Early modern Goa

Indian trade, transcultural medicine, and the Inquisition

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Portugal's introduction of the Inquisition to India in 1560 placed the lives of Jews, New Christians, and selected others labelled 'heretics', in peril. Two such victims were Garcia da Orta, a Portuguese New Christian with a thriving medical practice in Goa, and Gabriel Dellon, a French merchant and physician. In scholarship, Garcia da Orta and Gabriel Dellon's texts are often examined separately within the contexts of Portuguese and French literature respectively and in terms of medicine and religion in the early modern period. Despite the similarities of their training and experiences, da Orta and Dellon have not previously been studied jointly, as is attempted in this article, which expands upon da Orta and Dellon's roles in Portuguese India's international commerce, especially the trade in spices, and the collaborations between Indian and European physicians. Thus, the connection between religion and food is not limited to food's religious and religio-cultural roles. Food in terms of spices has been at the foundations of power for ethnoreligious groups in India, and when agents became detached from the spice trade, their downfalls were imminent, as seen in the histories of Garcia da Orta and Gabriel Dellon.

Early modern Goa through the eyes of Garcia da Orta and Gabriel Dellon

In the sixteenth and seventeenth centuries, Indian textiles, wood, gems, and spices were exported to the Middle East, Africa, and Southeast Asia. Mingling with merchants and doctors from across the Indian Ocean were Europeans who were merchants and doctors themselves. The Europeans were both transients and immigrants, and among them were Jews and New Christians who were refugees from the Inquisition. These Jews and New Christians found a hospitable home in India, even in the Portuguese colonies of Goa and Cochin, until the introduction of the Inquisition to India in 1560. One figure from the sixteenth century is Garcia da Orta, a Portuguese New Christian whose thriving medical practice at Goa collapsed after the Inquisition targeted him for investigation. Although da Orta died and was buried in 1568 before being charged, his body was later exhumed and burned at an *auto-da-fé* in 1580. One hundred years later, the Frenchman Gabriel Dellon, also a physician-merchant

but not a New Christian, was questioned by the Inquisition. Of Dellon's precise religious affiliation, sources vary. Abbé Barthélemy Carré visited Dellon at the Inquisition's Damão jail. When arguing with Inquisitors on Dellon's behalf, Carré insisted that Dellon 'was of an honorable and god-fearing family, good Roman Catholics' (Priolkar 1961: 47). Sanjay Subrahmanyam identifies Dellon as a 'French Huguenot' (2011: 171). By his own admission, Dellon owned a 'rosary', but unlike the Portuguese, he refused to wear it (1819: 53, 28). The Inquisition imprisoned Dellon for 'heresy' from 1673 to 1675. Upon release, Dellon was sent to the galleys. Unlike da Orta, however, Dellon obtained a reprieve, returned to France, and lived to write of his sufferings.

Da Orta and Dellon's lives share a number of similarities – which are unique to these two individuals in particular – despite the differences in their national origins, religious histories, and of course, the fact that they lived in different centuries. These parallels include their education and training in Europe, their interaction with Indian physicians, subsequent incorporation of Indian drugs and medical procedures into their practices, involvement in the India trade, and experience of oppression by the Inquisition. Da Orta and Dellon also share another important experience which distinguishes them from their peers but renders them doppelgangers in relation to each other: both wrote influential books about Indian trade and medicine, and in Dellon's case, the Frenchman offered a commentary on the evils of the Inquisition. The titles of these books are da Orta's Conversations on the Simples, Drugs and Medicinal Substances of India (Colóquios dos simples e drogas he cousas medicinais da Índia) (1563) and Dellon's An Account of a Voyage to the East-Indies (Relation d'un Voyage fait aux Indes Orientales) (1685) and An Account of the Inquisition at Goa (Relation de l'Inquisition de Goa) (1687). In scholarship, da Orta and Dellon's texts are often examined separately as examples of Portuguese and French literature respectively, or as artifacts of pharmacology and autobiography (Priolkar 1961: 35; Boxer 1963: 12-13; D'Cruz 1991: 1593-4; Ames 2003: 163-80; Walker 2009: 247-70). These relevant views of the texts match their authors' intentions: an encyclopaedic account, aimed at Europeans, of otherwise little-known 'tropical plants' (da Orta) and an adventurer turned aggrieved victim's allegations against a powerful institution (Dellon).

While I do not dispute where previous approaches have located the Conversations, An Account of a Voyage to the East-Indies, and An Account of the Inquisition at Goa, this essay synthesizes the texts' combined offerings towards a characterization of the 'early modernity' of Goa. The commonalities between da Orta and Dellon and between their books show them to be products of the unifying moment that is early modern Goa, therefore permitting a combined

examination. The interdisciplinary methodology involves biographical and textual analysis within the framework of medical and religious histories keeping in mind the following thematic questions; what do we learn about medicine at Goa in terms of the transcultural conferencing between European, Indian, and Persian physicians? What role did the Indian Ocean trade, especially in so-called drugs and spices, play in treatments? How did the Inquisition single out the likes of da Orta and Dellon for their religious background and scientific worldview? Finally and most significantly, how can we explain the paradox of Goa as a place of progressive transculturalism with an oppressive ethos?

Before the Inquisition: Goa and cosmopolitanism

Prior to 1498 – the year that Vasco da Gama arrived in India after having 'discovered' the sea route from Europe – Indian cities on the west coast of the subcontinent, including Cambay, Surat, Goa, Mangalore, Cannanore, Calicut, and Cochin, had been trading for centuries with other Indian Ocean and Red Sea ports, among them Mombasa, Malindi, Mogadishu, Aden, and Ormuz. Hence, as detailed in *The Journal of the First Voyage of Vasco da Gama (Roteiro de Primeira Viagem de Vasco da Gama*, 1497–9), when Vasco da Gama reached Mozambique *en route* to India, he met African merchants who were veterans of the Indian Ocean trade. Da Gama had a similar encounter with Indian traders near Malindi (Fontoura da Costa 1969, Ravenstein 1995). The frequent interactions and exchanges between Indian Ocean peoples created an atmosphere of cosmopolitanism which fostered the transcultural, multicultural, multi-religious nature of the region's trade centres, such as Goa.

