

## Mutis, or The Trap of *Mutisia Clematis*

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The malady called America is an affliction that attacks certain inhabitants of the Old World. It presents as a longing to stretch beyond the ocean and beyond what is known, to reach a New World: an ambiguous desire, in fact.

—Giorgio Antei, *Mal de América:  
Las obras y los días de Agustín Codazzi, 1793–1859*

I saw that I had to free myself of the images which up till then had announced the things I was seeking: only then would I succeed in understanding the language of Hypatia.

—Italo Calvino, *Invisible Cities*

MANY PAINTINGS and sculptures memorialize José Celestino Mutis. He spent twenty-two years surrounded by painters drawing the flora of Nueva Granada, and he did not live in such company in vain. These painters immortalized him too on canvas. He now presides over the halls and chambers of museums and planetariums, universities and governments, to such an extent that his image ought to be immediately recognizable to Colombians at least. One particularly common portrait adorned my third-grade natural sciences book: the painting of an old man's head and torso suspended above a marble pedestal which itself was surrounded by instruments of measurement and books of botanical notes. A vine that seemed to emerge from one of these books climbed the base of the bust and delicately began to circle around the man. Underneath was written, "Mutis: scholar and precursor of Independence" (Figure 1.1). My curiosity could not help but be aroused by this founding father with neither weapon nor uniform, gently touched by a flower. Reading the reports of the Royal Botanical Expedition of the New Kingdom



FIGURE 1.1 “José Celestino Mutis”

Villegas, Oil on Canvas, Attributed to Salvador Rizo 118 x104 cm, Original in Museo Veinte de Julio. Taken from Villegas, *Mutis y la Real Expedición Botánica del Nuevo Reyno de Granada*, 1992.

of Granada (Villegas 1992) satisfied my curiosity at last. The plant is called *Mutisia clematis* in honor of the scholar and was so named by none less than Linnaeus. The portrait is by Salvador Rizo, the outstanding painter among the personnel of the Royal Botanical Expedition of the New Kingdom of Granada of which Mutis was the promoter and the director. Rizo painted it in Santa Fe de Bogotá, in the expedition’s workshop where the innumerable collections of the plants of Nueva Granada were organized according to Linnaeus’s system. He depicted Mutis this way a few years before the botanist’s death. Mutis rests atop the marble pedestal where dead patriots are placed,

enmeshed in a plant that grows not out of the earth but out of a book. To the left is an astrolabe, to the right his treatise on quinine, and carved into the marble is a Latin inscription: “*Virtutem Factis, Naturam Scriptis Colere Docuit*” (“He taught respect for the virtue of facts and the writings of nature”). Mutis did in fact spend his final days surrounded by these items that Rizo selected for his portrait, while suffering, among many other maladies, the American one: that literary disease said to attack European travelers who dare to cross the torrid zone, which condemns them to be unable to ever return to Europe.<sup>1</sup>

That ubiquitous painting assembles elements that are symbolic of the links I propose to make in this reading of the *Diario de observaciones científicas de José Celestino Mutis (1760–1790)* (Journal of Observations of José Celestino Mutis).<sup>2</sup> In the center is the Spanish traveler of the Enlightenment whom historiography raised onto a pedestal even before his death, converting him into a “precursor” of Nueva Granada’s independence. In the wings are the instruments used to create geography, that text about nature, and the books in which an unknown reality is classified within the new code of the West. Wrapping itself around the botanist comes the *Mutisia*, the involving, entangling nature that completely takes over the *Diario de observaciones* just as it took over the life of the historical character there portrayed. The painting thus summarizes a travel book that, like so many, is also the story of an interior journey, of a transformation provoked by the visited reality. A reading of this text from the perspective of the subjectivity, desire, and transformations that make themselves felt in the journal allows us to look at another facet of the ambiguous desire of those Europeans who contracted the malady of America. It contributes, too, to an analysis of how the texts generated by their travel fed the consciousness of national geographies and the discourses of Independence.

### THE ENLIGHTENED TRAVELER

Mutis was born in Cádiz. This Atlantic port had a particular importance for the Spanish eighteenth century, which opened with the defense of empire in a sea infested by pirates and privateers, and closed on the point of the loss of the empire overseas. In between there was a redistribution of power among the countries of Europe and a variety of internal national reorganizations in which science played a central role. Spain, in its drive to redesign education, created institutions such as the College of Surgery of Cádiz. This was where Mutis studied, and where the guidelines about natural experimentation laid down by Feijóo found their greatest response among botanists.<sup>3</sup>

As a scientist, Mutis left behind a legacy of such dimensions that his work has still not been published in its entirety. He enjoyed international respect among his colleagues. He maintained correspondence with scientists in different parts, especially with Linnaeus, which allowed the two of them to

make use of each other's research and also to develop a moving friendship—all without ever having personally met. Linnaeus began this correspondence when Mutis was already in Santa Fe. In it, one can observe how, for the botanist of Upsala, Mutis was a direct emissary to that paradise which America represented for his science. In his last letter, Linnaeus says:

I hope you may return safely to Europe, as from your letters I see that you will return, richer than Croesus himself with his treasures, with your plants and the observations you have made of them. I wish it were granted to me, in this life, to see you personally at least one time, now that you are returning as from paradise. Certainly, if you should return, on your account I would dare undertake a voyage to Spain, even though such a trip is impeded by old age and a death which will not wait. (Gredilla 1982, 9)

They never met. Mutis did not return from paradise, and death did not keep Linnaeus waiting.

