Charles Darwin (1809–1882) is one of the most brilliant minds in the history of science. This article proposes philatelic iconography to offer a didactic description of his life and work. The images are analyzed and related to relevant aspects of our character.

1. Introduction

Philately can be considered an auxiliary branch of history as events significant for society are recorded on postage stamps. In recognition of their contributions to society, postage stamps often commemorate scientists, their experiments, and their publications. Undoubtedly, the most important biological theory of the 19th century was Darwinian evolutionism. The Origin of Species (1859) by Charles Darwin resulted from a large amount of empirical data and is a milestone in the history of science. It posited the theory that living organisms evolved from a common ancestor over time. The starting point of this theory is the variations that occur within species of plants or animals; variations that occur naturally and can act as the substrate for evolution by natural selection. If a variation is heritable and beneficial to the survival or reproduction of its own, it is likely to be perpetuated in the next generation to a greater extent than variations that do not have such an advantage, which would tend to die out. This process was called natural selection by Darwin. Now, I move on to using philatelic images to document the life and work of Darwin.

Images are considered an effective medium for the teaching-learning

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**Figure 1.** Postage stamps commemorating the 200th anniversary of Darwin’s birth. (Postage stamps from the author’s collection.)

process. Comenius, the father of didactics (the science of teaching), proposed the idea for didactic purposes. Locke proposed teaching history in a pleasant way, to the point of considering it a delight. Kant highlighted the importance of images in the teaching-learning process; he considered it an awakening of the senses and a path to understanding. Thus, this proposal to teach using philatelic images uses the richness of the images represented by philatelic iconography and allows for the possibility of a different teaching-learning process (as Locke would say: Enjoyable).

2. The Second Centenary of Darwin’s Birth

Charles Darwin was born in 1809 in Shrewsbury, England. In 2009, several countries issued postage stamps commemorating the second centenary of his birth (Figure 1). Examples include stamps 1 and 2, issued by Spain and Great Britain. The British stamp shows a photograph of Darwin around 1879. In 1825, Charles Darwin went to Edinburgh University to try his hand at medicine, where his older brother Robert was also studying medicine. While there, he did coursework in geology and zoology and became interested in natural history, especially invertebrate sea animals, which he studied throughout the rest of his life. Abandoning the idea of becoming a physician, Darwin enrolled at Cambridge University in 1827 to qualify for the clergy, although he continued to pursue his interest in natural history [2].
3. Aboard Beagle

Just after Darwin’s graduation in 1831, the British navy ship, the Beagle, was about to set sail to circumnavigate the Earth, and the captain was seeking a naturalist to join the crew. Darwin was happy for the opportunity to participate in the expedition. In December 1831, the Beagle left England and crossed the Atlantic Ocean to reach South America [3]. Young Darwin devoted most
Figure 3. Postage stamps on the centenary of Darwin’s visit to the Galápagos Islands. Postage stamps from the author’s collection.

Moreover, on the Beagle, he was following a geological research agenda outlined in the second volume of Charles Lyell’s Principles of Geology, which suggested that paleontological data alone could provide an insight into the laws that govern the appearance of new species [3].

In the autumn of 1835, the Beagle spent five weeks in the Galápagos Islands, where Darwin observed the now famous giant tortoises and finches. The Beagle then sailed to Australia, visited Cape Town, returned to South America, and finally returned to England in October 1836 [1]. During his historic Galápagos visit in 1835, Darwin spent nine days making scientific observations and collecting specimens on Santiago (James Island). During the course of this visit, Darwin ascended twice to the Santiago highlands. There, near the springs located close to the island’s summit, he conducted his most detailed observations of Galápagos tortoises [4]. The postage stamps in Figure 3, issued by Ecuador in 1936, commemorate the first centenary of Darwin’s visit to the Galápagos Islands. The iconography relates a map of the islands and the giant tortoise (Chelonoidis nigra).

4. Darwin’s Publications

Darwin posited that over countless generations, small modifications would add up, resulting in new species. Thus, natural selec-
tion acting on heritable variation would drive evolution. Darwin managed to solve the greatest riddle in biology, but he delayed publishing his groundbreaking discovery for two decades. He wanted to gather evidence to prove his theory beyond any argument [1]. On 24 November 1859, the first edition of this fundamental work of Darwin was issued under the title *On the Origin of Species by Means of Natural Selection* [5], a foundation of the theory of evolutionary biology. Postage stamp 7 (issued by Italy in 2009) also commemorates the second centenary of Darwin’s birth and connects the first edition of *The Origin of Species* with a series of human and anthropoid skeletons based on Thomas Henry Huxley’s (1825–1895) *Evidence as to Man’s Place in Nature* (1863) (Figure 4).

