

Articoli/13:

The Big Picture

Philosophy After the Apollo Missions

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Abstract: In “The Big Picture,” Kelly Oliver analyzes the rhetoric surrounding the first images of the Earth from space. She demonstrates that mainstream media in the United States, along with testimony from the astronauts who took the photographs, is filled with ambivalent desires. The first photographs of Earth triggered rhetoric about saving and protecting the planet, rhetoric about technological unification of the global, and fantasies of escaping Earth to colonize other planets. These images made us want to love it and want to leave it. Kelly Oliver shows how these reactions to Earth are still with us today.

Men's conception of themselves and of each other has always depended on their notion of the earth.

(Archibald MacLeish, 1968)¹

The spectacular images from the 1968 and 1972 Apollo missions to the moon, “Earthrise” and “Blue Marble,” are the most disseminated photographs in history². Indeed, “Blue Marble,” the most requested photograph from NASA, is the last photograph of the planet taken from outside of Earth’s atmosphere³. Whereas “Earthrise” shows the earth rising over the moon, with elliptical fragments of each (the moon is in the foreground, a stark contrast from the blue and white earth in the background), the later image “Blue Marble” is the first photograph of the “whole” earth, round with intense blues and swirling

¹ A. MacLeish, *Riders on Earth Together, Brothers in Eternal Cold*, *New York Times*, December 25, 1968.

² See B. Lazier, *Earthrise; or, the Globalization of the World Picture*, *American Historical Review* 116 (3) 2011, p. 606. I am fortunate to have found Lazier’s article “Earthrise” while working on this project (2011). His analysis is insightful and provocative. This chapter is indebted to his work there. I am also grateful for conversations with Jennifer Fay, which helped me immensely in formulating this project.

³ B. Lazier, *Earthrise; or, the Globalization of the World Picture*, cit. p. 620; D. Cosgrove, “Contested Global Visions: One-World, Whole-Earth, and the Apollo Space Photographs”, in *Annals of the Association of American Geographers* 84 (2), 1994.

white clouds so textured and rich that it conjures the three dimensional sphere. Even more than previous photographs of Earth, the high definition of “Blue Marble” and the quality of the photograph make it spellbinding. Set against the pitch-black darkness of space that surrounds it, the earth takes up almost the entire frame. Unlike in Earthrise, in Blue Marble the earth does not look tiny or partial, but whole and grand. Both of these photos from Apollo missions (8 and 17) were immediately met by surprise, along with excited exclamations about the unity of mankind on this “blue marble,” this “pale blue dot,” this “island earth”⁴.

In the frozen depths of the Cold War, and over a decade after the Soviets launched the first satellite to orbit Earth, Sputnik, these images were framed by rhetoric about the unity of mankind floating together on a lonely planet. At the same time as vowing to win the space race with the Soviet Union, the United States wrapped the Apollo missions in transnational discourse of representing all of mankind. While aimed at the moon, these missions brought the Earth into focus as never before. The photographs sparked movements aimed at “conquering” our home planet just as we had now “conquered” space. Indeed, the criticisms of these early ventures of the space program asked why we were concentrating so many resources on the moon when we had plenty of problems here on Earth, not the least of which was the threat of nuclear war⁵. The Apollo missions were a direct outgrowth of this threat, in terms not only of the significance of the race to space, but also their technologies, which originated with military developments in World War II. The atom bombs dropped in Japan in 1945 heralded the nuclear age with the threat of total annihilation. And the development of rockets by both the United States and Germany as part of military strategies in WWII, gave rise to rockets launched into space by the U.S.S.R. and U.S.A in decades that followed. Indeed, the U.S. recruited German scientists to work with N.A.S.A..

Within a decade, we had gone from *World War* and the threat of genocide of an entire race of people, to the possibility of nuclear war and the threat of annihilation of the entire human race. And, within another decade or two, with Sputnik and then the Lunar Orbiter and Apollo missions and photographs of Earth from space, the *World* gave way to the *Planetary* and the *Global*. Following the 20th Century German philosopher Martin Heidegger, we might call this “the globalization of the world picture”⁶. Within a few short decades, the rocket science used by the military in WWII had given rise to the globalism that we have inherited today. From global telecommunications such as cell phones and Internet, to global environmental movements, the Apollo missions moved us from thinking about a world at war to thinking about both the annihilation and the unification of the entire globe.