Humboldt and Bonpland, however, did change their travel plans so as to go to Santa Fe to meet Mutis. This was the beginning of these scientists' admiration for the man they often referred to as the most important botanist of America.<sup>4</sup> Years later they dedicated their *Essai sur la Géographie des Plantes* (1805) to him, and asked:

But what is the degree of goodness of each of these species? With what virtues are they endowed and what valuation do they deserve on our part? . . . We have here some important matters whose solution depends upon the profound knowledge of the illustrious Mutis. . . . How many relationships! How many characteristics! How many rays of light essential to discerning these distinctions could be supplied by that Linnaeus of the new world! (Gredilla 1982, 119)

What is strange is that besides noting the relationship between Mutis and Linnaeus, Humboldt and Bonpland also see the New World as Mutis's "place." To them he is part of paradise and not a visitor there. Mutis is, without doubt, a European traveler within the line of those who contributed to the scientific reinvention of tropical America, but nonetheless his circumstances were unique. He came from Spain, where the Enlightenment had its particular nuances.<sup>5</sup> He was not sent by the crown to do his research, like La Condamine, nor sent on a diplomatic mission, like Boussingault,<sup>6</sup> nor did he travel as head of a scientific expedition, like Humboldt. Perhaps the most essential peculiarity is that he never went back to Europe to make his work known. He never felt the work was completed nor gave his text a final shape, never felt he was ready to return from paradise and tell what he had seen. His exhaustive output remained in perpetual transit between the patrimonies of Spain and Nueva Granada/Colombia, in a sort of limbo that even now is also

home to his name. After the triumph of Independence all his physical works were sent to Spain by order of the crown, but it is in Colombia that he is remembered as a founding father. His figure is some way a part of the patrionomies of both lands.<sup>7</sup>

Mutis departed for America in 1760 in the capacity of private physician to the viceroy Pedro Messía de la Cerda. Twenty-eight years would pass before his pleas for the crown to patronize his scientific dream would be heard. His *Diario de observaciones* begins in that same 1760, and in 1763 and 1764 he sent his first letters to the king of Spain requesting support for the undertaking of a natural history of the New Kingdom of Granada. In the letters, as part of his argument in pursuit of the money, Mutis places himself in the context of the international situation:

If other Nations which possess establishments or Colonies in America have acquired from the outset a precise knowledge of all that the soil of these Possessions yields them—as may well be gathered, especially in this century, from their handsome, well-printed histories—this must be attributed not only to the good taste of that beautiful day which for them dawned so early, but also to the ease with which such expeditions could be mounted. (Gredilla 1982, 43)

That letter to the king of Spain, an extensive document transcribed by Gredilla, is particularly important to this study because in it Mutis describes his personal project in America as a contribution to Spanish national glory and the advance of European knowledge:

[F]inding myself unexpectedly solicited to follow our Viceroy in the capacity of his physician, I resolved to leave behind projects, comforts, and whatever my permanent establishment in the Court may have proffered, because I wanted to dedicate myself wholly to the development of the Natural History of America, gloriously begun by the munificence of Señor Don Philip II. . . . The Natural History of America, for which learned Europe longs so much, is the work of a monarch like Your Majesty. (Gredilla 1982, 44–5)

He continues lauding the good it would do for Spain to put itself on a par with the other European nations, as well as making a detailed analysis of the agriculture of Nueva Granada and repeating ad infinitum that the riches of the colonies are not only mineral but agricultural.

The shores of the Marañon could supply all of Europe with stores of spices sufficient to tarnish the much-praised merits of the Orient, according to the testimony of M. de la Condamine. In the hot country and along the shores of the mighty rivers that bathe the interior of our Provinces, all of the plants that yield these spices grow in the same abundance as in the East. (Gredilla 1982, 46)

In presenting his scientific project, Mutis not only writes a history of scientific voyaging during the three centuries of the Colony, but also uses the rhetoric of many of the travel texts in which America was presented to the Spanish crown as an inexhaustible source of riches. In spite of his convincing arguments and the fact that his letter went accompanied by one from the viceroy Pedro Messía de la Cerda, the crown did not approve any funds for the expedition. Along with his heavy burden of work as a doctor, this denial was a frustration for Mutis. He had left Spain convinced that his botanical project in America would be viable thanks to the viceroy's support.

Countless and continuous obstacles spring up to interrupt my literary tasks in the area of natural history. I have barely any time to involve myself in these matters, nor can I take any comfort in my previous plans which I highly suspect to be frustrated. Since Spain I had thought to . . . investigate the Quinine, and such projects appeared well-founded in the confidence with which the Viceroy promised me that within a few days of our arrive he would assign me to this task. The silence which His Exc. has maintained with me on this point, and need for me to devote myself to preserving the health of Don Felix de la Sala, now confirm my doubts. All doors appear to be closed to the presumption that I might begin a search for any sort of solution. (*Diario de observaciones*, libro I: 100)

At the same time as Mutis began to doubt that the viceroy would be of any use to his enterprise, local authorities started to recognize him and give him academic opportunities. In 1762 he took occupancy of the chair in mathematics in the Colegio de Rosario de Santa Fe de Bogotá, which he would continue to hold until 1766. The Colegio was the first institution in the kingdom to teach the mathematical discoveries of Newton and the physics employed in the exploitation of mines. Both sciences, Gredilla makes clear, stimulated the exploitation of natural resources in the local area.

