# TABLE OF CONTENTS

List of Tables ........................................................................................................... vii

Introduction ............................................................................................................. 1
   *Ana Delicado*

## Part I: The Role of Associations in the Development of Scientific Disciplines

Chapter One ............................................................................................................. 10
   Of Objects, Networks, Politics and Poetics: The Royal Academy of Sciences of Lisbon in the Context of the Enlightenment
   *Cristiana Bastos*

Chapter Two ............................................................................................................. 30
   The Association of Portuguese Archaeologists and the Establishment of Archaeology in Contemporary Portugal
   *Ana Cristina Martins*

Chapter Three ....................................................................................................... 45
   Railways and the Portuguese Civil Engineers Association: Practice and Theory (1870-1899)
   *Hugo Pereira*

Chapter Four ......................................................................................................... 64
   The Geographical Society of Lisbon and the New Challenges in the Science of the Nineteenth and Twentieth Centuries
   *Rui Pinto*

Chapter Five ......................................................................................................... 75
   Scientific Societies during the Portuguese First Republic: An Historical Perspective on Cancer and Radioactivity Studies
   *Ricardo Moreira*
Table of Contents

Chapter Six ............................................................................................................. 92
Modernizing Ambitions: Agronomists in Action between Dictatorship
and Democracy (Portugal, 1957-1986)
Dulce Freire

Part II: Contributions of Scientific Associations to Profession
and Society

Chapter Seven ......................................................................................................... 110
Scientific Associations: a Social Movement in Expansion but with Low
Ambition?
Raquel Rego

Chapter Eight ........................................................................................................ 126
Participation of Researchers in Professional Associations
Lúis Junqueira

Chapter Nine ........................................................................................................ 145
New (?) Actors in the Public Communication of Science:
The Role of Scientific Associations
Cristina Palma Conceição and Ana Delicado

Chapter Ten ........................................................................................................... 166
Caves with Life and Unexpected Remains: The Contribution
of AESDA to Speleological Knowledge in Portugal
Francisco Táta Regala, Rui Luís, Rui Mergulho and Paulo Pacheco

Chapter Eleven ..................................................................................................... 179
Group of Studies in Human Evolution: Its Role in Society and in Science
Sandra Assis and Vanessa Campanacho

Chapter Twelve ................................................................................................... 189
Scientists, Environmentalists and the Nuclear Debate: Individual
Activism and Collective Action
Ana Delicado

Contributors .......................................................................................................... 209

Index ..................................................................................................................... 213

List of Tables

Table 7-1: Paid and voluntary workers in Portuguese scientific
associations in 2011 ............................................................................................ 118
Table 7-2: Political influence of scientific associations by association
type in 2011 ........................................................................................................ 121
Table 8-1: Professional situation of members of the association .............. 133
Table 8-2: Age of members by association ....................................................... 134
Table 8-3: Area of residence of members by association ................................ 135
Table 8-4: Scientific area of last completed degree of members
by association ........................................................................................................ 135
Table 8-5: How members became aware of the association by scientific
area ........................................................................................................................ 138
Table 8-6: Motivations to join by association ..................................................... 140
Table 8-7: Participation in the association’s activities ...................................... 141
Table 9-1: Scientific associations in Portugal by year of foundation .......... 150
Table 9-2: Proportion of “non-scientists” among the Portuguese
scientific associations’ members ........................................................................ 153
Table 9-3: Frequency of public communication of science activities,
for young people and the general public, by type of association ............... 154
Table 9-4: Researchers’ motivations for belonging to a Portuguese
Scientific Association, by type of association ................................................ 156
Table 9-5: Collaboration with other institutions for the purpose of public
communication of science, by type of scientific association ...................... 156
CHAPTER ONE
OF OBJECTS, NETWORKS,
POLITICS AND POETRY:
THE ROYAL ACADEMY OF SCIENCES
OF LISBON IN THE CONTEXT
OF THE ENLIGHTENMENT

CRISTIANA BASTOS

Objects of curiosity

Well-kept in the historical building of the Academy of Sciences in Lisbon, a number of artefacts from around the world co-exist with books, paintings, furniture and other rare objects from a time when knowledge, wealth, pomp and some degree of cosmopolitanism went together. Among them there is a small collection that includes a helmet, masks, hooks, oars and some other artistically crafted objects from the islands of Hawaii and the coast of Vancouver. These objects piqued the visitor’s curiosity, not only due to their beauty and presumed value, but also, and foremost, for their unusual origin. Tinglit, Nootka and Kwakiutl are familiar names to anthropologists, but their artwork remains exclusive of very few international collections. They are absent from Portuguese museums. The same goes for Hawaiian peoples and their artefacts. None of them belonged to the far-reaching Portuguese networks in maritime trade, political relations or military conquest of colonial times, and from which the Portuguese brought back the goods, knowledge, crafts and artwork that compose existing ethnographic collections. Most of the ceremonial masks, religious artefacts, religious statuettes or domestic utensils that exist in Portuguese museums come from Africa or, to a lesser degree, from Asia, South America or Melanesia/Timor. There are scarcely any objects from the northern regions of America, Asia or Europe.¹

Maybe for that reason, the Northern Pacific objects of the Academy of Sciences had been initially classified as African, and for over a century remained misclassified, indistinguishable from many other museum objects, as if metonymically affected by the majority. Only towards the end of the twentieth century were they correctly identified and given appropriate museological care.² They were placed in special display cases in a front room at the Academy of Sciences, and can be visited on special occasions, but not photographed. The reasons and routes that brought them to Lisbon are still a matter of speculation. When did they arrive, how did they travel, through whose networks, and under what circumstances?

