## CHAPTER II

## PREPARING THE EXPEDITION

With the completion of his voyage around the world, Alessandro Malaspina had proved himself to be a truly accomplished officer. He knew it, and was not especially modest about it either. We can view in that light the criteria for the ideal navy officer that he set down in two letters probably written on February 6, 1789. To the Lombard nobleman Gian Francesco Ala Ponzone, father of the midshipman Fabio, he wrote:

For the Navy officer ... it is truly painful to have to combine the laborious study of difficult sciences with a great lack of comfort, continuous risk and, above all, the vexation of seeing the most beautiful rules of theory undone at every turn by practice. As compensation, however, one acquires a certain strength of character and the strength to face up to difficulties. As far as I am concerned, this is the only way to overcome them. Besides, a greater variety of subjects only opens a greater range of knowledge, and gives us a proper idea of the Creator of man and of the surface we inhabit.

And to the ex-Jesuit Ramón Ximénez, mentor to the young Fabio, he wrote:

In themselves, our studies are arid, since they only bear fruit after a long while, and are not comparable to the far more pleasant pursuit of literature. They also have the disadvantage that they do not admit half-baked ideas. For us something is either well known or totally unknown.

And referring specifically to Fabio, he added:

I do not intend to draw him away from the Fine Arts, nor from those rewarding studies without which a Navy officer soon becomes a coarse man who is incapable of speaking about anything, and only knows how to discuss storms, shipwrecks and hunger, with a thousand swear-words whose only saving grace is that they are incomprehensible.

Alessandro adhered to these criteria in his own education. He did not abandon literature, and stayed up-to-date in philosophy and economics by obtaining the most recent French and English publications, as we have seen. Although, as he put it, "quiet study is the polar opposite of the wandering life," Malaspina was able to combine both of these activities. He was confident that he could emulate the enterprises of Cook and other British explorers, and that in doing so he could amass a great amount of information. He also had clear ideas about how to do it. For instance, he would not consider scientists merely as "honour passengers" on his ships, as Cook had done. On the contrary, he would consider their work to be as important as that of the officer-geographers. In this way the enterprise would greatly benefit the Spanish nation, which for many years now had claimed his total allegiance.

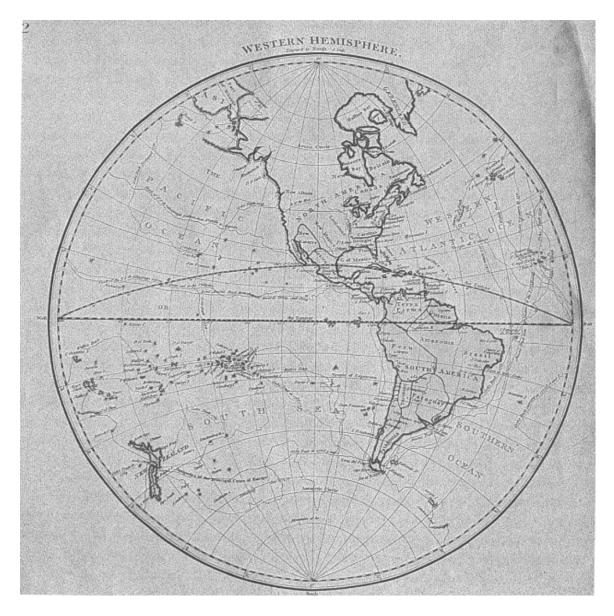


Figure 8. Western & Eastern Hemispheres. 1793. Showing the routes followed by the expeditions of Cook, Wallis and Anson. Mendoza y Ríos Collection at the Biblioteca Nacional.

Malaspina also knew that he could not expect any further spectacular geographic discoveries. He knew that some respected geographers still maintained the existence of an ill-defined *Terra Australis Incognita*, and of a navigable strait between the Atlantic and Pacific. But he also knew that these men had never stuck their faces out of their precious libraries. Their ideas lacked the support of any direct experience at sea. It was therefore up to the seamen to provide this support. Such cooperation between men of the sea and men of science could only enhance the utility of future voyages.



Although Alessandro remained sceptical about the likelihood of new discoveries, he was convinced that a thorough exploration of already discovered lands would be just as valuable. He felt that this was especially true for Spain, which controlled immense regions, but often remained ignorant of their natural resources, their economic potential, their strategic worth, and the characteristics and needs of their inhabitants.

To provide Spain with just such data was surely one of the factors that drove Malaspina to plan a great maritime scientific expedition, but he harboured other motivations as well. The Royal Navy officer in him was eager to show the rest of Europe that Spain, considered on all sides to be totally decadent, was still capable of mounting grandiose enterprises that would merit the attention and respect of the scientific world.

