The Malaspina Expedition was not only the largest scientific effort ever made by the Spanish monarchy, it was also the most important expression in Spanish history of the attitudes of the eighteenth century European Enlightenment, which historians have christened the Age of Reason. The fact that the expedition has been almost unknown outside Spain is a result of one of the tragedies of Spanish history: the eclipse of this bright moment by the darkness of political instability at the century’s close, and the chaos of war which followed it. During the eighteenth century, however, political reform, social development, economic growth, military reorganization and rationalization through scientific knowledge characterized the national life of Spain and almost every country in Western Europe. As in earlier centuries, Spain played a significant role in European affairs thanks to the profits acquired from the immense empire she controlled in America. While for Spain the seventeenth century was one of depression and decline, the eighteenth century was, above all, one of achievement. Spain in fact experienced unparalleled development, particularly under the twenty-nine year rule of King Carlos III, crowned in 1759.

In earlier times, belligerent enthusiasm for conquest moved Spanish adventurers to win as many territories as possible for the crown. The motives were religious expansion and financial gain: the famous “Gold, God, and Glory.” In the late eighteenth century, however, Spanish attitudes toward her dominions were tempered by Enlightenment ideals. The Enlightenment was not the spontaneous appearance of a revolutionary new way of thinking, but was instead the result of the maturation of ideas introduced by the Humanist movement during the fifteenth and sixteenth centuries, combined with the rationalism of the scientific revolution of the seventeenth century. Like their predecessors, the “enlightened” explorers also looked for economic gain, but did so from a very different perspective. The hunger for conquest, as understood in the conquistador era, was extinguished; instead, the
Ilustrados ("enlightened ones") re-explored previously discovered territories and observed them through the eyes of science, seeking greater knowledge and an improved exploitation of their resources. In the phrase of the historian Iris Engstrand, “the hope of the Spaniards, however, unlike the French Philosophes, was that the discovery and application of useful knowledge would improve life in a practical way.” Utilitarian thinking thus guided the many scientists, naturalists, and seamen who believed with blind faith in the potential importance of their discoveries. The idea of integrating these new regions into a coherent scientific and economic system fit more closely with Enlightenment ideals than the idea of merely exercising control over them. Thus, scientific rigor characterized these expeditions, as did the broad objective of regulating the known world by subjecting it to rational analysis.

In general terms, the scientific enterprises launched by the European monarchies were a peaceful arena where the most outstanding scholars from different European scientific institutions participated in common projects with an unprecedented cooperative aim. It is important, however, to note that official interest in science often hid other purposes, such as the gathering of strategic information to further military objectives, or the undertaking of social and economic studies intended to improve productivity and revenue.

In addition to the scientific motivation for these enterprises, the emergence of rival European powers as serious threats to Spanish hegemony in the New World was a factor. England had secured her permanent settlements in North America. While her ships, along with the French and the Dutch, were hunting whales off Cape Horn in seas claimed by Spain, other English subjects occasionally harassed Spanish ports in the colonies, challenging national security. In the name of science, English, Swedish, German, and French scholars, led by experienced seamen, explored the world as far as their ships could take them. These expeditions were, to a great extent, also organized to identify strategic territories beyond Spanish control which could offer advantageous positions to counter Spanish hegemony. For this reason, Spanish scientific expeditions had the additional role of observing the movements of foreign competitors.

On October 10, 1788, captains Alejandro Malaspina and José Bustamante y Guerra presented their proposal for a political-scientific expedition around the world to the office of Don Antonio Valdés, Minister of Marine. The thirty-four year old Malaspina, born in Italy, had entered the Spanish navy in 1774, was commissioned ensign two years later, and by 1789 had ascended to ship captain. Bustamante, five years his junior, had joined the Spanish navy in 1770. He was commissioned ensign in 1774 and reached the rank of frigate captain a decade later. Their proposal, which was intended to be similar to the expeditions of Captain James Cook and the Frenchman Jean F. G. de La Pérouse, was to sail to the Pacific coast of the Americas and proceed north to 70° latitude, sounding, charting, and observing geological, zoological, botanical, and ethnological phenomena, and definitively determining the existence or non-existence of the Strait of Anián, supposedly linking the Pacific with the Atlantic. Their plan...
received speedy approval from King Carlos III on October 14; with royal permission to determine the organization and preparation of all aspects of the expedition, the two officers began planning the details of the enterprise.5

