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Lost on Mars

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Children, too, of Eve, forever building Edens—
and kicking them apart in berserk fury
because somehow it isn't the same.

–Walter M. Miller, Jr.,
A Canticle for Leibowitz

For the Achaemenid kings of ancient Persia, the world outside their dominion was a desert to turn into a garden. Ahura Mazda, Zoroastrianism's creator and most wise lord, had given them power, and with it the responsibility of regency. In conquest and faithful rule they would undo the drought and disorder made by diabolic Angra Mainyu and bring forth in the dry places fresh springs of water, both verily in walled gardens and metaphorically with truth. What they built with their hands and their laws was to make one paradise.

In Genesis we are told Jehovah planted a garden in the east in Eden, and that there he put the man whom he had formed. He put him in that paradise to dress it and to keep it. For man was made in God's image, after his likeness, male and female. And God said unto them, "Be fruitful, and multiply, and replenish the earth, and subdue it," and gave them dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creeps upon the earth. But man and woman fell in disobedience. And therefore the Lord God sent man forth from the garden of Eden, to till the ground from whence he was taken.

Later we read that humanity wished to make a name for itself. And accordingly, lest they be scattered abroad upon the face of the whole earth, they set to build a city and a tower, whose top might reach unto heaven. But Jehovah said, "Go to, let us go down, and there confound their language, that they may not understand one another's speech." And did. So men left their tower to ruin, and the name of that place was called Babel, for man's language was confounded, and they were scattered abroad upon the face of the earth.

Today, multiplied and scattered men find themselves seeking new deserts to replenish and subdue. And so they look upward to the stars and

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planets and dream of reaching unto heaven to make a paradise of its dusts and build cities in its canyons. Whether on the Moon or Mars or Jupiter's Callisto, such new homes would be wastes more bare and wild than any they have known—yet humans yearn for them. But the colonization of space will fail to fulfill our hopes of gardens in that desert, even should we succeed in building towers there or causing plants to grow, unless we first alter ourselves and our purposes.

A New Worldview

Why do we wish to go? It is not just a desire for discovery. That is and still can be accomplished with further and farther voyages of our probes and instruments. We wish to go ourselves, to send humans to space and not merely to bring space to us. There are earthly reasons, which do not explain but justify: We tell ourselves that in exploring other spheres we will learn more of geology and the origins of life, or will derive new techniques and technologies. We say there are minerals to mine, or new means of energy production to harness. Elon Musk, SpaceX's middle-aged boy wonder, gives reason of a slightly higher order when he says Mars must be colonized for the survival of the human race—that it will be a citadel in which the torch of our civilization may be kept alight whatever calamities may come here below, in order to, like Hari Seldon in Asimov's *Foundation*, shorten future dark ages. Musk's rival space-bound billionaire, Amazon's Jeff Bezos, believes that, by moving human industry away from here, the colonization of space will save the Earth from its depredations. Robert Zubrin, president of the Mars Society, has in these pages ("The Human Explorer," Winter 2004) called for manned colonization in grander terms: "It is the chance to do something heroic, to advance humanity on the frontier." [See also Zubrin's plan in this issue for a continuous human exploration program on the Moon. –*Ed.*]

But why are we so eager? Every call for volunteers to be the first to live—and quite probably die—on Mars has been answered with enthusiasm. People are ready to leave brothers and sisters, fathers and mothers, friends and land behind. We want to get out of here, though here will remain a more hospitable place than anything we build in space. There is a subtext of disaster to much of our thought of settling space. Some, like Musk or Christopher Nolan in his 2014 film *Interstellar*, make it explicit: Disaster will strike or has struck and so we must flee. For others, like Zubrin, the beauty of these dreams of space is that they might give us back a sense of hope and destiny, for destiny and hope seem to have been

lost. A cadet branch of man on Mars would reassure us "that we have the capability to do such things, the capability to engage in yet greater ventures, more daring ventures, further out, toward an unlimited future." In some psychic sense, then, disaster really has struck. And so we wish to leave.

