

MARTIAN DREAMS™



MYSTERIES OF THE RED PLANET



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FOREWORD

I write these words aboard a colossal bullet rocketing from the Earth to Mars. Wondrous as this is (and it is, I assure you, quite wondrous), I am even more amazed by the fact that it is the year 1895! Tesla — yes, the noted scientist of years past, Nikola Tesla! — is unsure how long the voyage will take, so I have decided to pass the time recording what mankind (circa 1895) knows of our destination — Mars. How I came by this information is a story in itself:

Scientists have long suspected that Mars was capable of supporting intelligent life. As early as 1877, Italian astronomer Giovanni Schiaparelli mapped nearly eighty “canali” criss-crossing the Martian surface — canals that he said couldn’t possibly be the work of chance.

Among the scientists who followed in Schiaparelli’s footsteps was an American, Percival Lowell, who in the early 1890’s began studying the canals and other features of Mars. Remarkably, no late-20th century sources record the fact that Lowell did more than study the red planet from a distance — in 1893 he constructed a giant space cannon to send an expedition there!

When the cannon accidentally discharged ahead of schedule (with several notable figures of the day aboard) most observers agreed that the explosion must have vaporized the huge bullet-ship within, killing the passengers instantly. Luckily, the extraordinarily inventive Nikola Tesla, one of Lowell’s associates on the space cannon project, remained optimistic about the fate of those aboard the craft.

As planned, Tesla went ahead with the construction of a system of reflectors which would allow him to flash Morse code messages to the expedition (which had, in fact, crash-landed on the red planet). Lowell set up a matching system of mirrors and was able to send messages about what he and the other explorers discovered on Mars.

Having read through the transcripts of Lowell’s messages, I find



myself puzzled — the Mars he described in his messages is so very different than the one we of the late 20th century know. What could have changed the planet so in just 100 years? How could the Mariner and Viking spacecraft have missed such clear evidence of Martian life? I must know the answers to these questions. Perhaps we will uncover them during our explorations.

It seems likely that Lowell himself knows the answers, but he is either unwilling or unable to tell us. His Morse code messages ended abruptly not long after the first expedition landed on the red planet. Why they ceased we do not know, but cease they did. The information in this journal is, therefore, incomplete. Still, I will endeavor to record all that mankind knows of Mars. The facts — if facts they be — may prove invaluable to my fellow space travellers in the days and weeks following our landing on Mars.

PLANETARY DATA & GEOGRAPHY

THOUGH details have changed, much of what 20th century man knows of the red planet still appears to be accurate in 1895:

Mars is the fourth planet from the Sun. The Martian day lasts 24 hours, 37 minutes. Its year is 687 Earth days long. Its elliptical orbit



takes Mars as close as 128 million miles to the Sun and as far away as 155 million miles. Its distance from Earth ranges from 40 million miles to 250 million miles.

The diameter of Mars is 4222 miles at the equator, but only 4195 miles through the poles. Its mass is significantly lower than that of the Earth. The gravitational pull of Mars is, therefore, 60 percent lower than that of Earth. For this reason, Mars loses hydrogen and oxygen, the components of water, at a rate equivalent to 60,000 gallons of water a day. Another interesting effect of Mars' weak gravity is that escape velocity is only 11,214 mph, far less than the 25,000 mph required to escape the confines of Earth.



Basins, Craters & Planitia

OVERALL, Mars has suffered neither more nor less from meteor and asteroid strikes than the other inner planets. Still, Mars' proximity to the asteroid belt has resulted in periodic bombardments that are especially heavy. Sixteen impact craters with a diameter of 150 miles or greater have been clearly identified. These large, flat basins are called "planitia."

The Argyre planitia, approximately 350 miles across, is surrounded by mountains. Passage through these mountains is thought to be all but impossible.

The basin-like areas of central Mars are somewhat different than Hellas, Argyre, and the other large impact basins — the central planitia are believed to be lava plains created long ago by the eruption of the Tharsis volcanoes.

Caverns & Canyons

THE surface of Mars is marred by countless crevasses, chasms, and fossae (miles-long, trough-like ditches).

