

Chapter III

Finally, there was the question of clearing out the section of the Sciences. Nadir was very embarrassed. He did not have sufficient knowledge to make firm decisions in that regard.

He has put in the reserve books of algebraic calculations, the elements of mathematics and geometry, but for matters of Physics, and the new elements of Chemistry—that science which embraces all of nature, whose theory always seems founded on experience but in which he nevertheless sees an infinite number of opposed opinions—he is suspended in indecision. He picks up a book, and put it down again. He picks up another, and puts that one down again. He walks around, he sits down. He thinks.

“Just as I expected,” an unknown voice suddenly exclaims.

Surprised, Nadir looks up; there does not appear to be anyone there. His slaves have all gone. Convinced that the sound was only the effect of his imagination, he has resumed thinking when the same voice repeats the same words, distinctly. Then he springs to his feet.

He searches, and soon perceives, in a sheltered corner of his library, a man reading a scientific work.

That face was not absolutely unknown to Nadir; his library being open to all the scholars in Chrysoopolis, he recalled having seen it there before, but the memory was vague. In fact, the man, a trifle taciturn, modestly dressed with a polite simplicity, had not been much noticed by Nadir, and even less so by the pretentious individuals who often came to spend time in the library in order to offer opinions on science.

However, Nadir found what the man had said to be very singular. “I would like to know, sir,” he said, honestly, “what you think about the book you’re reading.”

“It’s very good,” said the stranger, looking at Nadir with an affectionate vivacity, “but I would say the same to the author as to you. This is why: he has clearly demonstrated the movement of the Earth and the other planets around the sun, but, still enslaved to general prejudice, he thinks that the sun is a fiery body; in consequence, when he sees by his calculations that Mercury is so close to the sun, he has difficulty deducing what quality the surface of that planet might have, in order that it should be neither consumed nor volatilized by the sun. It was by reason of that embarrassment that I said to him, as I said to you, that it was just what I expected.

“Well, my dear Nadir, I want to render you a service. I can see your embarrassment in choosing between all your books of science. You shall soon know enough to appreciate each of these works according to its value. I am a philosopher, but a philosopher by taste and not by ostentation—so don’t imagine that I owe my origin to your globe. I am, as you can see, an inhabitant of Mercury. It is with the aid of an ingenious discovery that I have risen or descended to the world that you inhabit. I say ‘risen or descended’ because, as you know, in the extent of the Universe, there is neither up nor down, nor center nor extremities.

“I will tell you, briefly, how I came to undertake my voyage.

“All the people of our globe are active. The climate is almost the same as yours, although it is closer to the sun; I will explain the reasons. Although our planet is fertile in men of intelligence, we nevertheless only have one Luminacy—that is what you call an Academy—and that Luminacy is only comprised by a dozen Sages or Incumbents.

“That small number will doubtless surprise you, but know that in order to be a Luminarian on Mercury it is necessary to have made either important discoveries in science or to have produced genuinely new works of literature. It is also necessary for a Luminarian to have renounced permanently the great display of petty prestige, the fury for making a name by means of erroneous theories, the mania of wanting to rise by debasing others, and, finally, those unsustainable pretensions that are sometimes presented beneath the veil of modesty. The number of aspirants is sixty. It is from among those aspirants that the replacements are chosen for Luminarians who return to the great principle of light, but in making those choices, no attention is paid either to the order of seniority or the quantity of published works; merit alone decides.

“I am one of those aspirants, who put myself forward for election at the recent promotion for work in science. The assembly had been convened. Already, the twelve Sages were looking at my

work. They took extracts, comparing my reflections in summary, examining the connections between them, their verity and utility. I was quite certain that I had only exposed faithfully verified experiments, not imagined in order to present or support ridiculous theories. I was quite certain that I had stripped away, in that regard, all pretensions, and that, having sought only to educate myself, my reflections could only be more justified in consequence. I therefore awaited my fate with mild anxiety—which is to say, less anxiety than many of your scientists would probably have had if they submitted themselves, without self-regard, to a similar examination.