Hannah Arendt reflected on the significance of humanity's desire for the stars in her 1963 essay "The Conquest of Space and the Stature of Man." Man, she said, has not found a new place for himself after his self-displacement in modernity's rejection of old orders. We stand alienated from ourselves and nature. And as we see deeper into the firmament, and account for more of nature, we only better know the scale of our disorientation, the smallness of our vision. Science cannot bound the cosmos into a comfortable domain, for "this observed universe, the infinitely small no less than the infinitely large, escapes not only the coarseness of human sense perception but even the enormously ingenious instruments that have been built for its refinement." But neither does modern science really wish to find a place for man in all this space, for the questions that would require would produce answers for man that act "as definitions and hence as limitations of his efforts."

This alienation calls for some kind of transcendence—a need to find ourselves and discover where we are. And this is why, Arendt writes, we wish to go not just in spirit and imagination but in body to the stars.

> An actual change of the human world, the conquest of space or whatever we may wish to call it, is achieved only when manned space carriers are shot into the universe, so that man himself can go where up to now only human imagination and its power of abstraction, or human ingenuity and its power of fabrication, could reach.

The erotic drive to get outside, beyond, ourselves requires that we take dramatic action and find a new world. We are looking for home.

In his *Lost in the Cosmos* (1983), Walker Percy said that all this is a sign of our sickness. The optimist may argue that man's search for self-transcendence in such great enterprises is a sign of his freedom, that his stature is unthreatened. But Percy was not an optimist. Man fell in Eden, fell into self-consciousness without self-knowledge, became the being who sees and reads all signs except his self. He can name the other creatures but cannot name himself. Our alienation is complete, our language confounded. As animals, we have an environment, the relevant context of events acting upon us and our reactions to them—the relation of the bell and the food to Pavlov's dogs, or even just that between a body,

height, and gravity. But as sign-users—"semiotic" beings, as Percy calls us—we also have a world, a supposed-to-be comprehensive linguistic map of everything we know or could know, an ordered cosmic cartography. In Percy's use, this is the world in your world-view: "All men in all cultures know what is under the earth, what is above the earth, and where the Cosmos came from." You have one whether you like it or not, a symbolically organized world in which everything you can think or experience shows up.

For most human beings who have ever lived, this "world" has involved an understanding of the self in relation to others, to nature, and to a divine transcendence that is beyond the cosmos yet also immanent in it. But, writing of the same sense of alienation and displacement as Arendt, Percy says, "In a post-religious technological society these traditional resources of the self are no longer available, leaving in general only the two options: self conceived as immanent, consumer of the techniques, goods, and services of society; or as transcendent." In the first option, immanent man is mass man, integrated as a part among many into the structures and mechanisms of the social system, accepting his world through passive ignorance of it. In the second option, "the only transcendence open to the self is self-transcendence, that is, the transcending of the world by the self. The available modes of transcendence in such an age are science and art." To broaden the world-view, to actually change his experienced world, seems to require that man secure a position as active observer and interpreter rather than mere participant within a pre-made order. In the outsider role of scientist or artist, man may refuse to be just himself, a consumer conforming to functions made for him by a faceless society. "The pleasure of such transcendence derives not from the recovery of self but from the loss of self. Scientific and artistic transcendence is a partial recovery of Eden, the semiotic Eden, when the self explored the world through signs before falling into self-consciousness." Science's taxonomies and art's sub-creation give scientists and artists a structure or mode in which to explore and position themselves in their world—an occasional detachment from circumstance.

"The environment has gaps," says Percy. "But the world of the sign-user is a totality." What is relevant to us in our circumstances is always partial; we experience little of what is actually there around us, making up our environment. Our world, though, contains even what we have not seen, nor heard, nor touched with our hands, that does not exist apart from our thoughts; it contains ideas and not things only. Space is an intersection of environment and world. For practical purposes—in the

environmental realm of causation—the movements of Mars are a blank space; I see or miss its rusty light without effect. Its gravity is to my motions here insignificant. But its *place* in the sky, its presence in thought, is significant. It is near my planet Earth, a new environment relative to my world, and is therefore a part of my world, of my system of signs. I have some idea of it, if only that it is there, another rock in orbit around a great ball of burning gas. But what it is made of is not what it is, and what it means to us has little to do with what it is made of.