At the same time, the political man in him hoped to offer the Spanish government a plan for the reorganization of the Empire, a plan which would halt and eventually reverse the process of the country's decline.

It was not always easy for the officer. From time to time he was gripped by a deep pessimism that made him question the point of it all. In the end, though, his extraordinary sense of duty always overcame his despondency. If he knew he could do something, his duty was to do it in the best possible way. Consequently, he dedicated himself to planning an expedition that was to be at the same time scientific and political.

It is probably true that the political interests of the voyage overpowered the scientific ones as socio-political realities imposed themselves on the minds of the voyagers, and especially as the officers found themselves in lands that, as the expedition progressed, were more and more unfamiliar. However, even though the journey allowed Malaspina to collect concrete data about the structure of the Empire, and about the measures necessary to strengthen it, it is clear that the fundamental ideas had been formed before the voyage ever started. Thus the real significance of the expedition was that it verified these ideas and provided the objective data that made them more acceptable.

The ideas were not totally original to Malaspina. They had derived from extensive reading and heated discussion. Some of them were clearly based on the writings of Jorge Juan (which in turn were based upon reformist ideas that had taken root in certain intellectual circles), of Antonio de Ulloa, of the Count of Campomanes, and probably also on an anonymous 1783 memorandum usually attributed to the Count of Aranda. The discussions included the diplomats of Greppi's circle, probably Ulloa, and perhaps from time to time Cabarrús and Antonio Valdés. The ideas presented were unusual.

In Cádiz Malaspina found the ideal companion for his coveted expedition in the person of José de Bustamante y Guerra. Bustamante was also a frigate captain, but was four years younger. His expertise in naval construction was complementary to Malaspina's experience. Alessandro presented his ideas to his colleague, and the two of them got along splendidly. The plan for the voyage was prepared quickly, signed by both men, and presented to the Minister of the Navy on September 10, 1788. It is a document worth considering in its entirety:

For the past twenty years France and Britain, in noble emulation, have undertaken voyages in which navigation, geography, and humanity itself have made great progress. The history of society has been built up by more general research. Natural history has been enriched by countless discoveries. Finally, the most interesting achievement of navigation has been the maintenance of health in varying climates, on long crossings, and in the face of almost incredible labours and perils.

The proposed voyage is directed at the fulfilment of these objectives. The part that is usually thought of as scientific will be carried on with great care, following the lead of Mr. Cook and M. La Pérouse.

But a voyage undertaken by Spanish navigators must necessarily include two other objectives. The first is the construction of hydrographic charts for the most remote regions of America, and of sailing directions which might reliably guide the inexperienced merchant navigator. The other is the investigation of the political situation of America in relation to Spain, as well as to foreign nations.

And there will be other points whose investigation – and concealment – will be useful to the nation. Thus the state of commerce in natural resources and manufactured goods for each province or kingdom will be discussed; the ease or difficulty of resisting an enemy invasion, and of mobilising forces against those same enemies, will be of interest; the position of those harbours that are more conducive to reciprocal trade will be noted; and finally naval production and the relevant branches of the building trades will be explored. Thus the investigation will try to come to terms with political theories on national prosperity whose previous acceptance or rejection depended solely upon the respectable judges who had examined these matters. The study will have to be divided into two parts: the first will be public, and will consist of all geographic and historical matters, as well as the gathering of curiosities for the Royal Cabinet and the Botanical Garden; the second will be secret, and will address the aforementioned political speculations, among which, if the Government deems it expedient, might be the Russian holding in California and the British holdings in Botany Bay and Liqueyos. All of these are interesting issues, whether for commercial purposes or in view of the possibility of hostile situations.

The Royal Navy will be able to provide all the participants in this mission, except the two botanists or naturalists and the two perspective artists, who can easily be found among volunteers in Madrid. As for the type of vessels and the quality of their accoutrements, the three main objectives of security, comfort and economy can easily be combined; the crew of each of the two vessels will be restricted to about one hundred men. The breakdown of each crew by type, as well as of the fittings, interior configuration, quality and number of smaller boats and spare equipment, and finally of the quantity and quality of provisions, is too long to be detailed in each case. Furthermore, we cannot exactly determine these things until Your Majesty sees fit to establish the parameters of the proposed expedition.

The following plan would take about three-and-a-half years, starting on July 1, 1789, a date on which the two vessels could leave, if Your Majesty sees fit to approve the proposal now, either as a whole or in a modified form, and allows about eight months to stock all the necessary materials and for the preliminary studies, in particular the application of practical astronomy.

