

Anniversaries

Travels of Correia da Serra 250 years ago



CORREIA DA SERRA (1751–1823): “*JOURNAL D’UNE COURSE EN AVRIL 1774*” THE ART OF OBSERVING AND DESCRIBING

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JOURNAL D’UNE COURSE EN AVRIL 1774

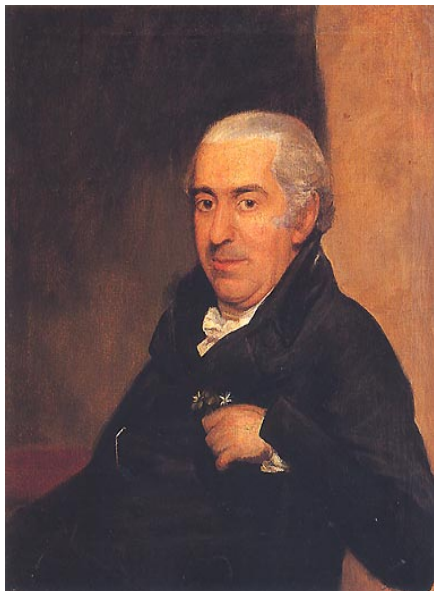


Figure 1. Portrait of Correia da Serra by Domenico Pellegrini (1759–1840).
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The Portuguese naturalist José Francisco Correia da Serra is the author of the manuscript “*Journal d’une Course en Avril 1774* (Journal of a travel in April 1774)” written 250 years ago. As a result of religious and political persecution, during his lifetime he frequently lived as an exile. He spent his childhood and youth (1757–1777) in Italy to where his family of Jewish ancestry had moved fearing the Inquisition.

His education was greatly influenced by Antonio Genovesi (1713–1769), an advocate of the Enlightenment and of John Locke’s (1632–1704) theses on political economy, with whom he became close, and Luís António Verney (1713–1792), also a Portuguese *émigré* and pedagogue, who awakened in young Correia da Serra an interest in botany. It was during this period that he began corresponding with Carl Linnaeus (1707–1778) and met Alberto Fortis (1741–1803), the author of the bestselling book *Viaggio in Dalmazia* (1774), both outstanding influences at this stage of his formative years.

On Monday, 4 April 1774, Correia da Serra left Rome, accompanied by the Belgian physician, Jean Demeste (1743–1783), whose main scientific interests—chemistry and mineralogy—somehow complemented his, more oriented to botany. They travelled along the Ligurian coast and Correia da Serra recorded daily observations, reflections, and critical comments in a 28-page manuscript written in French, to which a two-page *Index* was appended. This comprised three sections, *Mineralia*, *Vegetabilia* and *Animalia*, listing 150 items identified throughout this excursion. The journey lasted 20 days, from 4 to 24 April, during which from Rome they headed northwest to Palo, Civitavecchia, Alumiere and the plains of Tolfa. They then returned to Civitavecchia and headed to Cornetto, Leghorn, and Pisa. Having returned to Leghorn, the next visit was to Porto Ferrajo, located on the isle of Elba, then finally returning to Rome.

The “Journal” offers a detailed description of the places they visited, the plants identified and collected, the animals, and minerals observed, the mineral content of soils and waters, as well as considerations on different mines and mining. He focused his attention on the above-mentioned cities, their inhabitants, social classes, the role of the numerous clergy, that were deemed

by him of no use except for those clergymen and women who dedicated themselves to education. The living conditions, air quality, health, schools, monuments, libraries, and scientific facilities all were of interest and were the subject of his comments and criticism, together with considerations on economic policies and taxation.

This travelogue was the first of many written by the author, in which mineralogy and geology play a significant role, along with botany, zoology, economy and history. The manuscript also brings together the main topics and lines of his research, that became increasingly more narrowly focused and refined throughout the author's life. First and foremost, in his later years he carried out fundamental research on botany which resulted in important contributions; secondly studies of geology were closely linked to those on geography and eventually, to history. In his view, the history of each country would be complete only if it took into consideration on par with politics and religion its natural history, which ultimately determined the characteristics of peoples and regions.

In this diary he already expressed his criticism of Linnaeus, by arguing that naturalists should be seeking to find structural affinities (similarities), rather than differences, between species belonging to different natural kingdoms by using the comparative method, anticipating his more explicit endorsement of the idea that nature follows a single plan. He also discussed the impact of marshy salt pans and iron mines in Porto Ferrajo, notably on fish and reptiles: their colour having turned brownish due to the presence of iron, demonstrating the impact of the environment on animals and plants, a topic that he would later explore further.

This initial journey and diary opened the way to others. In 1776, Correia da Serra travelled throughout the "Patrimoine de Saint Pierre" (The Papal States), recording precise descriptions of lithological layers and minerals. The following year, he travelled to Portugal via Cádiz, Spain, writing a travelogue such as that of the 1774 "Journal", in which natural and human landscapes are described and personal impressions and opinions expressed.