Our eagerness to explore is a kind of collapse of world and environment. In discovery of new material conditions—environments—the spiritual might be changed. The colonization of other planets, of *new worlds*, is motivated by hope of a new world-view, a search for a permanent transcendence now only occasionally found. As Charles T. Rubin has written in this journal ("*Thumos* in Space," Fall 2007), "The human explorer manifests his delight, his joy and excitement, at juxtaposing the familiar and the strange; watching, we can, at least in some distant way, feel with him. (Once, merely reading the reports of explorers would have sufficed.)" President Kennedy said in 1962, "We choose to go to the moon in this decade and do the other things, not because they are easy, but because they are hard." But the relationship between expanded environment and world does not by necessity elevate man's dignity and stature, and we may choose to go to Mars not because it is hard—though it is surely the greatest technical challenge we have yet presented ourselves—but because it is easy, easier to be explorer than to find another and better sense of self.

The Self in the New World

And what sense of self has human exploration brought? Before we thought to "explore strange new worlds" with Kirk and Spock and all the rest, early modern man ventured forth in an Age of Discovery. A New World beckoned. And with Europeans' arrival in the Americas came a drastic revision of man's place in the world and thus his relationship to his fellow man, to nature, and to his God. Scholastic figures such as Bartolomé de las Casas and others associated with Francisco de Vitoria's school of Salamanca responded to the discovery and exploration of the Americas with a focus on the alien "Indians"—particularly the obligations Christendom had toward them as fellow creatures of God, bearing rights and deserving justice. But proto-liberals, particularly John Locke, fixated on the vast and seemingly uncultivated expanses of North America, and hastened past cursory acknowledgments of indigenous populations.

In examining the continent from, let's say, an extremely academic remove, Locke found space and scope in which to develop his anthropology of a state of nature, removing the individual from any prior context of relationship, society, or politics. This became new grounds for a fundamental equality of man, in which God played a mostly incidental part: Apart from entrance into voluntary society and communal justice, every individual is judge and executor of the laws of nature, and nature is held in common till some individual mixes his labor with it to create property. And even property creates for him but minimal obligations to his fellow man. In his *Second Treatise on Government*, Locke holds up the bounty of North America as support for his completely individuated pre-political humanity:

> …for supposing a man, or family, in the state they were at first peopling of the world by the children of *Adam*, or *Noah*; let him plant in some in-land, vacant places of *America*, we shall find that the *possessions* he could make himself, upon the *measures* we have given, would not be very large, nor, even to this day, prejudice the rest of mankind, or give them reason to complain, or think themselves injured by this man's incroachment, though the race of men have now spread themselves to all the corners of the world, and do infinitely exceed the small number was at the beginning.

And elsewhere in his treatise, the father of liberalism connects his worldview even more baldly to his idea of the Western Hemisphere, writing, "Thus in the beginning all the world was *America*."

As English ethicist Oliver O'Donovan reminds us, we can condemn the bizarre ahistoricity of this scheme even simply on the level of ideas, without needing to summon the testimony of pre-Columbian and colonial-era native populations to remind the enlightened doctor they were in fact here first. In *The Desire of the Nations* (1996), O'Donovan writes of "the myth of the social contract" that is at the heart of Locke's political theory—the myth that "society derives from an original free compact of individuals, who have traded in their absolute freedoms for a system of mutual protection and government. So obviously is this myth unhistorical that it is easy to underestimate its hold on the modern mind." No one is ever a free individual among individuals in empty land, without ties to body, family, or culture.

But Locke needed North America to be a vacuous desert for his vision of nature, and consequently his entire project, to hang together. As O'Donovan writes, "Corresponding to the transcendent will is an

inert nature, lacking any given order that could make it good prior to the imposition of human purposes upon it." That is, wishing to make an apology for an unbondaged will and construct a new *world*, Locke simply makes America's vast wilderness evidence, regardless of what is actually there. In our exploration, we moderns have muddled environment and world, confusing and distorting in both directions, with worlds projected onto environments, and environments and the people in them altered to fit worlds—think of Manifest Destiny, or the Turner thesis, or so much of the worst of colonialism.