Goa is India's smallest state and located on the west coast between Bombay and Cochin, somewhat equidistant from both cities, which are separated by about 1,300 kilometres. Goa is a lush Eden of rich soil and abundant fresh water, but the famed spices of India were more commonly harvested south of Goa, along the Canara and especially Malabar coasts. Black pepper (*Piper nigrum*), ginger (*Zingiber officinale*), cardamom (*Elettaria cardamomum*), and turmeric (*Curcuma aromatica*) were available, as were spices transplanted from Sri Lanka (cinnamon or *Cinnamomum*, of several species) and the Moluccas (cloves or *Syzygium aromaticum* and nutmeg/mace or *Myristica fragrans*) (Pickersgill 2005: 153–72). Hence, since its earliest days, Goa has engaged in continuous international commerce. Economic histories date from the period of the Emperor Ashoka in the third century BCE (De Souza 1989: 118). In the fifteenth century and before Vasco da Gama's entrance, Goa was ruled by successive empires (Vijayanagara, Bahamani, Bijapur) under whose aegis

international trade was particularly lucrative. Horses were imported to Goa from Arabia and distributed to other parts of India. Goa exported ships and textiles. As for spices, pepper and ginger were brought to Goa from Malabar and sold. Betel/areca and rice were also traded (*ibid.* 137–9).

Given the commercial vibrancy of Goa, naturally its population diversified as Indians from beyond Goa as well as foreign merchants settled in the city. In 1498, when Vasco da Gama landed on the shores of India, he was asked about the objectives of his mission. 'Christians and spices' was the admiral's famous reply. Da Gama was not disappointed. He encountered plentiful amounts of spices of all kinds, and although he heard of Eastern Rite Christians, Roman Catholics were few if any. Hindus, Muslims, and Jews were more prevalent. Indeed, Jews appeared to be ubiquitous. They were immigrants, converts, travellers, merchants, and, most notably, given the exclusions they experienced in Europe, Jews worked as trusted government officers for local monarchs. Many of these Jews had resided in India for generations. Compared to Bombay and Cochin, the foci of the Bene Israel and Malabari Jews respectively, Goa's Jewish community was smaller but significant. One such Jew was Gaspar da Gama, a Polish expatriate. Gaspar da Gama was the go-between for Yusuf Adil Khan (r. 1489-1510), the Muslim ruler of the Bijapur empire which, in 1498, controlled Goa.

Yusuf Adil Khan's incorporation of Gaspar da Gama, a process similar to the inclusion of Jews in other areas of Asia - as for example Ottoman Sultan Suleiman the Magnificient's elevation of Joseph of Naxos thirty years later exemplifies the religious tolerance of the Indian Ocean littoral and anticipates the Ottoman model. Cosmopolitanism, as expounded in various disciplines, implies the acceptance of difference and a perhaps nascent version of the constructive, versus imperialist, aspects of globalization. Of course, cosmopolitanism's progressiveness has often experienced significant stresses such as conservatism, slavery, and genocide, but it has survived, if at times only in certain pockets of the world, among them Goa under the Bijapur kings Yusuf Adil Khan and Ismail Adil Shah (r. 1510–34); the latter until the Shah's army was defeated in 1510 by the Portuguese naval general Affonso Albuquerque. Yusuf Adil Khan, the founder of the Bijapur dynasty, cultivated diplomatic relations with the Vijayanagara Empire and with Persia. He patronized artists and scholars from across India as well as Persia, the Ottoman Empire, the Arabian peninsula, and elsewhere. Ismail Adil Shah continued his father's efforts, strengthening ties with Persia to the extent that he assumed the Safavid title of 'Shah' or 'ruler' (instead of the Ottoman 'Sultan' or the Hindu 'Raja') (Farooqui 2011: 174-5; Nayeem 1974: 21-2). Since creed was not a deterrent to professional

advancement under cosmopolitanism, Gaspar da Gama's and other expatriates' presence in Goa is a testament to the cosmopolitanism that existed before Portugal's official conquest of Goa in 1510. The tide had started to turn earlier, however, when Gaspar da Gama was abducted by Vasco da Gama in 1498, converted to Christianity, taken to Portugal, and then returned to India in 1500 with a fleet under Pedro Cabral's command. Gaspar da Gama was then put to work for the Portuguese (Malieckal 2012: 23–42). Although the Inquisition was yet to be established in Goa during Gaspar da Gama's lifetime, his fate foreshadows efforts to crush cosmopolitanism and transculturalism as well as the falls of Garcia da Orta and Gabriel Dellon.

Jews and New Christians, Portugal and Portuguese Goa: the early years

In an essay titled 'India nurtured Jewish heritage without prejudice', published in the February 1988 edition of the magazine *India Worldwide*, Renu Mehra quotes Elijah E. Jhirad, President of Congregation Bina, described as 'an organization of Jews from India living in the United States' (1988: 7). In a speech written for a Hanukkah Candle Lighting Ceremony in 1987, Mr Jhirad announced, 'One of the most fascinating aspects of the life of Jews in India is that they lived free from persecutions that have plagued them elsewhere in the world. ... In fact, we are the only Jewish community in the world which has not experienced anti-Semitism' (quoted in Mehra 1988: 8). This assessment may need to be nuanced, since Jews were persecuted in Goa under Portuguese rule. By and large, though, Jhirad is correct. Most Indians, irrespective of religion, did not oppress India's Jews; however, the experiences of Goa's Jews and New Christians are different from that of other Jews in India.

Before examining the trials of the Jews and New Christians in Portuguese Goa, a bit of history is in order. In 1510, Admiral Affonso Albuquerque and his forces defeated the army of Ismail Adil Shah to claim Goa for the Portuguese empire. The conquest resulted in a population shift within the principality. Most Muslim residents were ousted, many Hindus were advanced in their place, and mass conversions to Christianity of the remaining Muslims and Hindus occurred. A smattering of practising Hindus and Muslims remained as did small groups of Armenians and Chinese (Pinto 1994: 50–65). Portuguese immigrants settled in the city, most notably, Portuguese Jews and New Christians. As scholarly studies have pointed out, 1496 is an important year, distinguished by a royal decree making it illegal to be Jewish in Portugal, or as José Alberto Rodrigues da Silva Tavim puts it, 'Jews lost their right to exist in Portugal' (2008: 17). In the years following, a series of events prompted New Christians to leave, in

droves from 1530 to 1560, for India and the colonies; in 1519 Manuel I revoked his own 1507 law which stipulated that 'Old Christians' and 'New Christians' were one and the same, and in 1531, the Inquisition was introduced in Portugal (Wojciehowski 2011: 211). Even though the Inquisition became active only in 1540, Lisbon's first *auto-da-fé* taking place in the same year, Papal approval of the Portuguese Inquisition had been obtained nine years earlier by João III. The status of New Christians was so precarious that many fled to Goa and Brazil, this despite edicts that outlawed their immigration (Boxer 1963: 8). Da Orta was in all likelihood a participant in the exodus.