By 1785 and 1786, having returned to Portugal he wrote, this time in Portuguese, about two excursions throughout the province of Alentejo, southern Portugal. In the first description, he claimed that the history of the motherland did not begin with the origin of its inhabitants but with its very origin. Accordingly, he described the physical "theater," that is, he recorded the "geognostic" description of this province, but in interpreting and explaining geological observations he compared theories of various naturalists, such as those of Georges Leclerc Buffon (1707–1778), Georges Cuvier (1769–1832) and Johann Jacob Ferber (1743–1790). The second manuscript complements the former by focusing on various archives and the history of Alentejo.

In the same vein, Correia da Serra published his first article, in 1799, while he was living in London. He described fieldwork carried out with Sir Joseph Banks (1743–1820) on the coast of Lincolnshire. He focused on the formation of the islets, only visible during low tide, which were essentially composed of rotten trees, associating in this way geology and botany. He argued that in geology more than any other field of natural history one should separate observed facts from ideas that might occur in the mind of the observer, and accordingly he first presented facts, and afterwards his conjectures followed.

Although these kinds of excursions and diaries were then common practice among naturalists, the observation and recording of a variety of both natural and manmade environments almost inevitably led to the establishment of interrelationships between what was being observed. In this way these travelogues decisively contributed to shaping not only a style of writing, but also a holistic and integrated view of different disciplines, emerging in the transition period from the Enlightenment to Romanticism. Thus, Correia da Serra's 1774 travelogue becomes relevant

not only because it hints at the research topics he would study in depth throughout his life, but also shows this very transition. His account already presents both the characteristics of a field-work notebook and those of travel literature. Personal impressions, emotions, and incidents were recorded together with detailed scientific observations as well as economic, and historical considerations constituting a narrative based on the general idea of a reunification of Nature, Humankind, and its own nature. With its pre-romantic overtones, it prefigures a genre, which intentionally opposed strict rationalism of the Enlightenment and flourished during the Romantic period, epitomized by Alexander von Humboldt's (1769–1859) famous *Personal Narrative of a Journey to the Equinoctial Regions of the New Continent* (1821) and *Kosmos* (1845).

A LIFE OF MANY JOURNEYS

Following the years spent in Italy, when Correia da Serra was 26 years old, he returned to Portugal, where he became involved in the activities of the Royal Academy of Sciences of Lisbon. In 1795, however, he fled to London because the kingdom's General Intendant of the Police became suspicious of him and of some of his fellow academicians. Correia da Serra had expressed publicly his liberal leanings and sheltered in the premises of the Academy the French Girondin and Freemason physician, Pierre Broussonet (1761–1807).

In London, he worked in the Portuguese Embassy and became friendly with James Edward Smith (1759–1828), first president of the Linnean Society, and Sir Joseph Banks, then President of the Royal Society. He initiated Robert Brown (1773–1858), who later became famous for the “Brownian motion,” in the Linnaean methods of plant classification and recommended him to Banks for the position of his private librarian.

But even in London Correia da Serra was threatened, this time by the Portuguese Ambassador and his nephew, a high-ranking dignitary of the Inquisition. He sought refuge in Paris, in 1801, where he focused on botanical research and was stimulated by the intellectual atmosphere of the Jardin de Plantes. He based his work on plant classification on the method of Antoine Laurent de Jussieu (1748–1836). Correia da Serra pioneered the transposition of the principles of comparative anatomy from zoology to botany, introduced the structural concept of “symmetry” (“the arrangements of the parts, which results from their relative position and their forms”) to be applied in taxonomy and systematics and focused on the role of the environment in inducing diversity. Augustin-Pyramus de Candolle (1778–1841) considered Correia da Serra his intellectual mentor, and the most sagacious among the group of naturalists of which von Humboldt and Cuvier were part.

Meanwhile, the Napoleonic invasions led the Portuguese King and the Court to flee Lisbon and settle in Rio de Janeiro, Brazil, then a Portuguese colony. During the third invasion (1810), Napoleon ordered Correia da Serra to write a document endorsing his policies, but he refused. In 1813, he decided to move to the USA as in Paris he had become friendly with the Marquis of Lafayette and the Dupont de Nemours and empathized with their ideas. In 1816, he was appointed Ambassador of Portugal to the USA at Washington D. C. but was based in Philadelphia. He then engaged in botanical research, delivered lectures at the American Philosophical Society of which he became a member in 1812, and the University of Pennsylvania, and contributed to lay down the foundations of an American community of naturalists. He eventually became adviser to Thomas Jefferson—notably on the organization of the University of Virginia—who reserved a room in his house, in Monticello, that is known to this day as the Abbé's room. As a diplomat, he contributed to the Neutrality Act of 1817, but this did not prevent the attacks of American pirates on the Portuguese fleet in South America nor the American endorsement of the independence movements in Brazil.

Disillusioned by American politics, in 1820 Correia de Serra was about to leave for Brazil, to preside over the local Royal Academy of Sciences and Arts, but this plan was never realized. In Portugal, the Liberal Revolution had meanwhile taken place, and following his arrival in Lisbon, in 1821, he became a member of the Constituent Assembly. Two years later, he died in the spa town of Caldas da Rainha.

Further Reading

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