The travels of Captain Cook and his objects

My first acquaintance with the artefacts dates to a special visit to the Aula Maynense of the Academy of Sciences in March 2010, where I also became familiar with the oral history running in the institution: the objects had been collected by Captain Cook on his third and last trip around the world, made their way to England after his death, and from England were transferred to Portugal due to the connections of one of the Academy members.³

It is widely known that Captain Cook lost his life in Hawaii in 1779, during his third great voyage after exploring the coast of British Columbia and searching for the Behring passage. He first arrived in Hawaii during the Lono god festivals; whether he was taken for Lono himself, treated as a god, or something else, constitutes a matter of debate among

¹ For a wider discussion about Portuguese museums and collections, see Brigola (2003), Cantinho Pereira (2005) and Delicado (2009).
² A special thanks to Manuela Cantinho Pereira, PhD and specialist of colonial collections, for sharing her valuable knowledge with the author and research assistant Patrick Figueiredo on an interview at the Lisbon Geographical Society in Lisbon, 2011.
³ The official page of the Museu Maynense at the Academy of Sciences states that among its ethnographic collections are “the precious, high quality and partly unpublished collection from British Columbia and Hawaii obtained in the third and last expedition of James Cook and transferred to the Academy thanks to Sir Joseph Banks (President of the Royal Society and a member of our Academy) and his friend the Abbott Correa da Serra” (http://www2.acad-ciencias.pt/joomla/index.php?option=com_content&view=article&id=255&Itemid=81, accessed on July 29, 2013).
anthropologists—who also use his case to engage in further discussions about issues as diverse as first encounters, human rationality, European culture and the art of butchery (Sahlins 1985, 1995; Obeyesekere 1997). The fact is that after having first left Hawaii in glory, his unexpected return to the island had dire consequences: he was killed and his body was ritually disassembled.

When the vessel *Endeavour* returned to England leaving Captain Cook’s body parts behind, it is likely that there were quite a few artefacts on board, both from Hawaii and from British Columbia. It is also likely that they landed in England. Yet there is no evidence, so far, that the Lisbon Academy objects were among them, nor is it clear how they would have travelled to Lisbon. With some speculation and creative thinking, oral history suggests that the objects travelled from one place to the other due to the special friendship between two important men of science, one in London, the other in Lisbon.

One of those men was the famous naturalist Sir Joseph Banks (1743-1820). Banks had accompanied Captain Cook on his first voyage around the world on board of the *Endeavour* (1768-1771). Although the Cook-Banks connection prevails in historical and popular imagination, Banks did not participate in Captain Cook’s second trip, aboard the *Resolution* (1772-1775), nor in the third, back on the *Endeavour* (1776-1779). He nonetheless remained at the centre of knowledge-making of his time. He surveyed, identified, collected and systematised knowledge about different species; he supervised their cultivation at Kew Gardens (Desmond 1995, Gascoigne 1998). He was at the core, and he had a vast network of collaborators, interlocutors and friends collecting data in numerous places.

The other man of science mentioned in the legend was the Portuguese naturalist Correia da Serra (1751-1823), one among Joseph Banks’ friends and interlocutors, and one of the founders of the Royal Academy of Sciences in Lisbon in 1779 (Beale Davis 1993, Teague 1997, Carneiro et al. 2000, Diogo et al. 2001, Simões et al. 2006).

**Objects and scientific networks**

Rather than the less noble and more common reasons of colonial plunder or trade, friendship and intellectual camaraderie in the age of the Enlightenment explained the presence of these unusual pieces in Lisbon. They travelled to Lisbon as a gift, after a series of transactions involving several scientific celebrities; an attractive tale of high pedigree, in sum. Collected *in loco* by no less than Captain Cook and traveling after his death in Hawaii, the pieces would have made their way to Europe and were later given by Sir Joseph Banks, Captain Cook’s associate and famous naturalist, to the Portuguese naturalist Correia da Serra, as part of the exchanges that sustained their friendship. If we apply Marcel Mauss’ theories about “the gift” (Mauss 1925, 1990), we see that after this journey the objects possessed an overwhelming abundance of *Hau*, enriched by the vitality and notoriety of each of their owners, givers and receivers. Captain Cook, Joseph Banks and Correia da Serra had imbued their personas in the wonderful, rare and authentic masks, ceremonial helmet, hooks, oars and ornaments kept at the Academy.

