

BOOK ONE

THE TITANS OF THE HEAVENS

*“At any rate, whether we expect another invasion or not,
our views of the human future must be greatly modified by these events.
We have learned now that we cannot regard this planet as being fenced in and a secure abiding-place for
Man; we can never anticipate
the unseen good or evil that may come upon us suddenly out of space.”*

H. G. Wells
The War of the Worlds

Part One: The Season of the Torpedoes

I. Before the Opposition of Mars in 1978

The Great War, in which the greater number of the civilized nations hurled themselves upon one another at the beginning of the 20th century, had been the last.

One invention, anticipated for some time, combined with the initiative of a few bold intellectuals and men of action, accomplished what the spectacle of death and vain devastation, the declamations of pacifists and the reasoning of economists, had been unable to do. The savage and ferocious instincts that had marked humankind since the legendary Cain with the stigmata of its animal origins, and had hindered the development of intelligence incessantly with its periodic explosions, constraining humans to organize mass murder instead of devoting themselves to the peaceful conquest of the planet, were conclusively strangled and reduced to impotence.

The solution of the “problem of war” was, so to speak, a two-step process. In the beginning, what was known as “universal disarmament” remained utopian, insofar as it was supposed that it had to emerge from mutual good will. The sudden attack in 1932 by the allied Japanese and Chinese, which had militarized 20 years before—the famous “yellow peril” about which the incredulous Europeans joked until the very last minute—almost overwhelmed the West, which had scarcely recovered from its previous war, but the Great Discovery, perfected in the most absolute secrecy by a committee of men who combined scientific genius with the noblest plans for the future of humanity, thwarted the invasion and, at the same time, struck the first mortal blow against militarism.

Controlled at a distance by telemechanical waves, hundreds of “deflagrators”—silent helicopters working in relays—flew over the Asian hordes by night, bathing them in high-frequency electromagnetic radiation. Under that influence, powerful sparks sprang forth in every direction from metal objects. Cartridges exploded spontaneously in their cases, girdling soldiers on the march with fatal fire, and shells exploded in their boxes in every ammunition dump, arsenal and munitions factory. In a few hours, like Sennacherib’s army mowed down by the Archangel’s flaming sword, the soldiers of the Nipponese and Celestial Empires were strewn in millions upon the plains of Siberia. Europe was saved, without suffering any other losses than a German advance-guard that had already arrived in proximity to the invaders, whose munitions had been subjected, without any differentiation, to the effects of the incendiary waves.

Emboldened by this success and the unique possibilities that it offered, the government of France—or, rather, the CSP (Committee for Science and Progress), whose members had the frightened politicians at their mercy—faithful to the immortal principles of 1789, immediately revived the old idea of general disarmament and, in the name of definitive peace, proposed *urbi et orbi* the immediate creation of a United State of Europe under the nominal presidency of His Highness the Prince of Monaco. The ultimatum, supported by the tacit threat of the teledeflagrators, was accepted at once. All the munitions of every country were transported to remote regions, the areas surrounding the depots was evacuated, and, on a given day, the fatal helicopters circulated silently, under the sole control of directive antennae, along all the meridians and parallels of Europe, which resounded for several hours with millions of explosions of every magnitude.

The United States of Europe was founded once and for all. Gradually, the ex-nations learned to consider themselves as members of the same human fraternity, having no more interest in going to war with one another than the people of the Bouches-du-Rhône against those of the Pas-de-Calais or Londoners against Glaswegians.

It is true that the bellicose instinct occasionally reared up its ugly head, in the beginning. Attenuated by the suppression of firearms, on the powers of which it had supported itself like a millionaire on the virtue of his banknotes, such instinct was nevertheless profoundly anchored in the depths of human nature. Under various pretexts of rivalry, sporadic skirmishes took place—and, since airborne patrols of deflagrators circulated on a regular basis, prohibiting the use of cannons, rifles or revolvers, people fell upon one another with swords, pikes, lances, bows and arrows, as in ancient times.

