medico-botanical knowledge is neither new nor exceptional, but was "common knowledge in Goa among the *casados* and the Portuguese officials, apothecaries, physicians and merchants" (Costa 2015, 53, 55–6). She downplays the "inductive methods" still praised by other contributors to the book claiming that it meant nothing but "that he was dependant (sic) on myriads of accounts brought to him by a variety of historical actors, his contemporaries in India" (Costa 2015, 56). She informs her readers that "(i)t has been established by historians, more recently by Teresa Nobre de Carvalho, that Orta had at hand a wide variety of accounts by Portuguese officials and Italian travellers ..." (Costa 2015, 56). Unfortunately, she does not name the earlier historians nor does she provide any reference to a paper or book in which Orta's use of such a wide variety of Portuguese and Italian texts with information about plants and drugs has indeed been established. She merely points in her footnote to this passage to Orta's well-known reference to Ludovico Varthema and to his mistaken claims about the difference between black and white pepper against an unnamed Portuguese apothecary in Goa, a passage which she herself analyzed in an earlier paper (Costa 2015, 56, fn 26; Županov 2009).

Carvalho indeed writes in an English summary of her doctoral research that Tome Pires's (ca. 1465–ca. 1540) and Duarte Barbosa's (ca. 1480–1521) "information collected by these royal officials was included in Garcia de Orta's work" after having been "confirmed and validated by Orta's inquires (sic), observations and medical experience" (T. Carvalho 2013, 15). Unfortunately, in her thesis she does not prove that Orta truly had known the texts of both writers and confirmed or even validated their information. The brief summaries of the works of these two as well as other Portuguese and Italian travelers in her thesis do not discuss their impact on Orta's book nor does she prove in her chapter on the latter's library and his use of Pliny's, Dioscurides's and Ibn Sina's texts that he had read or reflected on the Portuguese or Italian works (T. Carvalho 2012, 189–272).

Hence, a reliable comparative analysis of these sixteenth-century writings about Asian drugs, plants and histories remains an important desideratum. The lists of plants, fruits and spices given by Duarte and Pires overlap undoubtedly with much of what Orta writes about (T. Carvalho 2013, 14–5). But this alone does not prove that Orta has had access to their texts. This knowledge was common knowledge on the markets in India and other parts of Asia, as Orta more or less clearly writes himself. It also was commonly known among Muslim and in all likelihood Hindu physicians and druggists as the Persian texts on fevers, drugs, plants, foodstuff and sex listed in Keshavarz’s catalogue of the library of the Wellcome Institute (as well as in other catalogues of Persian and Arabic medical manuscripts all over the world) show.

A systematic study of this commonly known knowledge and its written codification at the time of Orta’s presence in India is a second desideratum. It is of even greater importance for a less magnifying, nationalistic and simplifying evaluation of Orta’s work than the comparative study of Portuguese and Italian texts, because they too depended on this common local knowledge available orally or in written form in different sectors of the various societies in South and Southeast Asia, Portuguese India included. Further texts that need to be read in conjunction with Orta’s book are the Latin translations of medical and pharmaceutical texts in Arabic, which Orta studied in some form at the universities of Salamanca and Alcalá de Henares and pharmaceutical texts that practicing physicians used on the Iberian Peninsula. Both types of texts contain information about Asian drugs and plants from a variety of sources. The pharmaceutical glossaries of practitioners on the Iberian Peninsula list since about the eleventh century Arabic, Hebrew, sometimes also Greek, Syriac and Latin, and over the centuries in increasing numbers vernacular names of plants and drugs (Bos and Mensching 2005; Bos and Mensching 2015).

General Historiographical Problems with Regard to Scholarship About Orta’s *Colóquios* Before 2015

Three themes rank highest among the various approaches to the study of Orta’s book: (1) his role as a scientific hero; (2) his role as a transmitter of knowledge and culture between “East and West” or between “civilizations”; (3) the purposes of his book. The first two themes and their representation cut through all types of methodological stances. Historians express their shared conviction that Orta was an experimental scholar of a new kind, a person who clearly broke with the ancient and medieval authorities in Greek and Arabic in their Latin translations, the very first and systematic author of a book on Asian *materia medica*, the first re-

porter of the clinical properties of (epidemic) cholera in precise and recognizable symptoms, and a man curious to know languages, nature and people.¹¹

The problem with practically all those claims is that they are often substantially and sometimes partially in conflict with the explicitly formulated content of Orta's book. Orta certainly wrote more than once about experience and truth, naked truth even, as a few recent historians found worthy to celebrate (Županov 2009, 21; 2010, 41; Pimentel and Soler 2014, 118). But we should ask in which sense these references to experience or experiment differed from these very same terms in medieval medical or philosophical texts. Instead of celebrating such terms for their apparent novelty, we should check the quantitative frequency of their usage and of the groups of words related to them. The application of current technical tools for such purposes is able to provide other information than a manual survey can deliver. A preliminary frequency check of the text found in Count de Ficalho's Portuguese edition posits many difficulties for a convincing interpretation, because the notes cannot be separated from the main text.¹²

A search of the 500 most used words in in this edition shows no occurrence for *experience* or *experiment* and only 111 occurrences or 0.08% for *verdade* together with 39 occurrences (0.03%) of *verdadeiro*. In the semantic analysis these two groups are more closely related to traditional forms of knowledge production like writing, author, writer or book than to terms that point in the direction of particularities, tests, trials, experience or experiment. I do not wish to suggest with this quick excursion into the possibilities of a quantitative, software-supported analysis of word frequencies that these numbers necessarily contradict the results of the qualitative analysis, that is, the isolation of specific formulations about truth and experience and their interpretation. I nonetheless think that a fair and solidly grounded analysis of Orta's text needs to pay attention to such textual features.¹³

Orta rejects time and again ancient medical authors for their insufficient knowledge of the plants he writes about. But he does the same and in sharper tone with his contemporaries. His attitude towards medieval Muslim authors, in contrast, differs recognizably from these two other groups of writers. It is true that he repeatedly criticizes Ibn Sina, Ibn Rushd, Ibn Sarabiyun and Ibn Masawayh, but he also shows his clear appreciation for their texts, opinions, and even their mistakes. He defends them against what he considered the unreasonable attacks of the Humanists, his contemporaries, whose bad moods towards "the Arabs" or

¹¹Boxer (1963); Fischel (1974); Barreto (1985); Grove (1995); Mathew (1997); Cook (2007); Walker (2009); Županov (2002, 2009, 2010); Costa and T. Carvalho (2013); Pimentel and Soler (2014). Grove's *Green Imperialism* (1995) copies almost verbatim his article of 1991. Hence, I will only refer to the former if its slight modifications are relevant to my argument.

¹²Count of Ficalho's name is Melo Breyner. I will use its second part according to Portuguese custom in the rest of my paper instead of the title given in the edition.

¹³I thank my daughter Rana for her support with this quantitative study.

“the Moors” he denounces as self-serving and false: “You seem to be very much attached to these modern authors who, in order to praise the Greeks, speak evil of Arabs and of some Moors born in Spain, and others in Persia, calling them ‘Maumetistas’ and barbarians (which they hold to be the worst epithet there is in the world), especially the Italians [...]” (Orta 1891, 31; 1913, 13).

The quantitative analysis moreover shows that after Orta and Ruano, the two interlocutors of the dialogues, the scholar most often referred to is Avicenna, that is, Ibn Sina (d. 1037). Ibn Sina’s name occurs 126 times (0.09%).¹⁴ Dioscurides’s name appears 87 times (0.06%). Galen is ranked third with a drop by 50% (45 occurrences). Despite the preliminary character of my analysis and the problems it poses, the quantitative distribution of these three as well as the few subsequent names that fall into the group of the 500 most frequent words, highlights the overwhelming attention that Orta paid to Ibn Sina and his medical canon *al-Qanun fi l-tibb*.