On July 1, 1789, the two corvettes will leave Cádiz for Montevideo, where we shall reset our chronometers, perform some astronomic observations, and carry out some natural history research. We shall also restock the ships with various types of food for the crew and for the experiments ahead. From Montevideo we plan to reconnoitre the Malvinas [Falkland] Islands and also the Bay of Buen Suceso in the Strait of Le Maire, if the government considers it prudent to do so, since this route provides the best and most economical stop en route to Cape Horn. We shall make an effort to reconnoitre Cape Victoria and some islands of the Chonos Archipelago, and finally, toward the end of '89, we shall anchor in Chiloé. The entire year of 1790 will be spent on the west coasts of America, from Chiloé to San Blas. We shall try to simplify the route from Guayaquil, Acapulco, etc., to Lima. We shall search for the Gallego Islands, and from Acapulco we shall make an excursion to Mexico City.

The reconnaissance of the Sandwich Islands will take place during the first three months of 1791. Afterwards, we shall cruise along the coast of California, and continue north between Asia and America as far as the snows allow, and after a stop in Kamchatka, if the Government so wishes, we shall proceed to Canton to sell otter pelts to increase the crew's bounty.

The departure from this harbour will take place toward October or November 1791. We shall go on to reconnoitre Capes Bogeador and Engaño on Luzón's eastern shore. From there we shall proceed to the Marianas, after which we shall work arduously on the navigation chart covering the area from the Strait of San Bernardino to Manila.

From this capital we shall proceed with the reconnaissance of Mindanao, and after passing between Célebes and the Moluccas, and, passing north of New Holland [Australia], we shall end up in the Indian Ocean.

Once we have sailed around the west coast of New Holland, we shall set our course for Botany Bay around March 1792. We shall visit the Friendly and Society Islands, and, around October or November, New Zealand. From there we shall head due south around New Zealand and then northwest. We shall sail along the north coast of New Holland, then in the direction of the Cape of Good Hope, and finally back to Europe in April or May 1793.

The Frigate Captains Alessandro Malaspina and José Bustamante y Guerra, anxious to devote all their labours to the service of the State, offer themselves to execute this plan, and nurture the hope that they will be directed by the enlightened and inquiring members of government, as well as by information offered by civilians from our continent and from the Americas. As for the subalterns, it is necessary that all be volunteers and know each other, and that they be familiar with one another's health and ability.

In general, the expedition followed this itinerary, with some minor deviations, and the voyage took longer than planned, but in the original plan one can already see the salient objectives of the enterprise. The scientific agenda was foremost, but also important were the political objectives which had to be presented to the Government in secrecy. Among these secret aspects (and we shall see that the idea of secrecy became greatly attenuated), the commercial branch was held to be the most important. This was surely a consequence of the recent experience of the *Astrea*, and it is also possible that Alessandro felt that this subject was of particular interest to the ministers.

A little more than a month later Malaspina and Bustamante learned that the King had approved their plan and that they could rely upon abundant resources and full cooperation. Moreover, the Navy Minister decided to concentrate all the resources at his disposal on this initiative, even going so far as to cancel the plans for another voyage whose objectives were purely geographic. This expedition was being prepared by some of the officers of the Tofiño group, among whom were Dionisio Alcalá Galiano and José Espinosa y Tello. Both of these men were co-opted by Malaspina for his own expedition. Perhaps this manoeuvre was at least one of the reasons why the Commander and Espinosa never got along.

Alessandro began to organize the voyage in his usual meticulous manner. The abundant documentation for these preparations has been preserved at the Museo Naval in Madrid, and has already been partially researched. Therefore, it seems more useful for us here to stress the great preoccupation that Malaspina had with the socio-political characteristics of the Spanish possessions and their relationship with the mother country, than simply to analyse the organizational phase of the voyage.

The officer realized with great clarity that the current world and its political order, already rather out-of-date, were coming to an end. Perhaps he was aware that revolution was just around the corner; or perhaps he thought that governments still had enough time to take preventative measures, that is, to reform the laws in order to preserve the monarchies. But he knew that short of such innovative politics all would be lost, or, to put it more accurately, all would be used to profit another cause, which he, as the scion of an ancient aristocratic line, could not condone. Whatever the reasons, he acknowledged and reflected upon the potential for revolution. Thus, at the beginning of 1789, he wrote to the father of the young Fabio Ala Ponzone about Fabio's intellectual education:

Without tiring him with thoughts to which his strengths are not yet suited, I shall make him pay attention to everything that is necessary, not so much for the present situation of the monarchy, but for what will happen 25 or 30 years from now, when major revolutions will take place. If I am not mistaken about this, great knowledge will be necessary at that time, since it will be extremely difficult to maintain correct and honourable behaviour.