Power over Nature

Of the modern age, the German Catholic priest-intellectual Romano Guardini said, "What determines its sense of existence is power over nature." Inspirited by Bacon's scientific project—the vexations of nature and discovery of her secrets by the skills of man's *techne*—this world-view seems to both define and demand our efforts toward exploration and self-transcendence. Hannah Arendt assigns it blame for our alienation: "Has not each of the advances of science, since the time of Copernicus, almost automatically resulted in a decrease in his stature?" She laments that the increase in humanity's physical knowledge seems to correlate with further displacement, a loss of cosmic coherence—that, in short, an expanded environment has created an alienated world.

The scientist truly does achieve a kind of self-transcendence. Noting the casualness and speed with which men opened the container that had until then kept the destructive power of nuclear weapons from our child-ish hands, Arendt observes, "the scientist *qua* scientist does not even care about the survival of the human race on earth or, for that matter, about the survival of the planet itself." The scientific world-view allows the self to transcend the world because it ceases for a moment to consider the questions of interiority. Instead it makes man merely another subject of observation, another material cause and action among many.

There is an irony to this, however, for Arendt writes, "All of this makes it more unlikely every day that man will encounter anything in the world around him that is not man-made and hence is not, in the last analysis, he himself in a different disguise." We are to ourselves the most confusing and inaccessible thing in the cosmos, and so we wish to find ourselves everywhere and in everything even as we seek to escape ourselves. We are our own aliens, whether in space or upon the Earth. The effort at self-transcendence reaches a limit, then, and can free us only so far from

our alienation. Even were we to build cities on Europa we would not escape, for

> These new possessions, like all property, would have to be limited, and once the limit is reached and the limitations established, the new world view that may conceivably grow out of it is likely to be once more geocentric and anthropomorphic, although not in the old sense of the earth being the center of the universe and of man being the highest being there is.

That "new" world-view would be just as defined by our desire to know our place as it has been.

While the dominance of a kind of scientific world-view is incontestable, how and why it replaced the religious humanist paradigm of the past remains up for debate. For Arendt, there was an unconscious trade: The growth of the scientific displaced the humane. For Percy, the ascendance of the scientific was incidental: Man has abandoned religion, myth, totems, and all the other old ways, and so now has few options besides science to resort to. Notre Dame's Patrick Deneen sees no accident in this exchange. It is deliberate. Man, by means of science, has in a kind of Faustian bargain replaced religion with the powers of his self. Writes Deneen in these pages ("Nature, Man, and Common Sense," Fall 2007), "The purported aim of lowering human stature is deceptive, inasmuch as its more fundamental motivation lies in displacing the status of the *grantor* of that special status, namely God. By displacing God, humans—increasingly enhanced in power and control by means of science—can occupy the space once occupied by the divine." Man makes himself the subject of experiments that he may no longer be the subject of his God.

Power over Man

Most of humanity are not scientists. In a scientific and technological age, then, most of humanity will not experience transcendence by science's means. They will not be observer but observed, not experimenter but experiment. Most men are mass man. "If nature is being more and more subjected to the control of man and his works, man himself is also increasingly controlled by those who fit him into 'the system,' even as his work is controlled by the end to which it is directed," Guardini wrote in *Power and Responsibility* (1951). This is the same observation as one made by C. S. Lewis in *The Abolition of Man* (1947), that "Man's power over Nature turns out to be a power exercised by some men over other men,"

particularly over future generations, as we increasingly turn both our children and the habitat they inherit into engineering projects.

There is obviously something grand about mankind's technological accomplishments, however, and so despite the exclusivity of the scientific caste, its structures become self-justifying, and even invade the language of would-be humanists. Consider this pitch from the Mars Society's Robert Zubrin: "It's an investment: If we go to Mars, we'll someday get the payoff that comes from challenging people in a serious way, and by being a society that values great scientific and human achievements." But the payoff of a system, our system, ordered to power over nature is more power over nature—and hence over other men—for those who wield it, the scientists and technicians. St. Augustine's *libido dominandi* manifests itself in every age.