The CSP, however, soon contrived to suppress these whims, and, by the same token, reduced the scourge of war conclusively. As soon as the news of these disturbances reached the central government, the aerodrome

at La Turbie sent a helicopter which descended from the sky above the combatants and hovered a few meters above the ground. A Senegalese leaned out of the cockpit, armed with no other apparent weapon than a sort of white baton, like the ones carried by traffic police, but terminating in a small parabolic reflector. After three instructions had been ignored, he pointed his mysterious staff at the most persistent combatants; a long jet sprang forth and, with a dazzling explosion, those it touched fell where they stood, not so much blown apart as volatilized without the least residue, utterly annihilated.

No resistance was possible. Whether or not they were hypnotized—as some people claimed—these black gendarmes were as devoted to their masters as the famous Assassins once were to the Old Man of the Mountain. Rather than give up the secret of their “blasters,” they would blow them up by means of a special trigger, together with themselves and their assistants.

Besides, the submission imposed by this sort of scientific dictatorship was not too hard to bear. The CSP was soon transformed into the Paris-based Terrestrial Directorate. By virtue of the forced incorporation of every country into the United States of the World, it only used its police for the purpose of maintaining the order and peace necessary for the integral development of humankind. The terrible “blasters” themselves were merely the first application of a new principle, whose generalization soon permitted the replacement of coal, oil and other combustibles, saving the enormous human effort employed in their extraction. In effect, the means had been discovered of releasing at will, in a matter of seconds, all the powerful intra-atomic energy embodied in radium. It was anticipated that the same “activator” might be applied to other, less scarce, metals, allowing their energetic produce to be industrialized.

While people waited for this limitless source of energy to make the social problems disappear, their acuity was much diminished. After a few political—or, rather, economic—experiments, stable and definitive peace bore its fruits. Humankind, in its entirety, thus protected against its violent instincts, experienced unprecedented well-being and prosperity, to such a degree that the last survivors of the period preceding the Great War of 1914-18, ever ready to talk up those distant days as a kind of lost paradise, ended up admitting the superiority of the contemporary era.

The perfection of mechanical technology and the limitation of the birth-rate—finally admitted as the natural consequence of a civilization that had arrived at its apogee—had reduced the duration of the working day to three hours, offering people more leisure time. Numerous public festivals channeled the need of the masses for external entertainment, while their moral aspirations were satisfied by the practical obligations of the various official religions—which, in Europe, now included Theosophy and Buddhism. A new elite, which replaced the old ruling classes, devoted itself to the noble joys of scientific curiosity, passionately conducting research organized by the Terrestrial Directorate. That institution, positing as axiomatic that the pursuit of truth is an essential duty of the human species, dedicated the disposable resources of its global budget to works of pure and disinterested science. Previously subject to the demands of practical utility, and funded in a derisory fashion while its adepts—considered as harmless lunatics—were left to die of starvation, speculative science was now triumphant; progress, directed towards ever-loftier horizons, marched at an ever-accelerating pace.

Gigantic laboratories, furnished with equipment whose excessive cost had previously inhibited their construction, were given to researchers intoxicated with the sublime joy of exploring the secrets of nature. Astronomy benefited especially from this unprecedented largesse; new optical instruments far in advance of the telescopes of yesteryear, which had been privately funded by the likes of Lick and Carnegie, scrutinized the sidereal depths.

The problem of the plurality of habitable worlds was taken up again—a problem that had once had its martyrs, such as Giordano Bruno, burned at the stake for having proclaimed that the Earth was not the only world in Creation on which thinking beings lived, and which had caused so much ink to flow while there was no practicable means of resolving it. The idea, boldly expressed in the 19th century, of sending fiery signals to our brothers in space was finally realized, and every night, across the extents of the Sahara, immense geometrical designs solicited the attention of extraterrestrial observers. At the same time, extremely powerful TSF¹ waves, beamed by the Equatorial Alternators, bombarded our neighboring planets, Mars and Venus, incessantly.