⁴Cf. C. Sagan, *Chapter 1: You Are Here*, in *Pale Blue Dot: A Vision of the Human Future in Space*, 1-8, New York 1994.

⁵*Men of the Year*, *Time*, January 3, 1969.

⁶See B. Lazier, *Earthrise; or, the Globalization of the World Picture*, cit., p. 606.

The real nuclear destruction in WWII and the threat of nuclear war during the Cold War sparked fantasies of nuclear devastation in popular culture. Films such as Roger Corman's *The Day the World Ended* (1956), Stanley Kramer's *On the Beach* (1959), Stanley Kubrick's *Dr. Strangelove* (1964), and the James Bond film *You Only Live Twice* (1967), along with lesser known films such as *The Final War* (1960), *The Day the Earth Caught Fire* (1961), *This is Not a Test* (1962), *Atomic Rulers of the World* (1964), *Fail Safe* (1964), *The End of August at the Hotel Ozone* (1967), all revolved around the threat of nuclear destruction, many of them imagining what would happen if the U.S.A. or U.S.S.R. "pushed the button." The mushroom cloud became the iconic image of nuclear destruction. After the Apollo photographs of "whole" earth, the mushroom cloud and fear of nuclear destruction was joined, if not replaced, by images of other types of annihilation of the entire planet through our own pollution and climate change or at the "hands" of aliens. Some in the environmental movement spurred on by the Apollo photographs imagined the Earth itself as our enemy, taking its revenge on us by trying to eradicate us from its surface⁷. The mushroom cloud and the iconic Blue Marble became intertwined in popular investment in the fantasy of *whole* earth. It was as if we could think the whole earth only by imaging its destruction, that all attempts to "save" the planet require first imagining destroying it.

In order to take the world as a whole, we imagine it gone. In order to see the whole earth, we fantasize its obliteration. In this regard, fantasies of Whole Earth and One World are nostalgic in that they begin with imaginary scenarios of annihilation followed by the longing for wholeness. In this retroactive temporality, we embrace the earth and the world by first imagining them gone and then reconstructing them whole. In the words of the tagline of the 2013 film *Oblivion*, in which aliens have rendered the earth a barren desert and convinced the few remaining inhabitants, whom they have cloned, that habitable earth was irradiated through our own nuclear war, "Earth is a memory worth fighting for."

Is it a stretch to say that before the World Wars, we had no sense of the World as a whole? And is it just coincidence that the images of the "whole" Earth appear only through the threat of nuclear annihilation of the entire planet? Are the mushroom cloud and Blue Marble two sides of the same coin, namely the technological mediation of our relationship to both Earth and World?⁸ Did the threat of nuclear destruction change the *World* into a *Globe*? Finally, does imagining the earth as a whole necessarily mean imagining its demolition? In this case, the Whole Earth and One World in the photos from space are phantasms created by the fallout of the fantasies of World being gone and Earth being obliterated. This was the fear that inspired men to reach for the stars, the fear that life as we know it on Earth might disappear one day. And on "the day the world ended" and "the day the earth caught fire," these men wanted to be ready to abandon ship and make a new start someplace else in the universe. Yet,

⁷ See B. Lazier, *Earthrise; or, the Globalization of the World Picture*, cit., p. 619.

⁸ Cfr. Ivi, p. 619.

what they discovered with their first ventures off world rocketing to the moon is that looking back and seeing the Earth was the most profound moment of their mission. Certainly, the most enduring legacy of the Apollo missions are the images of earth from space.

