## CHAPTER I

## THE FORMATIVE YEARS

In 1754, David Hume began the publication of his *Essays and Treatises on Several Subjects* in London; Linnaeus published his *Genera Plantarum* in Stockholm; and in Paris Condillac's *Traité des sensations* and Diderot's *Interprétation de la nature* came off the presses. Also, in Russia, the first bank was founded; in Haarlem, the Literary Society was established; and, in Spain, Jorge Juan and Antonio de Ulloa became members of the Chamber of Commerce.

In short, although alternating between periods of slow and of feverish creative activity, the intellectual climate throughout Europe was maturing rapidly in preparation for the coming golden age, an era whose spirit was to be found in the plans, projects, and legislative proceedings of its statesmen over the next twenty years.

However, at mid-century there were still some regions that remained impervious to this intellectual ferment. They were unaware of the philosophical, scientific and economic debate that was taking place in the major capitals, and unaware too of the emerging nucleus of the bourgeoisie that would soon demand, and by the end of the century realize, the fulfilment of its role in history.

In Italy, Lunigiana was one of these stagnant regions. This territory, which extends from the narrow valley of the Magra River to the peaks of the mountains that surround it on all sides, was fragmented into some fifteen miniscule fiefdoms, each of which was governed by one of the marquises of the Malaspina family, who were direct vassals of the Austrian emperor. These territories were surrounded by the Republic of Genoa, the Grand Duchy of Tuscany, and the Duchy of Parma.

In Lunigiana, life's rhythm remained as immutable as it had been through the centuries. It was regulated by the eternal laws of nature, marked by the succession of seasons and by the modest agrarian tasks carried out in each of them: the harvesting of chestnuts and olives, the cutting of forests, the planting of vegetables. The Enlightenment had enlightened few minds. The mercantile and intellectual bourgeoisie was non-existent; the peasantry was too poor and too desperate to be able to reflect on its own condition; the clergy was too ignorant and superstitious, and the aristocracy too reactionary.

Half a millennium before, the Malaspinas had been flourishing. They were less numerous, but more powerful. From the 12<sup>th</sup> to the 14<sup>th</sup> centuries they had even had a reputation as patrons of the arts, and one could find some talented and cultured individuals among them. Dante Alighieri, exiled from Florence at the time, was their guest for an extended period, possibly in Mulazzo itself. He left an indelible record of this pleasant respite in his *Divine Comedy* (Purgatory, VIII, 118-139). But those times had come to an end much earlier. Each generation had seen a fixed amount of land divided among an ever-growing number of heirs, so that the estates had become smaller and smaller, and poorer and poorer. By the 18<sup>th</sup> century the marquises were withering in their fiefdoms, lost in memories of the past, with pride of caste their only distinction.

Carlo Morello Malaspina, the Marquis of Mulazzo, was perhaps the most intelligent of the fifteen cousins, although he was certainly not exceptional. On

November 5, 1754, he became the father of Alessandro, who, in intellect and achievement, was destined to rise above the mediocrity that had characterized his family for several centuries. That very day, Antonio Genovesi gave his first class in economics at the University of Naples.

Times were difficult for that generation of intellectuals. In their formative years they could immerse themselves in the rationalist culture of the early Enlightenment, in the learned refinements of the *Encyclopédie*, and in the somewhat abstract pleasure of submitting every conceivable topic to discussion. But in their adult years they had to confront the consequences of that play of the intellect in a cruel intemperance that was characterized by violence and by opposed radicalisms with which they were unfamiliar. Some of them responded by renouncing the idealism of their youth and taking refuge in protracted Jacobin despotism. Others, however, remained true to themselves to the end, and consequently suffered more from the change of climate. These idealists suffered the contempt of all their adversaries. The old reactionary class took them as near traitors, while the new Jacobins, and later on the Bonapartists, saw them as pathetic dregs of the past.

In fact, there was some truth in each of these judgments. On the one hand, these aristocratic intellectuals rejected the vestigial feudalism of the *Ancien Régime* because of the way it restricted the free play of individualism; on the other hand, they were not prepared to mingle with the common people, toward whom they felt superior because of their education. Some felt tormented and hid their anguish behind a façade of aloofness, which only accentuated their isolation and failure to be understood.

These are the main moments of the intellectual destiny of Alessandro Malaspina. And he was not alone. In Lunigiana itself, the democratic poet Giovanni Fantoni would suffer a similar fate; in Naples, only an early death saved Gaetano Filangieri from the same; and later on, in France, talented people such as Lavoisier and André Chénier fell victim to revolutionary upheaval.

Alessandro Malaspina was a little more fortunate, if it is good fortune to survive the destruction of the old world only to be denied influence in the new.

We have already indicated that Alessandro's father was neither myopic nor indolent like the majority of the marquises of Lunigiana. According to custom he dictated the future of his male children. Azzo Giacinto, the eldest, would eventually replace him as head of the fiefdom; Luigi and Alessandro would follow either military or ecclesiastical careers. A proper education, along with powerful family connections, would be of help to all three.

