

Earthrise (24th December 1968)

Earthrise

Brendon Waterhouse, 3rd May 2017



Figure 1- Earthrise (Common orientation) - NASA, William Anders. Apollo 8 Lunar Mission, 24th December 1968.

Source: NASA <<https://www.nasa.gov/sites/default/files/thumbnails/image/3-as08-14-2383a.jpg>>

To many, including myself, the wonder of the night sky is enrapturing. Including the brightly shining Moon, filling the dark sky. How the Earth must appear if it was itself there beaming down at you. Earthrise, oceans of deep blue with white puffy clouds shining brightly, above a desolate powdered white surface of the Moon. Only a select few have seen back towards the Earth in this way, unlike most of us, who stare out into the volumes of an endless and distant space. An image from the 1960's American space program, Earthrise, capturing an opposing face to the viewpoint seen above every month.

Throughout human history, events have shaped the world, changed the way we think, and made lasting impressions. Opinions aside, past human endeavours to the Moon between the two super-powers (The United States of America (USA)) and Union of Soviet Socialist Republics (USSR)) shortly after the Second World War (WWII), administered both nations considerable technological advancements. Above all, The Apollo Missions throughout this period produced knowledge about the Moon previously unknown, and in fact it was the discovery of the Earth that changed the way humans perceived it. Subsequently, Earthrise, captured on Christmas Eve 1968 produced immense wonder. The roles of the Earth and Moon have been reversed, giving way to a discovery not planned by either the USA or USSR. Apollo 8 astronaut William Anders along with his fellow crew, became the first to enter the Moon's orbit and gather information for the future landing, and yet while exploring the Moon, Earth rose above the lunar surface and became a beacon of environmental protection (Granath 2016; NASA administrator 2015). Significantly, the Apollo program was prominent in the Cold War. The USA and the USSR battling to gain control over the world, including challenging to develop the technologies to even dominate the Earth's atmosphere and beyond (Zimmerman 1998, pp. 225-230). However, this time, traversing with ordinary American citizens and providing the basis of protecting the world we live in (Zimmerman 1998, pp. xi-xiv). Accordingly, protection of the Earth gained elevation and greater awareness under the influence of Earthrise, and amongst all environmental photography and of the Apollo photographs taken, Earthrise has made one of the greatest and everlasting impressions (The Sciences 1998). To begin



**Figure 1 - Earthrise (Original orientation) - William Anders.
Apollo 8 Lunar Mission, 24th December 1968.**

Image Collection:	70mm Hasselblad
Mission:	8
Magazine:	14
Magazine Letter:	B
Lens Focal Length:	250 mm
Film Type:	SO-368
Film Width:	70 mm
Film Colour:	Colour

Source: LPI <<http://www.lpi.usra.edu/resources/apollo/frame/?AS08-14-2383>>

with, only three pictures were taken whilst the Earth rose above the Luna surface for the first time, one in black and white and two in colour, one of which is seen in figure 2 (LPI 2017₂). However, two different picture orientations exist, landscape and portrait as seen between figures 1 and 2. The original orientation in figure 2 is how the spacecraft moved around the Moon on its flight trajectory, whereas in figure 1, the picture has been rotated for a more normal Earth-like view to that of the Moon rise or Sun rise, although, since there is no gravity (up or down) in space, either have the correct orientation (Judd 2012). Moreover, this iconic photograph was taken with a medium format 70mm Hasselblad 500 EL. These electric cameras with interchangeable lenses and film magazines were specially developed through an alliance between the Swedish manufacturer of Hasselblad cameras and a rapidly growing photographic knowledge inside NASA after a Hasselblad 500C was modified by an earlier astronaut Walter Schirra in 1962 (Wikimedia 2017; Hasselblad 2017₁). A few decades earlier in WWII, Victor Hasselblad developed the first Hasselblad HK-7 for the Swedish military established from a captured camera from the German troops, equally, many other nations had been evolving some form of photography for warlike purposes (Chambers 2004; Hasselblad 2017₂). Thus, the Apollo Missions, effectively a pretence of USA military capacity towards the USSR, utilised this format camera to document their observations, consequently capturing an iconic twentieth century photograph of Earth (Lazer 2011; Clash 2015₁). Notably, with such a significant photograph, William Anders did not consider himself a photographer. William gave his fellow astronauts a camera each and then left a camera to himself that he did not particularly enjoy due to its heavy long lens, hence his camera technique was to change the aperture, point and click, nevertheless, NASA selected William's

slightly out of focus image (Clash 2015₂). For an unwilling photographer, William's image Earthrise is part of the 70mm Hasselblad collection in the Apollo Image Atlas, held in the Lunar Planetary Institute (LPI) USA, and in association with NASA, this provides a central research centre for scientific research, providing an abstract database and engagement in planetary and lunar education (LPI 2017₁ & 2). Overall, Earthrise has widened the minds and the reach of humankind, but the wonders of the past have not changed. Our technologies have surpassed the outer planets, footsteps taken upon the Moon, occurrence of still photography and a new concern for the environment, to this end, astronomical space and photography has had limited forward motion (Lenman & Nicholson 2006; Zimmerman 1988, pp. 302). Humankind is still tiny, still on a small rock, drifting in the vastness of space, attempting to learn something new, but arriving to the familial of unchanging wonder, yielding improvements toward Earth, to the place that individuals already lay (Lazier 2011; Zimmerman 1998, pp.287-289). Therefore, through the steps of a small few ideals and through the click of a cameras shutter, the world has gained the knowledge to achieve the previously thought not possible. However, with all things

considered, a simple picture, an un-orchestrated click and just taking the opportunity to capture the moment, an image of wonder and amazement may eventuate. That is, a different moment caught on film, may just be a moment worth remembering, not just for the one behind the camera.