Immediately after the Earthrise photograph was transmitted back to Earth from Apollo 8 on Christmas day 1968, poet Archibald MacLeish's wrote an article in *The New York Times* entitled *Riders on Earth Together, Brothers in Eternal Cold*, in which he proclaimed the significance of the moon mission as changing our very conception of earth: «The medieval notion of the earth put man at the center of everything. The nuclear notion of the earth put him nowhere—beyond the range of reason even—lost in absurdity and war.... To see the earth as it truly is, small and blue and beautiful in that eternal silence where it floats, is to see ourselves as riders on the earth together, brothers on that bright loveliness in the eternal cold—brothers who know now they are truly brothers»⁹ MacLeish speculates that seeing the earth «as it truly is» will «remake our image of mankind» such that «man may at last become himself»¹⁰. Seeing the earth «whole» for the first time unites all of mankind, together on «that little, lonely, floating planet». Realizing that we are all in this together on the precarious lovely earth alone in the «enormous empty night» of space is seen as a catalyst for our finally coming into our own as a species united as «brothers». When MacLeish calls the astronauts «heroic voyagers who were also men», however, we cannot hear the universal mankind but rather the masculine heroic space cowboys, riders in the sky, who have the power and vision to unite all men as «brothers» against the eternal cold of space¹¹. MacLeish's assessment is consistent with NASA's press releases after both Apollo missions, which included panhuman themes of uniting mankind and representing all of mankind in space outside of any national borders¹². For example, then NASA chief Thomas Paine told *Look* magazine that photographs of Earth from space «emphasize the unity

⁹ A. MacLeish, *Riders on Earth Together, Brothers in Eternal Cold*, *New York Times*, December 25 1968.

¹⁰ *Ibid.*

¹¹ Denis Cosgrove analyzes the masculinist and imperialist rhetoric surrounding the early Apollo missions (*Contested Global Visions: One-World, Whole-Earth, and the Apollo Space Photographs*, *Annals of the Association of American Geographers* 84 (2), 1994, pp. 270–294). Cosgrove argues that the within this discourse «the airman unveils the true face of the earth» (Ivi, p. 279). He also argues that the very use of the word «mission» conjures both Christian missionaries and military missions, both of which inform the rhetoric of the early space program (Ivi, pp. 280–182). For a discussion of the rhetoric of the missions in terms of gender, see also Y. J. Garb, *The Use and Misuse of the Whole Earth Image*, *Whole Earth Review* (March 1985), pp. 18–25.

¹² Denis Cosgrove describes the way in which this pan human rhetoric aligns Christian universalism and the American vision of global harmony imagined because imperialism can be taken into space where there is enough to go around: «The dominant rhetoric of Apollo spoke of an incorporative vision of global human mission rather than of dominion or territorial control; and as such, that rhetoric was unremarkably consonant with much of post-war American foreign policy. Imperial expansion, henceforth, was to be directed peacefully beyond the Earth for the benefit of 'all mankind' rather than into the territories of other human cultures» (*Contested Global Visions: One-World, Whole-Earth, and the Apollo Space Photographs*, cit., p. 281). See also R. Poole, *Earthrise: How Man First Saw the Earth*, New Haven 2008.

of the Earth and the artificialities of political boundaries»¹³. NASA presented the Apollo 8 mission as one of peace and goodwill to all mankind¹⁴.

In 1969 *Time Magazine* named the Apollo 8 astronauts, Borman, Lovell and Anders, “Men of the Year.” The accompanying article described a New World born from their mission, one in which the human race could come together with one unified peaceful purpose as a result of the «escape from the planet that was no longer the world»¹⁵. The world had expanded to include the universe, while the earth had shrunk into a tiny fragile ball. *Time* describes the Earth as a troubled place full of war and strife and space as the great hope to «escape the troubled planet». Again, the astronauts are seen as heroic figures conquering space: «It seemed a cruel paradox of the times that man could conquer alien space but could not master his native planet»¹⁶. The goal is clearly to conquer; and the Apollo missions signal a great victory in escaping a troubled planet and moving beyond what appear from space as the petty disagreements between peoples. In the words of astronaut Frank Borman, «when you’re finally up at the moon looking back at the Earth, all those differences and nationalistic traits are pretty well going to blend and you’re going to get a concept that this is really one world and why the hell can’t we learn to live together like decent people»¹⁷. The irony is that Borman claims that he only accepted the mission because as a military officer he wanted to “win” the Cold War¹⁸. The *Time* magazine article concludes that man will not turn into «a passive contemplative being” because he knows how to challenge nature and in reaching for the moon he now conquered not only the seas, the air, and natural obstacles, but also space and the moon, which brings with it the “hope and promise of his latest conquest»¹⁹. Like Borman, the American media seemed to think of the Apollo mission as a triumph for freedom and hope, paradoxically both for all of mankind and as an American victory in the Cold War²⁰.