An antagonist in the first volume of Lewis's sci-fi "Space Trilogy," *Out of the Silent Planet* (1938), justifies shanghaiing the hero Ransom on a journey to Mars by taking modernity's ethic to its dehumanizing conclusion, declaring that small claims must give way to great ones.

> We have learned how to jump off the speck of matter on which our species began; infinity, and therefore perhaps eternity, is being put into the hands of the human race. You cannot be so small-minded as to think that the rights or the life of an individual or of a million individuals are of the slightest importance in comparison with this.

Elon Musk, in a presentation titled "Making Life Interplanetary" on his plans for Mars, said, "Becoming a multi-planet species beats the hell out of being a single-planet species."

We, like Ransom, should respond to such high hopes for a glorious human future with a reminder that we bring human nature with us, even when exploring a new world: "I suppose all that stuff about infinity and eternity means that you think you are justified in doing anything—absolutely anything—here and now, on the off chance that some creatures or other descended from man as we know him may crawl about a few centuries longer in some part of the universe." In this journal's last issue, James Poulos wrote optimistically of the prospect of Mars elevating our eyes and souls ("For the Love of Mars," Spring 2018). To put it in Percy's terms, Poulos hopes man may reform his vision of the world and expand his environment on the sanguine planet simply by lovingly settling it, a united movement of body and imagination. I am not as hopeful.

Again repeating Arendt: "The scientist *qua* scientist does not even care about the survival of the human race on earth or, for that matter,

about the survival of the planet itself." In its purity, the quest to vex nature's secrets from her sees human beings as simply something more to deconstruct. Indeed, in *Out of the Silent Planet* and its sequel, *Perelandra*, the danger is never aliens but humans. The promoters of space are not such pure scientists as Arendt's type. But, as lost in the cosmos as the rest of us, they nevertheless seek self-transcendence by means of scientific achievement. We may indeed arrive at a place where the survival of the human race *on Earth* is of less consequence to those possessing power than the furtherance of an abstract humanity that has abandoned much of what made it human.

Are You Happy?

Consider your place in our interplanetary future. Let us speculate. Suppose that SpaceX or some similar enterprise has succeeded, that in the aspirational year 2024 crewed missions settle Mars. Their base is serviced by rockets—Big F***ing Rockets, according to Musk—launched regularly from Earth to Mars. The colonies grow, slowly but seemingly surely. The technical challenges have been immense—but man's resourcefulness greater. The looked-for scientific and technological discoveries materialize with exhilarating speed. Are you happy?

You are Elon Musk. You have achieved your boyhood dream of laying the foundations of towers on other worlds, so that humanity may scatter to the stars lest mankind die upon the Earth. You have made a name for yourself. You have brought forth water in dry places, made gardens where there was only dust and ice. You are dating Grimes. You are very rich. You fight with strangers on Twitter. What is your stature? Where do you fit? Why?

You are a colonist on Mars. You have left behind your country, and your kindred, and your father's house, to go scrape an existence out of the thin infertile regolith of the fourth rock from the Sun. You will live the rest of your life maintaining an assembly-line routine of actions that, along with those of your crewmates, will slowly turn the red around you green. You will die here. Your body will be used for fertilizer. Musk paid off your college debt. You will miss your sister's wedding and your mother's funeral. You will not have children: Cosmic radiation, hardly blocked by the planet's scant atmosphere, causes each rare impregnation to swiftly end in miscarriage, and many crewmembers are now as sterile as the Martian surface. Is it worth it?

You are a scientist on Earth working on the colonization project. You are trying to solve the fertility problem. For now the settlers will simply

not be allowed to breed. You may sterilize those still technically fertile until a solution is found. It would be easier. But first there are tumors and leukemias to deal with. We are too fragile, it seems, the god of war too harsh. *Heterocephalus glaber*, the naked mole-rat, would make a far better colonist than the human being. The rodent is cancer- and pain-resistant. It is hive-socialized. So you are breeding mole-rats, tinkering with their DNA using CRISPR-Cas9 genome editing technology to try to find lines of their genetic code that could be useful to you. If man became a little more mole-rat, he might survive and reproduce on other planets. You are addicted to porn. You have not been on a date in months. Does *Heterocephalus glaber* love you?