The system of canyons we of the late 20th century call Valles Marineris is 1550 miles long, 125 miles wide at its widest point, and 2.2 miles deep at its deepest. It dwarfs Earth's magnificent Grand Canyon (280 miles long, 18 miles wide at its widest point, and a little more than a mile deep) — in fact, the Valles Marineris would extend all the way from Chicago to California. The careless explorer could easily find himself lost in the twisting passages of this magnificent valley.

Noctis Labyrinthus, at the western edge of the Valles Marineris system, is a complex maze of interconnecting channels. Three smaller (though no less maze-like) chasms link Noctis Labyrinthus with Coprates Chasma. We must be careful to map these areas carefully should we be forced to explore them in the course of completing our mission.





Amazingly, Valles Marineris is itself part of a system of canyons 2800 miles long, 435 miles wide at its broadest point, and over four miles deep. This canyon system would stretch all the way across the United States!

Unlike Earth canyons, which are carved by running water, Martian canyons often appear closed at both ends (meaning water could not have flowed into or out of them). On the other hand, the equatorial regions of Mars are marked by what are generally agreed to be dry river beds. Many of the canyons of Valles Marineris spill out into these dried river beds. No one knows how the canyons of Mars were really formed. Perhaps our expedition can solve this fascinating Martian riddle.

In addition to canyons, Mars is riddled with underground tunnels and passages, some natural, others carved out eons ago by the sentient Martian race. Some of these tunnels are home to Martian wildlife, while others lead to underground factories (see below). Here again, the watchword for would-be Martian spelunkers will be caution. Accurate maps may be all that stand between survival and certain death.

Dust Storms

DUST is the most common feature of the Martian surface. Small particles are often wafted aloft, while larger particles, picked up by the wind, roll and bounce along the ground.

Extreme temperature contrasts, particularly near the poles and in the Hellas region, create violent winds — up to 280 miles per hour — and raging dust storms. Tornado-like conditions are common and quite deadly, often whipping the sandy surface of Mars to a stinging frenzy. Flying dust often blots out the entire surface and blinds the unwary explorer.

Lowell reports that the only thing to do if one spots a Martian dust storm is to run away. Seek shelter as quickly as possible.



Ice Caps

MARS is devoid of surface water. Most of the water that does exist is locked up in huge ice caps at the poles. The north pole is largely composed of water ice, while the south pole is a combination of water and frozen carbon dioxide.

Lowell theorized that the Martians melted small portions of the polar ice masses to fill their canals and irrigate the equatorial region. Gargantuan towers located near the north pole appear to have been part of an elaborate system for filling the canals, but the rigors of polar exploration stymied the 1893 expedition's efforts to investigate.

Mountains & Volcanoes

MARS features some of the tallest and most rugged mountains and volcanoes in the known universe. The volcanoes of Mars are noteworthy for reasons other than their prodigious height — they appear to have been formed from iron-rich, basaltic lava. The possibility exists that Mars may one day provide much of mankind's iron ore and steel.

Just north of the equator is the Tharsis bulge, a raised plain some five miles high and as far across as the United States. Tharsis boasts some of the highest points in the solar system. Olympus Mons is the tallest volcano known to exist (90,000 feet high and well over 350 miles across!). By contrast, Mount Everest, the tallest mountain on Earth, is only 29,000 feet high. Three slightly smaller volcanoes — Ascreaus Mons, Pavonis Mons, and Arsia Mons (each "just" six miles high) sit atop the Tharsis bulge in a diagonal line southeast of Olympus.

The Elysium bulge rises 2.5 miles above the surface and features somewhat smaller volcanoes than Tharsis. Only three of the Elysium mountains are as much as 93 miles across. The tallest of them, Elysium Mons, stands 5.5 miles high. Albor Tholus and Hecates Tholus, nearby, are a bit smaller.

Fortunately for us, none of the volcanoes of Mars appear to be active!





HUMAN SURVIVAL ON MARS

THE hard facts on the preceding pages appear to have changed little during the 20th century. The same cannot be said of other aspects of Mars. Though not as wild and fantastic as Edgar Rice Burroughs imagined in his John Carter books, Mars is far from the dead planet known to modern science.

Percival Lowell theorized that Mars was in the process of cooling and losing its atmosphere, but it was not yet completely dead. His trip to the red planet appears to have proved his theories. Mars circa 1895 is capable of supporting life. Native lifeforms abound, and mankind can, with difficulty, survive the planet's harsh conditions. Among the dangers we can expect will be intense cold and an atmosphere far thinner and lower in oxygen than Earth's.

