

also had to tap into what was, to them, another variety of “occult” or concealed knowledge: the Catholic and indigenous pharmaceutical networks of the Iberian tropics.

Jesuits on Drugs

Explaining the changes in the revised second edition of his *Pharmacopea Lusitana* (1711), the Lisbon apothecary Caetano de Santo António noted a recent shift in his thinking about medicine: “Since the Northern nations have introduced chemistry it is evident that this important art [of pharmacy] is now very different than it was in earlier times.” Thus, he wrote, “I have resolved to revise my *Pharmacopea Lusitana*, increasing the number of *receitas*, and modern theories, that may not have reached your notice owing to an incomplete knowledge of the different languages that the foreigners write in.”⁶¹ Santo António may have been trying to catch up with his rival, João Curvo Semedo, who cited “Roberto Boyle” six times in the revised second edition of his popular *Polyanthea Medicinal* (1704). Semedo even included quotations from Boyle in a section on “remedies which work by occult virtues or qualities.”⁶² By 1733, the Portuguese physician José Rodrigues Abreu was citing Francis Bacon to argue that coffee was a “stupefying” drug. And in 1728, the Lisbon physician Luis Caetano de Lima demonstrated his bona fides as a proponent of the new chemical medicine by compiling an exhaustive, three-volume “epitome” of the works of the controversial English physician (and Royal Society founding member) Thomas Willis.⁶³ Even as British natural philosophers were relying on Portuguese material networks to study the properties of novel drugs, their Portuguese counterparts were beginning to embrace the “Northern” chemical methods of the Royal Society.

In the decades following the Anglo-Portuguese alliance, Portuguese and British experts engaged in an intensive but largely hidden set of knowledge exchanges. These exchanges usually occurred through personal meetings and manuscripts rather than in print, due both to pressure from the censors of the Inquisition and anti-Catholic bigotry in England. Just as English chemistry was influencing medical writers in Lisbon, knowledge and materials from the Portuguese tropics were shaping natural philosophy in England. In August 1671, for instance, Henry Oldenburg, the secretary of the Royal Society of London, dispatched his “Inquiries for Brazil” to the Jesuit astronomer Valentin Stansel, an informant in Bahia who remained anonymous in the official Royal Society account.⁶⁴ The questions (collectively com-

posed at a meeting of the Royal Society) highlighted the members' eclectic curiosity about tropical nature, inquiring about poisonous jellyfish, plagues, glow-worms, "fiery flying dragons," and native Brazilians who, "moved by affection," were reputed to "seize the bodies of parents not killed by poison and, having dismembered them, bury them inside themselves." Native knowledge of medicinal drugs was a central focus: "Are the older Brazilians excellent botanists," one question asked, "able with ease to prepare every kind of medicine," and to "seek after knowledge of diseases . . . according to some common intellectual principle?" Does the *murucuia-miri* plant "expel the afterbirth in a safe and pleasant manner?" What of ipecacuanha, already famous in England for "combating strongly every kind of poison"? Many drugs from South America had by this time been publicized through a series of treatises ranging from André Thevet's *Les singularitez de la France Antarctique* (1557) to Piso and Marcgrave's *Historiae Naturalis Brasiliae* (1648), and Arnoldus Montanus's *De Nieuwe en Onbekende Weereld* (1671). Much of the "Inquiries for Brazil" effectively sought to fact check the assertions made by earlier Dutch and Portuguese accounts of tropical nature.

Jesuits, merchants, and non-European informants from the Portuguese empire became important—albeit largely invisible—contributors to the Royal Society's mission. The Anglo-Irish diplomat Robert Southwell (Figure 23), was a specialist in forging these connections. In the 1660s, a now-septuagenarian Jesuit named Jerónimo Lobo (who we previously encountered, in Chapter 3, as a young missionary, nursing a fevered sailor off the coast of Africa), struck up an unlikely friendship with the gregarious Southwell. This was typical. Southwell seems to have made a habit of befriending Catholics with access to knowledge and encouraging them to exchange what he called "secrets" with Boyle and Oldenburg, the Royal Society's secretary.

In the fall of 1660, Southwell paid a visit to "a meeting of the *virtuosi*" in Florence (the Accademia del Cimento) and forged an acquaintance with the Accademia's eminent patron, the Cardinal Leopoldo de Medici. Southwell wrote to Boyle informing him of the Accademia's experiments, promising that "I am sure there will pass communication of great secrets between you."⁶⁵ As a taste, Southwell described a recent series of experiments attempting to extract and observe the "salts from all things" with the aid of a very early microscope ("by the help of glasses"). The Accademia had found, according to Southwell, "that [drugs] which afford the most sharp and edged salts, are of the fiercest operation in physic," a finding which may well have influenced Boyle's thoughts about the "uncommon textures" of certain psy-



Figure 23. A portrait of Robert Southwell still hangs in the manor he bought on his return from Lisbon. Geoffrey Kneller (c. 1680), Kings Weston Bristol. Courtesy of Wikimedia Commons.

choactive drugs. Southwell also referred to a box of Italian curiosities that he had earlier sent to Boyle, purchased from a curiosity cabinet owner in Bologna.⁶⁶

In a subsequent letter from Rome the following spring, Southwell happily reported that “Father [Athanasius] Kircher is my particular friend, and I visit him and his gallery frequently. Certainly he is a person of vast parts. . . . He is likewise one of the most naked and good men that I have seen, and is very easy to communicate whatever he knows.”⁶⁷ Although Southwell admitted that Kircher “is reputed very credulous, apt to put in print any strange, if plausible, story, that is brought unto him,” Southwell deemed him to be “philosopher enough” and promised to give Boyle a detailed report of Kircher’s answers to “all the questions you bid me ask him.”

