

"The digital world is like the Great Library of Alexandria and we are like those monks of the Middle Ages"

SCIENCE AND ADVENTURE, PAST AND PRESENT

The presentation of the Virtual Library of Illustrated Scientific Expeditions and the WindSled in the auditorium of the CSIC (Spanish Scientific Research Council) offered an exceptional opportunity to discuss and contrast the scientific expeditions of the 18th and 19th century with those currently being undertaken. In his speech, the polar explorer Ramón Larramendi highlighted the link that binds together science and adventure, past and present: "You cannot compare the expeditions of the 18th and 21st centuries, but what they do have in common is passion and reason."

This same passion has led to Fundación MAPFRE and the Larramendi Foundation employing the most innovative digitization methods to present before today's public the fascinating adventures of those scientists who, full of confidence and guided by reason, set forth in order to discover distant lands throughout the 18th and 19th centuries in an attempt to understand the laws of nature.

Freely accessible to the general public, this is a library which links the digitized works held in different institutions around the



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world, as well as its own. "The digital world it is like the Great Library of Alexandria and we are like those monks of the Middle Ages; we certify and catalog the works to highlight the exploits of those adventurous scientists," declared Luis H. de Larramendi, president of the foundation that bears his father's name, at the presentation. The virtual library, fruit of two years' work by both foundations, brings together works by Spain's greatest scientific illustrators, from Félix de Azara or Jorge Juan to Alejandro Malaspina and José Celestino Mutis, among others.

Surely few people know that Jorge Juan, on an expedition to Quito that lasted 10 years, was the one who obtained the length of one terrestrial meridian degree, which made it possible to determine the shape of the Earth with precision and plot new geographic charts. Or that Mutis carried out his first botanical studies in Bogotá, where he studied medicinal plants such as quinine for the treatment of all kinds of diseases; or that Félix de Azara, considered a precursor of Darwin's ideas, was the one who discovered the Rio de la Plata region and all that this area had to offer in terms of geography, fauna, resources, customs...

Surveying, drawing up new maritime routes and discovering unknown species were just some of the most common goals. However, in many cases, their conclusions were not restricted to purely scientific goals. The scientists were also agents at the service of the crown and, at times, the aim of the expedition went beyond mere exploration or scientific study.

This was the case of Malaspina, who led the last of the great illustrated expeditions to the Spanish colonies of America and Asia, in order to understand the problems that hindered colonial development. To this end, he sought all the information possible from the colonies, its demographics, geography, botany and zoology, and even the means of exploitation, with the idea of completing a global study of the Spanish monarchy's dominions. His expedition comprised prestigious scientists and excellent draftsmen. For the first time on a scientific expedition, some of the latter employed a camera obscura, which afforded their drawings greater veracity. Upon his return to Spain in 1794, Malaspina submitted a report entitled, Viaje político-científico alrededor del

mundo [Political-scientific journey around the world], which was not only scientific, but also criticized the political and economic situation in the colonies, and set forth liberal policies in favor of granting widespread autonomy to the Spanish colonies. The Spanish government decided not to publish it and Malaspina, disenchanted, participated in a conspiracy against Godoy that led to him being jailed.

These and other exciting stories are now within our reach in the 1,000-plus works by 23 authors that offer us an insider's view of the major illustrated navigation projects. An overview of the Spanish historical contribution in the 18th and 19th centuries arranged in four groups:

- 1.—Navigation, cosmography, and geography,
- 2.—Mathematics, physics and chemistry,
- 3.—Natural Sciences, and
- 4.—Medicine and pharmacognosy.

The Virtual Library of Illustrated Scientific Expeditions "unveils those forgotten times", as Luis H. de Larramendi put it, bringing to the present the works of those characters from our past history whose exploits we can now recover.

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Virtual Library of Illustrated Scientific Expeditions

This fabulous, innovative collection forms part of the virtual libraries organized by themes and authors on offer at the Ignacio Larramendi Foundation's website www.larramendi.es.

The objectives of this Library are: to publicize Spain's immense contribution, in both its European territories and the Americas or Philippines, to the Universal Illustrated Science and reflect the great illustrated expeditions, such as those of Celestino Mutis, a fantastic classifier of American flora, Félix de Azara, a precursor of Darwin's ideas, or Andrés del Río, discoverer of a new chemical element, vanadium.

The virtual library has been set

up with a latest-generation digital library management system that offers new, important features such as geolocation and searching on Europeana and the DPLA, the largest aggregators of digital content in Europe and the United States, among others.

