

Science Diplomacy in the Republic of Letters: The Naturalist Abbé Correia da Serra

An InsSciDE Case Study

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"The Abbé's diplomatic ability consists principally in affecting to be anything but a diplomat. He introduces himself as a familiar acquaintance, to talk literature and philosophy, as a domestic intimate, to gossip over a cup of tea."

- *Memoirs of John Quincy Adams*, in Davis 1993, 60.

Abbé Correia da Serra (1751–1823), a leading figure of the Portuguese Enlightenment, spent most of his life outside Portugal due to political and religious persecutions. He was a naturalist recognized by European botanical luminaries for his innovative ideas and his mediating skills, catalyzing communication between different scientific communities. Correia da Serra's life story and extensive correspondence suggest that his scientific accomplishments cannot be disentangled from his diplomatic activities, first as a member of the Portuguese Legation in London (1801), then as Ambassador of Portugal to the United States of America (1816–1820). Their conjoint analysis enables us to detect three varieties of science diplomacy in the practice of Correia da Serra: informal, formal, and imagined. By calling attention to the historical dimension of what today is called science diplomacy it is possible to detect in the past many instances in which science was used as a tool for diplomacy by a variety of actors. The *longue-durée* perspective helps us understand how science diplomacy is built and how it came of age.

Keywords:

Republic of Letters, American Hemisphere, Correia da Serra, Thomas Jefferson, Neutrality Act



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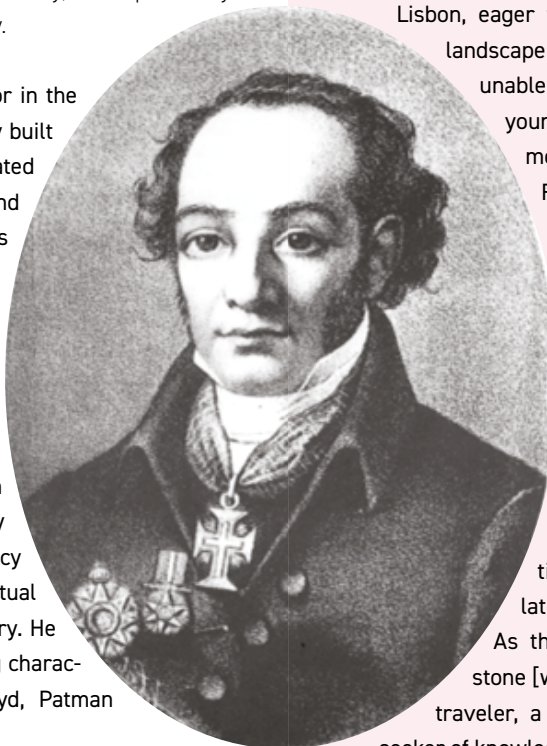
In his turbulent life, Abbé Correia da Serra played diplomatic roles twice. The first, in England, as advisor to the diplomatic legation and business agent of Portugal in London, during 1801, just before escaping to Paris; the second, between 1816 and 1820, as the first ambassador of Portugal to the United States of America.

Two diplomatic roles: UK and USA

Although there are no details of the scientific activities mediated by José Francisco Correia da Serra while serving at the Portuguese legation in London, one knows that throughout his stay in London (1795-1802) he informally performed functions close to scientific and technical espionage, especially at the beginning of his British stay. At the request of Rodrigo de Sousa Coutinho, a Portuguese diplomat and naturalist, then secretary of state of naval affairs, Correia da Serra sent to Portugal dry and live vegetable specimens, books, diverse material, including catalogs and instruments, maps of the defense plan of the ports of the British Isles, and hydrographical charts. His letters discussed medical and public health issues, and referred to the first vaccines.

The activities of Correia da Serra in England fall under what is usually called informal science diplomacy, and specifically science and technology for diplomacy.

The abbot's credibility as ambassador in the United States of America was largely built upon his scientific capital, accumulated over the preceding decade in England and France. He was acknowledged as a leading European naturalist, expert in botany and geology, versed in subjects ranging from theology to political economy, recognized as a brilliant communicator, educator, and promoter of junior scientists. Together with his membership in freemasonry, the transfer of authority and prestige from science to diplomacy gave him quick access to the intellectual and political circles in the new country. He performed multiple functions sharing characteristics of science diplomacy (Lloyd, Patman 2015; Ruffini 2017).