Southwell’s friendship with the well-connected Kircher gave the Royal Society access to a global network of learned Jesuits. In late 1665, King Charles II sent Southwell to Portugal to negotiate a peace with Spain, and as he resided in Lisbon for the following three years Southwell continued to develop ties to the Society of Jesus and Portuguese imperial agents. During this time, Southwell encouraged Lobo to write in greater depth about the natural curiosities of east Africa, and by 1667 Southwell possessed a com-

plete set of natural philosophical treatises written by Lobo and annotated by another Royal Society member and junior diplomat who worked alongside Southwell in Lisbon, Peter Wych.⁶⁸ These five treatises were decontextualized fragments from Lobo's extensive travels that carefully avoided extensive descriptions of Lobo's missionary activities. Instead, they emphasized the impartial relation of tropical naturalia, like unicorns and palm trees.⁶⁹

Wych and Southwell nurtured clandestine contacts with the Jesuit community in Lisbon. Wych, for instance, reported to Oldenburg that he'd "engaged for a Correspondent in Philosophical Matters, the Professor of the Mathematicks at Lisbon, called Father John Marks, an English Jesuit." Marks facilitated the Royal Society's ties with Valentin Stansel, the Jesuit astronomer to whom Oldenburg would later direct his "Inquiries for Brazil."⁷⁰ By March 1668, Southwell had sent Lobo's manuscripts to Henry Oldenburg, along with two boxes of "divers curiosities" from Portugal, Brazil, and Angola, which Oldenburg wrote of excitedly to Boyle.⁷¹ A year later, Southwell dispatched a letter from the German-Portuguese apothecary Gabriel Grisley proposing a plant exchange; the letter was accompanied by a bottle of Amazonian *copaiba* balsam, a Portuguese manuscript titled *Varias Receitas et Segredos da Medicina*, and an even larger set of medical and botanical curiosities from the Portuguese tropics.⁷² At the May 20, 1669, meeting of the Royal Society, some of Southwell's finds were presented. They were likely from the same cache of artifacts documented in Nathaniel Grew's 1681 compendium of the belongings and curiosities of the Royal Society (*Musaeum Regalis Societatis*), which Grew had described as medicines of "the Portugal Negros" sent by Southwell from Lisbon. The cache included "Sagu"; "the Mallaca gum"; Poco Sempie, "a Golden Moss . . . accounted a great Cordial"; and Rizagon, a "root brought from Bengala, of good use."⁷³ As was often the case in early modern drug descriptions, the labels were hopelessly ambiguous: Precisely what "good use" did the root have? And was it from Bengala (i.e., Bengal) or from Benguela, the African slaving port? Likewise, it is entirely unclear what was meant by "Portugal Negros" as a descriptor. English travelers increasingly viewed Portuguese colonial spaces in racialized terms, and the term could just as easily have referred to the inhabitants of Malaysia or São Thome as it did of Africa.

We do, however, have more clarity on the origins of four drugs from Southwell's cache that were clearly identified as originating in Angola. The source for these may have been the Lisbon apothecary João Curvo Semedo, or, perhaps, one of Semedo's suppliers in Lisbon's Chiado district or the Al-

cântara docklands. (Semedo had boasted of his close ties to participants in the African slave trade, and he appears to have been the only seventeenth-century Iberian author to mention Southwell's "tooth of the beast emgala.")⁷⁴ These dispatches from Southwell and his Lusophone informants like Grisley, Lobo, and the anonymous apothecaries of Lisbon evidently drummed up an interest in the drugs of the Portuguese empire in London. Later that year, four apothecaries, including Hans Sloane's associate James Petiver and the queen's botanist Leonard Plunket, gathered at the Temple Coffee House in London to plan a newly updated subscription edition of Grisley's *Viridiarum Lusitanum*.⁷⁵

In the earlier decades of the century, Lobo and Grisley had labored in the service of the Portuguese crown, with Lobo attempting to win converts and Grisley repeatedly petitioning King João IV to grant him funds to collect and grow "medicinal plants . . . for the good of the Kingdom."⁷⁶ Yet by the 1660s, both of these lifelong imperial servants found themselves working clandestinely with a charismatic Anglo-Irishman to send valuable natural knowledge of tropical drugs to the philosophers of London.

Decontextualizations of the Drug Trade

The Anglo-Portuguese exchanges explored here were obscured in the eighteenth century by both confessional antagonism between Protestants and Catholics and by emerging notions of racial difference. Duarte Ribeiro de Macedo had met with English natural philosophers and political leaders as an equal. Montagu was interested in how the Portuguese had managed to transplant oranges; Macedo was interested in English efforts to produce silk in Virginia. Both had a keen interest in transplanting drug and spice crops from the Old to the New World. Figures like Macedo, Southwell, Montagu, and Valentin Stansel moved within a cosmopolitan, "Republic of Letters" framework in which religious and national differences were, by and large, politely ignored. A mere generation later, the gap between British and Portuguese spheres of knowledge had widened considerably.

The anti-Catholic elements of the shift were already evident in the generation of Macedo and Southwell. The manuscript owned by the Royal Society identifies Lobo by name and calls him a "learned Jesuit." The members of the Royal Society even decided to send the "good old Jesuit Heironymo Lobo" (as Southwell referred to him) a formal letter of thanks.⁷⁷ Yet when Lobo's work reached print in November 1668 under the title *A Short Relation of*