It was therefore necessary that all officers be as broadly and deeply cultured as possible. With this in mind, Malaspina had the corvettes provided with libraries well stocked not only with volumes on navigation and travel, but also with famous treatises on America and with the latest studies in political economy. He specifically requested the texts of De Brosse, Jefferson, Hume, Robertson and Adam Smith.

A fragment of a letter from Alessandro to his brother Azzo Giacinto is particularly relevant:

Send me immediately a small selection of the best Italian political books. In particular, I ask that you send me the *Legislazione* by Filigeri, the *Lettere americane* by Carli, the history of Chile and that of Mexico written by two Jesuits. ...

It is clear that the last two of these texts, although not described in detail, are those by Molina and Clavijero, which were published respectively in Bologna (1776) and Cesena (1780). Unknown to Malaspina, the Molina text had also been published in Spain. Under the incorrect name of "Filigeri," Alessandro was alluding to *Scienza della Legislazione* by Gaetano Filangieri, which depicted a view of society somewhat different from that of Montesquieu in the *Esprit des Lois*. In the future he would always keep this book with him, even in the fortress of La Coruña. He recognized himself in some of its pages, which itself is not without interest.

What is even more interesting is the reference to Carli's work, because it points to a network of Masonic connections, thus providing another clue about Malaspina's membership in that brotherhood. Gian Rinaldo Carli, author of the *Lettere americane*, who wrote polemically about De Pauw, was a Mason; the second edition of his work (Cremona, 1781) was dedicated to the Mason Benjamin Franklin; both Isidoro Bianchi, who wrote the preface, and Lorenzo Manini, who edited that edition, were Masons; and they were from Cremona, where Ramón Ximénez, who sent the book to Malaspina, lived; needless to say, Ximénez was a Mason.

Among all of these books on history, geography and economics, there was one which perhaps Alessandro did not order, but which became one of his favourites. This was the comedy *Aminta*, by Torquato Tasso, a text from which the commander quoted on occasion in the journal of his voyage, when he wrote about nature and the happy state of mankind. The small volume had been reprinted in Parma by the famous Bodoni, and was dedicated to the young marquise Anna Malaspina della Bastia. Perhaps it was she who sent it to her cousin, who would surely have appreciated the small present.

However, the books were not enough by themselves. Alessandro knew quite well that not all Spanish or recent foreign maritime papers were published. Thus there was a diligent search for manuscripts, memoirs, and simply letters with information and advice. Toward this end, Malaspina asked for help from his Italian friends—above all, from Alessandro Belmonti, who had been forced to leave the Navy because of ill health. He asked Belmonti to search for information from the many Spanish Jesuits who had lived in the Americas and had established themselves in Italy after 1767. Other manuscripts were furnished by Count Fernán Núñez, the Spanish ambassador in Paris. Among the documents collected by this diplomat was the journal of La Pérouse. This journal had just been brought to Paris by a member of his expedition, de Lesseps, who had separated himself from his travel companions before their shipwreck. Most of the other unpublished reports were copied from the holdings of various public and private Spanish archives.

Malaspina also dealt with the scientific and nautical instruments. He obtained the best ones that the Cádiz astronomical observatory had to offer. However, since he considered those to be inadequate, he ordered others from England and France, using his many contacts among scientists, diplomats, colleagues and friends. José de Mendoza y Ríos, a brilliant Navy astronomer, made an important contribution, but we shall discuss him later. Unfortunately not every item arrived before the departure. Certain instruments did not reach the officers until their stay in Callao in 1790, and others not until they were in Acapulco the following year. Nevertheless, the vessels departed adequately equipped.

The selection of the men was made with great care. Because Malaspina and Bustamante agreed to include only those men who were truly motivated by the nature of the enterprise, they looked primarily for volunteers. They sent out a circular letter and, as they had hoped, received responses from some of the best officers in the Armada. Among the first to join were officers who had worked with Tofiño, but some of them, for various reasons, had to withdraw soon afterwards. Others, such as José Espinosa, had to join the expedition late because of health problems. But Dionisio Alcalá Galiano, Juan Gutiérrez de la Concha and Juan Vernacci were able to contribute to the preparations immediately. The commander also relied on Francisco Javier de Viana, who had proved so compatible during the *Astrea* voyage, and Felipe Bauzá y Cañas, who had just become professor of drawing and fortifications at the Cádiz Midshipman's Academy. Bauzá was placed in charge of cartography for the entire voyage. The Minister Valdés recommended his

nephew Cayetano, who naturally was immediately accepted, not only because of his uncle's intervention, but because he was an excellent and experienced officer. In the selection of midshipmen there was another instance of nepotism, this time traceable to Alessandro himself. He included the young Fabio Ala Ponzone, whose family was connected to his own.