Cold

THE Martian surface temperature varies with the location, the season and the time of day. The astronomers of the late 20th century report temperatures as low as -250 degrees Fahrenheit and as high as 90, with a typical range of -22 to -112 degrees.

Curiously, Lowell found Mars to be significantly warmer, though still dangerously cold. The most hazardous time is between the hours of 10 p.m. and 3 a.m. We must be sure to set up camp during these hours and consider remaining in an insulated tent until daylight. We also have a supply of heavy clothing to help keep us warm.

Oxygen

THE atmosphere of Mars is much thinner than that of Earth. By the 1990s, it was well established that the atmospheric pressure on Mars was just one percent that of Earth.



However, the Mars explored by Lowell seems far more hospitable than modern science would have us believe. Still, we will soon land on a planet just barely capable of sustaining life. We must anticipate reduced endurance, at the very least, when we disembark.

The Lowell expedition discovered a substance called oxium that makes life on Mars far more pleasant. The discovery of the gooey, foul-tasting, life-giving substance was pure luck — an old miner named Cooter McGee, gasping for breath and half mad from lack of oxygen, happened to stumble into a cave littered with geodes emitting air!

When he broke open one of the geodes he found a blue gelatin within. Despite the horrid odor he popped a wad in his mouth and began to chew. The taste was awful, but each bite released a bit of oxygen. He knew in an instant that he held the key to mankind's survival on Mars.

He dubbed the substance "oxium," and it quickly became both a necessity of life and the stranded expedition's primary form of currency. It was traded for all manner of foodstuffs, minerals, objects, and Martian artifacts. He who has oxium is assured of both health and wealth.

FLORA & FAUNA

AS recently as the late 1800's, Mars teemed with life. As dangerous as the cold and lack of oxygen may be, the most serious threat to human life on Mars is the danger posed by these decidedly alien and often hostile creatures.

According to Lowell's reports, there is little difference between those Martian lifeforms described as "flora" and those we would call "fauna." All Martian life appears to fall into one of two categories: There are plant-like creatures (dubbed "plantimals" by Lowell) and worm-like creatures.





All plantimals grow from seeds, spending at least a portion of their “youths” rooted in the ground. When seedlings near maturity, pods appear on the plant. Within each pod a new plantimal grows. The pods grow quite large and eventually burst, releasing fully grown creatures.

While the pods are growing, plantimals derive nourishment from the ground, just like Earth plants, but they also acquire something more — plantimals are capable of extracting species specific information from the soil in which they’re planted! In other words, the instincts of members of the seedling’s species that have died in the vicinity become part of the seedling’s own makeup. Each youngster acquires the “wisdom” of its predecessors. In the case of most wandering plantimals, little knowledge is passed on. In the case of the sentient Martians, the benefits of passing along multi-generational racial knowledge were dramatic.

Note that the red pods growing on some adult creatures are edible seed pods — fruit. The seeds are scattered when a piece of fruit falls from its host creature and bursts, allowing the seeds to be blown about by the Martian winds. Seeds can also be spread when herbivorous creatures pluck and eat the fruit of other creatures (in a curious blurring of the distinction between carnivore and herbivore). The indigestible seeds pass through the creature when it eliminates solid waste. Eventually the seeds take root and the cycle begins again.

The worm-like creatures differ dramatically from plantimals in appearance, habitat, and behavior. They are often shelled and generally avoid the extreme conditions of the Martian surface, living well-protected beneath the surface. Worms are almost always aggressive.

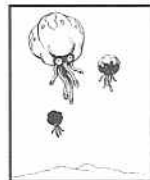
The unexplained disappearance of some members of the 1893 expedition led to rumors of the existence of mysterious, horrible, and deadly Martian creatures. Whether Mars is home to unidentified creatures and whether they are plant or worm is, as yet, a mystery.



Here is a listing of all creatures known to exist on Mars. The list may not be complete and further investigation is definitely in order.