In Goa, Sephardic Jews worked as translators, traders and pilots, as well as in other capacities, and according to Walter J. Fischel, 'the Jews there were established as an independent group with their own synagogues and their own religious and cultural life' (1956: 39). This, Fischel admits, was an unusual reality given Goa's position as the Indian headquarters of the Jesuits and later of the Inquisition (*ibid.* 40). Goa even possessed a Jewish quarter and a 'Jew Street', both located close to eminent Catholic edifices (Rodrigues da Silva Tavim 2008: 27). Despite being in the employ of the Portuguese, the Jews of Goa were subject to discrimination. According to Rodrigues da Silva Tavim, they were forced to wear a 'special symbol' identifying them as Jews (*ibid.*). Jews laboured alongside New Christians (*ibid.*). In addition to working as physicians and government agents, records speak of New Christians' connections to the diamond and cotton trades (Roitman 2011: 106–7). In other words, Goa's New Christians were ensconced in the Indian Ocean trade (Boyajian 1992: 31).

Enter Garcia da Orta and Gabriel Dellon

Garcia da Orta was born some time between 1490 and 1502, in Portugal. His parents – da Orta's father's name was Fernão – were Spanish Jews who had become New Christians only a few years before da Orta's birth. Educated at the universities of Salamanca and Alcalá de Henares in Spain, da Orta practised medicine in Portugal before travelling to Goa in 1534. At Goa, da Orta had a thriving medical practice and was one of the city's respected physicians. He is known to have been called upon by a number of Portuguese viceroys and governors, of whom Martim Affonso de Sousa was da Orta's initial patron. For a time, da Orta was also the personal physician of Burhan Nizam Shah I (r. 1510–53) of the Ahmadnagar Sultanate and at whose court da Orta was one of a consortium of Persian, Arab, and Hindu physicians who also served the Shah. In 1563, da Orta published his magnum opus, *Conversations on the Simples, Drugs and Medicinal Substances of India*. Written as a dialogue between

da Orta and an invented character, one Dr Ruano, *Conversations* reviews the medicinal uses of almost fifty spices and plants, many of which were the mainstay of India's international commerce. *Conversations* is constructed as a series of extended discussions; a section on a certain spice, for instance, will cover where it grows and where it can be purchased as well as its properties, uses, and variations.

Da Orta interacted with Jews and New Christians at Goa. Early in Conversations, da Orta informs Dr Ruano that aloe is unavailable in Jerusalem, a fact he learned from dialogues with Jews in India: 'I enquired respecting this of some Jews who came here and said they were inhabitants of Jerusalem. Some of them were sons of physicians, others of apothecaries' (Markham 1913: 16). Likewise, da Orta mentions talking with Jews (and Moors) who traded in benzoin, the tree resin used in making incense. These Jews carried benzoin to India from the Middle East and Africa and then returned with the Indian version (ibid. 60). In the chapter on mangoes, da Orta says that an acquaintance, a fellow New Christian and former (Sephardic) Jew, knows a great deal more about the foreigners (Franguia) of India than da Orta, perhaps due to a longer domicile in the country (ibid. 294). The above excerpts indicate da Orta's collaboration with Goa's Jews and New Christians who possessed similar interests in trade, botany, and India generally, not to mention da Orta's consultations with Goa's community of Jewish and New Christian doctors, one of whom may have been Jeronimo Dias. As we shall deal with later, both Dias and da Orta suffered under the Inquisition at Goa for being New Christians.

Although da Orta did not comment on the Inquisition, his fellow European, the French merchant and physician Dellon, published *An Account of the Inquisition at Goa* (1687). Like da Orta before him, Dellon mapped the plants of India (in particular those of Malabar) and remarked upon India generally in *An Account of a Voyage to the East-Indies* (1685). Gabriel Dellon was born in 1646 near Montpellier and followed in his father's footsteps by studying at Montpellier's famed medical school, the alma mater of François Rabelais. By 1668 Dellon had joined the French East India Company and shipped out to India, arriving in 1670. Dellon worked as a physician for the Company until 1673. He then practised medicine at Damão, a Portuguese colony north of Goa, and where he had great success. Dellon's patroness was a wealthy Portuguese woman named Donna Francisca Pereira.

Dellon admits in *An Account of the Inquisition at Goa* that had he not been seized by the Inquisition and expelled from India, he would gladly have stayed in the country forever (1819: 22). Dellon's proclamation is not surprising, considering India's many commodities and commerce, and French interests

in India were well-represented by Dellon's predecessors. François Pyrard de Laval (1578–1623) resided in Portuguese Goa from 1608 to 1610. Jean-Baptise Tavernier (1605-89) was a jeweller and merchant credited with transporting the future 'Hope Diamond' from India to France. Francois Bernier (1625-88) was physician to the Mughal monarch Aurangzeb (r. 1658-1707) and Dara Shikoh, Aurangzeb's rival and brother. Bernier's portrait of the Indian emperor formed the basis for John Dryden's play of the same name. Pyrard, Tavernier, and Bernier all wrote about their experiences in texts published in 1611, 1676, and 1670 respectively. Dellon possessed some affiliation with the French East India Company (Compagnie Royale), which was founded in 1664, as did Tavernier and Bernier. Since Tavernier and Bernier travelled and lived among the Mughals, they accumulated great wealth, either in goods or salaries. Pyrard had spent time in a Cochin gaol and as a captive of the Maldivians, but the Maldivians also paid Pyrard for certain services, and he grew rich. In Goa, he saw first-hand the benefits of trading with India and advocated greater French involvement. Dellon must have looked to his countrymen as models of success.