To implement this plan Carlo Morello, in 1762 (Alessandro was seven years old), moved his entire family to Palermo, where his wife's uncle, Giovanni Fogliani Sforza d'Aragona, occupied the post of Viceroy of Sicily during the period when Sicily belonged to the Bourbon Kingdom of Naples.

Fogliani was a very pious man, but he was also fond of pomp and *divertissements*, and Palermo was renowned as one of the most brilliant courts of the time. "Alessandrino," as the youngster was called in the letters of his great-uncle, must have been overwhelmed by the surprising contrast between the austerity he had known in his early years and the overbearing luxury embraced by the Sicilian aristocracy.



Figure 5. View of the port of Ripetta in Rome. Engraving by Gian Battista Piranesi. The last building on the right is the Clementine College, which was destroyed by Mussolini.

In any case, the boy remained in Palermo only three years. In 1765, almost by chance, he set off on his first real intellectual adventure. The Lombard Antonio Maria de Lugo, a member of the religious Congregation of Somasca, was the court theologian. The Somascan fathers, like the Jesuits, the Escolapians and the Barnabites, dedicated themselves to the education of the young, but with some substantial differences from these other orders. For one thing, the Somascans accepted students in their schools who were not of the aristocracy. It was their pedagogical method, however, that truly distinguished them from the rest. This method had earned them quite a few headaches—for example, many of them were thought to have Jansenist leanings. Still, their method produced excellent results, as long as the student was intelligent and at least somewhat interested in his studies. None of the instructors pounded maxims into the students. Instead, the different theories concerning a subject were discussed in an open way; debate was encouraged and in the end the students were free to embrace those theories of which they had become convinced.

It was by sheer chance that Father De Lugo was summoned to Rome in 1765 to direct the Clementine College, which had been in existence for over 150 years. Fogliani proposed that Carlo Morello entrust his son to the theologian, so that he could complete his education in the Clementine College, and the Marquis readily agreed. Alessandro had proved to have a precocious intelligence and an uncommon love for knowledge. Moreover, the Clementine was held to be one of the best Italian institutions of learning. It was not by chance that it had graduated from its classrooms young men who later became

doges of the Genoese and Venetian Republics, cardinals, generals, statesmen and diplomats. Moreover, the tuition costs were very low and within reach of the limited funds of a Lunigiana lord of the manor.

In the spring of that year, two other students of the highest Sicilian nobility travelled to Rome with De Lugo and Malaspina. They were Pietro and Federico Gravina, sons of the Prince of Montevago. We shall meet them again. The three young men entered the Clementine College on May 15, 1765.

Alessandro remained for more than seven years surrounded by the vast classrooms, the large courtyard and the majestic chapel of this tall palace by the side of the Tiber. There he was initiated into the ideas and issues of the times. The library was noteworthy and constantly updated. The scientific fields were not ignored for the humanistic; all were cultivated in a balanced manner. If any field was favoured, perhaps, it was literature. The way it was studied cut to the very roots of literary expression. One of the first literary exercises that Alessandro undertook (in 1767) dealt, specifically, with the origin of languages. As we shall see, these interests, so intelligently encouraged in the young man, remained alive throughout his life. Of all the contemporary literatures, French was foremost. It is worth noting that Voltaire's *Semiramis* was first performed in Rome at the Clementine College, where it was staged by the students.

During Malaspina's school years, the faculty included two scholars of particular interest. One of them was Father Giuseppe Pujati, a professor of rhetoric. He held that geography was a fundamental science, basic to the teaching of any other discipline. Consequently, he frequently referred in his lectures to geographic problems. Not surprisingly, then, atlases were prominent in his courses, and were used as texts that were basic to all other subjects. The other influential pedagogue was Father Pietro Cermelli, a professor of physics who guided Alessandro in the writing of his first known work. This was a twenty-six-page essay which was published in Rome, in 1771, under the title Theses ex Physica Generali. The exact role that Cermelli played in guiding this essay remains a mystery, but it is fascinating to see treated in it certain scientific topics which years later the navigator would investigate more fully. And it is especially fascinating to see how these ideas shaped the thinking and even the character of Malaspina. Among the subjects discussed, the problem of the earth's shape was paramount; Alessandro preferred the theory of polar flattening. The young man was beginning to assert his own intellectual position. He defined himself as an eclectic, which in his case meant an observer with no preconceptions and a readiness to assimilate any ideas that seemed convincing. Thus he claimed to distance himself both from Cartesian rationalism and Newtonian experimentalism, but in fact his ideas developed essentially in harmony with those of the Englishman. As for his personality, he loved to contemplate nature, and he had a careless indifference toward himself. One feels that the 1<sup>st</sup> century BCE Latin poet Lucretius, whose verses he often quoted, must have been one of the young Alessandro's most beloved authors.