The story seemed too good to be true: Banks at the centre of Enlightenment networks, the objects physically traveling from the islands of Hawaii and the shores of Vancouver to the city of Lisbon, via Banks, with Cook at one end and Serra on the other. Whether true or false, the story led me from objects to relationships and to a range of questions about the networks that at that time brought together naturalists and things, projects, research interests, sites on earth, flows of knowledge; about the insertion of the Lisbon Academy of Sciences in the wider Enlightenment networks; about the elusive Correia da Serra, who spent two-thirds of his life abroad yet was one of the major contributors to science in Portugal; about his connections to Joseph Banks and other key figures of the Enlightenment, in France, England and the United States. As much as the masks, oars, and helmet enchanted me, the questions around them enchanted me even more. I followed the threads that would lead me from the objects to the networks, trends, scientists and institutions of the Enlightenment. I also came upon unexpected scenarios involving not only science and politics, but also literature and poetry, class and gender, Freemasonry and religion, police and persecutions. The beautiful Kwakiutl objects and Cook’s adventures in Hawaii were just the beginning of an exploration that led me away from the Pacific and into the heart of Europe’s tensions at the end of the eighteenth century. While the route the objects took to Lisbon is still unclear and the subject of research by qualified scholars, one can apply Marcel Mauss’ theories about “the gift” (Mauss 1925, 1990), and while there is no support for the speculative hypothesis that they came to Lisbon via the Banks-Serra connection, one...
thing can be gathered regarding the *Hau* of those objects: they possess the magical ability of bringing new subjects to life.

**Beyond British Columbia and Hawaii: Banks and Serra in England**

Whether or not Banks and Serra, solo or as a team, ever touched, carried, studied, gave, purchased or even saw the Hawaiian and British Columbian objects that are now in the Academy of Sciences in Lisbon, the fact is that the two men indeed shared many interests, knew each other, corresponded, and even went on a joint scientific expedition to the Yorkshire coast. Serra may have been just one more of Banks many acquaintances and interlocutors, but everything indicates that he was an esteemed one (Simões *et al.* 2006).

Sir Joseph Banks had a vast network of correspondents and interlocutors. He was the naturalist of reference at the time, the person who most clearly epitomised the making of knowledge, exploring nature, collecting, naming, comparing, cultivating and foreseeing the uses of such knowledge (Gascoigne 1998). In 1766, at the age of 23, he was already a member of the Royal Society. His first great expedition, that same year, brought him to Newfoundland and Labrador on board of the vessel *Niger*. He described the species found there according to Linnaean terminology (Lysaght 1971). Since the ship stayed in Lisbon for six months, he became acquainted with the place and with some local scientists, with whom he formed lifelong relationships—such as with Domenico Vandelli, who would decades later ask Banks for protection in England during a period of political intrigue in Portugal. But the Abbot Correia da Serra, then 15-16 years old, was not in Portugal at that time—he was probably in Naples with his family, pursuing studies he would continue in Rome. Banks and Correia would meet later (Teague 1997, Simões *et al.* 2006).

When Correia da Serra moved to England in a rush, in 1795, out of fear of persecution, he was already a mature man of science with good credentials and connections throughout Europe. He had been the co-founder of the Academy of Sciences in Lisbon, and reputedly its mastermind. He had lived in Rome, Naples and Paris in past years, and would live again in Paris and in Philadelphia in the future. He knew James Edward Smith, interacted with several other peers, like Richard Anthony Salisbury and Robert Brown (Diogo *et al.* 2011, 358). Banks was a most esteemed colleague, with whom he shared interests and engaged in joint work. While in London, Correia da Serra published extensively and participated in many scientific activities (Simões *et al.* 2006).

Correia da Serra's time in England was one episode in a life full of variety; his relationship with Banks was an important, cherished and prestigious one, but also one among many others. A worldly character with a wide range of interests, Correia da Serra drifted in different directions, to different places and towards different scientific interests. He hardly concentrated on a single topic long enough to write a monographic study but, instead, he made many small and incisive contributions in assorted fields. He travelled since he was a child; he moved easily, and made himself at home in different places, sometimes running from one place to the other in fear of persecutions. His was a very full and multifaceted life, elusive to his biographers up until now (Teague 1997, 11).

Who was this man who so uniquely epitomises the Enlightenment in Portugal and in Europe, who spent most of his life abroad yet had a crucial influence on his country, who embodies the character of the *estrangeirado*, who co-founded the Academy of Sciences, who had important Masonic connections, who interacted closely with the major figures within and outside of Portugal, who made a home in Naples, Rome, London, Paris and Philadelphia, who came to be a dear friend of President Thomas Jefferson in the United States, to the point of having his own room at Monticello, Virginia, who took orders and earned the title of Abbé (Abbott) but never practiced much, who had a common law wife and a son, who befriended people from the ancient regime and the revolutionaries that fought against it? The variety of characters he embodied mirrors the complexity of interconnected worlds that coexisted at that time of radical change in politics and in knowledge-making. He was a man of his time, he resembled the time he grew up in; he engaged in different streams of knowledge—letters, philosophy, natural history, botany, carpology (study of fruits), geology, ethnography, politics, diplomacy (Diogo *et al.* 2001). He was a polymath, in the words of his biographers (Teague 1997; Beale Davis 1993).