Ideals of “One World” and “Whole Earth” manifest this tension in rhetoric around the moon missions. And, the Earthrise and Blue Marble photographs became emblems of both ideals. “One World” is the idea that techno-science can unite all of the nations of the world, while “Whole Earth” is the idea that concern for the shared environment can unite all peoples on the fragile planet Earth. Geographer Denis Cosgrove describes these two reactions to seeing the Earth from space: «High-technology industries, largely concerned with communication... have dominated global economic trends over the past decade, and for them 22727 [Blue Marble] serves as an appropriate successor to the global corporate symbols of the post-war years. They persist in the *One-world* reading in which the

¹³ Quoted in R. Poole, *Earthrise: How Man First Saw the Earth*, cit., p. 134

¹⁴ Cfr. D. Cosgrove, *Contested Global Visions: One-World, Whole-Earth, and the Apollo Space Photographs*, cit., p. 282.

¹⁵ *Men of the Year*, *Time*, January 3, 1969.

¹⁶ *Ibid.*

¹⁷ Quoted in R. Poole, *Earthrise: How Man First Saw the Earth*, cit., p. 133-134.

¹⁸ See also R. Poole, *Earthrise: How Man First Saw the Earth*, cit., p. 17.

¹⁹ *Men of the Year*, *Time*, January 3, 17, 1969.

²⁰ Cfr. R. Poole, *Earthrise: How Man First Saw the Earth*, cit., p. 133.

Apollo image signifies secular mastery of the world through spatial control. By contrast, for *green* environmental organizations... Earthrise and 22727 represent a quasi-spiritual interconnectedness and the vulnerability of terrestrial life. For them the *Whole-earth* reading signifies the necessity of planetary stewardship, best practiced from an insider's localist position»²¹. Whereas One-World is the image of the entire planet connected through technology, Whole-Earth is the image of the entire planet interconnected organically through the uniqueness of life in the universe.

The sentiments of Buckminster Fuller epitomize the One-World view of the earth as a technological wonder that unites mankind: «our space-vehicle Earth and its life-energy-giving Sun and tide-pumping Moon can provide ample sustenance and power for all humanity's needs»²². While this utopian vision is far from realized on Spaceship Earth, the technological goal of uniting the planet through telecommunications is increasing its reach, if not across the entire globe, then certainly across a sector of the earth determined by access to technology through wealth. Yet, even telecommunications with outgrowths of social media originate in military operations. The first satellites were Cold War technologies developed to spy on the enemy. The One-World reaction with its ideal of global technology comes out of the conquering model voiced by astronauts and media alike in response to the Cold War. For even more than most, the Cold War was about technology; and the race to the moon was a battle over the future of techno-scientific progress. According to *Time* magazine, if we could conquer alien space, then we should be able to master our native planet.

The Whole-Earth reaction with its notions of organic interconnectedness and the vulnerability of our native planet comes from the "loneliness" of Earth seen floating in the "vast night" of space. Perhaps more surprising than reveling in the technocratic triumph of the moon missions was the solemnity of realizing that Earth is the only thing that looks even remotely living from that vantage point. While it is not so surprising that astronauts may have felt alone floating in their space capsule thousands of miles from any other living soul, it is remarkable that their sense of isolation was contagious. Each one of them expressed the loneliness of space in which Earth appears as an oasis. For example, on a later mission, Apollo 11 astronaut Michael Collins voiced the loneliness and vulnerability of Earth when circling the dark side of the moon alone in the Command Module: «I am alone now, truly alone, and absolutely isolated from any known life.... Then, as the Earth rose over the lunar horizon: so small I could blot it out of the universe simply by holding up my thumb.... It suddenly struck me that that tiny pea, pretty and blue, was the earth... I didn't feel like a giant. I felt very, very small»²³. Collin's remarks express the contradictory reactions to seeing Earth from that distance. On the one hand, he

²¹ D. Cosgrove, *Contested Global Visions: One-World, Whole-Earth, and the Apollo Space Photographs*, cit., p. 287.