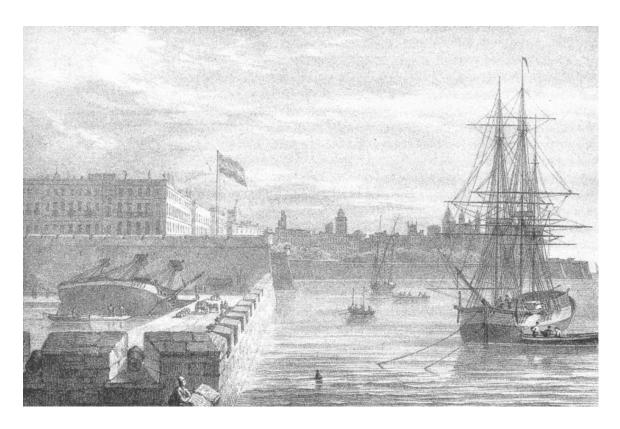


Figure 6. View of the port of Cádiz. E. H. Locker. Lithograph by Charles Hullmandel.

The students did not spend all of their time immersed in their studies, however. There were carnivals, salons, competitions of various sorts, religious ceremonies and worldly visits, all of which broke the monotony of the days. Although the archives of the school have been dispersed, enough remain to give us some idea of its life and ambiance.

Among Alessandro's school companions, besides the Gravina brothers, were the future Cardinals Lorenzo Litta, Bartolomeo Pacca, who would become the foremost defender of Pope Pius VII, and Fabrizio Ruffo, the future protagonist of the 1799 anti-French revolt in the Napoletano; the Marquis Marzio Mastrilli del Gallo, future statesman and ambassador of Naples in Paris and Vienna; and, finally, Diego Pignatelli and Torquato Malaspina, future generals of Spain.

In 1767, news of the expulsion of the Jesuits from Spain arrived at the school. A few of the pupils were Spanish and the Clementine directors worried about the impact the expulsion might have, since many of the youths had received their early education from the Jesuits. In 1769 the school was honoured by a visit from Joseph II of Austria, who became an enthusiast for the institution. In the same year Alessandro was visited by his parents, which probably pleased him more than the appearance of the Emperor. This was probably the last time Alessandro was able to embrace his father, who died five years later.

By early 1773, Alessandro had finished his studies. For some time already he had let it be known that he had no intention of entering the religious life. His father, and perhaps even more Fogliani, were disappointed, but had no desire to challenge the young man's decision. Consequently, a military life was chosen for him. Alessandro expressed

his desire to enter upon a naval career, and was thus delighted to join the largest and most prestigious navy in Europe, the Royal Navy of His Catholic Majesty, the King of Spain.

Malaspina did not go to Spain at once, however. Among aristocratic families it was the custom at the time for young cadets to enter an order of chivalry. Many members of the House of Malaspina had been Knights of Malta, and Alessandro followed that path. He journeyed to Malta and on June 4, 1773, he received the regalia of Knight of Justice of St. John of Jerusalem. Three months later he experienced his first voyage (aboard the warship *San Zaccaria* in a vain pursuit of Barbary pirates), and while the ship docked in Barcelona he experienced his first days in Spain.

Alessandro continued to live in Malta for a few months. The Order's navy, though only a small fleet, was a first-class school of navigation, and from that point of view the young man's experience was positive. However, the life and conduct of the young knights was something less than exemplary, and the senior officials seemed to be occupied only in palace intrigues. No doubt the young Malaspina did not feel at ease in such an atmosphere and was relieved when he left the island.

Alessandro probably arrived in Spain toward the end of the summer of 1774. He had travelled aboard a ship of the Order of Malta with the aging Fogliani, who had been forced out of his position as viceroy by a popular uprising. Fogliani was hoping to regain his post with the aid either of the Minister Squillache or of the King himself, in memory of their old friendship. Unfortunately his hopes were frustrated, but at least he was able to see that his favourite nephew was received with great honour into the Royal Navy. Indeed, we know that Malaspina received top marks. By November 18, 1774, he was a midshipman and scarcely two months later was promoted to frigate ensign. In this way he was able to by-pass long and monotonous academic courses.

The first voyage of the young officer was on the frigate *Santa Teresa*, of the department of Cartagena. He received his baptism of fire almost immediately, since his ship was involved in military operations, first in Melilla, and a few months later in Algiers. During those months Alessandro did not have an opportunity to show his intellectual capacity, but he did have a chance to demonstrate a cool head and organizational ability, qualities which are probably more valuable in the military context. In Melilla he won a citation from Francisco Hidalgo de Cisneros, the fleet commander, and in Algiers his behaviour was noticed by John Acton, the future minister to the King of Naples, who was then commanding the frigates of the Grand Duke of Tuscany. At social gatherings years later the man still recalled Alessandro's years of valour.

We do not know anything of Malaspina's life in 1776, the year in which he was promoted to ship ensign, but that was probably when he was transferred to the maritime department of Cádiz. The young man must have felt quite at home in Cádiz, with its glassed-in balconies like those in Malta. And yet the entrances, made of the Carrara marble he had admired since childhood, and the very urban nature of Cádiz, reminded him of Genoa and of the Ligurian villages from which he had seen the sea for the first time.