Portrait of young Correia da Serra. Courtesy of FLAD

Protagonists: The abbot and his networks

José Francisco Correia da Serra, known as Abbé Correia da Serra (1751–1823), was a leading figure of the Portuguese Enlightenment. His rich life and career are hard to define. He was a clergyman who seldom exercised religious functions; he was a freemason; he was a naturalist, an impressive contributor to the field of botany and an interlocutor of the network of naturalists of the Republic of Letters which included luminaries such as Joseph Banks, James Edward Smith, Alexander von Humboldt, Alphonse de Candolle, Georges Cuvier, to name a few.

The abbot however was furthermore recognized for his mediating skills as a catalyst in the communication between different scientific communities, a facilitator who encouraged and supported a transnational network of scientists; additionally he was a founding member of the Academy of Sciences of Lisbon, eager to change for the best the scientific landscape in his home country, although he was unable to build his own circle of students or young scientists in Portugal, as he spent most of his life in Italy, Great Britain, France and the USA, due to political and religious persecution.

Appropriating a concept used by historians, we define Correia da Serra as an *estrangeirado*, in the sense of a European-oriented intellectual, an active member of an influential and fluid network of diverse people united by the will to change the Portuguese cultural, scientific, and technological landscape of the late 18th century and early 19th century. As the song says, he was like “a rolling stone [which] gathers no moss”, a compulsive traveler, a citizen of the world, a globetrotting seeker of knowledge, prestige, and recognition (Simões, Diogo, Carneiro 2012; Raposo et al. 2014).

Personal, scientific, and political networks in the USA

Correia da Serra arrived in the United States in 1812, at the age of sixty. He was attracted by the liberal ideals of the young republic, consonant with his own political inclinations. He brought with him letters of recommendation from influential writers and diplomats, as well as from prestigious scientists.

While he waited to receive from the king of Portugal the news of a diplomatic post (which incidentally took four years to arrive), he enrolled in the cultural and scientific life of Philadelphia. He became a member of the American Philosophical Society, presided by Caspar Wistar, and of the informal Wistar Party, a restricted circle of intellectuals who met weekly; he also became a member of the Academy of Natural Sciences of Philadelphia. By 1815, he was delivering lectures and teaching courses at both societies and was probably the first to introduce the de Jussieu system of plant taxonomy in the United States (Agan 1926, 20). He advised on the reorganization of the University of Pennsylvania, suggesting the creation of a faculty of physical sciences and rural economy, in clear consonance with the utilitarian view of science appropriate to a country under construction.

He became also acquainted with local naturalists, intellectuals and editors of literary magazines and journals, including the *American Review of History and Politics*, in which the abbot was to publish historical reflections on the past, present, and future state of Europe. In 1813, he visited President Madison in Washington and met in Monticello, Virginia for the first time with Thomas Jefferson. This meeting marked the beginning of the long-lasting friendship of two kindred spirits despite all

that might seem to separate them. Freemasonry and scientific ideals united a deist and an unconventional catholic clergyman (Maxwell 2003, Carneiro, Simões, Diogo 2012). Correia da Serra became such a regular visitor to Monticello, Jefferson's estate, that one of the guest chambers is still called the "Abbé's oom."

Jefferson confided to Wistar that Correia da Serra was "the best digest of science in books, men and things that I have ever met with; and with these the most amiable and engaging character". They regularly discussed scientific matters of common interest. No wonder, then, that Correia da Serra was involved in the educational program of Jefferson, materialized notably in the creation of the University of Virginia. He not only advised on the definition of curricula but also on the criteria for hiring teachers, which presupposed, in his view, the admission of foreign teachers to circumvent New England parochialism.

Despite advanced age and chronic health problems, Correia da Serra traveled extensively throughout the United States, especially before becoming ambassador. He was soon one of the greatest connoisseurs of the country's natural landscapes, diverse climates, flora, and geological characteristics, as well as populations and their habits. He visited the states of New England, Pennsylvania, Virginia, Ohio, Kentucky, Tennessee, Georgia, North and South Carolina and the Cherokee lands. Traveling frequently with friends, he took advantage of these trips to make new acquaintances. These were also occasions to train a generation of naturalists and contribute to the professionalization of an emerging scientific community.