Medicine in India: the lie of the land

Certainly, India's position as the epicentre of Indian Ocean trade and Goa's role as the Asian 'capital' of the Portuguese Empire are the reasons for da Orta and Dellon's emigrations. As physician-merchants, da Orta and Dellon chose a land where they could find spices and drugs in abundance and where they could practise: both qualifications would allow these men to exercise their expertise, partake in a vibrant economy, and gain wealth. The fact that India was not new to medicine was also likely to have been intriguing. Indeed, India's medical environment was as long-standing, sophisticated, and international as its trade history. Two approaches are of note here. Ayurveda is the ancient Hindu medicine based on the Vedas and followed by the Brahmins (or 'Pundits', as Gabriel Dellon calls them). Ayurveda emphasizes the relationship between the mind and body, between temperance and health, supports organic treatments, and makes recommendations concerning lifestyle. Ayurveda is still widespread in modern India. Another common form of treatment in India during the early modern period was the Unani approach of humoralism. Refined in Galenic Greece, 'Unani' (a corruption of 'Ionian' or 'Greek') underwent further development in medieval Egypt, Persia, and in India.

Although da Orta and Dellon did not receive their medical degrees in India or Persia, their training in Europe (at Salamanca and Alcalá de Henares in da Orta's case; Montpellier for Dellon) included references to Unani through

the study of the three great practitioners: Abu Ali al-Husayn ibn Abd Allah ibn Sina (980–1037), otherwise known as Avicenna; Averroes or Abu 1-Walid Muhammad B. Ahmad B. Rashid (1126-98); and of course Maimonides. The treatises of Avicenna, Averroes, and Maimonides were exemplars in both the West and the East. Avicenna's successors emulated his methods; Zavn al-Din al-Jurjani (d. 1136), from Jurjan, Persia, was trained by Avicenna's student, Abi Sadiq, and among other books, al-Jurjani penned in Persian The Thesaurus of the King of Kharazm, as important as Avicenna's Canon of Medicine (written in Arabic, completed in 1025) for its content which combined the theoretical with the practical. Hence, among the Persians and Arabs at Burhan Nizam Shah's court, Unani practices were somewhat familiar to da Orta. Dellon too recognized Unani in his interactions with Indian doctors. Returning to da Orta and his sojourn with Burhan Nizam Shah, the Shah patronized one of the foremost Persian physicians of the time: Rustam Jurjani, a Persian also from Jurjan, who was ensconced at Ahmadnagar by 1544 and was the author of, among other works, Treasure of Nizam Shah (Zakhirah-i-Nizam Shahi, 1547), a text which was regarded in its time as 'a standard work on medicine' (Hadi 1995: 520). Jurjani, like other Persians and Arabs, followed the Unani approach according to Avicenna's model, which emphasizes imbalances of the bodily factors such as the humours as the cause of illness (Quaiser 2012: 115–36; Alavi 2009: 123-46). Even as Avicenna's Canon of Medicine proposed selected absolutes in terms of diagnosis and drugs, inductive reasoning was not shunned (Gruner 1973). Likewise, Jurjani incorporates a clinical method in Treasure of Nizam Shah (Elgood 2010). Jurjani's methodology is the result of his credentials: Persia was at the forefront of the study of medicine in the early modern period, so much so that Indians travelled to Persia to study (Rezavi 2001: 40-65).

While Avicenna and his successors in the Arab world, Persia, Islamic India, and Europe were humanists and dynamic scholars, India's indigenous therapy was heuristic in the context of an ancient, Sanskrit-based epistemology. It is partly for this reason that even today Ayurveda continues to be regarded as 'alternative medicine' compared to the relatively proven effectiveness of allopathy, although acceptance of Ayurvedic techniques is on the rise (Wujastyk and Smith 2008). One proof of the dissimilarity between Avicenna and Ayurveda lies in the differences between European, Arabic-Persian, and Indian schools, hospitals, and practitioners. While colleges at Salamanca and Montpellier as well as hospitals at Baghdad and Jurjan were inclusive (depending on the institution, students and physicians included Jews, Muslims, and Christians) and strived for curricular consensus via empiricism, India had fewer faculties in comparison, and they were confined to certain castes. Exclusivity led

to limited options for treatment, so Indian kings sought Persian and European physicians to supplement the efforts of local doctors; hence, Burhan Nizam Shah's employment of Rustam Jurjani and Garcia da Orta (Meulenbeld and Wujastyk 2001).

Transcultural medicine: West meets East

While da Orta and Dellon are only two of the many European physicians who operated in India in the sixteenth and seventeenth centuries, what is unique and notable about these individuals is their collaboration with India's doctors, a collaboration that involved disagreement over what were acceptable practices understandable since Europeans and Indians administered diagnoses and drugs differently - but more often than not the collaboration involved cooperation and partnership. The latter occurred in part because, to an extent, da Orta and Dellon's studies coincided with the application of Unani in India. Da Orta's alma mater, Salamanca, was founded in the early thirteenth century and not long after Bologna and Paris, and he also spent time at Alcalá de Henares, a newer institution built in 1508. Both universities taught humanism in line with Catholic tenets, but since Spanish scholars were in the process of translating Greek and Arab medical books into Latin for adoption, and since early modern medicine put great emphasis on empiricism in the study of anatomy, botany, and surgery, Salamanca and Alcalá de Henares offered a sophisticated curriculum (Earle 2012; Siraisi 2009, 2007; Ballester 2006: 37-64). Like Salamanca and Alcalá de Henares, Montpellier too emphasized Galen and Avicenna, and in fact some instructors hailed from Spain. Montpellier's prestige rivaled that of Paris, many court physicians being graduates of Montpellier (Williams 2010: 247-67; Prioreschi 2003). Understanding da Orta and Dellon's medical backgrounds explains the men's openness to Indian perspectives and their engagement in the exchange of knowledge, in spite of their rejection of some methods. It is important, however, to take into consideration that the availability of the potent items of the India trade - spices and drugs - contributed to the development of transcultural medicine in India. While Indians shared their treatments with da Orta and Dellon, the Europeans reciprocated.