The atmosphere in Cádiz was very stimulating for a man with a competitive spirit and a penchant for learning. Some time had passed since Jorge Juan, founder of the Friendly Literary Assembly, had left the city and died in Madrid, but the institution he had created was still feeding the spirit of that generation of enlightened officers. Years later these men were to constitute the very core of the Royal Navy. The young officers

tried to measure up to Antonio de Ulloa in their efforts to satisfy the demands of the monarch and the nation.

Quite apart from the navy, the society of Cádiz was vibrant and cosmopolitan. The Italian community, made up largely of diplomats, bankers and merchants, was particularly prosperous. It was probably at this time that Malaspina became a friend of Paolo Greppi. Greppi, who belonged to a newer aristocratic family, was just beginning a diplomatic career. He maintained relations with people who would eventually be significant figures in history. Among them the most important was Francesco Melzi d'Eril, who during the Napoleonic era became Vice-President of the Italian Republic. In Greppi's house (where Federico Gravina lived some time later) talented lay-people and officers discussed the salient issues of the day. In this milieu it is likely that Malaspina sharpened his knowledge of the Masonic ideals he had probably already encountered in Malta.

But his stay in Cádiz did not last long. In December 1777, just after a visit from his favourite brother, Azzo Giacinto, the young officer set off for the Philippines on the frigate *Astrea*. This ship had already attempted the voyage in March, but its Commander, Don Antonio Mesía, was forced to return to Cádiz because of an epidemic on board. The ship finally set off on December 17, carrying with it Spain's new Governor of the Philippines, Don José Vasco y Vargas. It proceeded by way of the Cape of Good Hope and anchored in Cavite Bay on July 27, 1778.

To return to Europe the ship had to wait nearly six months for favourable winds. It seems likely that Malaspina spent this time acquainting himself with the region. And it probably did not take him long to see that Spain's possession of this colony was actually limited to Manila and a few coastal outposts, and that, under the existing arrangements, its possession was of no advantage to anyone.

The *Astrea* left for Spain on January 13, 1779. On the return trip the ship carried a special guest with a retinue of four servants. It was, of all things, a female elephant for the King of Spain. One wonders what the sensitive Malaspina thought of the eccentricity of a government that paid more attention to an animal than to the welfare of its countrymen.

Again sailing around the southern tip of Africa, the *Astrea* arrived in Spain on September 5, 1779. Upon arriving, Malaspina learned that he had been promoted to frigate lieutenant.

The next three years were essentially years of war. Spain and France had allied themselves with the recently-born United States against England. Charles III was not concerned to ensure the independence of the American colonists. In fact, he was perhaps a bit uneasy that their break with the *status quo* might have a negative influence on the feelings of his *Criollo* subjects. However, he saw that the military situation might give him an opportunity to bring to an end the British presence in Gibraltar. All Spanish naval activity was concentrated on this objective.

In 1780, Malaspina was on the *San Julián*. The ship was commanded by the Marquis of Medina, and was assigned to the squadron of Juan de Lángara. On January 16, during the battle of Cape Santa María, the *San Julián* was captured by the English, who took the commander to one of their ships. While the Spanish ship was under escort, they left aboard it a skeleton crew, which included our lieutenant. There is no consensus among historians about the exact sequence of events, but what is certain is that Malaspina

somehow turned the tables aboard ship and returned it, free and flying the Spanish flag, to the harbour in Cádiz. A month later he was promoted to the rank of ship lieutenant.

In September 1782, aboard one of ten armoured floating batteries devised by the Frenchman D'Arçon, Malaspina was involved in an attempt to take Gibraltar, an unfortunate episode in Spanish military history. The batteries were set afire, one after the other, and had precipitately to be abandoned. Alessandro left his battery just before it sank, and spent the rest of the night in the exhausting task of saving wounded and shipwrecked sailors from certain death. We know about this act of heroism thanks to the memoirs of an Italian, Alessandro Belmonti, but Malaspina's superiors of course learned about it immediately, and on December 21 of that year the officer was promoted to the rank of frigate captain.

However, a different experience for Alessandro in the summer of 1782 is perhaps of greater interest than those military feats. At the time still a ship lieutenant, he was aboard the frigate *Santa Clara*, which was anchored in Algeciras Bay. As second officer of the ship he took over as commander when the captain was away. Week after week the ship rested at anchor, waiting for the call to some or other mission of war. What with routine marine chores and the standard religious services, the days passed slowly, so when he was not on duty Alessandro passed the time in his cabin reading and taking notes. Ordinarily, he did not even interrupt his studies to say the rosary and attend to other religious duties. And when he did have to attend mass, he was not properly dressed. To compensate for his extremely casual attire, he wore a hat, which he took off only during the Elevation of the Host.

And that isn't all. On one occasion, Malaspina amused himself by telling the chaplain about some of his ideas. For example, he said he was convinced that the souls of the dead went on to animate other bodies. When the chaplain reminded him that the mysteries of the Holy Faith entailed quite a different view, he replied that he was not about to discuss the matter with a priest. He is also alleged to have said that there was nothing wrong in having carnal relations with more than one woman.