Postage stamps have also commemorated another publication of Darwin. Stamp 8 (issued by Gibraltar in 2009) has a portrait of Charles Darwin from 1854 and also refers to *The Voyage of the Beagle*. *The Voyage of the Beagle* contains the memoirs of Darwin’s voyage and scientific annotations in biology, geology, and palaeontology, with the first observations of his theory of evolution by natural selection. In the iconography of stamp 8, you can also see the Beagle ship and Darwin’s work *The Zoology of the

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**Figure 4.** Postage stamps and *On the Origin of Species by Means of Natural Selection*. (Postage stamps from the author’s collection.)

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1 A curious fact in Darwin’s biography is that 2009 marks the 200th anniversary of his birth and the 150th anniversary of his monumental work. On stamp 4, you can read this coincidence.

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In the 1872 edition, the title was changed to a shorter *The Origin of Species*. On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life is the full, unwieldy title of the book written by Charles Darwin and published in London by John Murray on 24 November 1859 [6].
Figure 5. Postage stamps, *The Voyage of the Beagle* and *The Zoology of the Voyage of HMS Beagle*. (Postage stamps from the author’s collection.)

The reader can consult the work in the following link http://darwin-online.org.uk/converted/pdf/1841_Birds_F.9.3.pdf, the postage stamp image is on page 244.

Voyage of HMS Beagle (1838–1843), which was divided into 5 parts: Part 1 Fossil Mammalia, Part 2 Mammalia, Part 3 Birds, Part 4 Fish and Part 5 Reptiles & Amphibia. The stamp shows Darwin’s Tanager and connects to Part 3 Birds².

Stamp 9, issued by Great Britain in 2009, represents four species of finches in the Galapagos, published in the *Journal of Researches* in 1845. Postage stamps 8 and 9 (Figure 5) also commemorate the second centenary of Darwin’s birth. Postage stamp 10 issued by Portugal in 2009 connects with Part 1 Fossil Mammalia. Darwin collected the complete skull and lower jaws of Toxodon platensis³, the strange animal that he discovered in Uruguay, and that contributed to his theory of evolution [3]. The iconography on the postage stamp shows Darwin in a watercolour portrait by George Richmond in the late 1830s. Postage stamp 11 (Micronesia, 2010) connects with a note by Darwin in mid-1837⁴ on page 36 of *Notebook B: Transmutation of Species*, he wrote “I think”...
above the first known sketch of an evolutionary tree by Darwin. Postage stamps 10 and 11 can be seen in Figure 6.

5. The Centenary of His Death

Darwin continued his work in various branches of biology and published, among other works, *The Origin of Man and Selection in Relation to Sex* (1871) and *The Expression of Emotions in Man and Animals* (1872). Darwin, probably the greatest biologist of all times, died in 1882. He was laid to rest in Westminster Abbey.

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*Figure 6.* Postage stamps, Part 1 *Fossil Mammalia* and note of 1837. Postage stamp 10 commemorates the second centenary of Darwin’s birth. (Postage stamps from the author’s collection.)
Figure 7. Postage stamps commemorating the 100th anniversary of Darwin’s death. (Postage stamps from the author’s collection.)

Darwin’s geological studies carried out during the world cruise were published in several articles, including The Structure and Distribution of Coral Reefs, 1842, Geological Observations on Volcanic Islands, 1844, and Geological Observations on South America, 1846 [5].

[1]. In 1982, Great Britain commemorated the centenary of his death with postage stamps 12 and 13 (Figure 7) featuring Darwin with Galapagos Tortoise (Chelonoidis nigra) and Marine Iguana (Amblyrhynchus cristatus). India also issued a stamp that year in his honour (postage stamp 3, Figure 2).

6. Epilogue

This work is not intended to be an exhaustive biography of Darwin. The objective is to build with philatelic images a didactic biography that can be discussed between teachers and students in the classroom. Postage stamps have made it possible to document the years of birth and death, the expedition on the Beagle, and especially establish a connection between the philatelic images and
Darwin’s publications: *The Origin of Species* and *The Zoology of the Voyage of HMS Beagle*. With these 13 stamps presented, topics from the history of biology, the importance of scientific expeditions in the 19th century, to concepts such as biological evolution, natural selection, etc., can be introduced.

**Suggested Reading**


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