For the expedition to succeed, the utmost attention to detail was vital. For this reason, Malaspina and Bustamante corresponded with the most important European scientists and scientific institutions of their time. The atmosphere of scientific cooperation in Europe made possible consultations with the Royal Society of London, the Royal Académie of Paris, and scientific societies in Torino, Modena, and Ferrara. Malaspina and Bustamante also sought advice from individual scientists, including Italian naturalists Lazzaro Spallanzani, Paolo Greppi, and Gherardo Rangoni, the English chemist George Pearson, Captain King of Cook’s last voyage, Cook’s botanist Sir Joseph Banks, geographer Alexander Dalrymple, the French astronomer Joseph La Lande and horologist Ferdinand Berthoud.6 Their purpose was to fulfill the scientific aims of the expedition using the most innovative techniques, the most accurate taxonomic procedures, and the newest scientific information available in Europe.

Three factors determined the type of ship selected for the expedition: the previous experience of Malaspina with the frigate Astrea in the Philippines (1786-1788), the results of other European expeditions, particularly those of the British and French, and the experience of generations of Spanish maritime explorers. All of them suggested the use of small ships. Difficulties with the initial plan to transform the bomb vessel Santa Rosa de Lima into a corvette led to a decision to build two new corvettes instead, since the expedition, planned to last three and one-half years, would require two specially-equipped ships to complete the long trip successfully. Each of them was designed to carry one hundred men, and included large storerooms intended to hold the species gathered by botanists and naturalists, and

This cutaway view lays bare Malaspina’s corvettes Descubierta and Atrevida.

Constructed especially for the expedition, they included compartments for laboratories and art studios.
each was armed with twenty-two cannons. They were christened *Atrevida*—“Daring”—and *Descubierta*—“Discovery”—or, more properly, “The Discovered,” a name in keeping with her mission of re-exploring Spain’s existing territories.

Malaspina and Bustamante selected the officers personally. In December, 1788, Lieutenant Antonio de Tova Arredondo, who joined the expedition at Bustamante’s request, was entrusted with the selection of the crew, which he was to recruit from the men of the arsenal of El Ferrol. The final complement of each corvette consisted of 102 men. In addition to seamen and troops, there were officer-astronomers, naturalists, physicians, priests, a master chartmaker, and pilots. The expedition’s two naturalists, Luis Neé and Tadeo Haenke, were to search for botanical species and other natural resources. The artists Juan del Pozo, José Guiú, Juan Ravenet, Fernando Brambila, José Cardero, and Tomás Suría would draw the items collected along with ethnographic images of the native population, both Indian and Creole, and impressions of the towns they visited.

The expedition also carried extraordinary scientific equipment. The importance given to the enterprise is apparent from the fact that of the sixty-eight instruments borrowed by Malaspina from the Royal Observatory of Cádiz to equip the corvettes, sixty-two were acquired in London specifically for use on the expedition. Thirty-two of the sixty-eight were instruments for astronomic and geodesic observation, twelve were clocks (among them four Arnold chronometers), and eight were meteorological instruments.

On July 30, 1789, Captains Malaspina and Bustamante gave orders to weigh anchor in Cádiz. For more than sixty-two months, the *Descubierta* and *Atrevida*, commanded by Malaspina and Bustamante, respectively, surveyed the coasts of the Spanish empire in America and the Pacific Ocean.

One of the Arnold chronometers carried by Malaspina.
Their first destination was the Atlantic port of Montevideo, where they spent a few days gathering information and accomplishing scientific tasks. Then they sailed from Montevideo to Puerto Deseado, where they anchored to make some observations that resulted in excellent ethnographic data about the native peoples of Patagonia. From Puerto Deseado they sailed to Puerto Egmont in the Malvinas (Falklands), and thence by way of Cape Horn, which they rounded without incident, to San Carlos in Chile. Here they began their observations again, gathering important information about the area’s native population, local economy, and natural resources. For the next nine months the expedition visited the important ports on the Pacific coast of South America, including Talcahuano, Valparaiso, Coquimbo, Arica, Callao, Guayaquil, and Panamá. Everywhere the officers and the naturalists accomplished the tasks for which they were commissioned. On December 16, 1790, the two corvettes weighed anchor and sailed to Acapulco. From this port the Atrevida sailed for the port of San Blas, on the Mexican coast opposite Baja California. After completing the work of re-provisioning with food, water, and wood, and acquiring a ship’s boat, they sailed back to Acapulco where the Descubierta was waiting. The following segment of the voyage took them directly to the Northwest Coast, where they were commanded to seek the elusive Northwest Passage, this being one of the most important objectives of the expedition. The two corvettes met in Puerto Mulgrave, in Yakutat Bay, from which they proceeded to Nootka, on what is presently known as Vancouver Island. The stay in these ports resulted in some of the most interesting narratives produced by the expedition’s officers concerning their experiences with Native Americans. From Nootka they returned south, anchoring in Monterey.