These things were heard and recorded by a quartermaster of the Royal Navy, Agustín Alcaraz. Perhaps because his religious sensibilities were offended, or, what is more likely, simply because he disliked Malaspina, he denounced the officer to the Tribunal of the Inquisition. The denunciation was buttressed by other accusations: Malaspina was extremely severe with the crew; Malaspina took advantage of the absence of the Captain and ordered the removal from the officers' hall of the image of Saint Clare, patron-saint of the frigate.

The prosecutor of the Seville Inquisition did not receive the charges until October 1783, by which time Malaspina was near the Antipodes. In this period, the Inquisition had long since lost most of its sinister power, but it was still a fearsome institution, and determined to fulfil its assigned role. Hence the prosecutor immediately began to gather testimony.

One could analyse the way that questions were put and the manner in which answers were interpreted, but in the end these details would scarcely help us understand the captious nature of the inquisitional trials. Suffice it to say, for example, that when a witness confirmed an accusation it was taken as proof; but when a witness denied an accusation the testimony was simply ignored on the grounds that the culprit, as the accused was known *a priori*, had obviously perpetrated the act when the witness was not

present. Given such an approach, it was clear from the beginning that the Malaspina proceedings could only end in his indictment.

But at the outset no one knew how long it would take for the Tribunal to inch its way to this predetermined conclusion. Between 1783 and 1788 only six witnesses made depositions, and between 1788 and 1794 the investigation was halted altogether. It was not until March 5, 1795, that the inquiry was completed with the solemn declaration by the prosecutor that Alessandro Malaspina had to be seen as "vehemently and even very vehemently suspected of heresy."

The timing of the various events we have just noted probably has its own real significance. We shall return to this point later. For now it is enough to emphasize that all this proved one thing beyond doubt: Malaspina loved reading and because he wanted to keep himself up-to-date he obtained the most recent publications, including those in French and English. Moreover, he obtained these publications without regard to whether they had been approved by the censors. Apparently his wide-ranging interests led him to ignore the long, annoying transactions that were required just to gain permission to purchase foreign publications. And perhaps the perception he had of himself as superior prevented him from submitting humiliating requests to individuals he considered to be his inferiors in cultural matters. His avid quest for foreign publications leaves little doubt that Alessandro was in close contact with the hidden world of book smugglers that flourished in Cádiz during these years. The smuggling was done with the complicity of merchant vessels from neutral countries, particularly Sweden, that sailed the waters between Cádiz and Gibraltar. It is probably no coincidence that among Malaspina's closest friends was Jacob Gahn, an enterprising businessman and the Swedish Consul in Cádiz.

The matter of Malaspina's "heterodox" reading, and especially the ideas he expressed to the priest, raise an important point. Despite a lack of any firm evidence, Alessandro's biographers have always insisted on the likelihood of his membership in the Masonic Brotherhood. There may never be concrete proof of this affiliation, because Spanish Masons in the 18<sup>th</sup> century were careful to leave no trace of their meetings. Still, there are enough hints floating about to make it a reasonable assumption. For example, Masonic Deism (or pantheism) accords well with his belief in the transmigration of souls, a belief also held by Pythagoras, whom Masons believed to be one of the fathers of the brotherhood. In addition, Malta, where Malaspina had served his apprenticeship, was an important Masonic centre which, precisely in those years, had been visited by the sui generis Mason Giuseppe Balsamo, known as the Count of Cagliostro. Moreover, the enlightened bourgeoisie and the intelligentsia of that century had embraced the philanthropic and cosmopolitan ideals of the Masons. Even the disenchanted Voltaire, although possibly only through playfulness, never renounced his initiation into the order. Finally, the nature of Malaspina's circle of friends strongly suggests that he belonged to the Masonic Brotherhood.

Perhaps the best brief description of Alessandro's character at the time was given by one of the witnesses at his hearing before the Inquisition. Luis Rances, a surgeon, declared that Malaspina was thought to be a rather diligent officer who was prepared to fulfil all the obligations of his profession, who was orderly in his behaviour, and who was always occupied in reading and taking notes. This was an accurate picture of Malaspina in 1782, and was confirmed by his behaviour in later years. The twenty-nine-year-old

Alessandro was already a well-formed man intellectually. True, there were still some lacunae in his professional profile, but he was aware of them and tried to fill them in the years that followed. Meanwhile, he was consolidating his position in relation to scientific, political and broadly-defined social problems.

In January 1783, the preliminary peace agreements with England were signed in Paris. The hostilities came to an end and so did Malaspina's military commitments. In no time at all, the officer found another opportunity to remain active. He left Cádiz on March 14 aboard the frigate *Asunción*, commanded by Juan Ruiz de Apodaca. Their destination was Manila and the objective of the trip was to take news of the end of hostilities to the Philippines. As before, Malaspina navigated around the Cape of Good Hope both going and coming back. The *Asunción* arrived at Cavite on August 9, remained in that harbour until January 20, 1784, waiting for favourable winds, and anchored again at Cádiz on July 5 of that year.