Let us begin with Garcia da Orta. Da Orta's time with Burhan Nizam Shah and as part of the Shah's consortium of physicians exemplifies transculturalism on many levels. Like the Bahamani and Bijapur kings who ruled Goa, Burhan Nizam Shah I was a tolerant monarch and a supporter of literature, scholarship, and foreign trade, especially with Persia. One scholar claims that the Shah permitted da Orta to teach Portuguese to the crown prince (Pope 1989: 117). If

this is true, the Shah likely saw his son as a bridge between Europe and India, the foundations of which he was already building through his corps of doctors. As the Shah's personal physician, da Orta became part of an elite group – 'the physicians of Nizamaluco [Burhan Nizam Shah]' (Markham 1913: 151) notes da Orta – consisting of Indians and Persians, Brahmins and Muslims, who also served the Shah. As he writes in *Conversations*, Da Orta had full confidence in the abilities of his peers, observing that 'both Arabs and Gentios [Brahmins]' were 'great physicians' (*ibid.* 305). When he treated the Shah with Avicenna's methods, da Orta and the king – referred to as 'my friend' in *Conversations* – taught each other the Arabic and Latin terms for illnesses (*ibid.* 73). Others furthered da Orta's instruction: 'I was also taught by the Arabian and Khorasani physicians in his employment' (*ibid.* 306). Despite the variety of qualifications, given their common responsibility and cooperation, their treatments coincided.

Although Gabriel Dellon did not join an Indian king's court, he too learned from Indian physicians. For instance, in *An Account of a Voyage to the East-Indies*, Dellon praises the benefits of 'the Chaw [Chew]' or what Indians today call *paan*. Dellon explains that *paan*, which is usually chewed but not always swallowed, consists of areca, cardamom, cinnamon, cloves, and other additives wrapped in betel leaves. 'The Chaw', writes Dellon, 'fortifies the Stomach, promotes Digestion, and leaves a good smell behind it' (1698: 68). Other advantages to health are noted: 'It is a great Specifick against the Stone, as I myself have Experience'd several times, when I prescribed it to some of my Aquaintance in that case. And what may serve as a confirmation of what I have asserted as to this particular, it is to be observed that in those places, where it is frequently used; I never met with any body that was Afflicted with this Distemper' (*ibid*. 68–9). Clearly Dellon sees the Indian habit of chewing *paan* as beneficial, even for Europeans.

In some cases however, da Orta and Dellon found Indian medicine to be questionable. The use of pepper to treat fevers was frowned upon. When Dellon was living in Damão under the patronage of Donna Francisca Pereira, Donna Francisca asked Dellon to treat her daughter and granddaughter after the failure of an Indian physician's remedies. In the case of the granddaughter, who had a fever, the 'Pundit, or Indian physician' had 'covered her head with pepper' (Dellon 1819: 35–6). Dellon removed the pepper and subjected the child to blood-letting. The girl recovered, as did her mother. Dellon was rewarded with lavish gifts and a house neighbouring Donna Francisca Pereira's residence. Garcia da Orta too prescribed blood-letting when Indian treatments were ineffective. In *Conversations*, da Orta recounts that despite the objections of the attending Indian doctors, he used blood-letting to relieve the fevers of

both Burhan Nizam Shah's heir-apparent and the son of a wealthy merchant from Tripoli. He also allowed the men to eat meat, whereas the 'Pundits' recommended starvation. Since the Pundits were Brahmins, they did not consider the consumption of flesh to have therapeutic properties. Da Orta disagreed with Indians in this respect because, as he explained to his omnivorous benefactors, 'a shoemaker did not fit every one with the same pair of shoes'; cures should match diets (Markham 1913: 310). Similar patient-specific medications were supported by Avicenna.

Attitudes toward blood-letting were a point of contention. In ancient Greek, Roman, Talmudic, medieval Arabic-Persian, and early modern European medicine, therapeutic and purgative blood-letting were recommended to balance the humours and alleviate fevers (among other 'inflammations'). Avurveda allows blood-letting but not the repeated extraction of large quantities of blood, intended to drain an illness, as in the European procedure. Rather, somewhat similar to acupuncture, only small quantities of blood are shed at strategic locations or 'marma points' (Dash 2001: 605-6). Dellon writes in some detail about blood-letting. In An Account of a Voyage to the East-Indies, Dellon claims the pervasiveness of blood-letting in India, 'much beyond what is Practised in most Parts of Europe' (1698: 232). Patients are bled from their feet, he adds. In one sense, Dellon is correct: since Ayurveda regards the foot as possessing the marma points for internal organs (Tiwari 1995: 112), bleeding from the foot was necessary if organs were afflicted, but Ayurvedic blood-letting is both rare and appropriate only for selected patients. Hence, later in An Account of a Voyage to the East-Indies, Dellon's claim - 'These Pagan Physicians used to be [extremely] scandaliz'd when they saw us let blood' (1698: 244) - is accurate in that compared to Indians, Europeans were not restrained in their prescriptions of blood-letting.

Indians preferred to treat fevers with either starvation or the ingestion of spice-infused elixirs, notes da Orta in *Conversations* (Markham 1913: 310–11). Da Orta admits that he finds Indian pharmacology perplexing and Indians' ignorance of human anatomy troubling: 'These doctors are ... wrong in the classification of the medicines, for they call pepper and cardamom cold and opium hot. As for anatomy they do not know where the liver is, nor the spleen, nor anything else' (*ibid.* 308). Da Orta's classification of pepper as 'hot' explains Dellon's removal of the pepper poultice which had been placed on the grand-daughter of Donna Francisca by an Indian doctor. In humoural theory, pungent spices like ginger, mustard, and black pepper were regarded as hot and dry and suitable for phlegmatics and melancholics, but pepper 'warms' (Gruner fever; so in the *Canon of Medicine*, Avicenna warns that pepper 'warms' (Gruner

1973: 175). Indian doctors, in contrast, prescribed pepper to induce sweating and purge the body of toxins (Vijayan and Thampuran 2000: 463–75; Johari 2000: 40; Heyn 1990: 126). In *An Account of a Voyage to the East-Indies* Dellon describes how Indians mix pepper into rice soup (*cange*), feed it to the fevered, and smear the brew on the patient's head. But Dellon does not say that he prescribed pepper himself.