President Jefferson (by Rembrandt Peale); Monticello estate (by Matt Kozlowski) and the Abbé's Room. Wikipedia, public domain; © CC BY 2.5; Courtesy of FLAD

Sciences and stakes: The Abbé's double role in advising the young United States and his own government

Correia da Serra promoted a utilitarian view of science, anchored in the inventory and study of natural resources, with a view to their economic use and the consolidation of the political independence of the United States. In this context, he wrote to President Madison about the exploitation of mineral resources, such as iron, copper, lead, salt, and silver, and insisted that revenue should be taken from public lands. He also began an exchange with Jefferson, and others, on the characteristics and cultivation of various plant species of economic interest, such as chestnut trees, coffee and sugar cane, or the use of pozzolana as cement in the construction of cisterns and aqueducts. The detailed knowledge of the extensive North American territory was recorded in a single article published in 1818 in the *Transactions of the American Philosophical Society*, which describes the formation and nature of the soil of Kentucky and explains its exceptional fertility as an outcome of its specific geological character.

In all these instances, Correia da Serra informally exercised a kind of "science for diplomacy", in the sense of using scientific expertise to advise past and present philosopher presidents on political economy, thereby further amassing scientific credit for his future diplomatic functions.

In his capacity as ambassador after 1816, Correia da Serra carried out research in Philadelphia and in the main ports of the American Northeast, reporting economic and political findings relevant for commercial trade between Portugal and the United States. These pertinent "diplomacy for science" reports did not, however, get the attention they deserved from the Portuguese government as potential tools of science policy.

Portuguese ambassador in Washington and the Neutrality Act

In 1816, Correia da Serra was finally appointed Ambassador to Washington, a gesture that the abbot summarized with characteristic wit: "It is somewhat like the persimmon fruit, comes late, and has been ripened by hard frosts". Long recognized by the American elite as a liberal and exceptional naturalist who shared the ideals of the philosopher presidents, Correia da Serra confided to President Madison that as a new ambassador he found himself in a very unusual position: his strong attachment to the young nation made him feel like a "family minister". John Quincy Adams, at the time Secretary of State and later president, who had a great appreciation for Correia

da Serra, noted in 1819 that his diplomatic ability was anchored in intellectual and friendly debates over a cup of tea, particularly attractive to the philosopher presidents, that is Correia da Serra was an expert in the practice of "tea-cup diplomacy". Jefferson, of course, rejoiced at the nomination, for he wished Correia da Serra to settle in the United States, and anticipated that the post would leave him plenty of time for botanical investigations. But this was not to be.

The diplomatic situation of the American continent proved to be very difficult for Portuguese interests, especially due to the support of some North Americans, installed in South America, to anti-colonial, and by extension anti-Portuguese movements. There were constant acts of piracy against the Portuguese fleet by ships from the Spanish colonies in South America, often perpetrated by Americans with the complacency of local authorities. Brazil, then still a Portuguese colony (though not for long), also was politically unstable, a situation intensified by the declaration of independence by Pernambuco, followed by the quest for international, mostly American, recognition. Correia da Serra was forced to file various protests to the Secretary of state James Monroe, soon to become president. The ambassador's action led to the approval by Congress of the Neutrality Law, in 1817. This law became a central piece of the Monroe Doctrine, which advocated the non-interventionism and isolationism of the United States in matters of international politics.

In this crisis of American international policy relations, Correia da Serra exercised science diplomacy *avant la lettre*. His success in influencing the host country's posture resulted mostly from the capital he had accumulated as a masonic polymath.

Although Monroe, in his capacity as president of the United States, often reminded his Secretary of state John Quincy Adams (also a future president) of the importance of Correia da Serra as a diplomat and a cultured man, the fact is that he did not always do justice to the protests by the Portuguese diplomat. As stated before, the abbot's diplomatic ability, built largely on impressive scientific credentials, consisted principally in affecting to be anything but a diplomat, impersonating the role of a friend who dropped by for just a cup of tea. In Adams' words, Monroe saw through this, "but having no relish for literature and philosophy, and no time to listen and laugh at jokes, he always kept the Abbé (...) at arm's length".

Imaginary worlds of science diplomacy

In the end, the Portuguese ambassador felt increasingly powerless and disillusioned with American politics and politicians. His hopes nurtured in an American nation built on the egalitarian ideals of the Enlightenment gave way to weariness and skepticism, and Correia da Serra became progressively more conservative. By 1820 he planned to move to Brazil and hoped to play a decisive role in the definition of "Public Instruction", in the context of the project of an "American Hemisphere", autonomous vis-à-vis Europe, which his masonic friend Jefferson discussed with him.

