THE QUARRY

Voyager

Josef Pringle

"The spacecraft will be encountered and the record played only if there are advanced spacefaring civilizations in interstellar space, but the launching of this 'bottle' into the cosmic 'ocean' says something very hopeful about life on this planet." – Dr. Carl Sagan

I

On the fifth of September, in the year 1977, a group of scientists from the planet Earth put a message in a bottle. This bottle was an unmanned robotic spacecraft, a probe, which they named 'Voyager 2'. The message was etched onto a gold-plated phonograph record, and secured to the outside of the probe.

If a stylus were to be placed in the shallow groove that ran in a gentle spiral from the outer edge of the golden disc to its centre, and the record itself rotated at the appropriate speed, one would receive the message. The message was a collection of sounds and images of

life on Earth, greetings in 55 different human languages, and a 90-minute selection of music from a range of cultures and traditions. In short, the message was this:

"We are here, and so are you."

The Golden Record was protected by an aluminium cover, upon which the earthlings engraved instructions using simple diagrams and binary arithmetic. These instructions detailed how and at what speed the record should be played, as well as how the photographs and drawings encoded onto the record could be viewed.

The bottle was thrown out of the atmosphere from Cape Canaveral, Florida. The arm that threw it was an expendable launch system, a four-stage rocket. The bottle plopped into the cosmic ocean with 2,400,000 pounds of thrust and an almighty roar.

If you were to see Voyager for the first time as it emerged from its capsule, the first thing you'd notice would've been the large white reflector dish of its high-gain antenna, sat there atop the squat black body of the probe. At this stage, the rest of its instruments remained tucked tightly beneath the dish, but like a newborn stretching its limbs; Voyager unfolded its robotic arms and soared off into the void.

Voyager sailed through the main asteroid belt separating the inner and outer regions of the Solar System. It spent time observing the enormous gas giants - Jupiter and Saturn - and their moons, relaying data and images back to Earth.

By 1998, Voyager had travelled further from the Sun than any previous mission.

By 2012, it had left the outer limits of the Solar System and crossed into interstellar space.

By 2027, its generators could no longer supply the power needed to operate its scientific equipment. Many of its non-essential systems had already been shut down to conserve power. Its short-term mission was at an end, but its voyage had just begun.

H

Millennia slipped on by, and Voyager drifted into the domain of a young and stable yellow star. If humanity still existed, and were still counting the Earth's revolutions the way they had been when Voyager left, the year would be 2,072,377. By sheer coincidence, it would have been the fifth of September.

Preserved in the vacuum of space, Voyager looked just as it did the day it was launched. Picture it in this moment, where it sailed along its uncertain path. The light of the nearby star playing along the white dish of its high-gain antenna, flashing like a signalling mirror off the golden record that remains secured to the body of the probe. This flash obscures vision for a split-second, and fades in time to notice the enormous metal claw closing around the probe, as if to crush it. Instead, the 'fingers' of the claw come to rest gingerly on the sides of its quarry, and the craft it belongs to swims into view. It is teardrop shaped, smooth and contoured. Cargo doors open—mandible-like—at the front of the ship, and with the greatest of care, the titanic pincer gently deposits Voyager inside.

Humanity had always wondered what life beyond their blue planet might look like, how it might behave, if it existed at all. Some even claimed to have seen space aliens up close, and that they looked like reptilian humanoids or pallid, glassy eyed spectres or little green men. That they liked to infiltrate governments, mutilate cattle or kidnap people, sticking things up them for science, or just for the hell of it. Maybe they had, and maybe they did. The people that found Voyager were not intergalactic saboteurs, sadists, or scientific sex-pests. They were however, against all odds, 'little green men'.

They were ecstatic. These little green men, like the human beings that made Voyager, had an immense catalogue of theory and fiction about alien life. They had never found so much as an amino acid on any other planet, and being far more technologically advanced at this point than humanity was when Voyager was built, they had been to many planets.

When Voyager was first detected on their long-range scanners, the news was met with disbelief. So many of the little green men were sure that alien life simply did not exist, that if it did it would be so distant and so primitive that they would never encounter it, that they were alone in the universe and that they just had to accept that. Visual confirmation prompted system-wide celebration. A crew was promptly dispatched to retrieve the UFO and take it to a

remote research facility for study, and the greatest minds of their little green civilisation clamoured for a position on the research team.

In the cargo bay of the teardrop-shaped retrieval vessel, seven green men gathered round voyager. It was primitive, to be sure, but they marvelled at its design nonetheless, carefully inspecting its scientific instruments, its antennae and its radioisotope generators. They babbled and gestured to one another, taking notes and visual recordings. A little green technician gently laid two of his hands on the unblemished aluminium cover of the golden record.

Ш

The research facility was a tetrahedral orbital station that hung above a small, mineral-rich dwarf planet on the outer fringes of the system. It was the deep-space surveillance team aboard this immense trigonal pyramid that had first detected Voyager's approach. The little green scientists scanned the probe in order to construct a three-dimensional image for detailed study. After that they began to dismantle Voyager with the utmost of care, taking samples of material from every component to be analysed and catalogued.

The golden record had been removed to be studied in a lab of its own early in the process. The scientists decoded the instructions on the cover with ease and marvelled at their brilliant simplicity. The purpose of the technology was easy to understand, though the little green men had never encountered such a thing themselves. The grooves on this metal disc were recorded soundwaves, and could be played back using the stylus provided.

Little green hands, which were barely able to contain their excitement, gently lifted the record itself from its container and placed it on a spindle that had been fabricated for this purpose. They placed the stylus in the groove in the exact position, and rotated the spindle at the exact speed indicated on the record cover. The bottle was open, the message read.