The project of promoting a Natural History of America was becoming a personal one for Mutis. Meanwhile, he became an ordained priest in 1772, more than ten years after his arrival in America. During the following years the tenacious botanist also became a mine owner, which gave him the economic wherewithal to begin his scientific enterprise on his own account. Finally, in 1782, the then-viceroy Caballero y Góngora came upon Mutis shut up in his house in El Sapo at work on a book about the flora of Bogotá. Infuriated by the news that other scientists, foreign ones, had been granted the right to visit the colonies, this viceroy wrote to Charles III criticizing his decision which "snatched from the Spaniards the legitimate pride and glory of their discoveries" (Gredilla 1982, 139). Before receiving an answer, acting on his own authority, he named a provisional scientific commission, the Royal Botanical Expedition of the New Kingdom of Granada.<sup>8</sup>

The expedition officially began in 1783 with several draftsmen and plant collectors who moved to Mariquita where the collection, drawing, and scientific description of thousands of botanical and animal species was done. With infinite patience Mutis recorded all the group's work and progress in his personal journal until the year 1790. At the time of his death, in 1808, the expedition's base in Santa Fe de Bogotá had become a center of astronomic, zoologic, and botanical studies, where the work group continued on in spite of the absence of its founder. Colombian historiography has always linked the Royal Botanical Expedition of the New Kingdom of Granada with Independence in terms of the influence that the new sciences exercised in the formation of a creole consciousness. In addition, historical figures who would play major roles emerged from the expedition: Jorge Tadeo Lozano, a zoologist who deserted from the Spanish army to join the patriots; Francisco Antonio Zea, a scientist who fought on the patriot side; and Salvador Rizo, the painter, who fought in Bolívar's army. All three died in front of Spanish firing squads. But the most outstanding figure was the astronomer Francisco José de Caldas, Mutis's favorite disciple, founder of the *Semanario del Nuevo Reino de Granada*. The works of various members of the expedition were published in Caldas's weekly, and its pages stoked the fires of Independence too. Caldas was executed during Morillo's reconquest and pacification campaign.<sup>9</sup>

However, the *Diario de observaciones*, almost two thousand pages written over the course of thirty years, does not communicate the revolutionary spirit that grew up in the workshops of the expedition. The pages written during the period of the uprisings reflect the fervor of a scientist lost in his work—and then comes the absolute silence of his last eighteen years. The *Diario de observaciones* is a voluminous collection of observations in which, as this analysis will demonstrate, the narrative subject undergoes a total disintegration, ceding terrain to the representation of nature (the *Mutisia*). What at first was merely one more object of observation for the enlightened man, by the end has taken over the text and displaced the narrative subject.

#### SUBJECTIVITY VERSUS THE MUTISIA

Whatever genres travel narratives may belong to, all of them are testimonies that attempt to represent an unknown world with pretensions of objectivity. Yet, to one degree or another, they are always inhabited by a first-person voice of the author which makes itself the axis of the visited reality. This is one of the circumstances that make the concept of representation in travel writing so complex. Dennis Porter explains it this way:

To represent the world is a political as well as an aesthetic-cognitive activity. It is an effort both to put something alien into the words of a shared language for someone else at home and to put oneself in the other's place abroad in order to speak on its behalf. (14)

The traveler is at once representer and represented, reporter and lawmaker. Within those multiple and inevitable situations, the traveler is narrating herself or himself. The *Diario de observaciones* has a scientific objective, but in its final form it also testifies to a change in Mutis's subjectivity. At first we find him radiant with faith in the cause of European science. Little by little this certainty grows weaker, and Mutis establishes his alliances with the advancement of American knowledge and of his own personal wealth. At the end of his day, Mutis will be a silent patriarch of the exact sciences in a workshop where protest against the Spanish crown is taking root. His journal is a witness to this personal transformation and to the scientific advances he achieved, but not to what was happening around him in the workshop in Santa Fe.

The first complete edition of Mutis's journal was prepared by Guillermo Hernández de Alba. It was he who decided on the divisions into which the text is organized, taking into account the intervals in which Mutis stopped writing. The journal is divided this way: voyage from Cádiz to Madrid in 1760; voyage from Cádiz to Cartagena de Indias in 1760; voyage from Cartagena de Indias to Santa Fe de Bogotá in 1761; Journal of Observations in Santa Fe de Bogotá in 1762; and voyage from Santa Fe to Cartagena de Indias from 1763 to 1764. Between 1766 and 1782, Mutis wrote in disorganized fashion and undertook various travels within the country, about which he maintained an erratic observation journal. Between 1783 and 1790 he wrote the largest part of his journal, which corresponds to the observations of the Royal Botanical Expedition of the New Kingdom of Granada. One could question whether or not this part qualifies as a travel narrative, since it contains basically scientific reflections.<sup>10</sup> But Mutis also wrote a parallel work containing his various scientific reports, which was not only much longer than the journal but also was organized in a different way and written in a different sort of language that emphasizes mathematical formulas, research results, and theoretical discussions. Therefore, it is appropriate to think that the journal, for him, continued to be his personal interlocutor.

The narrative begins with the moment in which Mutis decides to go to America as the viceroy's doctor. He is in Madrid, twenty-eight years old and already a passionate follower of botany and mathematics. He writes enthusiastically:

Today, July 28, I left Madrid—along with Don Jaime Navarro who has decided to follow me to America—at eight o'clock in the night with the López pack train. A half league from Madrid, my mule was frightened by the sound of the beads on the rosary which I was praying, and threw me to the ground. I was lucky that this shock did not yield me anything worse than a good pounding of my body. I fell to the right side, so hard that I crushed a box of tobacco I was carrying in that pocket, but I preserved the small box compass that I carried in the other. (*Diario de observaciones*, libro I: 2)

The voyage has hardly begun, but the traveler has already presented himself as we will see him throughout the narration: an extremely meticulous observer who details even the direction of his fall, but for whom the only really important objects are his scientific instruments, which are present everywhere in his journal and his correspondence. Mutis is always asking someone to bring him, from somewhere, a very precise thermometer, or a magnifying glass, or some chemical. Upstream or downstream on the Magdalena River, he will suffer no end of difficulties with his huge baggage of instruments. We can imagine what it must have involved, in that era, to get hold of an object that was produced only in Europe. It would have had to cross seas by sailing ship and then rivers and jungles on the backs of mules or of peons before arriving at the scientific retreat of Mariquita.