Not many details of the voyage are known, but it is likely that the months in Cavite were spent in conversations with the Commander General, the same José Vasco y Vargas whom we met aboard the *Astrea* in 1777, and in marine studies with Ruiz de Apodaca. Upon returning, Apodaca submitted a report to the Navy on the efficiency of covering the ships' hulls with copper sheets. Malaspina was probably involved in drafting this text, since scarcely three years later he suggested that this technique, which was of such benefit to the British fleet, be applied to the *Astrea*.

Upon his return to Cádiz, Frigate Captain Alessandro Malaspina began a period of intense work on land. He became quite proficient in the administrative and bureaucratic functions of the department. In recalling this period later on, he would concede that it had given him the opportunity to acquire some facility in handling what he called "paper work."

This was also the period in which Brigadier Vicente Tofiño de Sanmiguel gathered a select group of officers around the astronomical observatory of Cádiz for the purpose of forming a scientifically trained officer corps, that is, a group of officers not only prepared to handle the naval and military problems which came up in the normal course of navigation, but also able to grasp the theoretical notions that were at the root of those problems. Tofiño's initiative had met with a hostile response from some of the senior officers, who were set on the idea that an officer was a military man only, and that to immerse him in scientific theory was a waste of time. Tofiño persisted, however, and Malaspina so completely agreed with him that he asked to be admitted to the group. The brigadier realized how useful Malaspina could be in these astronomical endeavours, and rushed to sponsor Alessandro's request. The Navy minister, Antonio Valdés, had already formed a high opinion of Malaspina, and immediately forwarded royal assent. Thus Alessandro became part of the group.

The observatory was installed in the old homage tower of the castle in Cádiz. Actually, the tower was not really appropriate for this purpose, but the officers were so enthusiastic about their work that they overlooked the logistical problems. Among the members of the group, Malaspina met his compatriot Alessandro Belmonti, and became better acquainted with José Espinosa y Tello, Dionisio Alcalá Galiano and Juan Vernacci, who later on would accompany him on the scientific expedition.

This little paradise did not last long, however. Vicente Tofiño was ordered to begin work on a long-planned atlas of the Spanish coastline, and Malaspina was called

back to sea. In January 1785 he was with a group from the brig *Vivo* and a felucca who were engaged in mapping the sea floor in the Western Mediterranean. In the summer of that year he was back in Madrid, working with Minister Valdés and José de Gálvez, Minister of the Indies, to set up a voyage to the Philippines aboard the *Placeres*. For Malaspina, the project never got beyond the planning stage, as apparently an illness held him back from the voyage. However, it is likely that the time spent in Madrid at least made him better known in government circles.

Back in Cádiz again, he was made lieutenant of the Corps of Midshipmen. In practice, he was the second officer of the corps, and the one most commonly in contact with the men. He met this new challenge by working well beyond the call of duty to improve his men's preparation. For instance, he set up weekly seminars in which the midshipmen took turns presenting topics that had been chosen the previous week. He gave them lessons in his own lodgings and helped them in writing their papers. However, he learned soon enough that not all the students had the incentive or perseverance to excel. Before long, Malaspina ended his work with the midshipmen. We know of this episode because he wrote of his dismay in his notes. Alessandro demanded much from himself and wanted others to live up to his standards. He was learning, however, that not everyone had his capacity and drive.

It must have been during this period – probably during the pleasant gatherings at Paolo Greppi's house – that the idea of a commercial voyage around the world took hold of Malaspina. The Royal Company of the Philippines had an office in Cádiz where Domingo de Olza was one of its top functionaries. He and Malaspina knew each other and together they used to review the major problems of trade, a subject that had always fascinated Alessandro.

At the time the company was going through a delicate phase of renovation. With the financial backing of the San Carlos Bank, managed at the time by Francisco Cabarrús, its directors were analysing various ways to reorganize trade between Spain and the Far East. Basically, they were proposing to end the prevailing system of the "Manila Galleon," that is, the annual convoy between Manila and Acapulco, which was risky and uneconomical.

The Minister of the Indies had succeeded in getting new statutes approved for the company, and moreover had persuaded the King to sign a decree which gave it the option of chartering ships from the Royal Navy. All the company had to do was put up security for any ships it chartered. Moreover, another government order exempted it even from that, as long as the chartered vessel was commanded by an officer of the Royal Navy.

Gradually Malaspina's conversations with Domingo de Olza and his colleague Francisco Rivas led to the idea of an experimental voyage: the vessel would leave Cádiz with a shipment of merchandise for Lima, go around Cape Horn, and after unloading at Callao, proceed to the Philippines, where it would load merchandise bound for Europe, and then return to Spain via the Cape of Good Hope.