---

6 Correspondence of Joseph Banks, Museum of Natural History, London.

---

7 Literally, "foreignised", or those who have undergone foreign influence. Carneiro, Simões and Diogo (Carneiro *et al.* 2000, Diogo *et al.* 2001) suggest that the best translation is "Europeanised". Mostly as an effect of political exile from authoritarian regimes—Pombal, above all—the *estrangeirados* abounded in late eighteenth century Portugal and contributed to major reforms in education and science. While most of them merely imported to the country what had been developed elsewhere, Correia da Serra genuinely contributed to the advancement of knowledge on several fronts (Diogo *et al.* 2001, 354).
Correia da Serra, a polymath of the Enlightenment: his youth

José Francisco Correia da Serra came into the world in 1751 in the southern town of Serpa, Portugal. His maternal and paternal families had known each other and maintained a close relationship for generations, a solidarity that may have emerged from their status as New Christians—meaning that their great-great-grandparents had been forced to convert from Judaism to Christianity (Teague 1997, 29-30). Throughout the centuries they suffered Inquisitorial accusations of “Judaism, heresy and apostasy” (Teague 1997, 30). When José was ordained in Rome, he produced the required documents denying that his parents, grandparents or great grandparents were prosecuted by the Inquisition. It is unlikely that he was unaware of his ancestors’ ordeals during the Inquisition; more likely, he was concealing his Jewish and freethinking background on purpose (Teague 1997, 31-32).

His own parents had moved to Rome in 1756-57 anticipating Inquisitorial prosecution, according to most biographers (Teague 1997, 33; Diogo et al. 2001, 355, note 2). In Rome, his father Luis Dias Correia kept a successful medical practice and trade in medicines. Yet they had to move again in 1760, when the Portuguese were expelled from the Papal States as retaliation against Pombal’s expulsion of the Jesuits from Portugal. The family moved to Naples and lived there for the following decade. New births expanded the family, but several died in childhood. In 1765, his mother Francisca died at the age of 31, giving birth to her 12th child—a girl who became one of the five siblings, from a total of twelve, who made it to adulthood (Teague 1997, 27).

José lived in Naples from the ages of nine to 19 (Teague 1997, 37). It is known that while in Naples he studied, although briefly, with the abbot Antonio Genovesi (Diogo et al. 2001, 355); it is less clear whether it was there that he studied with Luis Antonio Verney, a reference figure of the Portuguese Enlightenment and the author of “The True Method of Study” (Verney 1746), since their periods in that city did not necessarily coincide (Teague 1997, 38); the two may have met in Rome (Diogo et al. 2001, 356). It is also likely that the boy was influenced by the vibrant Napolitan culture of that period, with its lively palazzos, semi-secret associations and temples of knowledge—among which the famous pharmacy of the Ospedale dei Reamine (Incurabili) stands out (Valerio 2010; Rispoli 2010).

The young José went on to study in Rome with the priest Maratta, who contributed to his taste for botany; he also took classes in medicine and frequented the Papal Orto dei Simplicy. At the age of twenty he corresponded with Carl Linnaeus and Antonio Turra (Teague 1997), although later in life he chose Jussieu’s system over Linnaeau’s (Diogo et al. 2001). While in Rome, José planned a scientific expedition to Sardinia with his college roommate Jean Desmete, a Frenchman. Instead, however, they went for a shorter trip to Liguria in 1774. On that trip he wrote abundant notes and reflections on everything he observed, natural or social and cultural, from geology and botany to diving and fishing methods (Correia da Serra 2003).

In the meantime, José was ordained. Whether due to family pressure, efforts to conceal his research activities from the Inquisition (Carvalho 1948), or merely the pragmatism of security and protection (Simões et al. 2006), he became a man of the church, the Abbé Correia da Serra, yet one who was not overly enthusiastic about the endeavour (Diogo et al. 2001; Teague 1997, 45). He engaged in activities often opposed by the church: science, research, secret societies, civic associations to promote the development of science. He had relationships with women and even had a son with his French partner Esther Lavigne. He engaged with the free thinkers that on the opposite side of the Atlantic built the United States of America. He also took part in scientific expeditions, although more modest than the round-the-world explorations of Cook and Banks, to the English coast of Yorkshire, the Italian coast of Liguria, the Portuguese island of Berlenga, and other sites in Europe and the United States.8

Correia da Serra, Lafões and the Royal Academy of Sciences

When Correia da Serra returned to Portugal in 1777, after his studies in Rome, he found he had just lost his father, who had returned home a few years before. Dr Luis Correia had lost his wife Francisca and his business had been in frank decline. José Francisco Correia da Serra inherited no wealth, but stress and sorrows—which would erupt to torment him later in life.