²² Quoted in B. Lazier, *Earthrise; or, the Globalization of the World Picture*, cit., p. 284.

²³ Quoted in D. Cosgrove, *Contested Global Visions: One-World, Whole-Earth, and the Apollo Space Photographs*, cit., p. 286.

imagines blotting out the Earth with his thumb and on the other he imagines himself as very small and insignificant. The power and mastery of technological prowess is counterbalanced by the vastness of the universe that makes our entire planet look like a “tiny pea.”

The first astronauts to circle the moon all expressed similar sentiments, emphasizing the loneliness, uniqueness, and fragility of Earth. Apollo 8 Mission commander Frank Borman called Earth «a grand oasis in the big vastness of space»²⁴. Astronaut James Lovell described the loneliness of space, «The vast loneliness up here is awe-inspiring, and it makes you realize just what you have back there on earth. The earth from here is a grand ovation to the big vastness of space»²⁵. Astronaut William Anders stressed the fragility of the tiny planet: «The Earth looked so tiny in the heavens that there were times during the Apollo 8 mission when I had trouble finding it....I think that all of us subconsciously think that the Earth is flat or at least almost infinite. Let me assure you that, rather than a massive giant, it should be thought of as the fragile Christmas-tree ball which we should handle with care»²⁶. To these astronauts, and subsequently the media, along with One World and Whole Earth proponents, the Earth is alone in the universe, «a planet so eccentric, so exceptional» that the mission to the moon brought the Earth into focus²⁷. Through the lens of the Apollo cameras, the lovely planet Earth appears as lonely as it is unique set against the absolute blackness of space.

Seeing the Earth from space, so tiny and yet the only visible color, prompted ambivalent feelings of vast loneliness and eerie insignificance along with immense awe and singular significance. News anchor Walter Cronkite described the Earth as «floating in space»²⁸. And, speaking of the Apollo 8 astronauts in a NASA publication entitled *This Island Earth*, administrator Oran Nicks concludes, «Their eyewitness accounts impressed millions of men with the true reality of our situations: the oneness of mankind on this *island Earth*, as it *floats* eternally in the silent sea of space»²⁹. While, echoing the astronauts along with writers like MacLeish, another NASA administrator, George Low hopes that «By heeding the lessons learned in the last decade, and attacking our man made problems with the same spirit, determination, and skill with which we have ventured into space, we can make ‘this *island earth*’ a better planet on which to live»³⁰. Like an island, the Earth is alone, floating in the infinite sea of space. And like so many fantasy islands, some see it as paradise while others can’t wait to escape from their exile here. Seeing Earth from space made some appreciate Earth anew, while others imagined moving further away from Earth and traveling other planets.

²⁴ Ivi, p. 282.

²⁵ J. Lovell, quoted in *Men of the Year*, *Time*, January 3, 1969.

²⁶ Quoted in D. Cosgrove, *Contested Global Visions: One-World, Whole-Earth, and the Apollo Space Photographs*, cit., p. 284.

²⁷ B. Lazier, *Earthrise; or, the Globalization of the World Picture*, cit., 623.

²⁸ R. Poole, *Earthrise: How Man First Saw the Earth*, cit., p. 146 (my emphasis).

²⁹ O. W. Nicks, (ed.), *This Island Earth (NASA SP-250)*, Washington, DC 1970, p. vi.

³⁰ Ivi, p. iv (my emphasis).

For some, seeing the loveliness of Earth «is to wish also to return» to it³¹; while for others, seeing the insignificance of Earth compared to the vastness of space is to wish to leave it.