Orta names medical applications of the plants he describes and occasionally also depicts symptoms of diseases in less than a third of his chapters. Moreover, in most of those cases he merely states that a given plant can be used as a purgative, as relief for fever or as food. In contrast, Orta presents a significantly smaller number of elaborate, detailed explanations, whether they concern remedies or diseases. In the case of plants, the situation is different. Here, Orta indeed provides more regularly a larger range of data about the type of the plant (tree, shrub, flower), its leaves, blossoms, fruits, size, bark and other features. But even in this case, he does not proceed in a continuous and systematic manner. The information about plants is not exclusively of a medical, that is, scientific, orientation. Orta speaks of the commercial use of plants and stones at least as often, if not more, as of their medical usage. Several times, he also elaborates the culinary value and use of a plant. Orta’s interest in the objects he enumerates clearly is not the straightforward medical progress or the sharing of Eastern knowledge with Western readers claimed by twentieth and twenty-first-century historians.

Evaluations of Orta’s Knowledge of Languages

Opinions about Orta’s knowledge of Asian languages vary widely, as do the perspectives from which this knowledge is evaluated. Cook, Costa and Carvalho believe that Orta learned some Arabic in India or cooperated with locals who knew the language (Cook 2007, 98; Costa and T. Carvalho 2013, 5). Orta admittedly creates an illusion of knowing the language by claiming that he owned an Arabic

¹⁴This figure includes the footnotes. Since the text spells, in contrast to the footnotes, the name of the Muslim scholar with one n only (Avicena), I can easily provide the number of its occurrences for the text without footnotes, something that cannot be done for other terms: 92 times (0.07%).

text of Ibn Sina's medical summa *al-Qanun fi l-tibb*, which he had used to control the veracity of Andrea Alpago's new Latin translation. But his nonsensical beliefs that *al* is the genitive of the article and that *ma* in the word *magharabi*, which is a broken plural of the singular *maghrabi*, signifies *of* and thus can be separated from the plural form, leave no doubt as to the wildly exaggerated character of the claim (Orta 1891, 36; 1913, 18).

Grove believes that Orta had very little knowledge gained from his contacts with Hindu doctors (Grove 1991, 166–167). Pimentel and Soler expected that Orta had to be able to read Sanskrit texts in order to become a successful “cultural broker.” They scold him in general for his insufficient philological knowledge, choosing Joseph Justus Scaliger (1540–1609) as their expert to rely on (Pimentel and Soler 2014, 116 and fn. 47). They overlooked, however, that Scaliger knew only Arabic and thus was no competent judge of Orta's terminology in the remaining ten languages.

One of the problems with those philological evaluations is the lack of specific expertise among most of the evaluators. Another problem is the choice of sources on whom to rely for the evaluation. A third problem is the result of the expectations about what Orta should have been capable of in order to be a successful “broker between cultures.” A fourth problem relates to the usage that Orta's foreign words and expressions are put to. As a result of these four difficulties that the analyzed authors tackled, but did not overcome, no systematic and careful study of these names and expressions is yet available in addition to the laudable efforts undertaken by Breyner in his notes to the 1891/1895-edition of Orta's text.

Breyner's goal was to situate Orta's terminology within the medical, botanical and commercial terminologies of his time. In this respect, he provided a good basis for further studies. He rightly concluded that Orta's Arabic vocabulary was taken from the Latin translations of those Arabic texts that he had studied at the universities of Salamanca and Alcalá de Henares (Orta 1891, 42). As for the terminology ascribed to five Indian languages (Gujarati, Bengali, Deccani, Canarin and Malabar, that is, Gujarati, Bangla, Dakkhani, Konkani (?) and Malayalam) in addition to Arabic, Persian, Malay and Singhalese, Breyner provided Sanskrit, Arabic, Bengali, Hindi, Malayalam, Tamil, Malay and Singhalese words suggesting therewith interpretations or corrections of misunderstood, corrupted or creolized words. A few examples are the Sanskrit expressions *ghrita kumari*, *parajatak* or *parijatak*, *hing*, *vadari* and *vacha* for Orta's *catecomer*, *parizat-aco*, *imgu/imgara*, *vidara*, *batche*; the Tamil terms *konnekai* or *konraik-kai*, *kárruwá*, *manjal* and *shema kalengu* or *shema kilangu* for Orta's Malayalam words *condaca*, *cameá*, *manjale* and *chiviquilengas*; the Arabic term *salikha* for Orta's *salihacha*; the Malay variants *kamañan*, *kamiñan* and *kamayan* for Orta's *cominhan*, the Singhalese *coronde*, *kurunda* or *kurundú* and *puwak* for Orta's *cuurdo*

and *poaz* (Orta 1891, 37, 72, 90, 115, 126, 147, 198, 224–225, 282, 285, 335). Two of Orta's names (*parizataco* and *imgu*) are very close to the Sanskrit terms, and two others (*vadari* and *bache*) are not very far away from their correspondents. Given that Orta's words do not represent a spoken Sanskrit, but a dialect derived some centuries before from the literary language normatively spoken only by male Brahmins, these four words are fine specimens of local terminology. The Tamil background of Orta's supposedly Malayalam words comes as no surprise, since both languages are closely related and Tamil was more widely spread towards the west in the early modern period than is the case today. Nonetheless, this phenomenon emphasizes the need for a more systematic study of historical linguistic in western and southwestern India, if one wishes to appropriately understand Orta's knowledge.

Breyner was not an expert of the Indian languages referred to by Orta. He worked mostly with botanical dictionaries of the nineteenth century, produced in the British Raj. He was not and could not have been aware that some of the languages were still in a process of identification or separation, while others were neither purely Indo-European nor purely Dravidian, but mixed languages. Neither could he have been aware of our lack of knowledge of how languages were used in sixteenth-century India for claiming status and identities. The use of languages for sociocultural identity "policies" began only under the Raj (Mitchell 2005). Languages, states and identities continued to be reshaped throughout the twentieth century by the colonial administration and the subsequent new Republic of India (Mitchell 2009).

Hence, it is not easy, for Orta's period, to identify items as mistakes that from today's perspective can be clearly sorted and allocated. With more than 1,000 languages spoken across South Asia, local inhabitants everywhere were multi-lingual. They would have had their own ideas about the languages they spoke. Orta's "mistakes" might reflect those oral idiosyncrasies or multiplicities and thus may not have been mistakes at all. Working with today's dictionaries of the Indian languages mentioned by Orta may generate mistakes, rather than detect them due to ordinary changes in language content, meaning and usage, but above all, due to the complex and at times controversial language policies of identity in India's modern history. Thus, a fair and solid evaluation of Orta's botanical, medical and culinary terminology in Gujarati, Bangla, Dakkhani, Konkani (?), Malayalam and Singhalese will only be achieved with the help of experts in historical linguistics and the sociocultural contexts of those languages. As for Malay, Orta learned his few specialized terms in all likelihood from Portuguese merchants who traded east and southeast of India, because they seem to be similar to the terminology that Mahdi lists as Portuguese Creole (Mahdi 2007). Hence, a history of Por-

tuguese Creole botanical and pharmaceutical terms is needed for evaluating this element of Orta's vocabulary.