Despite the differences of opinion, Europeans and Indians came to see eyeto-eye with regard to certain treatments. Ayurvedic doctors observed the frequent use of blood-letting by the Portuguese and adopted the procedure, as Dellon himself testifies. During his incarceration by the Inquisition, Dellon feigned a fever. A 'Pundit, or Pagan physician' was called in. The doctor ordered that Dellon should be bled for five days (Dellon 1819: 97). In Conversations, da Orta acclaims pepper's many virtues. Additionally, he affirms Indian physicians' suggestion of turmeric (açafrao da terre), 'mixed with orange juice and cocoa-nut oil' (Markham 1913: 165) for ailments of the skin, eyes, and digestive system and praises the effectiveness of both the spice and the doctors: 'There is something to say of this medicine, as it is used by native physicians' (ibid. 163). Da Orta is so impressed with turmeric that he recommends its commercialization: 'You may, therefore, look upon it as a good medicine to take to Portugal' (ibid. 165). Turmeric was not unknown to da Orta and Avicenna, but its infrequent use in Europe led to confusion over its properties. Da Orta points out that Avicenna conflates turmeric (a yellow, fibrous root) with celandine (a plant with yellow flowers), and he blames Avicenna's limited experience with the spice: 'This Avicenna was a man who, when he did not know a thing well owing to its not belonging to his country, quoted the statements of others' (ibid. 164). Da Orta similarly corrects botanist and physician Matteo Silvatico (1285-1342), who, claims da Orta, inaccurately described cardamom as budding from 'great protuberances on trees' when in fact the plant 'only grows from seeds in the ground' (ibid. 111).

Da Orta's critique of his Western peers arose from first-hand experience with the spices and drugs in the land where they originated, were widely used, and catalogued completely. Hence, da Orta acknowledges that Indian doctors were better able to cure, with the help of spices, afflictions like diarrhoea that plagued both Europe and India. Da Orta confesses that he emulates Indians in this respect by administering to his patients, 'in secret', a cocktail of gambier, areca, betel, and cinnamon (Markham 1913: 196). Along the same lines, da Orta defers to Indians rather than Avicenna for other remedies. Da Orta learned about *Acorus calamus*, a plant of the myrtle variety and found only in India and Arabia, from inquiries among Khorasani and Arab traders as well as

'the physicians of the Deccan kings' (Markham 1913: 80). 'Indian physicians' are also mentioned in *Conversations* in relation to cardamom. 'They say', reports da Orta, that an elixir of cardamom mixed with the betel nut 'draws out inflammations from the head or the stomach', and as for the cardamom root, 'They take it in fevers' (*ibid.* 111).

While da Orta and Dellon received knowledge from their colleagues, the men actively and on their own reconnaissance pursued further investigations into Indian spices and drugs. After he arrived in India, da Orta never left its shores, but he travelled as far north as Cambay and as far south as Malabar, investigating and buying spices, drugs, jewels, plants, and seeds from Indians as well as Middle Eastern and Southeast Asian merchants. When mentioning these spices in Conversations, da Orta reports on the routes by which each spice was transferred from one region of the Indian Ocean to another, suggesting da Orta's purchase and sale of the commodities. In fact, da Orta acquired seeds and plants, both domestic and foreign, from fruits to flowers, and grew them in his own gardens. Similarly, as an agent of the French East India Company and given his particular interest in medicine, Dellon makes specific reference to Indian plants in An Account of a Voyage to the East-Indies, from the spice market of Surat to Mangalore and its inhabitants who are 'addicted to Commerce' (1698: 154). What distinguishes da Orta and Dellon's commentaries from other such narratives of India is that da Orta and Dellon's perspectives on India's commodities through the lens of medical usefulness, not just for sale and profit, obscure any goals they may have had as individuals harkening from a Europe awash with colonial politics. Whatever desire da Orta or Dellon may have had to conquer and dominate, all agency was dashed after their incarceration by the Inquisition, which, unquestionably, put theocratic ideologies at the forefront of its activities.

The advent of the Inquisition and the fall of Garcia da Orta and Gabriel Dellon

Although the Inquisition was established in Goa only in 1560, an *auto-da-fé* occurred as early as 1543. The accused was Jeronimo Dias, a New Christian and 'bachelor of medicine'. Of Dias's questioning and confession, a document records, 'When arrested, together with certain other persons who had discoursed with him, he continued to uphold certain things of the old law against our holy faith, all of which showed clearly that he was a Jew, and the proceedings were concluded' (quoted in Koschorke *et al.* 2007: 16). After his sentencing, Dias was pilloried, strangled, and his body was burned in public (Priolkar 1961: 22–3; Correa 1864: 292). Despite no mention being made of Jeronimo Dias in *Conversations*, da Orta had been living in Goa for ten years by 1543, so he could

have known Dias. If so, Dias' execution proved that despite the New Christians' many services to Goa, ultimately their religious heritage would become an issue. Late in his life da Orta too became a target of the Inquisition. The Inquisition was founded to eliminate perceived religious heretics, and while the repression of science might be seen as a repercussion, the stewardship of alternative medicine could be reason enough for condemnation. For Inquisitors, da Orta was an unreliable subaltern, and other Christians like Dellon were also accused of heresy and subversion. Before we examine da Orta and Dellon's cases, a review of the history of the Inquisition in Goa is necessary.

The Inquisition was first suggested for Portuguese Asia by the Jesuit missionary Saint Francis Xavier (1506-52). In a frequently quoted letter to João III, written from Amboyna on May 16, 1546, Saint Francis appraises the king on the state of Christians in the Indies and advises, 'Your Highness should establish here the holy Inquisition, because there are many who, without any fear of God or human respect, live according to the Mosaic law and the tenets of the Moors' (Costelloe and Joseph 1992: 149). Saint Francis was referring to Portuguese New Christians of Jewish and Muslim backgrounds, whom he suspected of being crypto-Jews and crypto-Muslims. The Inquisition was then launched in Goa in 1560. By all accounts, it was quite active. For the first thirty years of its existence, about one hundred people were burned at the stake either 'in person or in effigy' (Boyajian 1992: 72). While the majority of the Inquisition's victims were Hindu converts to Christianity and other Indian Christians, the Inquisition's original mission, to condemn New Christians of Jewish origin, remained a preoccupation (Wojciehowski 2011: 209–10; Oakley 2008). In An Account of the Inquisition at Goa, Dellon devotes an entire chapter to this subject, entitled 'The injustice committed in the Inquisition towards those accused of Judaism'. In the chapter, Dellon recounts the typical course of a New Christian's imprisonment and punishment by the Inquisition: the loss of all money and property, torture and the extraction of a confession, the false implication of others, and the New Christian's execution. Essentially, writes Dellon, the Inquisitorial system works in such a way that 'the poor New Christian' is doomed from the outset (Dellon 1819: 75).