“The twelve Sages were in closed session; the aspirants, who had no place in that examination, were walking around in a nearby room, according to custom, when all of a sudden, Scintilla, one of our young companions, from whom we had already seen some good works, arrived hurriedly, knocked on the door of the Sages’ conference room, and asked to be admitted.

“That request was contrary to the rules. It was refused.

“He insisted fervently. ‘My friends,’ he said, turning to us, ‘help me—it’s necessary that we should all go in momentarily. I only want a five-minute hearing.’

“The Sages immediately ceded to the fuss they heard, having, in any case, no arrogance—or, rather, the pettiness of believing that the infraction of the rules impacted on their authority or their merit—and granted the general audience.

“Scarcely had everyone gone in than Scintilla addressed the assembly. ‘Gentlemen,’ he said, ‘as no mortals can be certain of the successive instants of their existence, I thought I ought not to delay for a single moment in making you party to an interesting discovery. For a long time, people have been seeking to discover what mechanical means they might cross aerial spaces. I am glad to be able to tell you today of the success of my research.’

“He proffered a manuscript, saying, ‘Here it is—but the manuscript is not sufficient. The theory, although quite simple, will perhaps not be sufficiently intelligible, with respect to such a new subject. Thus, before arriving at a theoretical conclusion, let us carry out an experiment. Two slaves have carried my apparatus on to the platform of our Tower. Let us go up there.’

“Scarcely had he stopped talking than our dozen Sages looked at one another with evident surprise, but without any hint of scorn. Several of us, by contrast, smiled, and, being more indiscreet than the others, I burst out laughing.

“Immediately, the doyen of the Luminarians criticized me coldly. ‘Ormasis,’ he said to me, ‘we were unaware of this streak of arrogance within you, of believing that which you cannot imagine to be absolutely impossible. It is necessary to correct it. If Scintilla’s discovery is sound, do not think it inappropriate that we occupy ourselves with him in preference to you.’

“‘Willingly,’ I replied, swiftly. ‘If Scintilla’s discovery is sound, not only will I not be jealous of Scintilla’s merit, and render him all possible homage, but I promise, I swear, not to reappear in this august assembly until I have, with the aid of that machine, visited Hermione’—that is what we call the world you inhabit.

“Scintilla was not annoyed by my incredulity, because on our planet, scholars do not get annoyed. On the contrary, he came to grasp my hand amicably. ‘I won’t demand,’ he said, ‘that you keep your word. The author of such a perilous vehicle ought to run the first risks. I would be inconsolable if I deprived the Company of a member as useful as you.’ He went out immediately, asking the assembly to follow him. We followed him.

“I went with the others. I reflected privately, calculating that the movement of levers to form a sufficient resistance—which is to say, to embrace a large volume of air—demanded a considerable force of power; that in consequence, the fulcrum of that force or power must be comprised of a very solid material, and, the specific weight of that substance thus having to be increased proportionately, that it would be impossible for such a machine to rise up.

“In sum, I imagined a machine with wings, in much the same terms as you have envisaged the canonical vehicle of which the phaeton is the earthbound model. How surprised I was, therefore, when I arrived on the platform, to see two glass spheres three feet in diameter, mounted on top of a small and quite comfortable seat.¹ Four wooden struts covered with sheets of glass supported the two

¹ The notion of the glass spheres was presumably derived from La Follie’s acquaintance with the Leyden Jar, a device for storing static electricity invented in the 1740s. Such jars were often connected up to increase the

spheres. Between the struts there were several springs, which I assumed to have the function of setting the globes in motion. The bottom section that served as the supportive of the seat was a plate coated with camphor and covered in gold leaf. The top was circled by metal wires.

“As soon as I had seen that new form of electrical machine, I became less incredulous regarding Scintilla’s success. I remembered that he had already published interesting papers on that subject. He had rationally explained the electrical causes of certain effects, such, as, for example, the division of gold by the percussion of light, and its reassembled in its original form by a further movement. He had also demonstrated to us that the violet tint of litmus, converted into red by an electric pulse, was nothing but the effect of sulfurous parts contained in the air, which, decomposed by the inflammation of phlogiston, left the acidic fraction exposed, and sufficient acid to turn the tincture red. There had not been any decomposition of the air in that experiment, but only the decomposition of sulfurous parts contained within it. Finally, Scintilla had already explained to us an infinite number of petty phenomena similar to those that are now astonishing the scholars of your world, and allowing them to extrapolate consequences as far as the eye can see. I confess to you, therefore, my dear Nadir, that the closer I got to that machine, the more my surprise and credulity increased.