Airsquid

NO Earthly equivalent exists for this, perhaps the strangest and most surprising of Martian creatures. The carnivorous airsquid is a remarkable combination of hawk, squid, and jellyfish. It floats, seemingly harmless, through the sky, its body suspended below a distended bag filled with hydrogen gas. Blessed with keen eyesight, it can spot prey at great distances. When it finds a victim, the airsquid drops in vicious, gravity-aided attack. Sharp teeth, a tearing beak, and grasping tentacles make the airsquid a hideous and effective enemy. Not surprisingly, the first expedition reports no sightings underground. The airsquid seems willing to float anywhere prey is to be found. There is no place on the Martian surface free of these deadly creatures.



Ammonoid

THIS primitive, snail-like creature dwells exclusively in the dank, dark Martian underworld. Its spiky, thorned shell provides ample protection against attack. Its tentacles allow it to grasp prey, but the real danger posed by the ammonoids is the burning acid secreted from suckers on the lower tentacle surface.



Bushalo

THE plains areas are home to this bison- or buffalo-like herbivore. Herds of bushalo can generally be found near the wandering forests, feasting on the small plants found in and around the





woods. Though normally sedate, these massive, hippopotamus-sized creatures are easily provoked. The charge of a bushalo, wood-like tusks clacking, is something to behold — from a distance. The best advice that can be given is to leave these creatures alone unless it is absolutely necessary to disturb them.

Bushrat

HERE is a curious anomaly — one of the few plantimals to be found both above and below ground. How these rat-like scavengers survive without the light of the sun so necessary to other plants is a



mystery. Perhaps it is akin to Earth saprophytes — non-photosynthesizing plants that survive on decaying organic matter. Bushrats can be found everywhere, feeding on the remains of dead worms and the kills of surface-dwelling carnivores. Small,

quick and blessed with razor sharp teeth and claws, bushrats are surprisingly dangerous when provoked.

Canal Worm

NO human has ever seen one of these creatures, but several circular tapestries found in the Martian cities depict what Lowell believes to have been huge, canal-dwelling worms. Several features are immediately apparent. They had huge maws full of row upon row of shark-like teeth. They must surely have been quite ferocious, attacking anything that moved on or near the canals. And they were large enough to swallow a man whole. Perhaps it is a blessing that the canals are empty and mankind need never fear these awesome beasts.

Cave Worm

UNLIKE its distant relative, the extinct canal worm, cave worms are quite real and quite deadly. These glowing, shelled cave dwellers



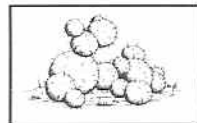
can grow to lengths up to ten feet, but a spitting attack makes them a threat at far greater distances. Once prey comes within reach, a cave worm uses grasping tentacles to squeeze the life from its victims. Like many Martian creatures, the cave worm secretes a burning acid through its skin. Victims are, in essence, rendered down to liquid which the mouthless worm absorbs through its skin.

Creeper

THIS rootless, leafy vine is the above-ground equivalent of the cave worm. Its natural habitats are the mountainous regions of Mars, though it will travel as far as necessary to find food. It squirms about the surface and attacks by wrapping itself around its victims and suffocating them. The creeper tends to be shy, attacking only when requiring one of its infrequent feedings, but it can respond viciously to provocation.

Creeping Cactus

AMONG the odder Martian creatures, this hybrid of cactus and sea urchin moves by inflating its rear pods and deflating the ones ahead, pushing it slowly across the surface.



This is probably a variation on the flight mechanism used by the air squid, but the creeping cactus is too heavy to get off the ground. Despite their weight, the strong Martian winds often send creeping cacti tumbling across the plains, like tumbleweed. Unlike tumbleweed, however, the creeping cactus has pointy spines that can inflict surprisingly serious damage.

Glow Worm

THOUGH similar in appearance to their cousins, the rockworms, glow worms are quite harmless. Found only in the maze-like underground passages of Mars, these shy creatures shrink into

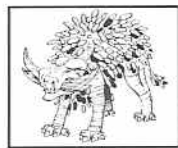




their shells at the approach of any creature larger than a bushrat. For reasons we can hardly guess, glow worms usually cluster at points where passageways curve or reach a dead end. Underground explorers quickly came to consider the creatures their friends for, as their name indicates, they glow quite fiercely. Whether this display is designed to scare away would-be attackers, to blind underground predators used to the dark, or to accomplish some other, unknown goal is a subject worthy of further study.

