BOOKS & ARTS

Visions of ourselves

The view of our planet from space is beautiful and humbling, yet this shift in human perspective has not altered how we care for our environment, argues **Charles Cockell**.

Earthrise: How Man First Saw the Earth

by Robert Poole

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It is human nature to try to understand our place in the cosmos. Changes in our perception of human significance have accompanied many revolutions in scientific thought, such as the theory of evolution and establishing the order of the planets in the Solar System. So it is perhaps unsurprising that as soon as we developed the ability to launch projectiles into space, one of the first things we did was to use them to look back at ourselves.

The history and significance of the view of Earth from space is the subject of Robert Poole's *Earthrise*. Although its publication is titled and timed to mark the 40th anniversary of the first snapshots of Earth rising over the Moon's horizon on 24 December 1968, the book also traces the long journey that led to *Apollo 17*'s iconic image, 'Blue Marble', captured on 7 December 1972.

Of the many attempts before the space age to understand how Earth looks from afar, the Roman historian Seneca provides the most remarkable quote: "Is this that pinpoint which is divided by fire and sword among so many nations? How ridiculous are the boundaries set by mortals." The first human view of the curvature of Earth is attributed to the high-altitude balloon flight of *Explorer II* in 1935. Floating 22 kilometres above the ground, two intrepid aeronauts inside the balloon's pressurized gondola snapped a photograph that later appeared in *National Geographic*, with a line drawn across the horizon to illustrate that the curvature had been seen.

A robot took the first picture of the whole Earth in one frame. Black and white photographs of the planet, developed on board the spacecraft and scanned by a light that picked up different shades of grey, were beamed back from Lunar Orbiter 1 on 23 August 1966.

NASA photographer Richard Underwood emerges in the book as an early crusader for photographs of Earth from space taken by humans. He battled against bureaucrats who either thought it was a waste of astronaut time or could not see the scientific value. But during *Apollo 8*'s mission, on Christmas Eve 1968, *Earthrise* over the Moon was captured for the first

Forty years ago, the crew of *Apollo 8* captured this iconic image of Earth rising over the Moon.

NASA

time. Even though the astronauts were trained for this eventuality, their transcripts reveal that they found the beauty of the sight profound and unexpected. The view of Earth from space has deeply affected many astronauts, particularly the lunar-module pilots who, while their fellow countrymen were wandering about on the Moon, had the time not merely to stare at Earth, but also to think about it.

In my view, however, the sociological significance of the *Earthrise* photograph is exaggerated — a possibility that Poole might have explored more. He devotes just a page to political theorist Hannah Arendt's thoughts and author Kurt Vonnegut's contrarian observation about the Earth images: "It looks so clean. You can't see all the hungry, angry earthlings down there — and the smoke and the sewage and trash and sophisticated weaponry." And yet, the idea that the environmental movement was caused by this view of Earth is controversial. One might equally say that our growing understanding of the connectedness of the biosphere was caused by the awakening in the 1960s to the global consequences of the use of atomic weapons and the effects of DDT insecticide. Yet the *Apollo* images were co-opted by the environmental movement and vocalized as another space-related analogy, 'Spaceship Earth', a concept that highlighted the planet's limited resources.

The promise of the future effect of this holistic view of Earth and its inhabitants may also be utopian. The revelations of Charles Darwin and Nicolaus Copernicus were not accompanied by a reduction in the number of wars as a result of a new humility. One might even make the case that understanding more fully the beautiful, but nevertheless insignificant scale of our planet might eventually dull us to acts of large-scale destruction as our field of play expands beyond the borders and histories of nations to territorial views of whole worlds.

Whatever one's opinion, seeing the view of our planet from space has been a psychological transition point. Like the first time one hears one's own recorded voice, or sees oneself on a video, we have been confronted with an objective view of ourselves that does not quite equate with our previous self-perception. *Earthrise* is a fascinating contribution to a growing discussion about how space exploration and settlement will change civilization. ■

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