Indeed, mission chief Frank Borman recounts feeling nostalgia and homesick when he saw the “picture” of Earth from the moon: «It was the most beautiful, heart-catching sight of my life, one that sent a torrent of nostalgia, of sheer homesickness, surging through me»³². Certainly, the photographs of Earth from the moon still provoke feelings of uncanniness when we realize that we are there somewhere, miniscule specks on that tiny “pale blue dot” floating in space³³. Yet, whereas fellow astronaut James Lovell, saw the Earth as fragile and in need of care, astronaut Buzz Aldrin continues to urge us to colonize Mars and become a “two-planet species”: «Our earth isn’t the only world for us anymore. It’s time to seek out new frontiers»³⁴. While some, like Lovell, saw the Earth from space and want to protect it, others, like Aldrin, imagine escaping from Earth to find our way in the galaxy, perhaps even the universe. With environmental disaster looming large on the horizon, in recent years there is a sense among some that the Earth has betrayed us or is taking it revenge on us; and rather than a safe haven, it has become a death trap and a threat to human survival³⁵. The urge to colonize Mars or find another habitable home is getting stronger, evidenced by the *Mars One* project, which plans to start colonizing Mars in 2023, less than a decade from now, and to continue bringing people on a one way trip to Mars every two years from then on, for a permanent self-sustaining Mars settlement.

Imagining the Earth as an island, isolated and alone, conjures the ambivalent reactions to all desert islands, as either places to escape from or to escape to. Earth as an island, beautiful and blue, floating alone in the darkness of space, is both threatening and reassuring. This image leads us to see the Earth both as our amazingly singular home and at the same time a tiny pea barely visible from space. The view of Earth from space makes us want both to protect our vulnerable planet and to escape from this insignificant speck in the universe. It makes us feel simultaneously special and inconsequential. This is the double sense of the loneliness of Earth; it is all alone in the universe and yet unique.

The media reports immediately following the Apollo images of Earth are full of rhetoric of returning home, returning to self, of man’s finding himself, of man becoming his true self, and so on. The iconic images of Earth from space became metaphors for man’s homecoming, united on one planet as “brothers in eternal cold,” and overcoming his own worst tendencies in order to master himself. In the words of *Time Magazine*, the hope of Apollo 8’s missions is that «as man has conquered the seas, the air, and other natural obstacles, he has also

³¹ B. Lazier, *Earthrise; or, the Globalization of the World Picture*, cit., 620.

³² Quoted in R. Poole, *Earthrise: How Man First Saw the Earth*, cit., p. 2.

³³ C. Sagan, *Chapter 1: You Are Here*, cit.

³⁴ B. Aldrin, *The Call of Mars*, *The New York Times*, June 13, 2013, sec. Opinion / Global Opinion, <http://www.nytimes.com/2013/06/14/opinion/global/buzz-aldrin-the-call-of-mars.html>

³⁵ B. Lazier, *Earthrise; or, the Globalization of the World Picture*, cit., p. 619.

at each stage, in a small way, conquered part of himself. Therein lies the hope and the ultimate promise of his latest conquest»³⁶. Or, in the more optimistic tones of Archibald MacLeish, «man may at last become himself»³⁷.

Yet, this mythical return to self contains within it a threat to self, the threat of self-annihilation. Certainly, in the case of contradictory reactions to the *Earthrise* and *Blue Marble* photographs, this paradoxical logic is apparent as we recommit to saving our planet, which is our only home, and at the same time to escaping it to find another home. This paradoxical logic is intrinsic to the photographs themselves. For, in order to shoot those images, astronauts were propelled into inhospitable space in an unsustainable and precarious artificial environment where their very survival was uncertain. In other words, those images could only be taken from a vantage point where the survival of man is impossible. This extraterrestrial vista is from an impossible viewpoint, where no one could live. In this way, both photographs signal the danger inherent in the viewpoints of the people taking them. On the one hand, these two photographs, taken by human beings rather than unmanned satellites have more rhetorical force because they are tokens of a human eyewitness standpoint. On the other, they also signal the perilous position of these space travelers who risk their lives while taking them.