The Oral Character of Orta's Language Specimens

Orta's alleged Malayalam and his Malay and Singhalese specimens are particular examples of my overall observation that his terminology of South and Southeast Asian origin has a dominantly oral character and does not reflect any familiarity with written medical or pharmaceutical texts. This oral character of Orta's local knowledge is made visible not merely by problems of transliteration, spelling and misinterpretation of sounds. It becomes strongly visible in the language Orta used when talking about it. He asked local doctors, he conversed with them, and he had discussions with physicians and merchants (Orta 1891, 180–181; 1895, 289, 291). One explicit description of how Orta learned local names, properties and the medicinal usage of plants is found in one of the last chapters (ch. 54), where he talks of a visit to Diu in about 1535:

One day being in the Bazaar (as we call the market or fair) in the afternoon, sitting at the door of one of the merchants they call Banians, a woman came past with a sack of dried TURBIT for sale. As I was an expert in medicines, and had heard that they were brought there for our ships, I asked the Banian what it was. He replied that it was TERUMBU, and that we and the Moors gave it that name, but that the Maratas (who are Gentios) call it BARCAMAN. I then asked for what it was bought and its use. He said it was of use to purge the stomach, and he showed me its gummosity and whiteness. (Orta 1895, 329–330; 1913, 433)

The declaration at the beginning of this chapter highlights another reason for some of Orta's confusions in regards to Indian plant names. While in this little story just quoted he says clearly that the Gujarati merchant said that the name *barcaman* was Marathi, when Orta lists names of the plant he writes that *barcaman* was Gujarati (Orta 1895, 328; 1913, 431). The modern Gujarati name of *Ipomoea Turpethum* is *nasottar*. But the Gujarati merchant also erred, since the three modern Marathi names for the plant are *shetvad*, *nishotar* and *tend*. None of the Indian lists of local names for this plant that I found provides anything close to *barcaman*. Orta's name of the plant as used in Goa is *tiguar*, which seems to be of Dravida origin, as the modern Kannada name is *vili* (or *bili*) *tigade* and the Malayalam names also include *tigade*.¹⁵

¹⁵<http://medplants.blogspot.de/2012/11/operculina-turpethum-indian-jalap.html>.

Orta's Narrative Strategies and Their Functions

Orta composed his work as a dialogue in fifty-eight chapters and one addition between two fictitious characters, Orta and Ruano. Both represent himself, different positions in medical teaching and writing, as well as different ideas about how to identify plants and remedies. Ruano is introduced in the first chapter as having arrived at Goa with his brother, who was an agent of the Portuguese Crown, that is, a royal mercantile servant (Orta 1891, 19). This is another mirroring of Orta's own practices as a merchant and physician. These practices are reflected in the further major talking points of the book: commerce, healing and books.

The books, Orta discusses, belong to three major periods: ancient Greek authors; medieval authors from Islamic societies; early modern Humanists. The members of these three oppositional groups are not on equal footing. It is here where my views deviate from numerous current writers about Orta's book. Grove, for instance, believes that Orta's text was "hostile to European and Arabic knowledge" (Grove 1991, 164).

It has been rightly acknowledged that this rhetorical setup of the text, while not at all rare in the period, provided Orta with a substantial liberty to present in a clear and poignant manner questions, doubts, beliefs, affirmations and rejections (Županov 2010, 41; 2015; Gutwirth 2010). This clarifies that Orta did not merely mean to "transmit Eastern medical and botanical knowledge to the West" as Costa, Carvalho and other modern writers believe (Barreto 1985; Costa and T. Carvalho 2013). He had programmatic goals that included first challenging recent developments in medical and pharmaceutical literature and legitimizing propaganda among Humanist writers in Italy, France, Spain, Portugal and German lands.

A second programmatic goal undoubtedly includes reflecting on what we call today "best practice." This "best practice" included a substantive and broadly construed critical and comparative discussion of literature as taught at universities in western and southern Europe. It also includes comparing this literature with products of nature and experiences of healing practices in India, which have to be described, tasted and occasionally tested. While this has been lauded in the general sense of "progress," things are not that easy and straightforward. Sometimes Orta presents his search for "truth" as a literary, intellectual endeavor. Sometimes it is gruesome reality that imposes on him and his young colleague, Dimas Bosque, the need to turn to local experience, practice and objects. In cases of conflicting approaches and beliefs, however, it is always the character Orta who describes himself as the polite, but clearly superior knower and practitioner. He is described as someone who is not merely successful when locals apply "theoretically weakly grounded" experiential cures, which sometimes work and sometimes don't, but who knows before the contest that his methods of curing are superior

and will be recognized by foreign rulers in India outside the borders of Goa (Orta 1895, 140–142).

Hence, Orta presents himself as a coveted subject who receives extraordinary offers of payment and positions, which he partly rejects since he is “a good Portuguese.” He also describes himself as an envied competitor against whom various intrigues are spun, but never succeed. Orta’s “experiential search for truth” is thus not alone an issue of epistemology, but as much or even more so an issue of social competition. Thus, the creation of Orta as the successful navigator in strange social, cultural and professional waters is a third programmatic goal of Orta’s text. This part includes also Orta’s description of his commercial success, after having arrived with what he downplays as “little property” (Orta 1895, 260; 1913, 379). When Orta writes his book he is the proud and very wealthy owner of at least two merchant ships and an extensive network of commercial partners. This is no surprise, since the allegedly little property contained five quintal, that is, about 500 kg, of guaiacum, which despite the losses at sea Orta still could sell in Goa for 1,000 cruzados (according to Cook about 800,000 \$) (Costa 2015, 132). The importance of Orta’s persona as a successful merchant has been acknowledged in modern research literature, but is often put below and behind his rôles as an author, reader and doctor.

The rhetorical and programmatic flexibility of Orta’s text suggests accepting that other, rarely, or not at all discussed features also reflect intentional decisions made by him. Such elements of Orta’s programmatic decisions with regard to what to write about and how to do it include: his various silences and emphases, the prevalently irenic atmosphere of his depictions of his household, the city of Goa and any of the Muslim states around it, the inclusion of “political” digressions about the five Deccani sultanates and his references to his participation in campaigns against Muslim and Hindu rulers without ever talking about their bloody, violent nature, as well as the complete absence of his family.

Orta’s Representation of His Knowledge as a Dictionary

Orta’s multilingual botanical, medical and zoological terminology is closely connected to this preference for Arabic words and authors. Assuring Ruano of his qualification for evaluating the Humanists’s works and for comparing Latin translations of Arabic texts with their original in order to judge the translation’s reliability endows his refutation of Humanist reductionist practices with substance. Directing Ruano’s attention to the fact that this body of medieval Arabic knowledge taught on the Peninsula relates to the practices of local Muslim physicians and that it provides access to new knowledge and cures for healing through describing and naming plants and remedies unknown to his teachers and colleagues

in Europe enlarges his own reputation and status. It also confirms his teacher's belief that knowing Arabic words was necessary for the successful doctor and for good practice.

The linguistic nature of Orta's book, which is set up as the main explicit framework for narrating and evaluating old and new knowledge at the very beginning of his text into which everything else needs to be integrated, is thus Orta's basic and most easily visible principle of order. Epistemology and ontology, that is, truth, experience, appearance and configuration, only occupy subordinate levels of organization. They deliver keywords and catch phrases, but do not order things or narration. They solidly serve the construction of Orta's persona as an erudite in every-day life outside of study. But contrary to the dominant interpretation they do not guarantee the veracity of Orta's statements, neither with regard to plants and diseases and their identities nor with regard to the authors Orta praises or criticizes. Time and again Orta's statements do not agree with ancient or medieval texts, symptoms of diseases or properties of or relations between plants. Epistemology and ontology were certainly important resources for Orta's argumentation for or against authors, healing practices or objects of nature. They served to challenge established literary knowledge. In a few cases, Orta also presents them as a tool for producing new knowledge. But he did not build his classification and evaluation of things on their basis. Naming plants and remedies was of course at Orta's time a centuries-old principle of organizing knowledge. Orta was not setting his foot on unploughed soil with his decision to use them as a tool for structuring the string of his chapters according to the Portuguese alphabet. Although Orta criticizes Ruano's proposal to choose the alphabet as the structural principle of order, Orta nonetheless follows it with very little deviation. His text indeed resembles a dictionary. In choosing this format, Orta may have bowed to António de Nebrija, one of his best appreciated teachers.