To his fortune however, the rich and influential Duke of Laços had also returned to Portugal following a long exile during Pombal's government under King José. Laços was a close relative of the new Queen, D. Maria, enthroned in 1777. He was also an opponent of the ancient regime, a sympathiser of the ideals of the Freemasonry and an enthusiast of progress, science and human growth through learning.

Through some connections with Beja's friar Manuel do Cenaculo, a man close to Pombal's circle of influence and at some point the head censor of the country (Carneiro et al. 2000, 599), Correia da Serra accepted the sponsorship of the Duke of Laços and in 1779 moved to his palace in Lisbon—the Quinta dos Alfinetes ao Grilo, in today's Beato-Xabregas neighbourhood. There he found the material, emotional and social support necessary for his intellectual work. There he wrote in abundance; he left behind many of his notes when he fled to England, even though Laços later denied their existence in order to cover up for his friend. It was also there that he and Laços planned the details for the society they were about to create. Its purpose was to promote science, research, knowledge and freethinking in general, to push the country forward, away from the ancient regime's lethargy and backwardness that they abhorred so much. That society would become the Royal Academy of Sciences—"the sole sheet anchor in this week," as Correia referred to it in a letter to Manuel do Cenaculo (quoted by Diogo et al. 2001, 356).

The Royal Academy of Sciences was officially founded on December 24, 1779, sponsored by the Queen D. Maria. The main figureheads were the Duke of Laços, its first president, and Correia da Serra, who became its first secretary and was appointed permanent secretary in 1788 (Diogo et al. 2001, 357). Soon botanist Domenico Vandelli joined them. Although the latter pushed for a focus on natural science, the Academy kept broader interests. With the motto "NISI UTILE EST QUOD FACIMUS STULTA EST GLORIA," the Academy bylaws stated its commitment to promoting public happiness, developing national education, improving science and arts, and advancing popular industry (see Cardoso 1990, Figueiredo forthcoming).

The Academy had different sections, or classes: natural sciences, hard sciences, beaux-arts and letters. At the time, letters or Literário meant more than fiction, and included most written work involving knowledge. There were full members, corresponding members, and foreign members. Via personal networks, international celebrities were invited to become corresponding or honorary members of the Academy and earn yet another distinguished title while broadening the Academy's networks, reach and prestige (see Simões et al. 2006, 53-54). Joseph Banks was among these, along with other key scientists and people of knowledge of the time. As noted by today's analysts, "in order to be effective, the Academy should function both as a centre of production and dissemination of knowledge in the country and as a part of an international network of scientific institutions" (Diogo et al. 2001, 356-7). If we follow the analytical suggestions of Actor-Network Theory (e.g. Law 1992), networks per se could account for the Academy's existence and functions. However, the genuine commitment of some of its members to progress, science, knowledge and human improvement should not be left out of the analysis.

In spite of some difficulties, the Academy was able to maintain an independent agenda and worked in parallel with the state. It attempted to keep the production of knowledge in constant flow while the governments drifted and shifted. The Academy, not the government, defined the methods of data collection in overseas territories and provided the guidelines for surveying the mineral, vegetable and animal worlds of each place, as well as the notes to take on the local societies. This created a core of organising principles for specimen collection and for the questionnaires that colonial officers in Africa and Asia used as a basis for their reports. Occasionally, the Academy promoted special expeditions, such as that of Alexandre Rodrigues Ferreira to the Amazon (Raminelli 2008).

In years to come, the Academy was either supported or targeted by the governments, but it always survived with an independent agenda. The headquarters moved between different temporary locations until they settled in the former Convent of Jesus, in 1834, where they remain today. The street was renamed Rua da Academia das Ciências. The reform of 1851 divided activities into two sections—Letters and Sciences, much similar to what today would be called Humanities and Sciences.

The Academy supported public education not just in theory but also literally. Its headquarters temporarily hosted higher education and entire sections of the University of Lisbon in the early twentieth century. Currently, the headquarters house the geology museum, which is open to the public, and the not yet open Maynense museum (after Father Mayne's class), with a precious collection that includes the Hawaiian and Pacific pieces mentioned earlier among other ethnographic rarities, as well as zoological and botanical specimens, scientific instruments and the remains of the former convent. Besides a vast library and numerous paintings and sculptures, the Academy produces its own publications, including the Memorias da Academia. The building itself is a gem with a majestic, gilded main hall, marble-paved corridors and stairways, beautiful rooms and cloisters.
With the mission of promoting knowledge against the country’s backwardness and its absolutist governments, politics has permeated the existence of the Academy since its very beginnings. It had to compete with projects promoted by other groups, which had ties to former or future scientific societies, vying with networks for influence, fighting for the prevalence of the knowledge produced according to the principles of science and reason. There were also some periods of lethargy; when Link visited Portugal at the end of the eighteenth century for the botanical survey that led to his monumental Flora Portugaise (Hoffinansegg and Link 1808-20), he found an incipient scientific society that had little to be proud of (Link 1801; see also Bastos 1988, Diogo et al. 2001, Simões et al. 2006, 73).