Since their only mission in this California port was to accurately determine its longitude and latitude, these days were dedicated to rest, and the men spent most of their time hunting, fishing, and taking
geographical and ethnographical notes on the surrounding area. The two corvettes were ready for sea again on September 25, 1790. Both returned to Acapulco, but followed different courses. While the Descubierta sailed directly to her destination, the A trevida explored the coast from Monterey to Acapulco, visiting San Diego en route and charting Point Loma. From Acapulco, the voyage began a new phase, sailing westward to the Philippines. En route they called at Umatac, Guam, then in the Marianas Islands, and visited in turn Palapag, Sorsogon, Manila, Taipa, Macao, Manila again, Zamboanga, Puerto Jackson (Sydney), and Bahía del Descanso in the Friendly Islands. All these places provided valuable data for the explorers, who accomplished tasks similar to those they had completed on the American coasts.

The expedition's original intent, which was purely scientific, was interrupted by news they received in Callao: Spain was at war with France. Immediately, the scientific expedition was transformed into a military mission and ordered to escort a convoy of merchant ships from South America to Spain, under the potential danger
of enemy attacks. After gathering all the ships from the commerce of Lima and Montevideo, the convoy weighed anchor at Montevideo on June 21, 1794. Three months later, on September 21, 1794, the expedition finally and happily reached the port of Cádiz, after five years and two months of hard work in the service of both science and the Spanish crown. Only ten seamen, four on the Descubierta and six on the Atrevida, were lost to disease or accidents, a virtually unheard-of feat.

The daily activity of Malaspina’s expedition is known to us thanks to the considerable number of documents it produced, but circumstances prevented its work from becoming well known in its commander’s own lifetime. When the expedition departed Cádiz in September 1789, the implications of the French Revolution were still unclear. Returning there five years later, they found that the Revolution had seriously affected Spain, and the new king, Carlos IV, with his wife, María Luisa, was governing the country through the omnipresent and erratic Minister of State Manuel Godoy. Largely due to Malaspina’s difficult political circumstances after the expedition’s return, the publication of his report and other documents produced by the officers during the trip was impeded.
At Cádiz, Malaspina ordered his officers to collect all written information about the expedition in order to prepare the official report. In addition to the preparation of the final work, he was concerned with other matters. Probably influenced by the anti-Godoy atmosphere in Madrid, Malaspina was uncomfortable with Godoy and the uneasy peace he had made with revolutionary France. He addressed an unsolicited letter entitled “Reflections About the Peace Between Spain and France” to Godoy, urging that he reconsider his policy. Though the letter was severely criticized at Court, Godoy attempted to reconcile the differences between them by signing Malaspina’s promotion to capitán de navío.

Malaspina, however, was less interested in promotions than he was in the prosperity of his adopted country. The Italian-born officer did not cease his intrigues against Godoy, who he rightly feared was ruining Spain, and formed a conspiracy to overthrow him. This plot, when discovered by Godoy, cost Malaspina dearly. He was arrested and all manuscripts, books, and documents concerning the expedition confiscated and kept “in a safe place” under the custody of the archivist of the Secretary of State and Navy, Florentino Pozo. A few days later, the Count del Pinar took these papers with him to El Escorial. Malaspina was tried, incarcerated for six years and then exiled to Italy for the rest of his life.

Despite these circumstances, Malaspina still had time to deal with the publication of the official report of the expedition. By royal order of July 26, 1795, he received permission to prepare his diary for publication under the supervision of Manuel Gil, who was named censor and general editor of the work. Malaspina, who chose not to edit the report himself because of his inferior Spanish and lack of skill as a writer, nevertheless opposed Gil’s ideas on how to compose the treatise, and wanted to keep personal control over its composition. This conflict delayed publication of the report for the remainder of its author’s lifetime.