The result of these sublime efforts to secure interplanetary brotherhood was not long in coming, but the first success, obtained at the beginning of 1975, amazed the cultured world. The paradoxical news was hardly believable: the response came from Jupiter! Jupiter, the sparkling jewel of terrestrial nights; Jupiter,

¹ TSF stands for “*télégraphie sans fil*” [wireless telegraphy]. As the equivalent English acronym is not used, it seemed sensible to leave the French formula in place.

the giant of the Solar System, eleven times greater in diameter than our modest globe; Jupiter, enthroned, escorted in its majestic orbit by its nine satellites, five times more distant from the Sun than Earth; Jupiter, finally, which orthodox science had hitherto deemed uninhabitable because of its enormous mass, which must have prevented it from cooling for much longer, conserving in its bosom the temperature of a scarcely-extinguished sun. But the fact was there, soon confirmed and undeniable; in the round black shadow that the largest of the Jovian satellites, Ganymede, projected on its mother planet as it passed in front of her, enigmatic moving lights first observed a long time before were resolved by the magnification of the most powerful telescopes—Mont Blanc and Gaurisankar—into distinct luminous lines, which eventually reproduced, one by one, the geometrical signals from the terrestrial Sahara!

There was no more doubt. The solitude in which the indifferent material blocks of ancient astronomy floated was no more. Intelligent beings were living up there, among the abysses of the Heavens, the bounds of which had been gradually extended by the bold investigations of science. The vertiginous infinite Space that had replaced the naïve firmament of the Ancients, whose crystalline spheres were secured by golden nails, no longer intimidated the imagination with its limitless void. Humankind was done with the sensation of being lost in the bosom of unfathomable gulfs, a unique and isolated spectator of the incomprehensible mystery of the universe, shivering in the loneliness of its infinitesimal globe! Life and intelligence were no longer reserved to one sole planet, among the smaller members of the Solar System. Minds analogous to ours populated, at the very least, the giant Jupiter!

A wave of sacred enthusiasm ran through all the thinking brains of Earth. Public ceremonies were organized, and thanks were offered in the temples of every religion, for the fact that other humans existed, who undoubtedly praised the glory of a Creator, and were now susceptible, thanks to the new means of communication, of being introduced to the knowledge of the one true God, if they did not have it already. It was not only members of the scientific elite, but the masses ordinarily inattentive to the progress of pure knowledge, who followed the development of the experiment passionately. A feverish curiosity held minds in suspense during the long months that passed before a satisfactory conventional language was established, so that an exchange of ideas could take place in consequence between the two planets—or, rather, between the planet Earth and the Jovian satellite Ganymede, from which the signals described on Jupiter's sea of cloud in the moon's shadow were emitted.

The task was arduous and complicated, to be sure, but Champollion had succeeded in deciphering the hieroglyphics of a race that had vanished 2000 years before. In the present instance, the most lucid and ingenious brains of two life-bearing planets were devoting all their energy to the solution of the problem. After ten months, intelligible conversation was established, and revelations were arriving from outer space, for which—for the first time since the origin of man—news of the Earth was sent in exchange. Every morning, the newspapers reproduced a "Message from Jupiter," and cinemas projected filmed images of Jovian life that telescopes had initially picked up on the dark screen of Ganymede's shadow... but the specialist works published on this subject are too numerous and widely-circulated for there to be any need to continue.

The most powerful impression was, perhaps, created by the news that the human population of Jupiter had very close affinities with the human population of Earth, even in the matter of physical constitution. Savants with preconceived ideas were astonished, but an explanation was soon forthcoming from the Jovians themselves, whose wisdom had proved to be superior to ours from the first. The kinship of the planets, all similarly emitted from the primitive Sun—or, rather, the primal Nebula—implied an analogical evolution on their surfaces of the identical seeds of life, or *cosmozoons*, incessantly brought to each heavenly body by the millions of aeroliths that are strewn through space in every direction—seeds that only develop to provide the root stocks of the entire series of vegetable and animal species in narrowly-defined circumstances, in particular under the influence of certain rays formerly projected by the Sun but absent today from its impoverished light.²

At any rate, the intelligent race on Jupiter, having appeared much sooner than its Earthly equivalent, possesses not only a very extensive scientific knowledge but a perfect dominion of its mental faculties over animal instincts. According to the Jovians, this is due to the particular nature of their individual longevity, which—in the course of years that are almost equal to 12 terrestrial years, each comprised of 10,455 days

² This thesis regarding the necessary similarity of life-forms on the various planets of the solar system was proposed by Christian Huygens in *Kosmotheoros* (1698); Joncquel and Varlet probably had read the summary of that text in Camille Flammarion's *Les mondes imaginaires et les mondes réels* (1864; revised ed. 1905).

of 10 hours—permits them to acquire at an early age the experience and the equilibrium that are, in us, the prerogative of decrepit old age.