It is quite possible that Malaspina had proposed just such a voyage to Antonio Valdés when they were drawing up the plan for the *Placeres* the previous year. What is certain is that the company proposed this circumnavigational voyage to the Minister of the Navy and the Minister of the Indies. It also asked permission to charter the *Astrea* from the Navy, and for the ship to be commanded by Frigate Captain Alessandro Malaspina, who knew the ship well from his travels aboard it from 1777 to 1779. Royal

assent was given quickly and Malaspina immediately took charge of preparing for the voyage, while the company and city bureaucrats proceeded to write a legal freight contract.

Malaspina made all preparations with great care. He oversaw the remodelling of the ship (whose hull, remember, was covered with copper sheeting); he chose the crew and the rest of the officers; and he laid down the regulations for the voyage. On this last point the commander had very clearly defined ideas. They were guided by his belief that a trade expedition had to operate on different principles from a military mission. Since this was to be a trade expedition, he felt that it was better to gain the compliance of the crew through rewards rather than through punishments. The emphasis was on emulation rather than subservience. While Malaspina was formulating these rules for his officers – Luis de la Concha and Francisco Javier de Viana (the latter of whom would serve on the future scientific expedition) – the administrative branches of the Navy and the company continued their work on the contract. Since there was no precedent for this sort of voyage, the negotiations proceeded slowly. Malaspina was indifferent to the particulars, which he knew would be settled one way or another. Indeed, the Astrea sailed while the document was still being developed. What mattered to him was that he behave with honesty and common sense on behalf of the Navy and the company, both of which had shown such confidence in him.

After many annoying delays the frigate finally sailed on September 5, 1786. The technical aspects of the voyage were more or less routine, in spite of some severe winds and counter-currents around Cape Horn. Malaspina took these in stride. What disturbed him, however, was the behaviour of the chaplain, who persisted in giving unsolicited advice on navigational matters. When the chaplain was just as persistently ignored, he proceeded to unsettle the crew by playing on their superstitions and predicting various misfortunes. Malaspina solved this problem by the simple expedient of having the chaplain locked in his cabin and then putting him off the ship at its first port of call, Concepción in Chile.

The *Astrea* finally arrived at Callao on February 1, 1787, and, after unloading the cargo, set off a month later to cross the Pacific for the Philippines. In order to avoid the calm zone around the Galapagos Islands, Malaspina followed a route somewhat different from the usual; he followed the old one of Alvaro de Mendaña. Consequently, even though this route was longer and he lingered in Guam for several days, he arrived in Cavite on May 14, only 75 days after leaving Callao.

Upon arriving, Malaspina heard the heartbreaking news that Jean François de La Pérouse had left the harbour only a little more than a month earlier. Disappointed at missing the French explorer, Alessandro tried to learn everything he could about his voyage. He also had many fruitful conversations with José García Armenteros, a local employee of the company, who had a profound knowledge of the archipelago and was an expert botanist. A few weeks later, the merchant ship *San Felipe* entered the harbour from China. From its captain, Antonio Mourelle, Alessandro probably received some first-hand news about the expeditions of Bodega y Quadra, Hezeta and Arteaga along the northwest coast of North America. All of which is to say that the long layover in Cavite was not a total waste of time.

The departure was set for November 20. The Captain General of the Philippines, José Vasco y Vargas, had been replaced and decided to return to Spain on the *Astrea*.

After a short call at Batavia, the ship sailed past the Cape of Good Hope on February 22, 1788, and with no further stops arrived in Cádiz on May 18. The voyage had lasted in all less than twenty-one months, three fewer than originally projected. From a commercial point of view it was considered a success, since neither ship nor cargo had been damaged.

The result was less spectacular from a human point of view. On the last leg of the voyage, between the Equator and Cádiz, an epidemic of scurvy broke out that claimed fifteen lives. This tormented the sensitive Malaspina, who agonized over what he might have done wrong. From that point onward he became almost obsessed with the crew's food, and in general with health measures aboard ship.

If the company was satisfied with the economic results of the trip, Alessandro was not. He had come to the conclusion that without complete commercial liberalization the company would never acquire enough funding to spur new investors to put their savings into its stock. Malaspina had already expressed these ideas in a letter, written during his stop in Lima in February 1787, to the directors of the company. It deserves a close reading, because it contains the basis for the reform proposals which, some years later, led to his disgrace and fall.

## Dear Sirs:

As the departure of the first vessels for Europe is getting closer by the day, as is that of the *Astrea* for Manila, I can no longer delay writing to inform you of the detailed manifest of the *Astrea's* equipment, as well as of the circumstances of the Royal Company which I have observed in this important marketplace.

On both subjects I will speak to you truthfully and without evasion, not so much because I believe my thoughts to be infallible or not totally subject to your judgment and your wish for the greatest success, but to show you that I am driven now, as I was in Cádiz, by the wish to provide the best service, and because I do not believe you are capable of enjoying flattery.

Credit and the augmentation of Company funds are without doubt the most important points at present. On this matter I must assure you that, in spite of the effort, intelligence and personal credit of the Count of San Isidro, the first will not be established for a long time and the second will fall short of the wishes of the company for perhaps many years.