Hedgehog

THIS belligerent, mid-sized carnivore fills the ecological niche of Earth wolves. Woody tusks, sharp fangs, and thorns that can be sent flying through the air make the lone hedgehog quite formidable. Unfortunately, they often travel in packs, making them even more of a threat. A group of hedgehogs can take down a bushalo with ease, and can even give a sextelleger a hard time. Be ever alert for hedgehogs — they range far and wide and can be found anywhere on the planet.



Jumping Bean

THE rabbit-like jumping bean looks almost comical as it traverses the Martian landscape with a peculiar hopping gait. Don't be deceived by its looks, however, or its herbivorous nature — beans are quite aggressive. In fact, they're just plain nasty, seemingly for the fun of it. (How else do you explain an herbivore that attacks without provocation?) A pack of jumping beans is quite dangerous, giving pause even to the carnivores of Mars.



Oxy-leech

THIS slug-like underground life form feeds on oxium. Unfortunately, these primitive creatures make no distinction between veins of oxium ore and travelling adventurers with oxium in their packs. The oxy-leech has a hideous, toothy mouth opening, but does very little physical damage, preferring to steal oxium and flee before victims can react. Generally found near cave entrances and in ravines, the oxy-leech is a disgusting creature, but more a nuisance than a genuine threat.



Plantelope

THE gazelle-like plantelope may remind explorers of its smaller cousin, the jumping bean. Normally docile, it tends to be shy, choosing to flee rather than fight in almost every case. The plains are its customary feeding grounds, though herds of plantelope have been seen leaping goat-like in the mountainous areas of Mars.



Planther

FAST, agile, and deadly, the planther is at the top of the plantimal food chain. Though it rarely attacks the larger herbivores, a hungry specimen of the breed can chase down a sextelleger (with some difficulty...). Planthers tend to be loners, sticking to the mountainous regions they love, but they move into the plains areas and travel in small prides during pollination season.





Pod Devil

HERE is a creature with no Earthly equivalent. Three times during the Martian year, the mysterious pod devil blooms. Anywhere from five to 30 pods appear on each mature adult. Within each pod, a young devil begins to grow. If left alone, the pods drop to the ground and a fully grown pod devil emerges. If the "mother" plant is disturbed before the "babies" reach full maturity, a variable number of pods burst, releasing immature (and quite vicious) devils. The young



are bipedal, frog-like whirlwinds of teeth and claws. They have been reported to attack from a distance by hurling small stones, an indication of relatively high intelligence. If one of the prematurely-released young dies, a new pod devil grows on the spot, thus assuring the continuation of the species.

Proto-Martian

THOUGH the sentient Martian race became extinct long before man set foot on the red planet, a primitive relative managed to survive. Though nowhere near as intelligent as their ancient cousins, the omnivorous proto-martians are clearly the top of the heap among the remaining plant creatures. (For the sake of comparison, think of proto-martians as somewhere between gorillas and human cavemen in intellect.) Alone among plantimals, the proto-martians travel in bands and use crude weapons (sticks, hurled rocks, and so on). They generally live near the bases of mountains, seeking the shelter of caves. They have also been spotted roaming the plains, living in crudely constructed shelters. Be warned that proto-martians are not intelligent enough to reason with. Consider them clever, dangerous animals.



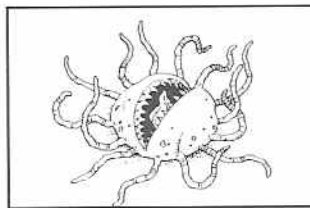
Rockworm

THESE gigantic tube worms live coiled up under the earth with only a hard, slime-covered tube visible at the surface. The tubes are made of a caustic material regurgitated by the worm. This same acidic ooze coats and lubricates the rockworm's body, allowing it to emerge with startling speed from its subterranean resting place. The slightest vibration on the surface draws the rockworm out. The speed of its attack, the caustic ooze, and a horrible thorny maw make each rockworm a threat. Making matters worse, rockworms tend to clump together in colonies and can be vicious when provoked. They are best left undisturbed whenever possible.