It should be noted at this point that, despite certain uncanny similarities, the physiology of these little green men was very different to that of the human beings who made Voyager. They had more in common with plants than with animals, subsisting through a process similar to photosynthesis, which allowed them to synthesize all the nutrients they needed

using carbon dioxide, water and ultra-violet radiation. In addition, at key points around the bodies of the green men were fine-tuned sensory organs. These small ridgelike appendages were sensitive to nearby vibrations, not unlike the lateral line of a fish. These organs gave them incredible spatial awareness, and facilitated their language of soft words and subtle gestures.

Music came as quite a shock to the little green men. At the moment that the first notes of the Brandenburg Concerto No.2 met with their sensitive ears, their world changed. These little green men, for all their sophisticated technology and know-how, had never had a culture of music. They would often relax in lounges filled with droning, carefully engineered static, designed to create a kind of sensory bliss. Melody was entirely foreign, as was complex rhythm. Bach's Baroque instrumental was cacophonous, confusing and exciting. They were hooked.

Who were these aliens - so behind the little green men in terms of technology - that had created such divine and diabolical sequences of vibrations? Answers lay carved further towards the centre of that golden disc.

IV

Following the 90 minutes of music on the golden record was a collection of 116 images. Information on humanity's native star system, diagrams of cell division, of human anatomy and reproduction, photographs of human beings, the planet they lived on and the animals they shared it with.

As they had been encoded as sound, they were indecipherable when played back via the spindle that the little green men had constructed. Each image was preceded by a tone, followed by the image itself, which came in the form of a harsh electrical buzz; like the whine of a band-saw, which sent shivers of discomfort through the little green listeners. Each of these signals traced a sequence of 512 vertical lines which composed a complete image.

Among those images, and likewise etched on the aluminium cover, was a diagram. Straight lines of varying lengths radiated out from a central point. It showed roughly the

position of Earth in relation to nearby pulsars; celestial bodies that emitted a constant and distinct pulse of electromagnetic radiation.

The human beings that had made Voyager had attached a map. By listening in deep space for electromagnetic pulses of the same frequency and intensity as those detailed on the pulsar map provided, the little green men located a main-sequence yellow star, which lay halfway along the inside of one of the Galaxy's long spiral arms.

With permissions granted and navigation locked, the research station began the process of relocating. Inside the pyramid, propulsion systems hummed into action. Excited voices chattered away, relaying and confirming orders. Klaxons sounded and little green men hurried to their assigned positions. In the silence of the vacuum outside, the pyramid withdrew from its current orbit and turned, angling one of its four corners towards its chosen destination. Without a sound, it hurtled off into deep space.

V

The station arrived on the fringes of its target system in a matter of hours, and drifted inexorably towards the planet which lay third from its star. This was not the shimmering blue marble of 1977. This planet was a wasteland. The carcasses of thousands of satellites hung in orbit over arid continents and dull grey seas. Could this truly be where Voyager had come from?

Judging by this planet's difference to the photographs found on the golden record, the little green men concluded that some immense environmental upheaval had occurred. Preliminary sensor sweeps revealed structures on the planet's surface, and a team of four was sent down in protective suits to investigate.

The team descended via landing craft to a region where hundreds upon thousands of ruined structures lay strewn across the landscape, landing near a concentration of particularly tall ruins. Plant life had reclaimed the area, but had since withered in the heat of the sun, which seemed to beat down relentlessly upon the crumbling city.

It was then they saw them, a pair of figures slinking from cover to cover, between ruined doorways and the disintegrating husks of what must have once been vehicles. They fled at any sudden movement, only to circle back around, watching curiously. They were filthy, rangy things. At last, when one of the little green men attempted to approach them, arms spread non-threateningly, they scampered off for good.

Over the course of the little green men's stay in orbit above Earth, more attempts were made at contact with the human beings that slunk among the ruins of their fallen world. Other groups were encountered, but the results remained largely the same. Where the little green men were not met with retreat, they were met with violence. Some humans threw rocks, crude spears, even faeces at the intruders to scare them off.

After every attempt at establishing contact, the little green men returned to their pyramid in dismay. Some suggested abducting one of the humans by force, to study it or to try to create some line of communication. Such ideas were voted down. These were not the people they had come to find, not anymore.

These were human beings who had inherited a world brought to the brink of destruction. They were the descendants of the human beings who had survived the collapse of the old world, had endured the unpredictable cycle of droughts and storms that had wracked their planet for millennia. Most of all they had endured each other. As resources had diminished, competition for those resources had increased. These human beings were not the human beings who had made voyager, nor were they the human beings that had written or performed the beautiful music of the golden record.

But the record endured, thought one little green man, and made his case. The message they received from Voyager had survived into their time. It could survive a little longer, and with a reply, to boot.

So the little green men took the golden record and they copied it. They copied its cover, complete with its instructions, its stylus and its spindle. They etched their own message onto their own phonograph records. In the grooves of these new records were the sights and sounds of their own world and people, their own science, and directions to their own world.

Around the planet they built trigonal pyramids of solid stone, and inside they placed a copy of each record. The structures were then sealed, but not too tightly. It was the little green hope that in time, this world would heal, and its people with it.

The message had been taken from its bottle and read, and those that read it had found it worthy of reply. They sealed their reply in bottles of their own and left them on the cosmic shore for someone to find. In short, the message was this:

"We are here, and so are you."

"This is a present from a small distant world, a token of our sounds, our science, our images, our music, our thoughts, and our feelings. We are attempting to survive our time so we may live into yours. We hope some day, having solved the problems we face, to join a community of galactic civilizations. This record represents our hope and our determination and our goodwill in a vast and awesome universe." – Jimmy Carter, 39th President of the United States of America.