The selection of the naturalists was more complex. Antonio Pineda y Ramírez was chosen to head this division. Pineda was a military officer, rather than a scientist, but he was a man whose love for the natural sciences was much greater than his love for the army. He in turn recommended his brother, Arcadio, who then joined the ship's company. Choosing someone to head botany was more problematic, because there were cross-pressures and recommendations from all quarters. Finally a Frenchman, Louis Née, and a Bohemian, Tadeusz Haenke, were chosen. Unfortunately Haenke was late in arriving at Cádiz and was not able to join the expedition until a year later in Valparaiso, after an arduous journey that included a shipwreck at Montevideo and a trek across the Andes.

Malaspina's preoccupation with the natural sciences even influenced his selection of the chaplains. Don José de Mesa and Francisco de Paula Añino were chosen because they had a rudimentary knowledge of embalming. The commander must have thought that the two priests, when not occupied with religious matters, would be able to assist the naturalists.

Having thus addressed the health of the soul, Malaspina turned, in his choice of surgeons, to the health of the body. At the time the position of naval surgeon was held in very low esteem, not much above that of barber. But Alessandro remembered what had happened the previous year on the *Astrea's* return voyage, and knew that the crew's health was crucial to the success of the expedition and thus too important to leave in the hands of mere barbers. He finally chose Pedro María González and Francisco Flores Moreno, who proved to be excellent physicians. Upon their return they wrote a voluminous treatise on the illnesses of seafarers, which became a classic among educated members of the navy.

The choice of painters posed a different problem. These men were supposed to paint landscapes of various places on the expedition, do portraits of indigenous people, and make drawings of plants and animals. Malaspina wanted Italian artists for the job, because he was convinced that they were the only ones adequately trained in both perspective and portrait techniques. This time he did not prevail, and the Spaniards José del Pozo and José Guío were assigned to the expedition. This was only a temporary setback, however. Malaspina bided his time until the ship reached Acapulco, when he dismissed the two Spaniards. (Later, on his return from the northwest coast, he took on, as replacements, the Italian Fernando Brambilla and the Franco-Parmesan Giovanni Ravenet.) The officer Antonio Tova took charge of enlisting the rest of the crew, who came mainly from Asturias and Santander.

Other officers, under Espinosa's supervision, worked in the archives copying reports and navigational charts. Later, in the Americas, the voyagers would acquire other reports from local officials, who had been instructed by the Government to cooperate. In this manner the expedition had at its disposal a mass of unpublished documents that had never previously been seen or used.

While these preparations were going on, Bustamante was occupied with the ships themselves. He and Malaspina had decided to use corvettes, ships that were smaller than frigates, but more manoeuvrable. At first, it appeared that the ships would have to be dedicated to two female saints, but eventually they were named *Descubierta* and *Atrevida*, no doubt in honour of Captain James Cook, whose ships on his first voyage were the *Discovery* and the *Resolution*.

The outfitting of these ships was delayed well beyond schedule, but this permitted Malaspina to receive further documents and information from abroad. He corresponded with Joseph Banks, President of the Royal Society in England, who had participated in the first Cook voyage, and with Alexander Dalrymple, who sent him many books as a gift; he received letters from Lazzaro Spallanzani in Italy, and from the Turin Academy of Sciences; the astronomer Lalande wrote to him from Paris. And these were only the most notable of the many people who tried to contribute, however modestly, to the success of the enterprise. Everyone – members of the academies, expelled ex-Jesuits, Navy officers and Government officials – was very aware that Spain had never before sent off a maritime expedition that was better equipped or better directed.

The commander himself, of course, was the first to be convinced of this, but very early in the voyage doubts began to set in. The objective of the journey was to offer to Spain and to the entire civilized world information that would constitute a serious contribution to knowledge. This was a daunting task and he knew it. Doubts grew over whether this knowledge would foster the universal brotherhood he had believed in, for his faith in unlimited progress for humanity was waning. From this point on, there was a widening gap between what he said in both his official correspondence with the Government and his journal of the voyage, on the one hand, and, on the other, the thoughts and ideas he expressed in private to his friends.