From the end of the eighteenth century, part of the Portuguese intelligentsia as well as some politicians advocated the idea of a "Brazilian Portugal" as an extra way of neutralizing, through integration, local Brazilian nationalisms. After the transfer in 1807-08 of the capital of Portugal from Lisbon to Rio de Janeiro, following the Napoleonic invasions, this project gained a new impetus and new advocates. Correia da Serra was among them.

Named by his American friends "our Socrates" or the "Franklin of Portugal", Correia da Serra shared with Jefferson similar views on politics and history, based on the structural and integrative function of the sciences. His diplomatic practice, and historical reflections in the American Review of History and Politics on the past and future of Europe, made him particularly attuned to the Jeffersonian geopolitical project.

Therefore, Correia da Serra was prepared to explore what we may call science diplomacy imaginaries (Jasanoff, Kim 2015), when designing, together with Jefferson, a project to build a new international order, splitting the American continent between the United States in the northern hemisphere and the Brazilian Portugal in the southern hemisphere. This utopian vision, grounded in their shared views on politics and history, was guided by the structural and integrative function of science.

In Jefferson's words to Correia da Serra, "nothing is so important as that America shall separate herself from the systems of Europe and establish one of her own. Our circumstances, our pursuits, our interests are distinct. The principles of our policy should be also. All entanglements with that quarter of the globe should be avoided if we mean that peace and justice shall be the polar stars of the American societies."

As a science diplomacy imaginary, the American Hemisphere project embodied the vision of a new geopolitical continental block, fighting for hegemony vis-à-vis the old European continent.

Conclusions:

The Abbé's three science diplomacies and their impact on the geopolitical order

Through three varieties of science diplomacy – informal, formal, and imagined – Correia da Serra helped to mold a new geopolitical order, both real and imaginary. Vis-à-vis the Portuguese government as ambassador in Washington he exercised functions which may be dubbed **formal diplomacy for science**. Vis-à-vis the American philosopher presidents and the American government his scientific credit helped build a strong diplomatic role, that is, **the success of his formal science diplomacy was grounded in informal science for diplomacy**.

Correia da Serra developed his influence through field trips, education of young scientists, advice on university organization and discussions on the scientific agenda of the new country; he weighed on new geopolitical constructions through his "tea-cup diplomacy." His proximity to the high spheres of American government was such that Correia da Serra acted as a double agent, not in the usual sense of a Portuguese diplomat secretly serving the United States of America but, on the contrary, as someone considered a citizen of the world by his peers, who furthermore dreamt of becoming a founding father of the new political American Hemisphere. In this last instance, Correia da Serra, together with Jefferson, were scientist diplomats enrolled in the practice of generating geopolitical and scientific imaginaries.

Correia da Serra's diplomatic activities show why the history of science diplomacy is relevant. By calling attention to the historical dimension of science diplomacy, a quite novel term associated with a recent professional practice, it is possible to detect in the past many diverse instances in which science was used as a tool for diplomacy by a variety of state and non-state actors, and as part of formal or informal networks. By calling attention to the plasticity of the concept of science diplomacy, the *longue-durée* perspective helps us understand how science diplomacy is built and how it came of age.

Study Questions

- Are there instances today of scientist-diplomats fostering technoscientific activities that could determine a new world order?
- Is their primary objective technoscientific, geopolitical, or something else?
- Are science and technology important for diplomacy?
- Is diplomacy important for the development of science and technology?
- How should we deal with hybrid spaces and practices involving scientists, engineers, and diplomats?
- Have science, technology, and diplomacy equivalent power in negotiations?
- Why is science diplomacy particularly suitable to illustrate the concept of soft power?

Endnotes

- Throughout the case study, quotes (including the epigraph) are taken from Davis, R B (1993) *The Abbé Corrêa da Serra in America, 1812-1820*. The contributions of the diplomat and natural philosopher to the foundation of our national life. Providence, Rhode Island: Gávea-Brown. Citations pp: 60, 37, 200, 52, 202, 50, 60, 51, 60, 106, 324, 298-299.
- Cover image : *The Abbé Correia da Serra*, by Domenico Pellegrini (1759-1840). Source: commons.wikimedia.org/wiki/File:Abade_correia_da_serra.jpg. Public domain.

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Selected Publications

- Diogo MP, Simões A, Carneiro A (2021) *Correia da Serra, entre ciência, religião e diplomacia*. In Simões A, Lourenço MC, Silva JA (eds) *Ciência, tecnologia e medicina na construção de Portugal. Razão e progresso, século XVIII*. Tinta da China, Lisboa, pp 255-274
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