Sand Trapper

THESE large, pod-like creatures would appear to be easily avoided — they are completely immobile. Appearances can be deceiving, however. Like the Earth insect known as the ant lion (or, more popularly, the "doodlebug"), the sand trapper uses the lower portion of its abdomen as a shovel and digs itself a deep, conical pit in the loose sand of the plains. Any plantimal, worm, or human who gets too close loses its footing in the loose sand and falls to the bottom, where the creature waits to devour it. Even potential victims who don't fall within reach of the waiting creature have little chance of climbing out as the sand shifts beneath their feet. Escape is made even more difficult by the trapper's grasping, ropy tentacles.

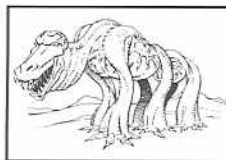




All in all, the sand trapper is a devouring machine — little more than a huge mouth lined with razor sharp teeth. A spitting attack can send a man tumbling down the slopes of its trap and into its waiting jaws. Don't be lulled into a sense of false security by its immobility. The sand trapper is quite deadly.

Sextelleger

HERE is another Martian plantimal with no Earthly equivalent. No other creature encountered by Lowell and the others was considered more dangerous or more malevolent. Even the planther thinks twice before attacking a fully-grown sextelleger. The six-legged



beast can only be described as a carnivorous rhinoceros. A lone sextelleger is a menace, but one seldom encounters a lone sextelleger — the creatures travel in herds, killing and devouring anything and everything in their paths.

Trees

THE pod-trees are not true plantimals like the other lifeforms of Mars, but they are, nonetheless, worthy of inclusion in a compendium of Martian creatures. Unlike Earth trees, Martian trees are capable of limited movement. For reasons not fully understood by human explorers, the trees clump together in forests and then wander together across the plains of Mars, usually in the vicinity of the canals.

Explorers quickly determined that it was not worth their time and energy to map either the location of the forests or the paths through them. The next time they reached an area through which they had passed earlier, the paths had changed and, in some cases, the entire forest had moved!



THE MYSTERY OF THE BERRIES

THE 1893 explorers sent many coded messages back to Earth. All of them were fantastic, but none were more remarkable than those pertaining to Martian berries. Before the messages stopped, George Washington Carver, noted agriculturist and one of the members of the 1893 expedition, catalogued many species of immobile, non-sentient plants. At least three of these bore fruit, specifically berries. When eaten, these berries reportedly conferred upon the user strange and inexplicable psychic abilities.

Some who used the berries claimed to be able to read minds (clairvoyance) or carry on conversations with inanimate objects (psychometry). Others reportedly gained the ability to move and use objects at a distance (telekinesis). Modern science generally denies the possibility of such powers, but then modern science also denies the existence of life on Mars. Perhaps it would be best to approach the subject of the Martian berries with an open, inquisitive mind.

MARTIAN CIVILIZATION

THE irrefutable evidence of sentient life on Mars leads inevitably to questions about who and what the Martians were. What was their lifestyle? How advanced was their civilization and how was it structured? After the members of the 1893 expedition determined that they could, in fact, survive on Mars, George Washington Carver began seeking answers to these questions.

All available evidence led Carver to conclude that the one-time masters of Mars were sentient plant-creatures — highly evolved plantimals, if you will. The remains of cities and towns — called “groves” — and the remarkable artifacts found in these settlements indicate a high level of civilization.





Life Cycle

LIKE all Martian plantimals and, for that matter, all Earthly plants, the sentient Martians (to be called simply "Martians" from here on) were born when seeds were planted in the ground, watered, nourished by sunlight and minerals, and protected from worms and carnivorous plantimals. However, Carver's study of records left by the Martians indicate that they grew to maturity somewhat differently than their non-sentient cousins.

First, each Martian plant grew just a single pod, and these pods didn't split open naturally when the creature within reached maturity. In fact, if left on the plant, Martian pods would become overripe, killing the young one within.

For that reason, the Martians tended their pods carefully and, using a knife-like implement specifically designed for the job, split the pod open at just the right time, releasing the "young" male or female Martian. The new organism was fully aware, but not fully mature. Were it not for the protection and guidance provided within the walls of the Martian groves, the young could not have survived.

The Martian life cycle began with an elaborate sexual ritual involving a male, a female, and a species of now extinct flying worm Carver called a "pollinator." The parties involved would gather in a sunny greenhouse in the couple's home grove. The two Martians would kneel across from each other as pollinators fluttered about them. The worms would land on the male, picking up a dusting of pollen, and then land on a ruff of flower-like structures about the female's neck and shoulders.