War has been unknown for thousands of years on this sagacious world, whose inhabitants, their needs satisfied in moderation, live for the joys of study and contemplation. Their practical industry seems to be quite limited in its development, but they have taken pure science and certain of its applications to a point of marvelous perfection. These include the domain of optics, for astronomy is there considered to be the highest of the sciences.

It is true that the atmosphere of the planet, frequently charged with opaque clouds, is unpropitious for the exercise of their preferred science—and perhaps that initial difficulty made them all the more determined to pursue it. At that time, the greater number of the sedentary inhabitants of certain equatorial zones never saw the solar disc, and, for the very best of reasons, had no knowledge of the marvelous spectacle of the stellar firmament. A long time ago, however, the Jovians learned how to communicate with their satellites. The five smaller ones, which were uninhabited, served as places of exile for rare degenerates, while a peaceful and fraternal alliance was established with the inhabitants of the four larger ones; observatories were established on one of them, Ganymede. Minuscule as it is by comparison with the immense planet, that world is quite sufficient to accommodate all the Jovian astronomers with ease, since its diameter is greater than that of the planet Mercury. Vehicles powered by “solar batteries” still permit mere amateurs to go there, in order to contemplate the marvels of the Heavens from the ideally pure atmosphere of the satellite. The description of their telescopes, whose details the Jovians did not attempt to conceal, took up numerous and laborious transmission sessions. Faithful to its rules of conduct, however, the Terrestrial Directorate kept the core of these revelations to itself. Only the general principle was divulged, and people were amazed to learn that the Jovian telescopes, which were only a little larger than those at Mont Blanc and Gaurisankar, nevertheless permitted the attainment of limitless magnification. Indeed, their images, instead of only being magnified by a system based on an ocular mirror, were also subjected, by means of special relays, to an “amplification” analogous to that which the terrestrial microphone imposes on sonic vibrations. This was so successful that, not only had the luminous signals in the Sahara been perceived immediately, but the life of the Terrans had been studied for centuries with troubled solicitude, much as a biologist might track a colony of microbes in the focal field of an ultramicroscope. The luminous signals projected from Ganymede on the screen of its shadow had not, therefore, been created at hazard, but specifically to attract the Terrans’ attention.

Now, it seems that the members of the planetary family are steeped in a sort of spiritual atmosphere analogous to that which reigns in the bosom of terrestrial civilization. It seems that the manifestations of the Spirit follow a strictly parallel course on the surfaces of the Daughters of the Sun. In addition to material communications, there are “interplanetary ideas”—much as there are ideas “in the air” here, thanks to which an invention emerges, when its time has come, in a host of brains at the same time, in various parts of the world. A preliminary proof of this hypothesis had just been given to us by the simultaneity of efforts made by Earth and Jupiter to establish intellectual communication. A startling confirmation soon arrived to convince us of its exactitude.

The detailed description of Jovian television technology had scarcely finished when the receptive antennae of the interplanetary TSF, mute until then in spite of daily appeals, were suddenly activated. Clear and precise signals arrived, in the dots and dashes of a conventional alphabet of the Morse genre, instituted by agreement with Jupiter. It was believed at first that this was a new mode of communication that the giant planet was bringing into play, at the instigation of Earth, to supplement the optical signals.³ On the first day, the news, published in that form, did not excite much curiosity—but after several hours, there could be no more doubt, and the provenance of the “cosmograms,” duly received and verified, was confirmed. It was necessary to yield to the evidence. The planet Mars had, in its turn, joined the circuit.

With marvelous sagacity, the Martians, ideally placed between the two planets to decipher their communications simultaneously, had succeeded in discovering the conventional key. With an immediate mastery—at the first attempt, without any fumbling—they had transposed the luminous language into TSF.