Those were times of intense turmoil, interrupted projects, short term governments and shifting political agendas. The waves of republicanism that came from France and its sympathisers were felt as a threat to the established powers; scientific activity was often considered suspect and scientists were accused of Jacobinism and Freemasonry, and the Academy was seen as a breeding ground for these ideologies (Taegue 1997, 57). Both Correia da Serra and Lafões were constantly targeted by the police superintendent Pina Manique (Diogo et al. 2001, 357). For reasons not fully documented, Correia da Serra moved to France in 1786 and returned only in 1791—right before and after the French revolution. In 1794, the French physician of Girondist persuasion Pierre Maria Auguste Broussonet, a known freemason, came to Lisbon and was hosted by the Academy of Sciences. Pina Manique was after him, and the pressure over Correia da Serra increased. After Broussonet escaped, so did the Abbé, who sought refuge in England in 1795(Diogo et al. 2006, 59-61).10

9 The relationship between the Academy and the Portuguese state is intriguing up to our days. No longer a private association but under the sponsorship of the government (Ministry of Education and Science), its collections are kept under reserve and only occasionally become available to the public—as if the Academy’s original mission of promoting science above the state was still in the agenda.

10 Diogo et al. (2006, 60, note 10) transcribe a document from the Inquisition accusing Correia da Serra of a multitude of crimes and misdeeds of sexual nature—naming several women and a young man, plus referring to a number of unknown victims.

The wide networks of the enlightenment:
Correia da Serra and Leonor de Almeida, Countess of Oeynhausen, Marquess of Alorna

After moving to London in 1795, Correia da Serra interacted with prominent English naturalists like Joseph Banks, James Edward Smith, Richard Anthony Salisbury and Robert Brown (Diogo et al. 2006, 77). Although the Abbé found shelter and support for his work in science, he could not secure enough income for his needs. Throughout his life he had a steady stipend from the house of Lafões (Monteiro e Costa 2006), but occasionally he encountered difficulties in making ends meet (Diogo et al. 2006, 63). He was chosen for a position at the embassy, but political intrigue prevented him from achieving it; the embassy was in the hands of the Marquis of Ponte de Lima, whose connections with the Inquisition revived the accusations against Correia da Serra (Diogo et al. 2006, 74). Seen from today’s perspective, Correia’s attitude may be considered slightly paranoid, as he so often feared persecutions that did not take place—yet, the accusations existed and supported his feelings of vulnerability, while fuelling his tendency to move from one place to the next.

In 1801, he moved to Paris where he interacted with the major naturalists and philosophers of the time; Lafayette, Cuvier, Pyramus de Candolle, Alexander Humboldt, Christian Persoon, Du Pont de Nemours, Julien La Metrie, plus the Portuguese botanist in exile Avelar Brotero (Carneiro et al. 2000, 609; Cardoso 2013, 19). For years, Correia da Serra had a fulfilling life. He had a relationship with Esther Lavigne, with whom he had a son, despite his vows of celibacy as a catholic clergyman. After some years however, France became uncomfortable for his demanding persona. What had once been the place of free thought, and thus the ideal setting for the pursuit of knowledge, had turned into a land of authoritarianism. He refused to write the eulogy of Napoleon and once again packed his belongings and left (Diogo et al. 2006, 127).

Correia da Serra crossed the ocean in search of freedom in America. He arrived in Philadelphia in 1812 with letters of recommendation from distinguished French scholars (Carneiro et al. 2000, 608). He taught at the University of Pennsylvania, became a member of the American Philosophical Society, engaged in several scientific expeditions and became close friends with Thomas Jefferson. Correia da Serra was a regular guest at Monticello, Jefferson’s place in Virginia, where the “Abbé’s room” can still be visited today (Teague 1997, Diogo et al. 2006, 132). Recent works
on Correia da Serra in America show how intertwined he was with American politics (Beale Davis 1993, Almeida 2013, Cardoso 2013).

But once again he planned to leave; he entertained plans of moving to Brazil, then a colony of Portugal—or, should one say, its centre, albeit a temporary one. In anticipation of the Napoleonic invasions, the old and now demented Queen D. Maria, her son João (future João VI) and a vast number of courtiers sailed from Lisbon to Rio de Janeiro at the end of 1807, establishing it as the capital of the empire in 1808, only to return to Portugal in 1821 (Wilcken 2006). Politics changed dramatically in 1822, when Brazil became a new independent nation and the liberals won in Portugal.