It is, however, not a simple dictionary of corresponding words. This is not only so, because he wished to talk about much more than names. Going through the titles of his chapters, it quickly becomes clear that the alphabetic structure is neither simple, that is, consisting of one name only, nor completely regular. More than one chapter title contains more than one name of a plant, drug or disease or mixes two or three of these different items. In a few cases Orta comments on the following content of the chapter to forewarn the reader that it will not be about medicine or is meant to be a digression. Orta's structure of order is thus openly disorderly. This renouncement of strict order shows in a further property of the chapter titles. The names offered there to the reader combine, as far as I can tell without substantial study, three different linguistic layers: names of the traditional Greco-Arabic-Latin *materia medica* in vernacular or Latinized form, names from vernacular Indian languages and Portuguese Creole names, that is,

names of plants and drugs known among the Portuguese in Asia before Orta's arrival and noted in chronicles, travel accounts or letters (Orta 1891, 23, 45, 74, 95, 103, 117).

An early example of this mixing is the title of the seventh chapter: "Coloquio setimo do Altiht, Anjuden, Assa Fetida, e Doce, e Odorata, Anil" (Orta 1891, 75). The languages combined here are (a corrupt) Arabic, Persian and Portuguese Creole on the basis of the Arabic form *al-nila* of the Sanskrit term *nila*. Duarte Barbosa, who was the scribe of the Portuguese factory in Kannur (Cannanore) at the Malabar Coast between 1500 and 1516/17 and who wrote—according to Giovanni Batista Ramusio (1485–1557)—his first book about his experiences in 1516, calls *indigo anil* (Orta 1891, 93, note 7). Although Barbosa's manuscript was not published before the nineteenth century, his knowledge may have circulated orally or in form of lists among Portuguese administrators, merchants, physicians and druggists in India. At the very least, his text confirms that the form *anil* was used by scribes in the Portuguese commercial system before Orta wrote his book.

Further Structural Elements in Orta's Narration

Looking for the execution of structural principles and the presentation of the promised knowledge it is easy to discover another important feature of Orta's text that speaks against the simple stories of epistemological progress and cross-cultural accumulation of knowledge. Below the level of the alphabetical as the main principle of order, a systematic, regular execution of declared intentions and goals does not take place. Names in all the languages that Orta uses are only irregularly provided. Medical or pharmaceutical instructions allowing the new knowledge to be learned, copied and imitated are more often either lacking or overly brief and general. It is at best the initiated that can make use of them. Orta's text is thus neither a handbook for the practitioner nor a textbook for the student.

Orta's ambivalence is also to be seen in his classification, which was not local as Grove claims, but mixed (Grove 1991, 166). In order to make local plants and remedies useful in Orta's intellectual world of healing, they had to be integrated into the knowledge he had acquired in Spain. This is the main function of his alphabetical approach and the second function of his extensive debate with ancient, medieval and early modern authors, in addition and beyond his decision to set them up for critique and appraisal.

However, if the only alphabet that Orta could read was the Latin one, no other alphabetical options were available to him. His text at the very least does not show any trace of such knowledge. Another issue that limits the hold of the

Portuguese alphabet over local names and their objects is the rôle and visibility of writing in Goan public life in the first half of the sixteenth century. If Orta had no incentive to learn reading Devanagari, Arabic, Vattellutu (for writing Malayalam until the seventeenth or eighteenth century), Kannada or Bengali scripts, even on a limited level, his decision for an alphabetical arrangement of the plants and drugs he wanted to discuss meant necessarily a decision for the Portuguese alphabet.¹⁶ If, however, he could read another alphabet, other options were open to him for alphabetically organizing his narrative. Not choosing them would then have meaning. Hence, for fairly evaluating Orta's work and its multilingual features, a history of writing in Goa as well as familiarity with the general cultural environment during the first half of the sixteenth century is needed.

Another ambivalent relationship characterizes Orta's choice of the book's title and the book's content. The book's title combines traditional medical terms (simples, drugs) with a focus on a newly "re-opened" territory (India). The book's content goes much beyond these two points. Numerous matters belonging to other genres of knowledge and other kinds of narration also appear: a survey on the more recent history of the Deccani sultanates, most likely appropriated from other sources; comments on his "travels" in western India and along the coast to Sri Lanka; reminiscences on Muslim rulers and their courts; depictions of his close and friendly relationships to leading clerics of Goa and Kochi, governors or viceroys of Goa, the sultans of Gujarat and Ahmadnagar and his gardens in Mumbai and Goa; and a very few events in Goa, mostly relating to diseases. Although such topics, which are not directly related to simples and drugs, were not strictly absent from all previous texts on *materia medica*, neither was their inclusion standard fare. Carolus Clusius opted against a number of them, when he paraphrased Orta's book in Latin in 1567. He added other themes, for example geographical information appropriated from books. This indicates that he had a different idea about what constituted a pharmaceutical text, even if this text was on simples and drugs from India unknown to himself. Orta's choice of title and themes of discussion or questioning was thus part of his programmatic approach. The conservative title suggests a traditional kind of professional book extended to India. The choice of thematic digressions permits him to develop his autobiographical story and the manner in which he wants his readers to see and appreciate him.

¹⁶A script for Gujarati was only invented in 1592. Dakkhani was written either in Devanagari or in a slightly modified form of the Persian version of the Arabic alphabet. Konkani is found in three kinds of script before the introduction of the Latin alphabet for it: Devanagari, Kannada and Vattellutu.

Orta's Autobiography as a Second Textual Layer

The strong presence of instances related to his activities in India since his arrival in 1534 defines the autobiography as a second text within the alphabetical representation of simples and drugs. This autobiographical narrative possesses three outspoken features and one element of silence. The outspoken features concern his depiction of his professional status as a doctor, his success as a merchant and his excellent connections with the Goan secular and ecclesiastic elites, as well as with some of the main Muslim neighbors of Goa. The glaring element of silence in his autobiographical narrative is the absence of all members of his family (Županov 2010, 41). He also kept silent about all of his acquaintances among Goa's merchant community, including those with whom he carried out his own business ventures.

In his narrative, Orta constructs his status as a doctor through two kinds of reports: reports about encounters with Muslim and Hindu doctors, often outside of Goa, and calls to high-ranking patients. The first group of reports depicts him as the almost always superior physician who knew a broader range of texts and the better methods to healing. It is primarily his knowledge, his training and his experience that Indian diseases validate, because he repeatedly heals them better than all local doctors (Orta 1895, 137, 140–141; 1913, 306–307, 309–310).

Another form of the same message is the use of a Brahmin physician in Goa for confirming information that Orta gave to Ruano about local plants and for making him say: “Dr. Orta knows better than all of us, for we only know the Gentios, but he knows Christians, Moors and Gentios better than we all. I kiss the hand of your honour” (Orta 1895, 332; 1913, 436). The chosen language strengthens the effect of this passage. While the Brahmin expert, who is clearly identified as “o fisico,” addresses Orta as “doutor Orta” and “vossa merce,” whose hand he kisses, Orta simply calls the Brahmin by his given name: “Girl! call Malupa [...] Malupa! tell this gentleman, who is a doctor, [...]” (Orta 1895, 331–332; 1913, 435–436).

The second, smaller group of reports presents him as superior to local Hindu doctors and as familiar with the local interpretation of the diseases, since he possesses experience and theory, while they, he claims, are pure empiricists (Orta 1895, 137; 1913, 306). But even in this regard, they can fall short compared to Portuguese healing practices. In Orta's narrative, while knowing well, for instance, how to heal dysentery or how to diagnose with the pulse, the Hindu doctors did not know, prior to the arrival of the Portuguese, how to bleed or how to draw conclusions from the urine. When applying Portuguese methods, he assures Ruano, they make mistakes or imitate those methods like monkeys (Orta 1895, 137; 1913, 306). Orta, however, chose the word *bugio* for describing the behav-

ior of Hindu doctors, not *simio*, which represents monkeys and apes as an umbrella term. *Bugio* is much more specific. It signifies the howler monkey, which lives in South and Central America. It was considered the loudest of all animals. He could have known about this from his patron Sousa, who had been the first governor-general of Brazil. *Bugio* can also be used to signify the *macaque*, some species of which live along the western coast of India. Moreover, *bugio* also signifies *cinocéfalo*, the doghead, which today is an umbrella term for *macaques* and *baboons*. The doghead in Christian mythological cosmology is one of the less-than-human life forms that populate Asia and in some cases also Africa. Hence, Orta's designation of the Hindu doctors as *bugios* is a crude as well as subtle insult of multiple degrees.