³ Varlet inserts a footnote here: “The optical exchange of signals did, in fact, become precarious during Jupiter’s conjunctions, which is to say, when the orbits of Jupiter and Earth placed them on opposite sides of the Sun, as much by virtue of the distance involved—six times greater than that at opposition, when the Sun, the Earth and Jupiter were aligned—as by virtue of the radiance of the central star. TSF apparatus had therefore been established by Jupiter, according to designs transmitted to it by Earth, but the apparatus did not function in the correct manner before the second week of the Martian torpedoes.

Without a doubt, they had perceived the Hertzian signals radiated from the Earth into space at the outset, but had omitted to reply to them for some reason or other. Perhaps their transmission apparatus was not yet ready, or perhaps...

When these questions were posed, though, Mars refrained from answering. From the very first messages, it was understood on Earth that this was not a matter of the noble exchanges of ideas to which the sagacious planet Jupiter had accustomed us. Clear and curt questions, positive and technical, unfurled on the tapes of the receptive apparatus, and were then published, causing the public to reflect, divided between their naïve admiration for such imperious precision and their disgust for the dry and arid character of the messages.

What was the exact population of the Earth? The greatest aggregations of population? What force was exerted by the most powerful lifting apparatus? Where were there ores of...? (After elaborate explanations, it was understood that the question related to radium.) And then, pell-mell, as if at hazard: Explosives? The most powerful means of destruction? Exact thickness of the Earth's crust? Composition of the atmosphere? The precise concentration of argon, in particular? Climate? Temperature? Salinity of the seas? Etc, etc...

In brief, questions seemingly representative of an aimless curiosity, which the public soon found repellent, but which flattered the vanity of terrestrial savants happy to demonstrate to their brothers in space the level to which their knowledge had already risen. The Terrestrial Directorate itself, on this occasion, lifted its embargo concerning certain secret formulas. What danger could these Martians, orbiting 50 million kilometers away, pose? They would never be able to do us any harm or inhibit the forward march of Progress and Civilization?

Oh, nobly trusting Earth, as naïve as some *nouveau riche* counting his gold coins in front of thieves—how soon and how cruelly you were disabused!

Now that the catastrophe has happened, and bitter experience has revealed the true character of the inhabitants of Mars to us, I think with respectful admiration about the intuition of our distant ancestors, who were certainly ignorant of astronomy, but were situated in mysterious proximity to the profound heart of Nature, in which their souls could read a language that the subsequent development of rational thought caused us to forget.

Mars, whose name has always been associated with carnage since the distant epoch when our first forefathers fought to the death on the icy slopes of Pamir to conquer the fertile plains; Mars, whose occult influence alone seemed to drive men mad; Mars, symbol of war and devastation; Mars, savage and pitiless god, presiding over discord and violent death—thus consecrated by an infallible prescience of the threat that the red planet would bring down from the heights of heaven upon the Earth and the human race!

And, more recently, at the dawn of the 20th century, that other seer, worthy of being placed in the rank of prophets inspired by the universal Spirit, for whom the future and the past were contained in an eternal present—that simple English man of letters who was perhaps enabled by the impending approach of the event to interpret similar presentiments, made precise and concrete, in a visionary document. He had seen, through the mists of the future, the monstrous invasion to which we, the last terrestrial humans, would be witness less than a century later! But his novelist's brain, distorting the horrors to come in order to please an optimistic public, had softened the terrible denouement, and, imbued with the scientific theories of his own day, had attributed a fantastic cephalopod anatomy to the Martians...

Oh, if we had only been able to remember his book during those first Martian communications, not as an imaginary fantasy but as an augural *Mene, Mene, Tekel upharsin!*—what an irreparable disaster we would have been spared by a modicum of suspicion and foresight!

But the gods blind those they wish to destroy, and, after happening upon the secret of Jovian television as it was transmitted, Mars was benevolently instructed by the Earth as to the most precious discoveries of our science—including the principle of the radium “blasters,” which was delivered to them by an unpardonable sin of the Directorate.