Due to Malaspina’s unfortunate luck the publication of the results of the expedition seemed to become virtually impossible. In 1795, Dionisio Alcalá Galiano, one of the expedition’s officers and later commander of the Sutil and Mexicana, (sent at Malaspina’s urging for one final search for the Northwest Passage in 1792), asked Minister of Marine don Pedro Varela not to name him in the royal order issued after Malaspina’s arrest, in an unsuccessful attempt to prevent the expedition’s documents from being confiscated.

On November 29, 1795, however, the king entrusted José Espinosa y Tello of the Hydrographic Bureau with the publication of Alcalá Galiano’s materials regarding the Strait of Juan de Fuca, particularly the maps and the account of the voyage. Thus, the documents of one aspect of the expedition were finally published in abbreviated form by the Imprenta Real in 1802. After difficulties due to the political and strategic importance of its contents, an atlas containing the expedition’s maps was also published in 1802 with the title Atlas Marítimo de América. Not until the 1980s and early 1990s, however, were the Malaspina Expedition’s documents at last published in full, a long-overdue testimony to Spanish exploration in the Age of Reason.
NOTES


The reasons for the two young Italians joining the Spanish navy are not entirely clear, although it is known that Malaspina went to Spain under the influence of his uncle, the Duke of Fogliani. Carlo Castelli, *Alessandro Malaspina* (Milano: Edizioni Alpes, 1929), 5-12; Emilio Soler Pascual, *La conspiración Malaspina (1795-1796)* (Alicante: Instituto de Cultura Juan Gil-Albert, Diputación de Alicante, 1990), 19-20.

Maria Dolores Higuera, *Catálogo crítico de los documentos de la expedición Malaspina (1789-1794) del Museo Naval* (Madrid: Museo Naval, 1985), 19. This is an excellent, exhaustive work. Higuera collects all documents as bibliographic entries in sections organized as economic, political, administrative, natural history, cartographic, etc. Each section is preceded by an explanatory introduction. Two further volumes appeared in 1988 and 1992. This “official” diary was masterfully edited by Mercedes Palau, Blanca Sainz, and Arézazu Zabala.


Higuera, 21; Beerman, 57-88.

Beerman, 49-55; Soler Pascual, 35.

*Relación del viaje hecho por las goletas Sutil y Mexicana para reconocer el estrecho de Juan de Fuca* (Madrid: Imprenta Real, 1802). In 1958, José Porrúa Turanzas published a limited facsimile edition in Madrid, and in 1991, Dolores Higuera and María Luisa Martín-Merá of the Museo Naval published a second facsimile edition. As the former edition ran only to 250 copies and the latter only 1,500 and was not for sale, this document is extremely difficult to find.

Mercedes Palau, Blanca Sainz, and Arézazu Zabala, eds. *Viaje científico y político a la América Meridional, a las costas del Pacífico y a las Islas Marianas y Filipinas verificado en los años de 1789, 90, 91, 92, 93, y 94 a bordo de las corbetas Descubierta y Arevida, mandondas por los capitánes de navio D. Alejandro Malaspina y D. José Bustamante y Guerra* (Madrid: Ediciones el Museo Universal, 1984). The largest collection of documents concerning the Malaspina expedition is today held by the Museo Naval, Madrid. Other documents, including personal reports, charts, letters, and maps are held in institutions around the world. Most can be found in Madrid in the Archivo del Real Jardín Botánico, which holds documents concerning botanical studies, pictures, and drawings; the Archivo del Museo de América, which holds an important collection of drawings and ethnographic artifacts; the Archivo del Museo Nacional de Ciencias Naturales, holding documents of Antonio Pineda and other naturalists; the Archivo Histórico Nacional, and finally, the Biblioteca del Palacio Real, which holds collections of documents concerning the Malaspina conspiracy. In addition to those Archives in Madrid, there are collections in the Archivo General de la Marina, El Viso del Marqués; the Archivo General de la Nación, México; the British Library, London; and the Archive of the National Museum, Prague. Other materials of interest are located in numerous private and public archives in Spain, the United States, México, Uruguay, Chile, France, and Italy.