Ayurvedic medicine is of course not a system of healing without doctrines. Orta's misrepresentation of the Brahmanic system may be the result of his ignorance of Sanskrit texts as Pimentel and Soler suggest (2014, 116). But Orta never even gives the tiniest hint of having been interested in these writings nor of ever having seen their manuscripts, which differ strongly in appearance from Latin, Arabic or Persian manuscripts. His emphasis on the empirical character of local Hindu healing practices may thus rather reflect a more broadly shared attitude among doctors from the Iberian Peninsula towards local remedies and cures. Orta presents them in two main functions: as helpful means for criticizing and correcting textual knowledge about the classical Graeco-Arabic-Latin *materia medica* and as proper means for combatting local diseases.

These two functions reflect the overlap between Indian *materia medica* and medical practices with the Greco-Arabic-Latin traditions as well as their differences. Indian plants, remedies and healing methods had been partially integrated in the Greco-Arabic-Latin traditions since antiquity. A more substantive assimilation took place beginning in the late eighth century, when Sanskrit texts on medicine were translated into Arabic in Baghdad. During the seven centuries before Orta's arrival in western India numerous further mergers between pharmaceutical knowledge available in Arabic and Persian and that available in Sanskrit took place in addition to the extensive overlap of plants and drugs caused by trade. However, the overlaps remained partial and were, most important for the discussion of Orta's textual practices, not present in the author's medical consciousness. It is thus not surprising when in Orta's narrative local remedies that were not part of the traditional Greco-Arabo-Latin *materia medica* had an ambivalent status as did healing methods. Although a number of them made it into the title of a chapter, reflecting thus an equal status with an older, well-known plant or drug, Orta did not arrange his text in a manner that gave the new, local objects clear precedence. Dimas Bosque's praise for a South Indian plant used by the locals against dysentery shows that he only turned to it when the standard collection of

drugs and tools transported on ship from Portugal to Portuguese India had been depleted.¹⁷

Orta's comments on Muslim physicians mix appreciation with condescension. When Sousa fell ill with fever in his military campaign undertaken together with Bahadur Shah from Gujarat against the Mughal army of Humayun (r. 1531–1540, 1555–1556), the Gujarati Sultan and Orta had a little dispute over who could better heal such a kind of sickness. The Sultan was convinced that Portuguese doctors fell short in this point, while Orta believed the same for the local doctors. Turning to Ruano after telling the little story, Orta comments: "Further, as their physicians are not learned, there are none that cure to our rules" (Orta 1891, 140; 1913, 310). Such a comment on the physicians in Bahadur Shah's environment is certainly inappropriate, whether Orta aims here at Muslim or Hindu doctors, since the Sultan's court was a highly literate, cultured place and most physicians will have acquired their knowledge through reading the classics of either school and receiving practical training with their relatives, another teacher or maybe in a hospital. The understanding of learned as signifying to follow the rules that Orta had learned at home describes his views on things a short time after his arrival in Goa. Although his appreciation for all groups of local doctors rose over time in regards to formal learning, he remains closely connected to the doctrines of Humoral medicine, and mostly emphasizes the respective education of Muslim doctors. Hence, not only is it inappropriate to characterize Orta's positions by today's values and terms; using concepts such as "multiculturalism" or "exchange between East and West" denies the obvious disequilibrium in Orta's narrative between the different medical systems and their practitioners.

One way to elucidate possible undercurrents below such explicit depreciation of the practitioners and their education consists in clarifying in a more systematic manner than done so far, the relationship between the different kinds of plants and remedies. Calling his text an eclectic mix of "Western, Arabic and indigenous" *materia medica* and healing methods, as Costa and Carvalho do, is certainly closer to Orta's text than the dichotomies created by Grove, Cook, Županov or Pimentel and Soler.¹⁸ But this does not suffice for capturing the connections between the different *materia medica*. A more precise determination of the usage of the various plants and drugs in the various healing systems in western India is necessary, because all of these systems often overlapped one another. They were also not static, unique and unified collections of things, but generally in flux and regionally different. For Orta, "indigenous" clearly meant at the very least two, if not more medical practices: that of Muslim physicians and that of Hindu doctors.

¹⁷Costa and T. Carvalho (2013, 5, 9) propose a similar view, following S. D'Cruz.

¹⁸Costa and T. Carvalho (2013, 6, 9); Grove (1991); Cook (2007); Županov (2009, 2010); Pimentel and Soler (2014).

Although it is not clear to me whether he further differentiated between the Hindu doctors, he clearly did so with regard to Muslim physicians, whom he names according to their geographical origins, mostly outside of India, according to his limited knowledge of west and south Asian geographical divisions.

Orta's Mistakes

A feature of Orta's book already pointed out systematically to the best of his abilities by Breyner are the numerous factual mistakes in Orta's descriptions, both of classical and medieval texts and of local languages, plants and diseases. This also applies to those cases like the cholera or pepper that are often presented in the research literature as proof for Orta's new knowledge and his contribution to scientific progress (Costa and T. Carvalho 2013, 6). Syed and Swaminathan compared Orta's description of the disease of one of his well-off patients in chapter 17 with the disease called *murcchi*, the Sanskrit origin of the local term *morxi* used by Orta. *Murcchi*, they say, stands for fainting or syncope. The word is, however, also used in a compound (*murcchatisara*), which describes a different disease called *visuchika* (beset by needles), a symptomatic description of the beginning of the disease with a sharp burning pain in the limbs. Further symptoms quoted from an early modern medical text from South Bihar (Maghada), the *Bhava Prakasha* of Bhava Mishra (sixteenth century?), show close similarities to the symptoms the two physicians list. Hence, Syed and Swaminathan suggest that the disease Orta treated in Goa was what the Ayurvedic physicians called *visuchika*. Since Orta explicitly states that the disease was not infectious and since both his and Bhava Mishra's descriptions miss a key symptom characterizing what today is called *cholera*, the two authors reject identifying Orta and Mishra's disease with epidemic cholera (Syed and Swaminathan 2009, 60–62). In Syed's and Swaminathan's view, Orta's mistake in this case consists in identifying *morxi* with "our Cholera morbus," since in a description of the seventeenth century the symptoms of the latter as well as its treatment differ significantly from the former (Syed and Swaminathan 2009, 62–63).

Županov neatly summarizes Orta's lofty rejection of a druggist's claim that black and white pepper are not different plants, but merely different appearances of one and the same thing. She also notes that in Orta's view knowledge was socially constituted and valued. She points out that Orta's own claim about the two peppers coming from two different trees was false (Županov 2009, 26). This observation does not motivate her, however, to engage in a more profound analysis of the kind of clear mistakes found in Orta's book and their meaning both within the text itself and with regard to the knowledge available in western India during the first half of the sixteenth century. Such a comparative analysis of

these seemingly minor details is necessary if we wish to go beyond the quotation of individually exciting or outstanding sentences or the repetition of individual stories, which merely confirm what we already believe in. These details will help us to understand why Orta went to such lengths as to engage the druggist, the Portuguese viceroy and the Hindu ruler of Kochi in a verbal as well as material competition over an epistemologically difficult issue of botanical classification, which could have been settled, in this particular case, rather easily if all those involved would have waited long enough to see the black pepper indeed turning white, as the druggist had claimed (Županov 2009, 25–26). Orta's triumphalist avoidance of this empirical solution of an epistemological and social question contradicts the widespread praise found in the research literature for his empirical, observational practices. This particular example highlights a more rhetorical usage of the language of experience, observation, eye witnessing and trust by Orta and at the same time, a less simple understanding of such concepts concerning demonstration and investigation.