Provided that a simple image can make an enormous impact, the familiarity and back story to the outlook captured, emulates engagement and interest to the viewer. In order to create a relatable photograph, the simplicity of the subject or the application of expressionless space gives an ease of relatability. Significantly, both are included in the image Earthrise. It is a very simple and powerful image. The Moon is sitting in the foreground and the Earth above the horizon line, popping out of the empty space completely filling the background. Equally, due to the fact this image was not an intended photograph and that it captures a familiar scene of a rising object over a horizon, Earthrise is relatable to the viewer. In summary, with today's technology, the digital camera allows the photographer to be able to seize many different expressions rather than just pre-empting a moment. An effortless image such as Earthrise demonstrates how effective blank space provides simplicity and by capturing a moment that is not constructed, it can be connective, and lifechanging. Finally, and most importantly, Earthrise is extremely relatable to me as I am passionate about space, the stars, and the planets. Nothing would make me happier than to be able to take a picture that has such an impact that could change the way we look at our universe, and maybe, even change lives for the future of our planet.

References

Chambers, JW 2014, 'Photography, War and the Military in' in *The Oxford Companion to American Military History*, Oxford University Press

Clash, J 2015¹, 'Astronaut Bill Anders Recalls Famous 'Earthrise' Photo He Took From Moon', *Forbes*, 17th April 2015, viewed 19th March 2017, <<https://www.forbes.com/sites/jimclash/2015/04/17/bill-anders-recalls-famous-earthrise-photo-he-took-from-moon/#d1f4904527a7>>

Clash, J 2015², 'Astronaut Bill Anders Recalls Famous 'Earthrise' Photo He Took From Moon', *Forbes*, 17th April 2015, viewed 19th March 2017, <<https://www.forbes.com/sites/jimclash/2015/04/17/bill-anders-recalls-famous-earthrise-photo-he-took-from-moon/2/#33c0dc2f6b61>>

Figure 1 – Source: NASA, viewed 3rd March 2017, <<https://www.nasa.gov/sites/default/files/thumbnails/image/3-as08-14-2383a.jpg>>

Figure 2 – Source: LPI, viewed 8th March 2017, <<http://www.lpi.usra.edu/resources/apollo/frame/?AS08-14-2383>>

Granath, B 2016, 'Astronaut Photography from Space Helped 'Discover the Earth'', NASA, 22nd April 2016, viewed 10th March 2017, <<https://www.nasa.gov/feature/astronaut-photography-from-space-helped-discover-the-earth/>>

Hasselblad, 2017¹, *Hasselblad in Space*, viewed 26th March 2017, <<http://www.hasselblad.com/inspiration/our-story/hasselblad-in-space>>

Hasselblad, 2017², *Hasselblad history A man with small hands*, viewed 26th March 2017, <<http://www.hasselblad.com/inspiration/our-story/hasselblad-history>>

Judd, R 2012, 'See the Apollo 8 mission and learn more from the astronaut who lived it', *The Seattle Times*, 7th December 2012

Lazier, B 2011, 'Earthrise; or, The Globalization of the World Picture', *The American Historical Review*, vol. 116, iss. 3, pp. 602-630

Lenman, R & Nicholson, A 2006, 'astronomical and space photography', *The Oxford Companion to the Photograph*, Oxford University Press

LPI – see Lunar and Planetary Institute, <<http://www.lpi.usra.edu/>>

Lunar and Planetary Institute, 2017¹, *About us*, viewed 8th March 2017, <<http://www.lpi.usra.edu/about/>>

Lunar and Planetary Institute, 2017², Apollo Image Atlas, viewed 8th March 2017,
<<http://www.lpi.usra.edu/resources/apollo/catalog/70mm/mission/?8>>

NASA – see National Aeronautics and Space Administration, <<https://www.nasa.gov/>>

National Aeronautics and Space Administration, Administrator 2015, ‘Earthrise’, NASA, 31st July 2015, viewed 3rd March 2017, <https://www.nasa.gov/multimedia/imagegallery/image_feature_1249.html>

The Sciences, 1998, ‘That Photograph’, Australian Broadcasting Corporation, November/December 1998, viewed 18th March 2017, <<http://www.abc.net.au/science/moon/earthrise.htm>>

USA – The United States of America

USSR - Union of Soviet Socialist Republics, 30th December 1922 – 26th December 1991

Wikimedia Foundation Incorporated, 2017, Hasselblad, viewed 30th March 2017, <<https://en.wikipedia.org/wiki/Hasselblad>>

WWII – Second World War, 1st September 1939 – 2nd September 1945

Zimmerman, R 1998, The Story of Apollo 8. The first manned flight to another world, Dell Publishing, USA