The pollinated flowers eventually grew into seeds which ringed the female, like strings of pearls. When the seeds had grown, they were gathered and given to the Cultivator, who planted and tended them in a communal plot. Eventually, the seeds grew into seedlings and then into



fully grown plants. The plants grew pods and the cycle was complete.

The existence of communal plots was probably the most telling difference between the Martians and their non-sentient cousins — they tended to settle in a few places and buried generation after generation of their dead in a few precisely defined locations. Seeds planted in these locations acquired knowledge and characteristics not only from the previous generation, but from all generations stretching back many thousands of years.

The germ of true intelligence was clearly present in the Martians from the very beginning — they, alone among plantimals, realized the potential benefits of settling in a single location. Still, given what we know of life on Mars, the resulting concentration of racial memory in a single location surely contributed to their dominance of the planet.

Martian Life & Social Structure

WHILE Carver studied the Martian life cycle, anthropologist David Yellin began a systematic study of the Martian lifestyle as recorded in scrolls and reflected in surviving Martian groves and artifacts.

According to Yellin, the secret of Martian success was rootedness. Once a Martian family (or group of families) settled in an area, it remained there, to the benefit of each succeeding generation. Thus, each grove is found today on the same spot it occupied at the dawn of Martian civilization.

Martian groves consisted of several homes arrayed around a central grave/nursery plot, the whole protected against nomadic plantimals by a stout wall. The homes were, not surprisingly, made entirely of glass or crystal. In other words, the Martians lived in greenhouses, not unlike the marvelous crystal palaces beloved by the Victorians.

The rule among Martians seems to have been "one-home, one-Martian." Since all seeds were planted in a communal birthing plot,



there were no families — in a sense, all Martians living in a grove were one family. When a Martian died, its body was carried to the birthing plot and buried there. As the body decomposed, all of its accumulated memories and experiences were, through some unknown mechanism, transferred into the soil, to be soaked up by seedlings planted there. Thus the seedlings acquired the knowledge of all previous generations in that location.

Each Martian birthing plot was tended by the community's Cultivator. This Martian held the fate of his community in his three-fingered hands. If the plot were damaged, the development of subsequent generations could be set back severely. If the damage were



so great that the community had to move and find a new plot, a small amount of dirt would be collected from the plot and carried to a new location. Martian records indicate that this only rarely resulted in success. Needless

to say, the Cultivator was held in the highest respect.

Assisting the Cultivator was the Gatherer. The Martian who held this position gathered all of the leaf droppings and other plant matter and kept up the community's compost heap. The Gatherer was also responsible for bringing the dead to the birthing plot, where their knowledge could be imparted to succeeding generations.

Another Martian, the Arborist, healed the sick and wounded. This involved taking cuttings, healing diseases, grafting limbs, and so on.

Coordinating the activities of these key Martians and seeing to the everyday needs of the citizens of each grove was the Agrarian. Think of the Agrarian as akin to a human Mayor and you won't be too far off the mark. In addition to internal affairs, this Martian negotiated water rights with other groves and took responsibility for inter-grove soil trading. Such trading ensured the widespread dissemination of knowledge and



enriched the overall Martian stock. The Agrarian also made sure the underground power plants and factories were well-maintained, ensuring the continued idyllic existence of Martians on the surface.

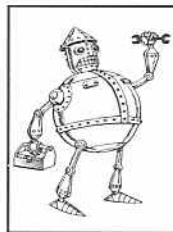
Martian records indicate that there were once scores of groves. Today, only four are intact enough to reveal anything of Martian life (to say nothing of sheltering the members of the 1893 expedition). Olympus, Argyre, Hellas, and Elysium are in surprisingly good repair. Other scattered buildings only hint at the former greatness of Martian civilization.

Factories, Mines & Mechanical Men

ALL of Martian civilization was built on the idea that the groves were inviolate, edenic, never to be sullied by machinery. The idyllic existence above ground was made possible by moving underground all of the machinery and mining operations that made such a life feasible.

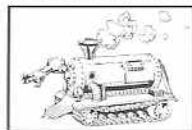
Power was generated by scores of hulking steam engines, each as large as the monstrous Corliss engine displayed at the 1876 Centennial Exposition in Philadelphia. Canvas belts conveyed power to a vast array of machines. The material to build and power these machines — iron ore, coal, and other substances — came from colossal mines as grand as any in human history.