“I soon had no further doubts on the matter. Scintilla, whose body was as nimble as my imagination, slowly climbed into the machine, and promptly pulled a lever. We saw the two globes rotate with a prodigious rapidity. ‘Gentlemen,’ he said, ‘you can see that in order to lift myself up in the air, my principal means is to annul the pressure of the atmosphere above my head. Observe that the percussion of the light is presently acting underneath my machine. That is what will lift me up without much effort, and, as the master of the motion of my globes, I can go up or down to whatever extent I choose. You can also see...’

“But we heard nothing more. His machine, suddenly surrounded by a luminous circle, had risen up at great speed. No spectacle so new and so beautiful had ever been offered to our eyes. We saw it remain motionless for a brief interval, then descend again, then rise anew. Finally, we lost sight of it.

“After our initial rapture of admiration, we reflected on the dangers that our friend was running. We did not doubt the solidity of his machine, but how could he withstand such a rapid flight without being suffocated?

“The doyen of the Sages set our minds at rest, however. ‘Gentlemen,’ he said to us, reflect on what we observed during the departure. Has he not assured us that he could nullify the pressure of the atmosphere above his head? Now, the effect of which he is making use is not that of vanquishing the resistance of the air by means of a force greater than that resistance, so I am confident that he is breathing with the same facility as us. I even believe that the rotatory motion of the globes must drive away from him the water vapor in the atmosphere that might have inconvenienced him, and I further presume that the same movement must maintain a warm and fairly agreeable temperature.’

“These judicious reflections reassured us. Indeed, after waiting for an hour, we saw Scintilla reappearing. His competent steering movements assured us that he was in possession of his mental faculties and his strength. When he came closer to us he descended more slowly, and set down in almost exactly the same spot from which he had taken off.

“You might perhaps think, Nadir, that our friend, on leaving his seat, would have been radiant with joy and pride, that he would have boasted of his importance by virtue of that of his discovery, and demand the tribute of our respects, like those petty individuals of Chrysopolis who, having presented their Luminacy with some minor saline compound, imagine that the Hippodrome is not large enough to contain them. Make no such mistake. Scintilla embraced us. We also embraced him with the greatest cordiality.

“‘My friends,’ he said to us, ‘you would surely have made this discovery before me, if you had occupied yourselves with it, but the other objects that have excited our endeavors are no less important. This discovery would be of very minor importance if we did not have the hope of traveling to the different globes of the Universe and augmenting our knowledge. I count on leaving tomorrow, and first plunging into the brilliant river that illuminates us, and from which we are not far distant. I want to discover, if possible, the principles of light.’

stored charge, into what Benjamin Franklin, who conducted an extensive study of electrical phenomena in the 1750s, called a “battery.”

“No, my dear Scintilla,’ I replied, ‘I cannot allow you to make such voyages. Your fecund imagination is too useful to our Company for you to risk your life. I shall go. Stay with our Sages, who will admit you to their number. I shall, as I promised, travel to Hermione. We have already presumed, by virtue of the ephemeral disappearances of that planet, that it is not luminous itself, since it is subject to being eclipsed by the interpolation of other opaque globes between itself and the sun. Now, the resemblance of that earthen body with ours tells me that there is little danger in visiting it. When I have explored that world, I shall pass close to the sun as I return, and then I shall make you party to my observations.’

“I went home immediately. I took a large provision of nutritive powder. I also took several of our phosphoric stones, but I only took them in order to furnish myself with light in case of need; I did not foresee then that those stones, very common on our world, would be of such great utility in yours.

“I returned to the platform. I found Scintilla there, who was instructing the assembly. I obtained from him the instructions necessary to regulate my progress as I wished. Finally, I left, with the admiration and regrets of my friends.”