And so Garcia da Orta was investigated, during which time his medical practice was suspended. Da Orta had three sisters, Violante, Catarina, and Isabel, two of whom had emigrated to Goa with their husbands and da Orta's mother after the sisters had spent some months in a Lisbon gaol (Boxer 1963: 7, 10). By 1541, da Orta had married Brianda de Solis. The couple had two daughters. The Goa Inquisition's probe of Garcia da Orta extended to his entire family. Da Orta died in 1568, before he was charged. A year later, his sister,

Caterina, and her husband, Lionel Perez, were accused of being Marranos (Isenberg 1988: 310). In documents from the time, da Orta's brother-in-law claims that da Orta confessed to him that 'Christ was not the son of God' (Boxer 1963: 10). Caterina was taken into custody and given a death sentence (Baron 1969: 84). She was burned at the stake on 25 October 1569 (Boxer 1963: 11). Eleven years later, Inquisitors 'posthumously condemned' da Orta and had his body exhumed and also burned at the stake at the *auto-da-fé* of December 4, 1580 (Saraiva 2001: 347; Baron 1969: 84).

While no record exists of da Orta's criticism of the religion in, or the state of Goa, Dellon publically condemned both even before he experienced his own troubles. In his earlier narrative, An Account of a Voyage to the East-Indies, Dellon writes, 'The severity of the Inquisition establish'd in all places under the obedience of the King of Portugal, Holy by its Name, but so terrible in its Consequences, serves for nothing else than to abalienate [?] the Infidels from the Christian Church' (1698: 43). An Account of the Inquisition at Goa is the more descriptive text of Dellon's experiences with the Inquisition. Here, Dellon asserts his firm devotion to Christ, as firm as that of his pious forebears, yet exposes the paranoia and tyranny that defined the Inquisition. Dellon relates that anyone under the Inquisition's jurisdiction was expected to be an informant, 'under pain of excommunication, but also under corporal and most cruel penalties, to denounce at once and without notice, those whom they may have seen commit, or have heard to say, any thing contrary, to its institutions' (1819: 148). This environment, Dellon points out, resulted in a society marked by mistrust and instability: 'The consequence of which is, that friends betray their friends, fathers their children, through zeal without discretion, forget the duty which God and nature impress upon them towards those from whom they derive existence' (1819: 28). During his residence at Damão, Dellon never abjured Christianity - he claims familiarity with the scriptures, was strict, and observant - but Portuguese acquaintances took friendly arguments to be indicative of apostasy. Dellon was reported to the Inquisition by a Dominican priest offended after a discussion about baptism and by a neighbour who asked Dellon to cover the crucifix in his room when Dellon's women visitors were present. (Dellon had declined, saying that God sees all.) Dellon's refusal to wear a rosary and to kiss images of Mary that were paraded in processions around the city did not help his case, nor did his dismissive comments about the Inquisitors as self-righteous and un-God-like. The Portuguese were displeased with Dellon's comment on France's good fortune not to possess an Inquisition. Dellon's remarks came to the attention of Manuel Furtado de Mendoza, the Governor of Damão. Dellon claims that the two men were in love with the

same woman, but more likely Dellon's outspokenness and absence of zeal precipitated his downfall.

Dellon was charged with 'heresy' and arrested. For five months he was imprisoned at Damão. The dungeon was overflowing with worms and human waste, which spilled down the walls from an upper cell. Fortunately for Dellon, his benefactress sent food daily. Others were not so fortunate. Starving prisoners ate their own excrement or committed suicide. From Damão, Dellon was transported to Bassein, which was 'less filthy' than Damão but where Dellon continued to encounter 'many companions in misery' (1819: 48). Upon reaching Goa and before being brought before Francisco Delgado de Matos, 'the Grand Inquisitor of the Indies', Dellon spent a night at the prison of the Archbishop of Goa (ibid. 52). This gaol, testifies Dellon, was 'more foul, dark, and horrible' than previous internments, yet he 'preferred it to the neat and light cells of the Holy Inquisition', known for solitary confinement and active torture (ibid. 49). Unfortunately, after a short and unproductive meeting with the Grand Inquisitor, Dellon was taken to a gaol cell of the Inquisition where was given three meals a day, and this cell had rudimentary toilet facilities. Nonetheless he heard the screams of the tortured and glimpsed 'crippled' men and women (ibid. 110). Since he was a Frenchman, Dellon was treated much better than Indians were. 'Europeans' were given sheets to protect themselves from the cold and mosquitoes, whereas others slept on mats (ibid. 60). While 'Blacks' were given rice and fish, 'Whites are treated more delicately', writes Dellon, and enjoyed a variety of foods, including rolls and sausage (ibid. 58). Indians were neglected. Dellon cites the tragic case of fifty 'Malabar pirates' imprisoned for their criminal activities (not for heresy). Forgotten and famished, forty of the pirates hung themselves (ibid. 42). Dellon spent two years of his captivity at Goa. After being censured at a 1676 auto-da-fé, he was sent to be a galley slave on the São Pedro de Rates. In 1677 a fellow physician, Sieur Fabre, made a successful appeal to Marie-Françoise, Princess Regent of Portugal, for Dellon's release. Dellon published An Account of a Voyage to the East-Indies and An Account of the Inquisition at Goa several years later.

