

# REFLECTIONS

Robert Silverberg

## MEMORIES OF THE SPACE AGE

On Saturday, May 30, 2020, a Falcon-9 rocket was launched at Cape Canaveral in Florida, sending NASA astronauts Robert Behnken and Douglas Hurley to the orbiting International Space Station. Three days later the astronauts returned, their capsule making splashdown off the coast of Pensacola, Florida. For me this is recent news, just a few months old, because copy for print-format publications must be written far in advance, and you are reading this next year. It may already have had a sequel by then, for another Falcon-9 rocket is due to be launched in a few weeks, this one carrying three more American astronauts and one from the Japan Aerospace Exploration Agency.

There is nothing new, by now, in sending astronauts to the space station. What is significant about that May 2020 launch is that, for the first time, the spacecraft was designed and built by a private corporation, SpaceX, an enterprise of the dynamic and eccentric entrepreneur Elon Musk, whose main company has given the world the Tesla electric car. Musk is one of a small group of billionaires—Jeff Bezos of Amazon is another, and Richard Branson of Virgin Galactic a third—who are putting up their own funds and those of the corporations they head in order to resume mankind's exploration of space after much too long a hiatus. If the Age of Space can be said to have begun when the Soviet Union put the first Sputnik into orbit in 1957, this can be seen as the beginning of the next phase, since all previous ventures beyond the atmosphere have been sponsored and controlled by government agencies. This, I think, marks the opening of the real Space Age, the one in which ventures into the unknown are made not for reasons of national prestige or to further the ambitions of some politician, but simply because bold entrepreneurs think it is time for humanity to move on from its earthbound limitations into an era of adventure and discovery that is a rightful continuation of a process of centrifugal movement that has carried mankind from its primordial zone of origin in Africa to the farthest tip of South America and the distant shores of Asia, and have the wherewithal to make it happen. It is a step that Robert A. Heinlein predicted in his 1940 story, "Requiem," in which Delos D. Harriman, a sort of prototype of Musk and Bezos and Branson, founds a corporation that makes the first space trips to the Moon, and eventually goes there himself to find his final resting place.

I rejoiced at that successful first Space-X voyage, because it provided one of the few bright moments of that dark and terrible year, in which a new virus has sickened millions and taken hundreds of thousands of lives, in which the consequent economic decline has brought further hardship to so many, in which my own state of California has endured a summer of vastly destructive wildfires, and in which our national political discourse has degenerated into vituperative warfare that threatens our traditions of free speech and the unity of the republic itself. Any satisfying moment in a year like that is more than welcome.

But also I am someone who has devoted his whole life to science fiction, first as reader and then as writer, and the exploration of space is a central emotional fact for people like me. Science fiction is about plenty of other things, of course—in my own work I have dealt with such themes as time travel, robotics, alternative history, telepathy and other unusual mental powers, and much else that has nothing to do with voyages into space. But these have always seemed secondary for me to the big main theme, the great journey to other worlds that is the logical extension of the process that began

when our first primordial ancestors began their long trek into the unknown parts of the world. I don't believe that we will ever travel to other stars, short of some revolutionary breakthrough transcending today's scientific theories, and I don't expect human explorers to be setting foot on most of the worlds of our own Solar System, which at least for now seem hopelessly inhospitable. But Mars is within our reach, and the moons of Jupiter and Saturn, and who knows what we will find there? Nothing, unless we take the first step. The steps beyond that one will not be easy ones. But they are plausibly doable ones. Christopher Columbus would not have believed it possible to travel from Europe to the New World in six or seven hours, as is routine in our day. And we will, some day, not in my lifetime and probably not in yours, move onward to nearby worlds that today are mere gleaming specks in the sky.

We did get to the Moon, the first step in the journey . . . long ago. I say that sadly, because we took that first step more than fifty years ago, before most of the readers of this essay were born, and we have not gone farther. That is something that Heinlein and Bradbury and the other science fiction prophets of my boyhood did not foresee: that we would reach the moon, prowl triumphantly around on it for a little while, and then . . . stop. There have been later ventures into space, of course, unmanned probes going off to distant planets and the space shuttle cruising about in low-orbital flights, but of real space exploration of the kind I grew up reading about and then writing about, there has been nothing.

And so the Age of Space that we science fiction readers of the 1940s and earlier looked forward to so eagerly has become, for me, mostly a thing of nostalgia. Instead of looking forward to the next step in the process, I have found myself cherishing, all these years, glowing memories of the Age of Space that came and went.