We must not only simply register the different types of Orta's mistakes, but also ask how these factual mistakes should be interpreted. Should they be interpreted as a reflection of Orta's limited access to books from home, or as an element of his self-representation? He often describes himself as a person who knows most things better than the ancients, the "Arabs," and his colleagues in Europe. But he adds to this rhetorical strategy claims of superiority with regard to medical practitioners in Goa, who had no university degree and ranked lower in the colony's social hierarchy. Or should we consider his factual mistakes as a reflection of the superficiality of his knowledge of local medical texts as emphasized by Grove, Pimentel and Soler?

In research I conducted in Goa in order to find out which scientific books had been available at the convents of Goa in the sixteenth and seventeenth centuries, I read the order and delivery lists of books that were requested to be sent to Goa from Lisbon. I also saw the titles in the National Library of Goa that had physically survived the climate and the centuries. Two results of this investigation struck me most: the lists did not contain scientific books ignoring the rare exception. The surviving items in the National Library did not come in their majority from the libraries of the convents, but from private collections of individual missionaries. Hence, Orta's access to medical books at Goa between 1538 and 1563 was certainly limited. Nonetheless, as Iken and Costa have indicated he knew (of ?) some books newly printed in Europe in the early 1560s (Iken 2009, 82; Costa 2012, 76). His mistakes with regard to books thus can be a reflection of the paucity of books available in town and the need to rely on memory.

Other mistakes concern foreign words. These mistakes reflect the oral character of this kind of knowledge, its location in trade, gardening and alimenta-

tion. They are witnesses to the multilingual society of Goa, in which Orta lived and those, which he encountered as a merchant and when traveling. They document the difficulties in identifying the multiple sounds of the consonants. With very few exceptions, Portuguese knows only one sound for each of its consonants. In contrast, Indian languages have two sounds for most consonants (aspirated and unaspirated). Moreover, the letters *n*, *t* or *ts* are pronounced in three or four different parts of the mouth with different manners of rolling and positioning the tongue, depending on the concrete language (dental, alveolar, retroflex, alveopalatal). The liquids *l*, *r*, and in some languages also *v* (aspirated and unaspirated) are so closely related to each other in pronunciation that it is very difficult for the uninitiated to separate them acoustically. A possible example of this last case is Orta's information that *areá* is the Bengali and Deccani word for *aloe* (Orta 1891, 25; 1913, 6). According to Breyner as well as modern dictionaries of Bangla and Hindi or Urdu, the corresponding words rather are *elia* (Bangla) and *elwa* (Hindi/Urdu) (Orta 1891, 37). Breyner thought that *areá* had to be seen as a corrupted form. It is, however, merely a minor confusion of the two sounds *l* and *i/w* with *r* and *e*.

There are of course numerous differences between the phonological systems of the individual Indian languages, whether Indo-European or Dravidian, which are the only two clusters relevant for Orta's linguistic environment. The mentioned sound types are nonetheless shared across them in most cases. They are those that create most of the problems for an untrained ear. Transforming these sounds into the letters of the Portuguese alphabet in an unequivocal manner was no easy and at times a hopeless task. No surprise then that Orta collapsed all of these sound variants into single sound types, not even differentiating between their aspirated and unaspirated forms.

Other problems with Orta's transliterated Indian words reflect their origins in Portuguese Creole that began to evolve with the first Portuguese settlers in Goa after the city's conquest in 1510. Hence, in order to develop a more precise understanding of Orta's linguistic environment as well as his personal abilities the history of Portuguese Creole needs to be taken seriously. A further issue concerning Orta's orthography of Indian words for plants, drugs or foodstuff is the ambivalent linguistic reality of Indian cities and port towns. Thus unequivocally identifying the language of origin of a particular word might have been impossible for Orta, since he depended on the language practices of his informants.

Mistakes in Orta's text are thus not simple, one-dimensional expressions of his limited range of knowledge of Indian conditions. Nor are they fully explainable by social boundaries between castes, although these forms of obstructing, preserving and containing knowledge will certainly have played their rôle (Grove 1991, 167). Several specific statements in Orta's text speak rather in favor of an

elaborate mix of Orta's knowledge of Latin translations of Arabic medical texts from the eighth to the twelfth centuries, a self-representational desire to devalue certain medical practices such as the treatment of fevers and a lack of familiarity with Persian, Arabic and Sanskrit textbooks of medicine and pharmacology taught and used in western and central India in the first half of the sixteenth century.

Orta's Stories About Indian Therapeutic Practices

Orta claims that in Gujarat doctors starved feverish patients almost to death as a cure (Orta 1895, 140; 1913, 309). Although I do not know much about Ayurvedic therapies, I doubt this report very much given Orta's respective claims about Muslim doctors. But contrary to Costa's and Carvalho's belief that Orta claimed that the Muslim doctors followed Ayurvedic therapy when treating fevers, this is neither what the text says nor what Orta argues about (Costa and T. Carvalho 2013, 5). Orta angrily dismisses the court physicians for being fickle, trying "to indulge the people of the land" instead of following his good therapeutic practice of bleeding and misidentifying the disease of the crown prince whom Orta finally had to bleed secretly with the belated consent of the ruler (Orta 1895, 141–143; 1913, 311–312).

Two, perhaps three, features of his story speak against taking it as a reliable description of medical and social practices at the Nizam Shahi court. While the Muslim physicians at court identified the disease as small pox, Orta does not give his own diagnosis in clear terms. He merely rejects his opponents's views. He presents himself as the only reliable doctor who does not wish to earn money, but always follows the dictations of his profession to do the best for his patients. The accusation that local doctors do not follow a medical doctrine or provide the best for their patients, but rather try to indulge them and bow to their wishes, is not born out from the details of Orta's stories about the Nizam Shahi court. It also is an attack that was leveled in the sixteenth century by other Christian doctors from Europe, when they were in foreign lands, having to compete with their local colleagues and wanting to represent themselves in their writings to their compatriots. One such example is Alpino Prospero's (1553–1617) description of the medical practices and doctrines in late sixteenth century Cairo (Alpini 1591).

A study of the rhetorical components of accounts of foreign socio-medical customs by doctors, trained at European universities, is thus needed for contextualizing Orta's negative comments on his Muslim colleagues in Ahmadnagar. One element of such a study is the observation of how often and in what terms Orta discusses books known to and studied in the various medical cultures of the Iberian Peninsula and western India. The asymmetry of books discussed for the

medical culture of the Iberian Peninsula and those discussed for Goa and the court of Ahmadnagar is difficult to overlook. Orta does not provide a single title of a medical book written in Arabic or Persian after 1100 nor does he mention the title of a medical book ever written in Sanskrit or any of the early modern Indian languages. All he reports about is that the Muslim doctors at the court of Ahmadnagar and a merchant at Goa, Khwaja Pir Quli, were familiar with some of the authors he also knew (Hippocrates, Galen, Aristotle, Plato, Ibn Masawayh, Ibn Sina, al-Razi, 'Ali b. Ridwan), while they did not know others, in particular Ibn Rushd and Ibn Zuhr (Orta 1891, 28, 48; 1913, 10, 23). Plato, however, was not an author widely read by Muslim physicians, except perhaps for his wise sayings. Whether the doctors at the court of Ahmadnagar read Aristotle is unclear, but not very likely. If they wished to read books on natural philosophy they may have read Ibn Sina's *Kitab al-shifa'* in Arabic or his *Danish-nama-i 'ala'i* in Persian or a more recent handbook taught at madrasas.

Moreover, it is highly unlikely that Muslim physicians at Ahmadnagar, Diu, Ahmadabad or elsewhere in the Deccan and along the Indian West coast still used all the texts of the ninth and the tenth centuries. Although I am not aware of a systematic study of the medical authorities used in those cities and courts during the first half of the sixteenth century, my overall experience with manuscript libraries in Hyderabad and Mumbai makes me highly skeptical towards Orta's claims. They rather resemble those of seventeenth-century travel writers from Italy, France or England where we have sufficient documentation on them appropriating this kind of "data" either from Arabic Christians in European cities or from books printed in Latin in Rome, Paris or London, in addition to their familiarity with such short lists of names from their years at university. Hence, Orta's claims about the alleged authorities known to Persian and Deccani Muslim doctors represent more closely his own knowledge acquired on the Iberian Peninsula than local reading and healing practices.

