

“The Murmurs of the Earth” (1977)

Added to the National Registry: 2007

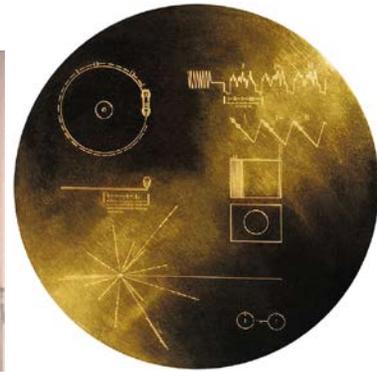
Essay by Cary O'Dell



The Golden Record



Voyager before launch



Golden disc covering with external markings/instructions

Somewhere, today, right now, floating out in space there is a record. It is a gold-covered copper disc sealed behind a larger gold disc. It is adhered to the side of NASA's Voyager spacecrafts. The unmanned mechanical explorers Voyager I and Voyager II were launched a few weeks apart in 1977. Voyager II was launched on August 20, 1977; Voyager I went up on September 5, 1977.

These two fastened records, titled “The Sounds of the Earth” (though also sometimes referred to as “The Murmurs of the Earth” or, simply, “The Voyager Golden Record”) exist as a sort of message in a bottle, a greeting card of sorts to any other possible lifeforms so that they may learn about the inhabitants of so-called “spaceship Earth.”

Voyager's records were not the first time that NASA had attempted to explain itself to other possible beings. The space probes Pioneers 10 and 11 (launched in 1972 and 1973, respectively), which preceded Voyager, and both carried small metal plaques identifying their time and place of origin for the benefit of any other spacefarers that might find them sometime, somewhere, in the future in the far reaches of space. But the Voyager recordings were the first concerted effort to explain something about their planet of origin and the people who made it.

The gold disc contains an embedded series of sights and sounds. On the record, are 115 photographic images and illustrations ranging from photos of the earth to photos of trees, plants, oceans, mountains, animals, insects and marine life as well as photos of various man-made structures (from simple thatched-roof homes to the Great Wall of China), to stills of various peoples engaged in every sort of activity from eating (showing how human obtain sustenance) to hunting to nursing their young. There are also diagrams: of DNA strands, of human anatomy, and of the solar system as we know it. Many of the photos and pictures contain measurements in order to give potential readers/viewers a sense of the various proportions of our planet (the circumference of the earth, the height of the average man and woman). A key explaining these units of measure is also encoded into the record.

It was these measurements that laid the groundwork for the disc's next component—its sounds and music. Since mathematics is closely aligned with music composition and, therefore, all aural stimuli, it was considered a smooth segue from lengths and distances to rhythms, songs, even vocalizations. First recorded on the record, there is a variety of spoken greetings, 55 different voices (male and female) offering “hellos” and “welcomes” in a 55 different, earthen languages, from Akkadian to Cantonese to Hebrew to Korean to Serbian to a simplified form of Chinese called Wu. There were also two “official” greetings as well, in English, from then United Nations Secretary General Kurt Waldheim and from then US President Jimmy Carter, the then

leader of the probe's home country. Next, were the natural sounds--of wind, water, rain, thunder, chimps, crickets, frogs, birds and chimps. Then, the man-made sounds—trains, planes, etc. And, finally, life sounds: an EKG, brainwaves, even the sound of a kiss.

At the time, of perhaps greatest interest to the earthly masses, was the music that was selected for placing on the record onboard the space craft. To NASA's ever-lasting credit, they took a decidedly xeno-inclusive approach to their selections; they included far more than just the music of the Americas. The gold disc contains an eclectic mix not only of international flavors but also of styles. The disc begins with Bach, specifically the first movement of the Brandenburg Concert No. 2 in F, but also includes: snippets of Australian Aborigine songs, panpipes and drums from Peru, an Indian raga, and a Navajo Indian night chant, among others. And there are a few pop and blues excerpts as well: "Dark Was the Night..." by Blind Willie Johnson and "Johnny B. Goode" by Chuck Berry. (At the time, "Saturday Night Live" joked that the first message sent back from space by aliens would be "Send more Chuck Berry!"). In all, the sound portion of the Golden Record is 27 minutes long.

(A full list of all of the Golden Record's content, sound and pictures, can be found, courtesy of NASA, at: <http://voyager.jpl.nasa.gov/index.html>.)

As can be imagined, summing up all of human existence in a just a few select images and sounds was a daunting task. It was one that fell to celebrated astronomer Carl Sagan who headed up the large committee of historians, anthropologists, musicologists and others who made recommendations. (It was also Sagan's wife, Ann Druyan, who submitted to the brain wave scan that was eventually included on the record.) Sagan would later co-author a detailed book about the making of Voyager's disc. Titled "Murmurs of the Earth," it appeared in 1978. As detailed there, the selection process, especially its musical component, presented some interesting challenges: what to include? what *could* be included? how much of each selection should be transferred to the disc? Music by the Beatles was chosen but ultimately omitted since copyright issues could not be resolved. (The Golden Record would eventually be released commercially back here on Earth.) Various songs by Bob Dylan were considered but eventually not used since they were often lyrically cryptic and often incomprehensibly sung.

As of this writing, the two Voyagers are still hurtling through space. By 1990, both vessels had passed the orbit of the former planet Pluto. And, as far as anyone knows, the Golden Records still exist on them for anyone (anything?) waiting to discover them as what they were meant to be: as an intergalactic descriptor of our world...and a kind of time capsule.

Similar to the National Sound Registry itself, the Golden Record was an attempt to create a national—or in this case, world—patrimony. Since the Voyager album is predicted to last for over four *billion* years, it stands to reason that by the time whoever or whatever discovers it, the Earth and its people could be greatly changed or, if some cynics are to be believed, be completely gone.

The purpose of the Voyager space crafts has always smacked of science fiction. Indeed, its mission seems to bear an uncanny resemblance to "Star Trek's" legendary opening refrain, "To seek out new life and new civilizations." Since its launch and entry into popular consciousness, Voyager has figured into a handful of sci-fi plots; both "Space: 1999" and "The X-Files" have made reference to it. Even the kids' show "Pinky and the Brain" based an episode around it. The first big screen "Star Trek" movie partially based its plot on Voyager by fabricating a fictional Voyager "6" probe that had a profound influence on a race of artificial alien beings.

The record's possible impact on intergalactic beings is an interesting speculation. The disc's outer shell describes, in symbols, two introductory bits of information: where the disc is from and how it can be played. Upon closer inspection, its engravings look a bit like Egyptian

hieroglyphics which, in a roundabout way, raises the question of just how messages and relics from other civilizations--those on our own planet--have been discovered, interpreted and perhaps misinterpreted over the centuries. After all, if our understanding of ancient civilizations is still in the embryonic stages how can we expect any other group, no matter how advanced, to fully comprehend and understand us? And what are the inherent risks in providing other species with such an inherently narrow glimpse of our world?

Of course, whatever risks there may potentially be, they are far outweighed by the greater importance of knowledge seeking, knowledge sharing, and the basic desire for human expression and exploration.

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