You are a member of the general public. Humanity has gone to space, is on Mars. You watched all the livestreams. You bought a poster of the first colonists to hang in your second bathroom. It is a print of a painting in the style of Soviet space-race propaganda. You bought your son a tin lunch box shaped like one of Musk's BFRs to take with him to school. You worry your son knows what the F stands for in BFR. You worry he might have ADHD. His teacher, Ms. Perkins, says he is not as well-behaved as his sister was and has suggested you take him to a pediatric psychiatrist. Your insurance will not cover that. Is the achievement of humanity conquering space and colonizing Mars your achievement?

The New World

In Genesis man and woman are called to dominion, to rule the Earth. Guardini writes, "Man's natural God-likeness consists in this capacity for power, in his ability to use it and in his resultant lordship." And elsewhere, "When we examine the motives of human endeavor and the play of forces set in motion by historical decisions, we discover everywhere a basic will at work, the will to dominion." In some sense the pioneer spirit and the desire to colonize space is an expression of that call, something teleological, essential to the human person. But modernity's drive to power over nature is a corruption of what ought to be mankind's dominion over creation.

> Modernity could bask in dreams of yet undiscovered lands, untapped reserves. The concept "colony" was an expression of this. Even the individual peoples and their states embraced, both materially and humanly speaking, unknown, unmeasured possibilities.

Until we have truly taken dominion of the Earth and subdued it as we ought—as lords and stewards placed here by its and our creator—to seek

space and the dress and keep of gardens on other worlds is to distract ourselves from our failures. It is the commencement of a new project when we find our first too difficult.

The motives and problems of our desire for the stars that I have sought to explore here are merely those of ourselves. We carry them with us into our post-modern age, and should we venture upward we will carry them into space. The task Guardini set for himself in *Power and Responsibility* is all of ours:

> The core of the new epoch's intellectual task will be to integrate power into life in such a way that man can employ power without forfeiting his humanity. For he will have only two choices: to match the greatness of his power with the strength of his humanity, or to surrender his humanity to power and perish.

To resituate man where he belongs, so that he is no longer lost and alienated, is to situate his power, where it comes from and for whom it has been given. Man can discover his true self in the world when he finds what and how he ought to do, for "the doer is constantly becoming what he does—every doer, from the responsible head of state to office manager or housewife, from scholar to technician, artist to farmer." In doing right—by exercising whatever power he has with responsibility for others—he can embrace his identity as doer. Indeed, he must, for "if the use of power continues to develop as it has, what will happen to those who use it is unimaginable: an ethical dissolution and illness of the soul such as the world has never known."

We continue to fall like the man and woman in the garden because of a failure to see the "fundamental facts of human existence: the essential difference between Creator and created; between Archetype and image; between self-realization through truth and through usurpation; between sovereignty in service and independent sovereignty." Until we regain a cosmic—that is, truly ordered—vision of the world, a chain of being in which to place ourselves and our environment, and until we consider all our placements, even the most mundane, as so situated, we will remain lost.

The new man for the new age Guardini says we require is much like those ancient gardener-kings of Persia, who ruled as regents of Ahura Mazda, under authority. For "this man knows to command as well as how to obey. He respects discipline not as a passive, blind 'being integrated into' a system, but the responsible discipline which stems from his own conscience and personal honor." This humanity needs neither the transcendent system-making of the scientist nor the blind immanence of mass

man the consumer. Rather, the future's man takes stock of his dominion, all that his given power gives him responsibility for, and makes a garden of it.

Until we can count on this kind of humanity on Earth, our efforts into space will fail to elevate us. "And, therefore," President Kennedy said, "as we set sail we ask God's blessing on the most hazardous and dangerous and greatest adventure on which man has ever embarked." For whether we stay or go, without it our sickness will only grow worse.