It is surprising, to say the least, that the viceroy's physician, the scientist who already had in mind the great work to be carried out in America, the bold youth who was embarking on one of the most dangerous voyages of the era, should decide to begin by retelling the rather ridiculous episode of his falling from a mule. In many parts of his narrative, Mutis would go on to present himself as a weak man. During the travels of the expedition he would often complain of his tiredness, of the length and complexity of the trips, the discomforts and shortages he faced. On his first voyage to Cartagena he fell terribly ill. In a letter whose intended recipient is unknown he complained about his destiny as a martyr to science:

The mosquitos, centipedes, scorpions, snakes, spiders and other vermin taint with unspeakable bitterness the wondrous flavors which the investigator of nature finds. (Frías 1991, *Viaje a Santa Fe de José Celestino Mutis*, 206)

His body fails him in every way, and suddenly he writes, "I lack the hands to draw everything I would like" (*Diario de observaciones*, libro II: 207). That sharp aside written by the scientific observer could be the beginning of a certain surrender to American nature, making it a project superior to his strength. This scientific traveler does not portray himself a strong figure capable of conquering and dominating that which he visits. To a certain extent this matches the rhetoric of the enlightened voyager who places his faith not in arms, nor in strength, nor in the religion he imparts, but in his science, which often comes up short before the immensity of his project.<sup>11</sup> Those travelers with magnifying glasses in hand often trip and fall and thank heaven for the bump that saved the lens. They are butterfly hunters and flower collectors who have made nature their object of desire. As Mutis says when he takes a friend to see the tree that yields quinine:

Doctor Valenzuela, all missteps forgotten, fixed his full attention upon the trees and plants, impatient to see the Quinine alive in its native soil.

Such is a botanist's desire to see a plant, especially one so justly celebrated. The object of our desires was near, we were approaching the marsh called Pantano Goloso, where the Watercress abound. (*Diario de observaciones*, libro II: 9)

Where Mutis sees a masculine ideal of an agile, intrepid explorer is in his plant collectors. They are what he needs but is not, an attitude in which we may also read a homosocial attitude on his part. At the death of Roque, his favorite collector, he writes:

He was a loyal worker to the end, a sufferer of hunger on the trail, tough and firm in his work, ingenious in findings and discoveries, trampling over dangers, climbing the steepest trees. He withstood the harsh rains and suns of this countryside. In a word, he was what I wanted and what I needed. (*Diario de observaciones*, libro II: 626)

What Mutis desired in those who made up his expedition was physical strength and an ability to travel and collect. He reserved for himself the authority of enlightened traveler and of scientific knowledge. Nonetheless, the authority of the narrator of the opening text is transformed by the experience of the voyage. When Mutis arrives in Nueva Granada he has enormous confidence in his accoutrements of the European Enlightenment, but his faith in science will not remain completely loyal to him. Mutis's text is not organized around the subject who returns home to share his findings with European confreres and produces a totalizing, highly structured work that lends him scientific authority. Rather, the fragile figure who tumbles from his mule will become, at the end of his days, a grumbly but rich old man shut up inside the expedition's workshop, concerned with nothing but the closed or open petals of his plants.

To help us see this process, we can divide the text into three major parts. The first covers his departure from Spain, arrival in Cartagena, exploration of the Magdalena, first stay in Santa Fe, return to Cartagena, and retreat to El Sapó.<sup>12</sup> The second part begins on April 29, 1783, when Mutis departs for Mariquita with his group of painters and plant collectors to begin the work of the Royal Botanical Expedition of the New Kingdom of Granada, which has been approved at last by the new viceroy. This part contains endless local expeditions, descriptions of the work of the group, and endless botanical reports. The final entry is for an unspecified day of 1790; the next-to-final one, from Mariquita in 1785. The journal of thirty years of life in America closes with a phrase as inconclusive as it is enigmatic: "Day 11. The third flower was open, and has continued as before" (*Diario de observaciones*, libro II: 684).<sup>13</sup>

During his silent years, Mutis wrote a text, "La vigilia y el sueño de las plantas" (The Sleep and Waking Life of Plants), which has been excluded

from the final version of the *Diario de observaciones*, but which for purposes of this study may be considered its third part. This text, although it continues the scientific obsession already present in the second part, differs in that now there are no human characters, not even Mutis himself. The entries are limited to determining the processes of some plants that sleep and wake like humans—and to drawing these plants, in representations that often fill an entire page (Figure 1.2).

Mutis's desire for American nature is motivated at first by scientific interest, then by economic possibilities this nature represents. Finally, both of these motives seem to abandon the narrator of the text. He opts for silence. When he is first leaving Spain on his American voyage, the narrator speaks with an authority granted by his faith in science and knowledge and his great confidence that Europe must reveal American nature to the Enlightenment mind. In the third part of the text, the narrator is absent; the first person has disappeared, and the sleep and waking of the plants are all that keeps him going. Around him, in the workshop of the expedition, his young assistants, Caldas in particular, began to immerse themselves in texts that would lead them to the gallows, in which the nature that their master taught them to dissect became a patrimony capable of producing patriotic pride. That nature was now the patrimony of the enlightened creoles who could map, study, and exploit it. For his part, Mutis had decided to keep silent forever. We will examine the process that led to that silencing.