After years of incertitude and occupation by both Napoleon’s troops and the English who had come to the country to fight the French, Lisbon was again in the hands of the Portuguese. And to Lisbon it was that Correia da Serra moved as well in 1822. No one can say whether this restless character would be ready to move again in a few years’ time; his life was cut short in the following year. He died in 1823 on a trip to the spa at Caldas da Rainha, where he sought treatment for the ailments he had accumulated throughout his life.

In each of the different places he lived, Correia da Serra expanded and cultivated an impressive number of friends, colleagues, interlocutors; a few of them were—like himself—well-travelled, cosmopolitan Portuguese men such as Luis Antonio Verney, his senior, and the Duke of Lafões, co-founder and mentor of the Royal Academy of Sciences. But there was also at least one well-traveled Portuguese woman he interacted with throughout his life: Leonor de Almeida (1750-1839), Countess of Oeynhausen and future Marquess of Alorna, herself a key element in the European Enlightenment. At least once, in 1785, Correia travelled with Leonor and two of her children, who were on their way from Vienna to Lisbon and took him on board in Avignon. A prolific writer of letters and diaries, Leonor portrayed him as great company, delicate and cultivated, full of humour, although a hypochondriac (Horta 2011, 531), and above all an insatiable seeker of knowledge, using every halt of the carriage to go into the bushes and collect plants, which he later dried, studied, compared and named (Horta 2011, 539-540).

Who was this unique person who travelled almost as much as Correia, and, like him, was at home in many different places, and whom, unlike him, belonged to the upper aristocracy, and befriended both the old French aristocracy and the revolutionaries whose ideas nourished her freethinking mind?

Leonor de Almeida was born into the family of the Marquis of Tâvora, whose members suffered major persecution by Pombal and were killed or jailed without any criminal evidence. Leonor grew up imprisoned in a convent in Chelas, Lisbon, with her mother and sister, while her father and brother were held captive elsewhere and her grandparents were tortured to death. Although in jail, she grew up to be a reader and a writer—her literary name would be Alcipe. Forbidden books of science, philosophy and poetry entered the convent in disguised ways; she read Voltaire, Rousseau and the encyclopedists. At the grade, the iron grate separating the imprisoned from the free, there were weekly meetings where she could interact with visiting poets and literati who came from all over the country. They mostly came to hear her readings and her poetry. Among them there was another woman poet, Teresa de Mello Breyner who is likely to have helped distribute Leonor’s writings in outer circles.

Freed at the age of 27, after the end of Pombal’s dictatorship and under the new political regime of the Queen D. Maria, Leonor pursued a life that combined her aristocratic sociabilities and her passion for knowledge and poetry. After her marriage to the count of Oeynhausen in 1779, she moved to Vienna; like the Duke of Lafões, she was exposed to the aristocratic version of the Enlightenment practiced in Vienna, different from the more bourgeois French agenda. She returned many times to Portugal, where she was close to the Queen—around whom, however, political intrigue abounded. Not merely a “Portuguese Mme. Stael”, as she is often referred to, Leonor made a unique contribution to the development of knowledge and went about life in inimitable ways (Anastácio 2009; Horta 2011).

Beyond the gentlemen’s clubs: a gendered account of the Enlightenment and its scientific societies

Leonor had an important influence in the development of Portuguese letters and knowledge in general; she is acknowledged in history textbooks
as one of the *estrangeirados* who brought in novelties from abroad and who herself contributed to culture via her poetry. Although most historical literature from that period refers to *Iluminismo* (the Italianised version for having light, for enlightenment), she preferred the term *Ilustração*, which might better be translated as cultivating, learning (Bello Vazquez 2005, 47-52, Horta 2011). Either way, she was a woman of the Enlightenment, whose life and work have been at the centre of numerous writings (e.g. Anastácio 2009; Horta 2011).

The study of Leonor de Almeida’s life and accomplishments provides us with a counter-narrative to the repetitively male-only accounts of the Enlightenment and the historical scientific societies. Acknowledging her contribution implies a revision of the gendered understanding of the Enlightenment networks; it also leads us to a number of other women who played a role in the literary societies of that time and who have remained until recently almost invisible (Bello Vazquez 2005; see also Bombelles 1979; Monteiro and Costa 2006).

As recent scholarship has shown, there were several women who actively engaged in literature and in promoting knowledge in Portugal at the time; Bello Vazquez (2005) lists the Viscountess of Balsemão (Natércia), Joana Rousseau de Villeneuve, Leonor da Fonseca Pimentel, Soror Teresa Angelica Peregrina de Jesus, the Countess of Pombeiro, the Countess of Soure, Joanna Isabel de Lencastre Forjaz (Aonía), Maria do Patrocínio, Maria Lobo, a nun Maria do Monte, Francisca de Paula Possolo da Costa (Francilia), Ana Bernardina Pinto Pereira de Sousa Noronha, Rita Clara Freire de Andrade, Ana Josefa de Bivar, Isabel Peregrina de Salazar Vasconcelos e Crato, Maria da Graça Fortunata, Margarida Gertrudes de Jesus, Maria Antonia de S. Bouventura e Menezes, Maria Teresa Margarida da Silva e Orta, Catarina Micaela de Sousa Cesar e Lencastre, Micaela dos Prazeres, Angela do Amaral Rangel, some of them frequenters of Leonor’s poetry circle.