The steam-powered underground machines must have roared deafeningly in their day, but now they sit idle, waiting for someone to figure out how to restore the power that once drove them. Today, countless years after the death of the last Martian, dirt and grit cover every unprotected surface. And the stench in the factories, powerplants, and mines is nearly overpowering.





The underground factories and mines are, along with the canals, the most remarkable displays of Martian industrial prowess. The achievement seems all the more amazing when one considers that, like Earth



plants, the Martians required sunlight in order to survive. This made underground work taxing and potentially deadly. The Martians solved this problem in a most straightforward, yet astonishing, manner.

In order to tend the machines, the Martians created metal surrogates, specialized devices that we of the late 20th century would



call robots. Lowell dubbed them “mechanical men.” The mechanical men vary widely in appearance and, we can only assume, in function. Unfortunately, the underground areas are sufficiently dangerous that Lowell and the others did little investigating. The nature and functioning of the mechanical men remains, therefore, a mystery.

Canals

INCREDIBLE as it seems. Schiaparelli and Lowell were right — the canals on Mars are real. Great causeways once carried water from the poles to irrigate the more arid areas. This alone made it possible for the Martians to settle in one place and build their mighty groves. That the canals could also be used to transport Martians and materials from place to place was an added benefit. Their chief purpose was to ensure the survival and continued dominance of the Martian race.

Though the canals now stand empty, and many mysteries still remain, Lowell was able to determine quite a bit about them. They are all perfectly straight, with perfect, right-angle intersections. Their depth and width make them impassible when empty. Extensible bridges allow travellers to cross. Unfortunately, nearly all of the bridges are retracted



and will remain so until and unless we can restore power to the Martian cities. Large switches at the edges of the canals can be used to extend and retract bridges.

Curiously, there would appear to be a bit of water below the surface near the canals — plants can almost always be found growing in the vicinity of the empty waterways.

Lowell was able to tell much about the canals by observation, but one question remained unanswered: How were they filled? Robert Peary, noted polar explorer, may have provided the answer. During his trek to the edges of the Martian icecaps, he came across gigantic towers positioned at strategic locations along the edge of the north pole. Atop each tower was a ruby-red lens. It may be that the sun’s light, focused by the lens, melted the ice and channeled water into the canals. This is, however, nothing more than conjecture.

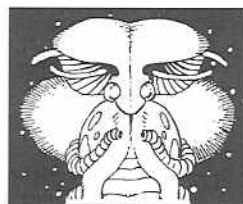
Needless to say, the empty canals limit movement on the planet’s surface and hinder exploration. The non-functioning switches and extensible bridges do little but frustrate would-be explorers. If there were only some way to restore power to the Martian machinery! Then, perhaps, mankind could explore Mars more fully.

Dream Machines

AS astounding as the Martian groves, factories, and canals are, nothing excited the members of 1893 expedition more than the mysterious dream machines. No one is really sure what purpose these devices served, but users reportedly experienced strange, dream-like visions (hence the name “dream machine”). Nothing more is known about these devices — among the few machines still functioning when the Lowell expedition arrived on Mars.

Shortly after the first reports were beamed to Earth concerning the dream machines, Lowell described a breakdown in communication





among various groups of humans. The once united expedition degenerated into several bickering factions. Little more is known about events on Mars. No one knows if there is any connection between the dream machines and the disintegration of the 1893 expedition — shortly after these reports reached Earth, communica-

tion ended. The dream machines appear to be at the heart of several mysteries. We must investigate, but cautiously...

MYSTERIOUS RED PLANET

Having reflected on the messages Lowell sent from Mars, I find myself drawn once again to the remarkable differences between the Mars of Mariner and Viking and the Mars of Percival Lowell. What cataclysm could have wiped all trace of Martian civilization from the face of the red planet? What catastrophe could have caused the extinction of so many lifeforms? We will — we must — find out!

GLOSSARY

- Chasma: Canyon
- Fossae: Ditches
- Labyrinthus: Network of valleys
- Mensa: Mesa
- Mons: Mountain
- Montes: Range of mountains
- Planitia: Plain
- Planum: Plateau
- Tholus: Hill
- Vallis: Valley (pl., "valles")



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