In order for the Company's ships to take their profits in cash, I think the port of call should be this one [Lima] and not Buenos Aires. The resources of the Royal treasury have been exhausted, and it will be easier to acquire funds here because of the preponderance of luxury and because of the rich proceeds from excise taxes on the traffic in black slaves and from freight earnings which would not materialize in Buenos Aires.

Operating within this framework, I tell you in the first place that the Royal treasury will only be able to supply very limited funds on very doubtful conditions; that European merchandise should constitute only a dormant stock for some years ...; that a cessation of the expeditions for only one year will greatly aggravate the diminishing of credit both for Spain and for foreign nations;

and finally that uncertainty and the unsuitability of measures taken will add years and expenses to the process with no return. We must, therefore, look to the merchandise of the Orient as the only way to amass the necessary funds here, and we cannot relax our attention to this matter by being dilatory or capricious. I do not think we can compare the instinct for novelty or the whimsical pursuit of pleasure by the fair sex in this capital with their equivalents in Europe. Nor do I think the transport of merchandise from the Orient to Spain via Cape Horn can ever take place. ... I wish that the ministerial orders were not as strict on this aspect of the trade, and that this visitor and the Count of San Isidro had the sort of freedom and authority necessary for commercial endeavours to flourish over such long distances. In a year of sailing between this capital and Canton, the Astrea would convince you of the correctness of my calculations. The billing would be done here. In each load of freight, goods from Europe would be mixed with those from China, Bengal and Hindustan. In two or three years the Company would have its funding and its credit assured, with a notable increase of stockholders....

I cannot amplify my evaluation until I return to Europe, but I can summarize it to date: it is necessary for the Company to receive broader powers from the Court, in particular to allow for direct navigation back and forth between here [Perú] and Canton. Either the '87 expedition to Perú will be undertaken on those terms or it will not take place. Perhaps they can grant this licence if we ask for only one year. I think that upon my return I shall be able to convince the ministry that this would cause little or no damage to the national interest, to which I shall always adhere.

But if this idea is not satisfactory owing to government doubts or because you find it either prejudicial or imprecise, you will have to look elsewhere for funds than to the Company or to trade itself. And you will have to examine any funding that the King may offer very carefully, since those funds are in serious jeopardy, and in any case it is always difficult to execute Royal decrees over great distances.

I will not try to hide from you the fact that the Company's credit in these seas is very shaky or non-existent. To secure the *Astrea's* loan, the Count of San Isidro had to give his personal guarantee. The signature of the Company's commissioner by itself would have meant little or nothing in spite of his incredible activity and zeal, and of his well-known commercial ability. This reluctance to grant credit will seem quite natural to anyone who combines knowledge of the trade with experience of the conditions here.

Anyone who is accustomed to look at trade with Spain as the sole object of operations will find in this trade nowadays only an endless source of misadventures on the two continents, and cannot have a good opinion of anyone who bases his actions on this principle.

Unfortunately, to these ideas, which are understandable in themselves, we must add the conduct of the captain, the pilots and the crew – their pleasures and sufferings – all of which made it impossible to amass money for the *Astrea*. It is not surprising, therefore, that the shareholders withhold their support these days, and for the future as well, until things take a different turn.

Although he never lost sight of the objective of the voyage, Malaspina was constantly on the alert for every singular detail of the new lands. He fed off the knowledge of officers and civil servants and, in general, found inspiration here for his ideas. He began to work on them upon his return to Cádiz. Alessandro Malaspina was not made for a life of ease.

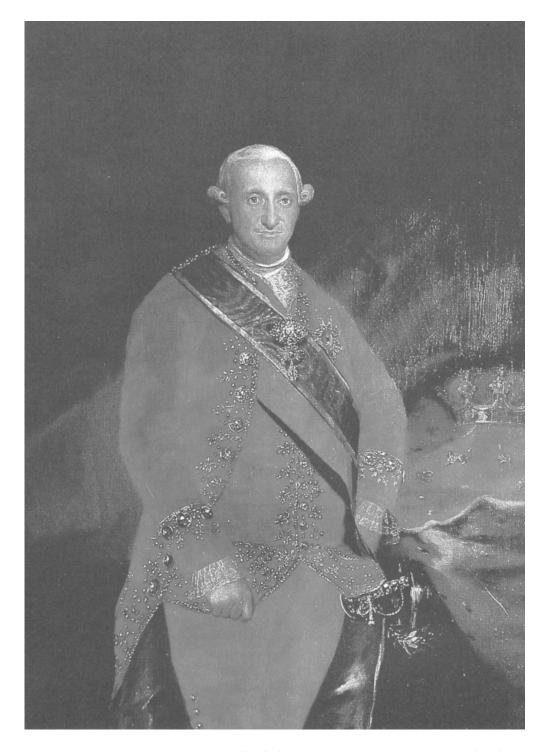


Figure 7. Carlos IV, King of Spain. Oil painting by Goya, Real Academia de la Historia.