Three months after beginning his journey, Mutis wrote to an unknown reader:

My dear sir: If I had to take notes about all the extravagant ideas of the men of this country, I would not have time to jot them down. It seems incredible that, in our own time, there can be a country whose inhabitants think so wrongly. On many such occasions I can only have recourse to silence, so as not to expose myself to unbearable contradiction and conflict. . . . To listen to these people speak of some effects of nature is to pass one's time listening to the delirium of madmen. . . . Let Your Honor learn something of these people's manner of thought, and give thanks to heaven that you are not in a country where rationality is so scarce that any well-enlightened understanding is in danger. (*Viaje a Santa Fe de José Celestino Mutis*, 1991, 23)

The letter was written from Cartagena during the first year of Mutis's visit. His journal of that period also displays his disdain for the curative practices of the residents of Nueva Granada. In this first part of the text he is still faithfully including dates in his entries, describing people and places, dreaming of returning to Europe, and establishing a clear difference between an "other" and a "we." Narrating his first trip to Honda, he writes:

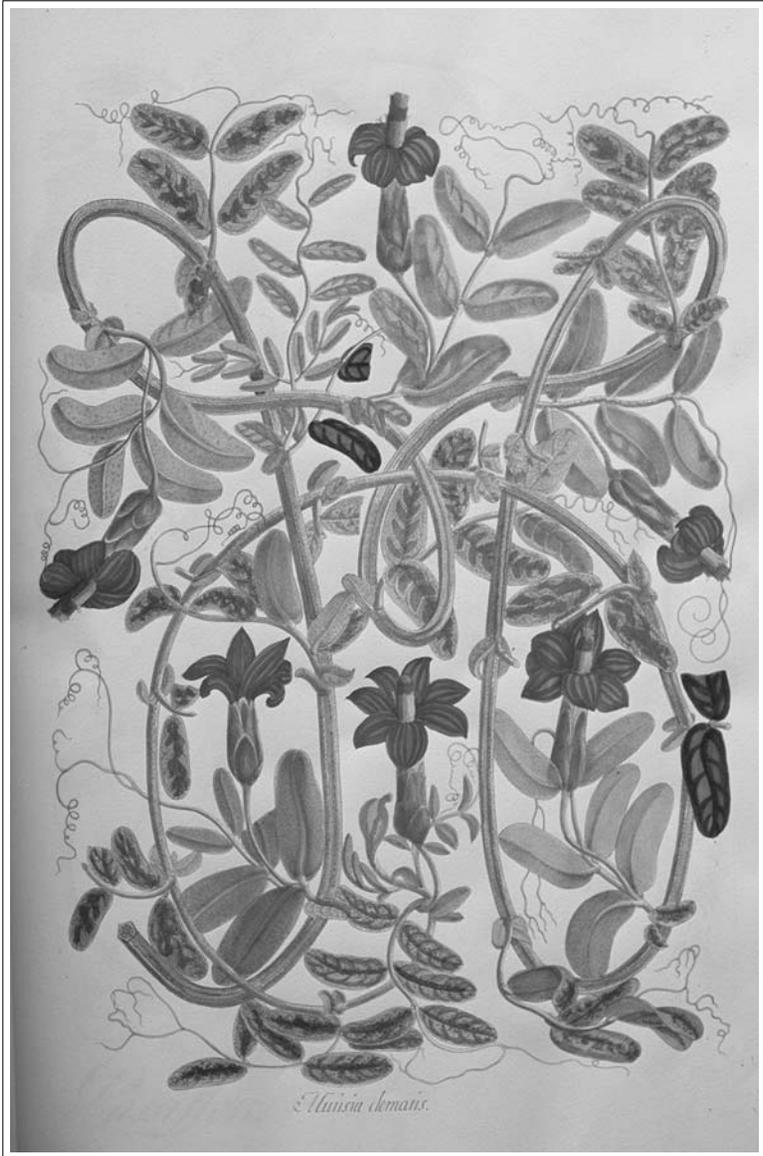


FIGURE 1.2 “Mutisia Clematis”

Painted by Salvador Rizo. Original in Real Jardín Botánico de Madrid. Taken from Villegas, *Mutis y la Real Expedición Botánica del Nuevo Reyno de Granada*, 1992.

At the moment (eleven months after having arrived) I am lacking many things that would contribute to alleviating the discomforts suffered by one away from home, but now in some manner I have adapted, until God pleases to return me from this exile and place me in my own country, surrounded by family and friends, whom I will entertain for a long while with my abundant harvest of tasty species. (*Viaje a Santa Fe de José Celestino Mutis*, 1991, 212)

He has made the decision to stay until he can assemble the “abundant harvest” which he will take back to his country, and he still places his role as a doctor above all of others. For long years his journal is full of patients and their sores, which the traveling doctor discusses insistently and repeatedly to the point of shocking the reader. He always disparages the way popular usage confronts these diseases: “[A]nother vulgarity, no less widespread, is the belief that the night air does much harm” (*Diario de observaciones*, libro I: 88). On hearing that no plant should be taken after nightfall he exclaims, indignantly, “Who ever heard of such a thing!” (*Diario de observaciones*, libro I: 89). On transcribing a legend about the influence of snakes on pregnant women he declares with irony: “The geniuses of America are full of such tales, naturally inclined to believe and repeat such prodigies, but rare is the one who can judge them with a critical eye” (*Diario de observaciones*, libro I: 97). His authority in the text comes from medical science and European knowledge, which make him superior to American circumstances and install him as the judge of what he observes.

Almost imperceptibly, the narrator begins to cede space to another phenomenon, one that took some years to motivate the scientific observer, but once it did, it changed him forever. The physician turns to observing how the native people effect their cures. What has earlier produced his surest disdain soon becomes his object of study. By 1761 he is writing:

I did not omit from journal some notes relative to Medicine, just as I have heard them from these people who daily put them into practice, as well as some other loose reflections about various vulgarities that prevail in Santa Fé among all classes of people. (*Diario de observaciones*, libro I: 87)

For months he keeps up the stories of how diseases and the bites of tropical animals are treated, and little by little local knowledge comes to occupy a good many of his pages. At first he ends every story with comments that disqualify the narrated remedy, such as, “I cannot understand such medicine” (*Diario de observaciones*, libro I: 108), or, “a story very similar to many in this country, which deserve eternal disdain” (*Diario de observaciones*, libro I: 94). Soon he comments, about a tale he has heard:

I was in conversation with some creole ladies, some creole men, and some newcomers, in which arose several matters worthy of my curiosity. Touching

upon the issue of the cures carried out by the blacks to protect themselves from the ill-effects of poisonous animals, Don José Rocha said that they involved pacts with the devil, while others held that some of these actions were fictions invented to impress the priest . . . all the rest concluded that there was a pact with the devil in these cures. (*Diario de observaciones*, libro I: 96)

This time the scientist confesses, “In this report many details are lacking, especially the result for the patient” (*Diario de observaciones*, libro I: 96). As he recognizes that he does not have all the necessary information, Mutis leaves open the extreme possibility of a pact with the devil. About a fantastic story of monstrous hens and roosters produced by a particular kind of corn, he notes, “A strange way of thinking, that does violence to the eyes, which might have seen the contrary. Nonetheless, I will remember the species so as to get to the root of this” (*Diario de observaciones*, libro I: 101). A time will come in which the transcription of all the curative knowledge he is gaining reflects a certain avidity, and he begins to employ a gushing syntax that calls to mind the *culebreros* who still walk the streets of Colombian cities, snakes twined around their necks, hawking magical remedies from the unknown jungles of the Amazon:

That the effective remedy for snake bites is the *bejuco curare*, which is much used in the hot country, [the people] carrying it with them so as to be protected from this ill. . . . That the *coyas*, after bursting upon contact with the skin, cause death by means of the poison thus introduced. . . . That the *ayutama*, when *vicha*, or unripe, sauteed to the point where the insides are cooked, are effective against gangrene. . . . That the hairy worms called *nuches*, which grow between skin and flesh, come from the bite of the *mosquito zancudo*. That . . . (*Diario de observaciones*, libro I: 100)

The narrator who endlessly reports these stories appears to have lost sight of the intended reader of his report. The family that is supposed to share “the harvest of tasty species” would not even be able to understand the vocabulary in which these findings are told: *bejuco*, *vicha*, *nuches*, *zancudo*. The text is becoming introspective, Mutis his own reader, and his *Diario de observaciones* the notebook where he collects information for his personal study. Four months later, the viceroy’s physician is so persuaded by the local beliefs that he begins an unheard-of experiment as the only means to demonstrate his scientific authority:

I decided to display a *Tatacúa* snake which I had kept in water for some twenty days, so as to be able to contradict, with experience, the tenacious vulgarity believed throughout the kingdom about the resurrection of said snake upon its feeling any humidity. (*Diario de observaciones*, libro I: 113)

The journal goes on in this way for several years. Yet such surrender to local knowledge cannot be seen as a result purely of Mutis's scientific curiosity. It also paralleled his involvement in Nueva Granada's economic production, which would make him a man of some capital. His desire to discover the mysteries of nature of America was the product of a scientific aspiration, but it was also the product of an economic interest.

In 1766 came an important event in Mutis's life: he began the mining activity<sup>14</sup> in which he would embody, for many years, his dreams of economic prosperity. In a 1789 letter to Charles IV's physician Francisco Martínez Sobral, in which Mutis communicates that at last he will devote himself to botany as had been his longstanding dream, he would write:

I also hope to soon harvest the generous fruit of my tasks in a most-abundant Mine in Sapo, which deserves recognition for its abundance and its wonderful circumstances. (Gredilla 1992, 91)

Mutis had by then given up his work as the viceroy's physician and devoted himself to his activities as miner and professor. Using the earnings these activities provided, he managed to turn to his true vocation, botanical observation, on his own account. American nature had become not only an object of study but a source of unexpected riches. It is difficult to determine exactly how Mutis's fortune came into being. Humboldt tells us that it was substantial when he went to visit Mutis in Santa Fe in 1801, but neither Humboldt nor even Mutis's biographer tells us anything more. Still, we can say with assurance that this fortune allowed him to join Nueva Granada's high society and to modify his judgment in some ways. The country previously seen as "where rationality is so scarce" becomes, now, the soil that offers him a chance at a private enterprise and the society that has named him university professor and recognized him as a teacher.

When he decided to move to his first mine, in Montuosa Baja, he wrote:

I arrived at my intended destination of Real de la Montuosa Baja in Vetas de Pamplona. . . . My toleration of such a voluntary exile, leaving behind the comforts of the court . . . leaving behind, that is, the delights of my study-room there, the rationality and culture, such as it is, of that city, my interests; it has led me to learn about the poverty of the Indies, about miseries which are truly unbelievable, though true, and not unknown to the Europeans who live near these mines. (*Diario de observaciones*, libro I: 179)

Geographically, what we might call an ideological displacement has occurred. Santa Fe de Bogotá, which earlier seemed to him a place in which "any well enlightened understanding is in danger," is now the site of "rationality and culture." Europe is no longer the exclusive center of knowledge. The territory

of Nueva Granada, in turn, has become more complex. Even its periphery is of scientific and economic interest to the botanist.

From 1776 until 1782, Mutis and his friend Clemente Páez would live at their new mine El Sapo (in Ibagué, near Mariquita), and devote themselves to mining and to the minute observation of nature, which we see reflected in a journal obsessed with description but now intermittent. The periodic entries of the early period are replaced by occasional descriptions of something he has seen. Now that he has again taken up the journal—after a great silence between 1762 and 1777—he has given up talking about diseases. The only beings in motion in these pages now are the ants and the bees, and the pages begin to be filled with botanical species instead.

There was another key event in Mutis's life during those years, one which, although not committed to paper in his journal, is regarded by Colombian historiography as a crucial moment. Mutis discovered the cinchona, the quinine tree, on the outskirts of Santa Fe de Bogotá. Acting on his suggestion, the Spanish government restricted its export in 1778.<sup>15</sup> Mutis apparently kept the details of the exploitation of the cinchona secret for many years, which eventually gave rise to a dispute with José López Ruiz, another botanist who claimed to be the discoverer of the species in Nueva Granada. *Quinas Amargas* (Hernández de Alba 1991) discusses this polemic at length. What is clear, however, may be seen in passages in Mutis's report *El arcano de la quina* (The Secret of the Quinine), in which he gives complete medical information about its use as a fermented beverage. The predictable may be confirmed: it was the native people who gave Mutis all his information about the methods of preparing quinine, something they used regularly.