Conclusion: the paradox of Early Modern Goa

Dellon's An Account of a Voyage to the East-Indies and An Account of the Inquisition were so popular throughout Europe that they went through multiple editions. Da Orta's Conversations too experienced similar renown, more so than the work of the acclaimed Tomé Pires (d. 1540), apothecary, appointed 'factor of the drugs' for India, and the author of An Account of the East (Suma

Oriental), completed at Malacca in 1515. Pires spent a short period in India, arriving in 1511 and leaving in 1512, time enough, however, to commend Goa's ships, sailors, trade in spices, horses, rice, salt, betel, areca, and Goa's revenues of 'four hundred thousand pardos a year' from imports and exports (Pires 2005: 58-9). Pires's text, though, lacks, as per da Orta's Conversations, a discussion of Luso-Indian cooperation, both in terms of the exchange of wares and collaborative learning. Even though Avicenna and Silvatico before da Orta addressed aspects of Indian pharmacology, only da Orta witnessed the production and application of drugs, thereby making Conversations a model for future manuals, from Cristóvão da Costa's Treatise of the Drugs and Medicines of the East Indies (Tractado de las drogas y medicinas de las Índias orientales, 1578), written in Spanish and considered a revised edition of da Orta's Conversations, to Manuel Godinho de Erédia's Summary of Trees and Plants of India (Suma de árvores e plantas da Índia), published in Goa in 1612. Regardless of the medical advancements which occurred after his death, Garcia da Orta should be remembered as a pioneer who, by virtue of being *in situ* witnessed the vibrancy of the Indian Ocean trade, deployed a combination of both traditional and innovative treatments, benefitted beyond previous experts, and passed new technology back to Portugal, even though, ironically, da Orta himself could not return to his native land.

Da Orta's revelations, however, were suppressed or banned in Goa in the years immediately following publication. At the time the Inquisition scattered his ashes in 1580, the Conversations had also 'disappeared'. Very few copies of the first edition exist (a dozen, perhaps), in part because the Flemish botanist Charles de L'Écluse (1526-1609) translated Conversations into Latin, revised and abridged it, and published it in 1567 under a different title. De L'Écluse's version went through several editions and was popular in medical schools throughout Europe but was regarded as de L'Écluse's accomplishment, not da Orta's. Goan colonial authorities' and the Inquisition's steady erasure of indigenous and transcultural medicine was well underway. Indian kings like Burhan Nizam Shah employed European-trained physicians as well as Indians and Persians, but Portuguese viceroys accepted the services of non-Western physicians only to a degree. Official edicts in 1563 and 1567 expelled or restricted indigenous medicine in Goa, and Inquisition policy prohibited the use of some remedies under penalty of punishment because Ayurveda, for example, was perceived to be a form of sorcery and which warranted censorship. Further exchange between Indians and Europeans sharply declined after 1618. The authorities at Goa required all physicians to take a qualifying examination in order to practise, and decrees stipulated that the Indian doctors of Goa must not exceed thirty in

total. The examination was administered by the Chief Physician and Surgeon of the Royal Hospital, an institution established in the mid-sixteenth century and administered by Goa's Jesuits.

As for Dellon, even though he was not persecuted for being a New Christian as da Orta was, he nonetheless was a victim of the Inquisition for his worldview. Like Conversations, An Account of a Voyage to the East-Indies is not a testament of faith in the manner of fellow Goan transplant St Francis Xavier's missionary writings; rather, da Orta and Dellon's texts are keen observations of all things medical and experimental. Putting science before religion was the basis of the Inquisition's objections, since science was seen as distinct from God's work, unless the two were combined in the manner of Jesuit models for charity and evangelization, such as Goa's Hospital of the Poor Natives. Pedro Afonso (d. 1578), an Old Christian, was a physician and surgeon for the Hospital of the Poor Natives. Afonso had never been ordained due to his inability to acquire Latin (Županov 2005: 207–12). He was nonetheless a perfect lay father in the eyes of the Inquisition – he had an impeccable heritage, an approved affiliation (with the Jesuits), and he embraced medical science as a means of spreading Catholicism – all qualities absent in da Orta and more so Dellon. The early years of Portuguese colonialism in Goa saw the continuation of international commerce and cosmopolitanism, but in due course Portuguese monopolies regulated movement in the Indian Ocean. Despite being a prestigious Portuguese colony, hostilities towards some peoples, especially Jews, New Christians, and Muslims, had escalated; the Portuguese operated similarly in other cities of the Indian Ocean (Pearson 2002). Once the Inquisition stepped in, it added fuel to the fire by discriminating against the founders and titans of the region's trade, consisting of merchants of many creeds and including New Christians like da Orta and associates such as Dellon, both adherents to the Portuguese Empire even if they were not outright devotees. Additionally, the Inquisition interrupted and banned the dialogue that was developing between European and Indian physicians, thereby halting medical advances that would have benefitted everyone. The diminishment of da Orta and Dellon then appears to be due to the colonial project, which, during this time period, was still at the forefront and not yet affected by what Cristiana Bastos (2010) calls 'local initiatives' (versus 'colonial rules').

Da Orta and Dellon's lives and treatises indicate that the persecutions committed by the likes of the Inquisition affected all aspects of life, from religion and politics to society and science. India would never be the same, and ironically, by turning on their own, the Inquisition precipitated the end of Portuguese dominance in the region. By the mid-seventeenth century, the Portuguese

colonization of India had stalled as the Dutch and the English gained control of the Indian Ocean. As for the period prior to the arrival of the Inquisition in Goa, the observations of da Orta and Dellon mark a brief but productive moment in early modern Goa when the East and the West seemed to be moving towards consensus, a conclusion we may make from the review of da Orta and Dellon's easy interaction with the Jews, New Christians, and Indians of Goa as well as da Orta and Dellon's collaborations with Muslim and Hindu physicians. Although fleeting, this time should be regarded as significant. Indeed, when the Marquês de Pombal (1699-1782) reformed the Inquisition in the eighteenth century, he specifically criticized the Inquisition's injunctions against New Christians and its rejection of science (Smith 1843: 65). Pombal's critique may be seen as an implicit reinstatement of da Orta and Dellon's legacies as well as an acknowledgement of the effectiveness of Indian medicines. The removal of strictures between religion and food heralded a new era of modernity in terms of medicine because doctors no longer needed to observe boundaries which had been set by religious institutions. Although one must acknowledge that some aspects of medical practice might be described as inflexible in their own ways, medicine has evolved into an independent entity sustained by empiricism, not traditional religious ideology, and intimations of the current state of medicine were present in the practices of Garcia da Orta and Gabriel Dellon.

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