As said above, the extant medical works of Rustam Jurjani and Firishtah provide a good opportunity to acquire an independent view of the knowledge and practices at the Nizam Shahi court of Ahmadnagar as depicted in their work works on drugs, fevers, gynecology and sexual diseases and therapies. Firishtah's *Handbook of Physicians*, for instance, describes, according to Keshavarz, the medical practice "of Muslim physicians in India" (Keshavarz 1986, 109). Its introduction discusses theoretical doctrines, that is, clearly contradicts Orta's claims to the opposite. The first and the second chapter describe simple and compound remedies, which may illuminate what Orta may have learned in Ahmadnagar. The third chapter is about therapy and explains treatments of individual diseases. Its analysis could help to understand Orta's story about his conflict with the court physicians. The postface, called seal, lists information about tastes and describes

the regions of the inhabited world (Keshavarz 1986, 109–110). Hence, Orta was not the first as claimed in Costa's new book who wrote in a medical work about food and its tastes (Costa 2015). The miniature, reproduced here (Figure 4.1) shows that other items created at the court of Ahmadnagar can also be found. Its ascription by art historians to a refugee from Europe may even open further avenues for analyzing Orta's report about his visits to the Nizam Shahi rulers.

Another possible explanation for the absence of any references to early modern Arabic, Persian, or Sanskrit medical texts in Orta's dialogues is the persecution of Hindus and Muslims in Goa and the long list of forbidden activities proclaimed since 1540 by the Portuguese Crown and subsequently the Church in Goa. The vicar-general in office at this time was Miguel Vaz Coutinho. With him, the so-called period of tolerance towards Hindus ended. He was largely responsible for the destruction of many Hindu temples in 1540. In 1546, King John III ordered the search of Goan houses for Hindu religious symbols and their destruction. He also forbade Hindu festivals and public rituals by Brahmins. In 1550, the king passed a law forbidding all Hindu cults and ordered the destruction of the remaining temples. As a result, until 1554, many wealthy Indians, including physicians, left Goa (Mendonça 2002, 275). These violent activities continued under the new viceroy Pedro Mascarenhas who took office in 1554 (Mendonça 2002, 257). In 1563, all remaining Hindu doctors were ordered to leave Goa within a month's time. Four years later, the Church demanded that no Christian should be treated by a Hindu physician, midwife or barber (Saraiva 2001, 348, 350–351; Županov 2002, 19). Although the edicts were often not rigorously implemented, Orta may still have considered it unsafe to report about the study of Sanskrit texts together with a Brahmin.

These two possible explanations and the two conflicting facts on which they rest point to the contradictions between demands and exigencies raised by the secular and religious elites of Goa for controlling the colony's populations and those resulting from the needs to heal sick people and the difference between climates, diseases and remedies that set Portugal apart from Portuguese India.

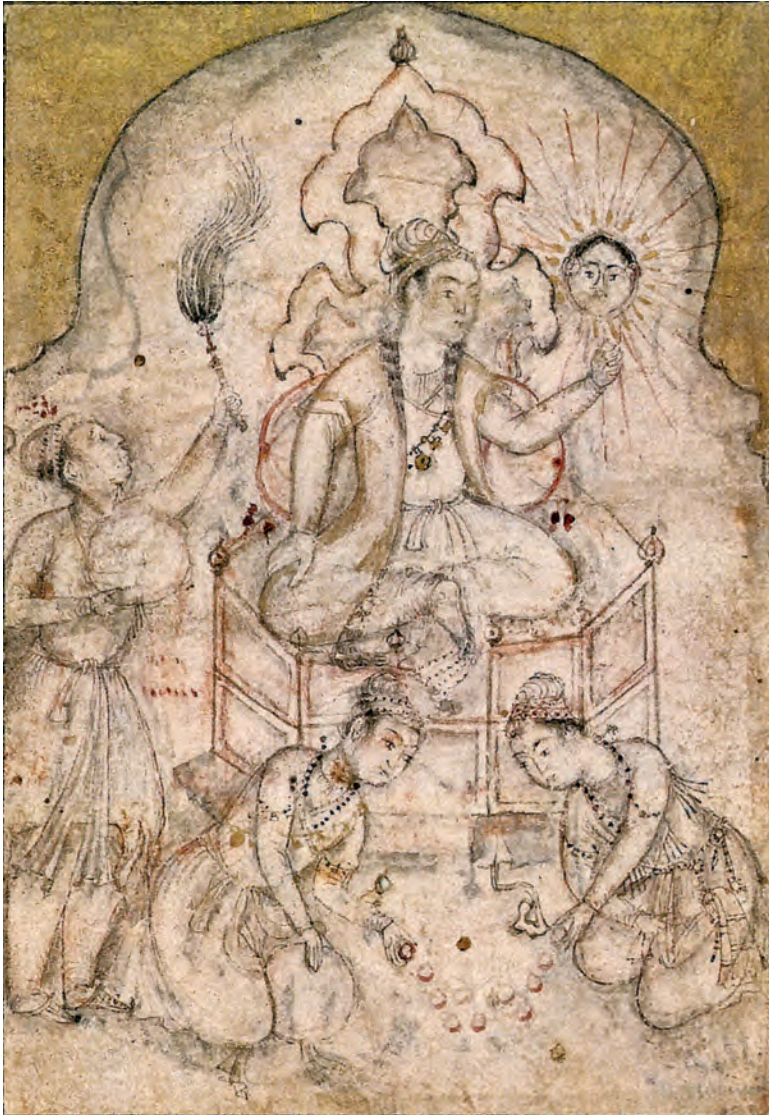


Figure 4.1: An Enthroned Prince (Alexander with a Magic Mirror (?)), Ahmadnagar, Nizam Shahi Court, late sixteenth century, attributed by Mark Zebrowski (1983, 27) to a European painter. The Stuart Carry Welch Collection, Part One, *Arts of the Islamic World*, London 6 April 2011, Sotheby's, p. 119, n° 96.

Orta's Silences and Issues of Violence

The penultimate feature of Orta's text which I wish to discuss here is his complete silence about his entire family who lived with him in Goa since 1548 and about any other living being named by their names except for five Portuguese governors or viceroys, a Zoroastrian merchant who had served the Portuguese in 1534 as interpreter at Diu (Khwaja Pir Quli), two physicians (Malupa, Hindu doctor from Goa and Mulla Ucem (Mulla Husayn), a Muslim doctor from Ahmadnagar), three slaves or servants in his household, the Tuscan administrator of his house and garden in Mumbai, three or four Spanish doctors and apothecaries, one merchant in gemstones from Milan and a single woman of mixed heritage (Orta 1891, 32, 97, 130, 154, 190, 205, 231, 299, 307; 1895, 18, 101, 109, 125, 140, 146, 164, 186, 235, 260, 331–332, 340, 364, 382, 384–390). This silence is intimately linked to the overwhelmingly irenic atmosphere that Orta creates throughout all of his 58 chapters, which I present here as the last remarkable property of Orta's narrative. He reduces conflicts between him and Muslim physicians to mere matters of jealousy and professional incompetence. He does not speak of his encounter in 1558 with the Goan Inquisition in the case of the arrest of his close friend Diogo Soares, which was part of the persecution of 35 so-called New Christians in Kochi and Goa from 1557–1559 (Cunha 1995). Nor does he talk about the bloodshed during the military campaigns or the destructions of Hindu temples and enforced conversions of Hindus and Muslims in Goa.