Although we can give assurances that we have not learned these ideas from anyone, we do try to base them upon some empirical practices, and upon other preparations which perhaps the Indians might make from this bark, which they would not have hidden so well had they not been constrained by longstanding tradition and their own experience of the infallible effects of this remedy. (*Quinas Amargas*, 226)

Mutis later gives a detailed description of the process of fermenting quinine. As he himself explains, it is exactly the same process used by the indigenous people in the preparation of their most popular drink, which was *chicha*. The result is that the scientist must criticize the judgments of European science in a tone that cannot but remind us of Las Casas:

Thus we conjecture that the Indians made greater use of the quinine, but the human weakness of regarding as barbarous the inventions of peoples lacking in the culture of our times, with the specious pretext of improving them, tends to worsen their state. Truly and in good faith we confess that there is neither any monument nor any tradition which would support

granting to our Indians, inventors of this remedy, the glory of having used the fermented quinine. . . . In these circumstances they obtained through a more abbreviated method an equivalent to the fermented quinine, whose efficacy, together with the benignity of its healthful effect, would highly commend that valuable secret which they hid for so long from their conquerors. (*Quinas Amargas*, 227)<sup>16</sup>

The commercial discovery of quinine-bearing trees had an economic impact that modified even the landscape. Between 1801 and 1806, 4,250,000 pounds of the wondrous bark were taken from the highland forests of Nueva Granada, which according to Hernández de Alba financed the last years of the vicereignty and the armies of the reconquest (*Quinas Amargas*, 242). The independence was interrupted the exploitation of these trees because the patriotic armies, in their recruitment of indigenous people, took away the only workforce able to collect and identify them. "Europe suffered a quinine famine. . . . Such was its power and its indispensability that, in some messages sent to the Vatican, this became the basic theme of Colombian diplomacy and helped bring on recognition of its independence" (*Quinas Amargas*, 245). It is not clear whether this exploitation yielded Mutis economic gains, but it did represent his glory as a botanist and was the culmination of his surrender to American nature. *Mutisia*, thanks to his observations, had become exportable.<sup>17</sup>

Shortly afterward, he decided not to return to Spain. In the above-cited letter to Charles IV's doctor, he writes:

This decision answers Your Honor's questions as to my return to Spain to follow up upon those glorious ideas you have suggested about the reform of the Sciences. No, my friend, age douses the fires of youth, which Your Honor saw burning in me at that time, and my personal Christian reflections have uprooted my hopes of return. (Gredilla 1992, 92)

Quinine was, without doubt, the last treasure the Spaniards were to find in the paradise of Nueva Granada, and it was Mutis who assumed the task of uncovering its secret uses so as to make it a much-sought commodity in Europe. So perhaps it is not so arbitrary that, while in Colombia he is remembered as a teacher of science and venerated in a romantic statue girdled by nature, his image in Spain is quite different. In his country of origin, the scholar from Cádiz is barely remembered on the 2000 peseta bill while Latin American imagery has made him a romantic precursor of Independence.

#### THE AMBIGUITIES OF SCIENTIFIC KNOWLEDGE

To analyze the development of the subjectivity that the traveler constructs in the pages of his journal, it is necessary to keep in mind that at first he planned

to return to Spain with the knowledge amassed during his explorations. In that context, his retreat to the Sapo mine and his discovery of the quinine-bearing cinchona mark the culminating period of a definitive change undergone by the narrator of the *Diario de observaciones*. In America, Mutis had found glory as a botanist and a place to carry out his great natural history project. At the mine, in 1782, he would be visited by Archbishop Antonio Caballero y Góngora, then viceroy of Nueva Granada. That encounter would pull Mutis out of his scientific isolation and set into official motion the Royal Botanical Expedition of the New Kingdom of Granada, now supported by the crown under special protection of the viceroy.<sup>18</sup>

In 1783, Mutis again picked up the journal he had put down some day or other in 1782, and this time the text picks up the narrative thread that had been abandoned for years:

29th day of April, 1783, Tuesday. After the many travails which, in these countries, are implied by the preparation of a voyage toward the progress of Natural History, with a much-enlarged family of comrades and servants and their corresponding volume of baggage, we set off at last for the Juan Díaz mesa [Mariquita], a site which I chose because it offers so many qualities for the rapid collection of natural products. (*Diario de observaciones*, libro II: 3)

The concrete opportunity to launch the expedition and the absolute decision to stay are also reflected in Mutis's new sense of himself as the colleague of Nueva Granadans. Here begins a new voyage, a new text if you will, in which Mutis's comrades appear as respected and even beloved members of a conversation. The narrator allows himself deep emotions when he describes his work team: "Roque so efficient and loyal" (319). Pedro and Esteban are now "my rustic observers." Although we never know as much as their surnames, we see them coming into the work room time and time again with an intact butterfly or plant in hand for Rizo, García, or Matiz to eventually draw. Mutis indicates quite often that the work of the Royal Botanical Expedition of the New Kingdom of Granada was the work of a team of botanists, draftsmen, and plant collectors. His own figure does not appear as the bearer of any previous and infallible knowledge. He is now an observer who can be moved by the small discoveries of these others, telling us about them in such an intimate tone that if we did not know the context of the composition, we might be under the illusion that it was verse:

Shortly after I left my study, Pedrito entered it, and luckily he was curious and managed to see the *Butterfly* hanging upon the outside of the cocoon, with soft wings unable to fly. He called my comrade (and in this he had the foresight to choose so well prepared a witness) and observed—carefully, for the reasons already discussed—that the butterfly had only recently emerged

from its cocoon. When they came to my house they gave me the good news and I had the pleasure of seeing it, leaving it behind glass so it would die there, so as not to kill it. (*Diario de observaciones*, libro II: 193)

The traveler in paradise who should have returned to Europe with more treasures than Croesus had now left the road home forever. Instead, he is captivated by the wings of a butterfly on some remote mesa. August 22, 1784, he writes, “My journals supply the history of my errors and disappointments” (*Diario de observaciones*, libro II: 441). In June 1785 he writes:

It is not easy to make discoveries at a single stroke, nor to verify that which you suspect. The polygamy of plants cannot be demonstrated by conjecture, only by repeated observations. The traveler cannot do so without stopping for a long time in the same place. (*Diario de observaciones*, libro I: 634)

Thus, travel could no longer be justified as pursuit of knowledge. What had scientific validity, now, was remaining in the same spot.