Most notable among them was the self-effacing Teresa de Mello Breyner, the Countess of Vimieiro (1739-18??), ignored by most historians of literature, sometimes misnamed as Vimioso and relegated to an insignificant role (see Bello Vazquez 2005). Like Leonor, Teresa was a literary writer of many talents. But what flamboyance Leonor possessed, Teresa had equally in discretion and modesty. She used the pen name of Tirce or Tirse (Bello Vazquez 2005; Horta 2011). But she went without using it as well. When in 1788 the Abbé Correia da Serra read the ticket that should contain the name of the secret author of *Osnia*, the literary work that won the Royal Academy of Sciences award, he found only a note saying that the author did not want to be known, and that they should use the award money “to reward the one who could indicate the best method to cure the olive trees that at the moment were ailing with a new disease.”13 The author was Teresa, but she remained anonymous for a long time. For many years, historians of literature attributed the work to a male author (Anastácio 2002; Bello Vazquez 2005).

A descendent of cultivated Austrian women on her mother’s side—her grandmother Barbara Breunner was an attaché to the Austrian-born Maria Ana, wife of King D. José—and of the prominent house of Ficalho on her father’s, Teresa had remarkable social capital, in addition to an education that set her apart (Bello Vazquez 2005). She married into the powerful house of Vimieiro, equally given to learning and education. Rich, influential, learned and talented, she may have been the shadow figure of the Royal Academy of Sciences, doing the basic work upon which everything rested, yet modestly erasing the traces of her presence (Anastácio 2002, Bello Vazquez 2005, Horta 2011). After her husband’s death, Teresa chose to move to a convent interrupting most of her social activities and the date of her death remains unknown. Much is still to be known; the work of Raquel Bello Vazquez on Teresa de Melo Breyner (2004, 2005) and the circle of women and men who not only contributed to science and learning but also influenced politics is just the beginning of a trend that may lead to a novel understanding of the gendered politics of scientific societies of the past.

**Concluding note**

We began at the present day Academy of Sciences with one of its collections, an intriguing set of objects layered with references to the past, distant places, and transnational networks that all contributed to their reaching the Academy’s cases. Whether the objects indeed circulated via those networks is unimportant: they stand as a metaphor for the insertion of the Academy of Sciences and its members in the networks of the Enlightenment, via which people and ideas circulated. By closely studying the circulation of some of those people and their role in the Enlightenment we reach a scenario that calls for a gendered appreciation of the Enlightenment and one of its icons in Portugal, the Academy of Sciences.

---

13 “Ao abrir o bilhete, que devia conter o nome do Author da Memoria coroada, se achou que elle se nao dava a conhecer, e so desejava que o premio fosse aplicado a quem indissece o melhor metodo de curar o mal que actualmente ataca as oliveiras em varios sitios deste Reino” (Gazeta, transcribed by Bello Vazquez 2005, 58-88).
Acknowledgements

This chapter results from research conducted within the project SOCSCI Scientific societies in contemporary science (PTDC/CS-ECS/101592/2008), under the coordination of Ana Delicado at the Institute of Social Sciences, University of Lisbon. I thank Ana Delicado and all the team members for the simulating intellectual exchanges, and I cherish the privilege of supervising research assistant Patrick Figueiredo in the historical component of the collective project. The first version of our reflections on the relationship between Banks and Serra was explored in the paper “Enlightened networks: Joseph Banks, Correia da Serra and the development of the Royal Academy of Sciences in Lisbon”, presented by Bastos and Figueiredo at the conference Exploring Empire: Sir Joseph Banks, India and the ‘Great Pacific Ocean’: Science Travel, Trade, Literature, Culture, National Maritime Museum, Greenwich, 24-25 June 2011. After the presentation I was able to engage on a brief reading of Banks correspondence at the Museum of Natural History in London. Further reflections on the networks of the Enlightenment possible were on a visit to Naples in September 2012 under the project The science, clinic and art of syphilis (FCT/HC/0071/2009), coordinated by Cristiana Bastos at the Institute of Social Sciences. Rich discussions about circulating objects and knowledge networks arose in the context of the project Colonial Mimesis in Lusophone Asia and Africa (PTDC/CS-AN T/101064/2008), coordinated by Ricardo Roque at the Institute of Social Sciences, of which this text is also a result. I am thankful to all my colleagues and interlocutors for their contributions to these reflections, in particular to Nuno Monteiro for sharing his knowledge on Lâbes and his entourage, and to Maria Teresa Horta for sharing her insights on the network of women and men that gave life to the Royal Academy of Sciences.

Bibliography