Several of these silences reflect the danger that emanated from talking about them. This applies in particular to all forms of persecution, since the Portuguese Inquisition had put speaking of them on its list of capital crimes (Saraiva 2001, 126–127). Other forms of violence, however, are standard stories in Portuguese historical chronicles of the sixteenth century. Speaking of battles, victories or sick soldiers was by no means unusual in their texts, some of which Orta certainly had read as his survey of the history of Delhi and the Deccan implies. He also might have met Diogo do Couto (1542–1616), the author of the continuation of John of Barros's (1496–1570) history of Portuguese Asia. Couto arrived in Goa in 1559, took part in a number of campaigns against Gujarat, collected information from Portuguese and Indian soldiers, prisoners of war, merchants and courtiers about the details of many of the battles that took place in the 1530s and 40s (Mathew 1986, 131–142). Hence, writing about military violence and its results was by no means a stigmatized or tabooed subject.

Orta participated as the personal physician of his patron Sousa for about four years in military campaigns along the West coast of India. When he pretends that his experience of these campaigns was mostly entertaining and at worst marred by Sousa's dysentery, he certainly beautified the events and chose to omit most

of their features. Indeed, he rather left it to his young Spanish colleague Dimas Bosque to speak of the consequences of war and disease almost at the end of the book. Bosque arrived in 1558 in Goa as the personal physician of the new viceroy of Goa, Constantino de Braganza (1528–1575), and as the ship physician of his fleet (Orta 1895, 376–377, 384; 1913, 464–465). He told Orta: “When the Viceroy Dom Constantino was in Jafanapatam, owing to the continual labor of fighting and the heavy rains to which the soldiers were always exposed, a great many sickened with dysentery; and their cure always fell into my hands, since there was no other doctor in the fleet” (Orta 1895, 376; 1913, 464). The only other instances of war within the text itself, which Orta mentions very briefly and calmly, were two confrontations with an Ottoman and a Gujarati fleet at Diu in 1539 and 1546 (Orta 1895, 340; 1913, 443). The contrast between Orta’s irenic narrative and the poems by Orta and by Luiz de Camões, which follow the book’s dedication to Martim Afonso de Sousa, is quite clear. There, war is celebrated as a virtue. In Orta’s poem war is hailed as a property of Mars, which Sousa unites in his person with the virtue of the wisdom of Apollo. The bloodstains on his white toga are marks of honor, not to be silenced. Camões’ poem, dedicated to viceroy Coutinho, celebrates the Troian War, which it presents as a metaphor for the Portuguese in India (Orta 1891, unpaginated).

Violence was certainly also an aspect of Orta’s rise from “a poor new-comer” in 1534 to a quickly well-off and later even truly wealthy merchant. He owed his wealth to trade in drugs, spices and gemstones, which at first he undertook in person and later, when he acquired first one, then at least two ships, through a larger network of partners. Orta reports more than once about the phases of his commercial success and some of the merchandise he traded in. Never does he mention, however, any kind of conflict at land or at sea, which in those times were rather ordinary events due to Portugal’s policy of a militarily controlled Indian Ocean (“*mare clausum*”) and the resistance of local rulers and merchant networks against conquest and subjugation, including piracy (Mendonça 2002, 37).

As in the other cases of ordinary, day-to-day violent events, possible reasons for Orta’s decision to avoid referring to them are difficult to reconstruct. The cooperative research project that I recommend with this paper needs to investigate the narrative of Portuguese trade and its major structures in order to weigh the reasons stated below and to propose others more closely related to such narrative standards of the sixteenth centuries.

In my current view, at least three conditions may have motivated Orta’s silence. Firstly, Orta may have abstained from telling his readers more about the sources of his commercial ascent due to the tensions among Goa’s merchant communities and the increasing difficulties that Crown and Inquisition imposed on collaborative work between Portuguese Christians, Jews, Muslims and Hindus,

although the Crown continued to rely on all of these groups when it came to trading (Fischel 1974, 411–412; Saraiva 2001, 130–155, 347–353; Mendonça 2002, 48, 77, 179, 255–260). Often enough, successful commercial cooperation provided the reason as well as the pretense for denunciations and subsequent persecution.

The cases studied by Cunha for the years immediately before the installation of the Goan Inquisition confirm that wealthy merchants were an important element of the persecuted group and that issues of commerce were named in the denunciations (Cunha 1995, 169–175). A second reason might have been the desire to protect his commercial connections from undesired competition. A third reason for Orta's silence about the sources of his wealth and the violent measures involved in its acquisition may have been the accusations leveled against his patron Sousa for placing scores of family members in lucrative and powerful positions in Portuguese India, for usurping too many opportunities for private trade for himself, his clique and other wrong-doings (Subrahmanyam 2012, 97–100). Reminding his intended audience of too many details of Sousa's governorship and their violent results might not have been in Orta's particular interests in the late 1550s and early 1560, when he may have written a good part of his book.

Yet, knowing of their existence and role in Orta's life as well as of the repeated moments of sharp violence between the Muslim rulers of the Deccan and Portuguese governors and viceroys, about whom Orta also talks of exclusively in friendly terms as if they lived together peacefully, without any threat to their possessions, power and lives, is a necessary precondition to see the asymmetry of Orta's narrative creation of a life of peace, friendship, social rise and successful patronage relationships. The presence and absence of concrete acts and forms of violence in his descriptions of Goa, Kochi, Ahmadnagar, Diu and other localities in western India is thus one possible key for a better understanding of Orta's life and his overt and covert goals when compiling his book. This pattern of narrating together with the breadth of his silence speak loudly for Orta's intentional construction of these features of the text. For a long time, they have irritated me deeply, and I did not understand their rationale. After having read Saraiva's and Cunha's books, as well as the seventeenth-century travel account by Charles Delon, a French victim of the Goan Inquisition, I came to see Orta as someone who belonged to a family who had already at least once been in the clutches of the Inquisition. His way of storytelling agrees with the rules that Saraiva describes for such families teaching their children how to behave in a future arrest (Saraiva 2001, 124–128). In his book, Orta clearly emptied his life in India from most of the people who shared it regularly or temporarily. He obviously adopted it in order not to endanger (any further) his family, friends and acquaintances. Orta's narrative thus appears in its overall structure as an Inquisitorial product, a testi-

mony to the power that this all-pervasive institution has had over all inhabitants of Portuguese India.

Conclusions

My investigation of recent articles and book chapters by historians and historians of science or medicine on Orta and his book confronted me with different readings of and approaches to the latter's work. The impression that I took from this reading is that many recent writers do not engage closely enough with Orta's text. They do not deal with its contradictory claims, its rhetorical forms or its medical, botanical, linguistic and historical technicalities. As a result, many claims are made that contradict Orta's explicit statements, while ignoring many others. A careful reading of Orta's book shows that he was neither the progressive hero of positivist historiography nor the multicultural, open-minded egalitarian of post-modernist beliefs. Rather, his text is, in parts, a product of the repressive atmosphere of his times and the narrative strategies that victims of the Inquisition were forced to learn if they wished to survive arrest and torture. Orta's text also reflects the profoundly asymmetric sociocultural relationships between Portuguese, Muslim and Hindu doctors with formal education and a literary canon as well as between such formally educated doctors and medical craftsmen like apothecaries. Orta's choices of language, style, arrangement and naming as well as his misunderstandings, false interpretations and disinterest speak loudly against a simple and glorifying interpretation of the author as a hero of recent ideological, political, religious and methodological camps. Orta was much more traditional, parochial and condescending than has so far been recognized. His text is certainly a narrative about Indian plants and drugs, but only partly so. Orta created for himself a monument of respect and appreciation, a text in which he is without doubt the central figure and the only hero. His choices of platforms of action, mostly his house in Goa, the Nizam Shahi court at Ahmadnagar, and to a much lesser degree the environment of Portuguese governors or viceroys, highlight this centrality of Orta's self-representation.

My analysis is, however, and can only be a beginning. If we wish to do justice to man and text, we need to organize a cooperative venture that combines the many different skills and knowledge forms that I have tried to outline in my paper. A central precondition for a successful research in such a cooperative venture is that we determine our prejudices and presuppositions in order to avoid them and enable us to overcome the one-sided, glorifying tendencies of previous research.

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