Mutis’s text “La vigilia y el sueño de las plantas” dates from this same year. His biographer regards it as a part of the *Diario de observaciones* and presents it this way:

The study we now present . . . if it might have been of some novelty at the end of the eighteenth century because it partially imitated the clock of the Flora conceived by Linnaeus in Upsala, today is completely lacking in scientific importance. (Gredilla 1992, 362)

The text consists of consecutive daily entries in which there is no observing subject, only the plants, which sleep and wake. Their anatomy is described in infinite detail and their reactions are perceived and told by the writer in a lyrical tone closer to poetry than to science.

About ten in the morning (with a clear sky and a cool wind) some flowers of the *exandras* began to wake up, displaying their corollas bit by bit (209). . . . Mid-day: Among the *exandras*, some are still fully awake and others withdrawing (300). . . . Toward dawn the *Exandras* began to stretch little by little, but without yet opening their little calyxes (301). . . . At five (the sun hidden, calm) All the calyxes completely shut. I see that lately the seeds of the *Triandras* have fully developed. It was pure illusion, therefore, to have believed they only seeded during the wakeful times. (303)

In this sensual language, in which it is not easy to recognize the traveler, José Celestino Mutis writes his final work. Really, this is direct scientific observation without the evaluative judgments that accompanied the observations of the first pages of his text. The narrator is alone before his sleeping object of

scientific desire, that American nature which he had made into discourse, and which had enveloped him and given him fame and fortune in return.

In 1791 the expedition moved at last to Santa Fe de Bogotá because Mutis fell ill. There he would work for ten more years, but he would not write any more in the notebooks that he called journals. The nation was living through the commotion of communal uprisings. In 1793 the crown began to question the results of the expedition, which seemed to prolong itself endlessly, and sent Don Francisco Martínez to act as supervisor. Martínez praised the work of the expedition but warned that Mutis was old and sick. In 1801, Humboldt and Bonpland came to visit. In a letter to his brother, Humboldt described his visit with the venerable old man whom he had altered his American itinerary in order to see. Of Mutis he says:

[H]e is an aged priest, venerable, of almost seventy-two years, and a rich man as well. The king provides 10,000 piasters a year for the Botanical expedition. 30 painters have worked for Mutis for fifteen years; he has from 2000 to 3000 folio-sized drawings, miniatures. After the Banks' in London, I have never seen a botanical library as large as that of Mutis. (*Cartas Americanas*, 85)

During the Bogotá years, Jorge Tadeo Lozano and Francisco José de Caldas joined the project, and the Expedition broadened to take in the field of astronomy and zoology. Part of the "family" from Mariquita had died: Roque trying to get hold of an exotic plant in Quebradaseca, and Pedro Ferná by snakebite. In 1808 Mutis died in Santa Fe, but his disciples continued his work until 1817. Then, in the face of the capture of the city by Simón Bolívar, the Spanish government decided to dismantle the Royal Botanical Expedition of the New Kingdom of Granada. All of Mutis's work was sent to Spain. A good part was lost forever, according to his biographer, because of negligence on the Spanish authorities' part.

During those last difficult years of political confusion and uncertainty, Mutis did not write anything. With this silence he responded to what was gestating in his workshop, where his creole disciples took responsibility not only for continuing and broadening his work but also for including the project of the Royal Botanical Expedition of the New Kingdom of Granada within the rhetoric of Independence. Colombian historiography has linked the figure of Mutis with the Colombian Enlightenment and has placed the Royal Botanical Expedition of the New Kingdom of Granada among the antecedents of Independence.<sup>19</sup> Around the creole Enlightenment there grew up an enlightened elite that assumed the creole leadership in the independence wars.

Precisely in those years when the ideas of emancipation were taking shape among Mutis's students, Rizo painted the master. A few years later, underneath

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a monument erected in his honor in the Colegio Mayor de Nuestra Señora del Rosario, was written: "José Celestino Mutis, teacher of free men." The connection between the nature that Mutis taught and Independence had been established. This note of a patriotic debt to the "scholar," which resonates even in the present day, was first sounded by Caldas himself. In the obituary to his teacher that he published in the *Semanario del Nuevo Reyno*, which may be considered the first biographical data on Mutis, he recognized Mutis's desire for American nature, which could not be deferred. "The silence, the peace, the forests of America, which exercised a greater attraction on his heart than the pomp of the courts of Spain" (Gredilla 1992, 182).

Nature, the *Mutisia*, had twined itself around Mutis, trapping him forever. At the same time, he had converted it into the discourse of his journal, leaving it as a legacy to his American apprentices who incorporated it into the rhetoric of liberation. The American nature he had come in search of, as an object worthy of the Enlightenment, now emerged from the pages of the book rather than from the untamed tropics. Now it did not take the form of contemptible mosquitoes and centipedes that embittered the victorious task of the enlightened martyr, but rather of a dissected text that did not need any scientific judgment to spread its wide wings in free flight. It became a butterfly with wings intact, which he left among his books so that it could die alone, so as not to kill it.