Two memories in particular stand out above all the others. There were many steps along the way to them—the Soviet Sputnik orbiter in 1957, the successful launching of the first tiny American satellite in the following year, Yuri Gagarin's pioneering manned space flight in 1961 and John Glenn's journey in orbit ten months later, and so forth. But they all were leading up to the one great achievement we had dreamed of for so long, the first manned visit to the Moon. And that itself required two events: sending astronauts out to make an orbital journey around the Moon and return to Earth, and then to have a second group of voyagers set foot on the Moon itself.

It was in the turbulent year of 1968 that the orbital trip would take place. That year had begun badly for me, with a fire that wrecked my New York home and sent me out into a freezing February night at three in the morning. It would take fourteen months to rebuild the house, and I spent the first nine of those living elsewhere, in uncomfortable rented quarters, a kind of exile from everything familiar. Then came the assassination of Martin Luther King in April, disruptive student riots that paralyzed many of our universities, protests in France that had that country on the brink of what came close to being a new revolution, and the assassination of presidential candidate Robert F. Kennedy. In August, Soviet troops invaded Czechoslovakia to suppress a popular government, and rioting associated with the Democratic National Convention in Chicago threatened to topple the country into a state of anarchy. There was much more, all of it bad, as the year drew to its close. And then, on December 21, amidst all the bleakness and blackness of that awful year, the eighth in the series of Apollo spacecraft was launched from Cape Kennedy on that first manned orbital voyage to the Moon.

I had returned to my damaged house by then, but the rebuilding job was still only half done—it would not be finished until April—and much of the house was still in a shambles. The television set was in a room on the second floor that had not yet had the heating system connected to it. But Apollo 7 had shown, in October, that it was possible to send live telecasts from space, and the voyage of Apollo 8 was something that I was not going to miss. So there we sat, my wife and I, in the dark and the cold of a New York

winter, feeling a little like spacefarers ourselves as we watched the small vessel bearing astronauts Frank Borman, James Lovell, and William Anders make the first of its ten orbital trips around the Moon. “The Moon is essentially gray,” Lovell reported, “no color; looks like plaster of Paris or sort of a grayish beach sand.” To which Borman added, “A vast, lonely, forbidding expanse of nothing.” Not very romantic; but they were astronauts, not science fiction writers, and they were in orbit around the Moon. The climax came on Christmas Eve, bitterly cold for us watching in New York, staring at the barren, suddenly unfamiliar face of the Moon on the screen, and seeing it staring back at us as Apollo 8 continued its silent journey around it. Then, voices in the night, the three astronauts took turns reading the first ten verses of the Biblical creation story from the Book of Genesis, finishing, “And from the crew of Apollo 8, we close with good night, good luck, a Merry Christmas and God bless all of you—all of you on the good Earth.”

A truly unforgettable moment, for those of us who were with them that night, at that time the largest audience ever to watch a television program. Nor have I forgotten it; nor will I ever.

But the second and even greater event was yet to come. Winter gave way to New York’s brief, lovely spring and the work on our house was done at long last; and the spring yielded to New York’s sultry, sweltering summer and we—and all the world—made ready for the crowning achievement of the epic, Apollo 11’s landing on the Moon. It was July 16, 1969, when it took off from the Kennedy Space Center in Florida with astronauts Neil Armstrong, Buzz Aldrin, and Michael Collins aboard. To most of you it is something to read about in the history books, but for me it is a living memory, the three-day journey, the separating of the landing module from the main body of the spacecraft, the harrowing descent of Armstrong and Aldrin to the Moon while Collins, the loneliest man in the universe, remained aboard the command module and circled the Moon in solitude.

There were problems in the descent, with Armstrong, the pilot, facing unexpected difficulties as he guided the *Eagle*, as the landing module was known, toward the ironically named Sea of Tranquility on the lunar surface. He managed it deftly—definitely the right man for the job—and soon the module was at an altitude of 2000 feet, 750, 540, 300, 73. . . . Through the miracle of very long distance television we saw the lander kick up a huge cloud of dust as it approached its destination, and then came Armstrong’s rivetingly understated announcement: “Houston, Tranquility Base here. The *Eagle* has landed.”

After which, a mysterious and endless six-hour wait, and then the hatch opened and the spacesuited figure of Neil Armstrong came down the ladder onto the Moon to utter those somewhat too theatrical First Words, “That’s one small step for a man, one giant leap for mankind.” And then Aldrin emerged also and we saw the two of them jumping about in the low lunar gravity like bizarre kangaroos as human beings traversed the Moon for the first time.

Old memories for me, memories of a distant era of the past, forever vivid in my mind. But finally the adventure resumes. It is up to the Musks and the Bezoses and the Bransons to continue the story now. I hope I live to see it.