Furthermore, the only way to get what even NASA officials called this “God’s eye view” was from this impossible point so far away from Earth³⁸. The view of the “whole” Earth could not be seen from Earth, but only at a distance born out of rocket science and compared to the viewpoint of God. As creatures of and on the Earth, we cannot see the Earth; it is never a whole or total object presented to our perception. Apart from photographs, the view of the Earth as a whole has been reserved for the rare astronaut who left the Earth’s atmosphere. Speaking of their view out the window of “the whole globe,” as «the first humans to see the world in its majestic totality», astronaut Frank Borman exclaimed, «This must be what God sees»³⁹. And many of the astronauts talked of traveling to the heavens⁴⁰. To see the Earth whole, as it really is, human beings must travel to the heavens to get a God’s eye view of the planet. Since this is not possible for most, luckily, they had cameras with which to document the first sight of the whole Earth by human eyes. Some earthlings even asked the astronauts whether they had seen God in space⁴¹. The view of the whole Earth is the view of God. It is no wonder, then, that the Apollo missions sparked as much discussion of conquering and mastery as they did vulnerability and fragility.

³⁶ *Men of the Year*, 1969, *Time*, January 3, 1, 17.

³⁷ A. MacLeish, *Riders on Earth Together, Brothers in Eternal Cold*, *New York Times*, December 25 1968.

³⁸ Y. J. Garb, *The Use and Misuse of the Whole Earth Image*, *Whole Earth Review* (March 1985) cit.

³⁹ Quoted in R. Poole, *Earthrise: How Man First Saw the Earth*, cit., p. 20.

⁴⁰ R. Poole, *Earthrise: How Man First Saw the Earth*, cit., p. 135.

⁴¹ *Ivi*, p. 129.

What the astronauts, the media, and the One World and Whole Earth proponents assumed they saw in the photographs, particularly Blue Marble, namely the whole Earth, however, was an illusion. For, both images show only part of Earth, indeed, a fraction of the Earth. Earthrise shows an elongated piece of the top of a sphere, while Blue Marble shows one side of the Earth; and both are rendered in the two dimensional space of the photographic medium. In other words, we did not see what we thought that we saw. The impact of seeing the Earth whole, seeing it as it *really* is, was based on the fantasy of the whole Earth, which not only was never visible in these photographs, but also, at least with current technology, never will be. The Whole Earth cannot be captured from any human vantage point, even one floating in a space capsule orbiting the moon, or any other point in space. For, as phenomenologists teach us, the human perspective is always only partial; there is always something that is occluded and missing from our viewpoint.

It is noteworthy that while some of the geographers and historians who have discussed the Whole Earth photos have quoted 20th Century German philosopher and father of phenomenology Edmund Husserl on pre-Copernican Earth or pointed out that Blue Marble only shows Africa and Asia, none linger on the fact that these photographs are actually not of the *Whole* Earth. For example, Geographer Denis Cosgrove points out that Blue Marble only shows Africa and Asia, but does not analyze the illusion of seeing the Whole Earth⁴². And historian Benjamin Lazier quotes Husserl arguing that our everyday experience is pre-Copernican in that for us the earth does not move, and even he yet treats the photographs as if they reveal the whole Earth for the first time⁴³. And in one of the only book length studies of reactions to the photographs of Earth from space, Robert Poole concludes, the idea of managing the Earth «only really took off when *the sight of the whole Earth* gave humanity a picture to think with. Hannah Arendt need not have worried so much. The space programme changed thinking about Earth....Earthrise was followed by Earth Day. As men journeyed from the Earth to the Moon, the human race made the philosophical leap from Spaceship Earth to Mother Earth»⁴⁴. Poole not only accepts that the photos are of the whole Earth, but also equates the environmental movement with the idea of managing the Earth.

German philosopher Hannah Arendt was 51 years old when Sputnik sent photographs back to Earth; and she died three years after Apollo 17 sent back the now famous Blue Marble photograph. Hannah Arendt criticized privileging this view of earth from space, the Archimedean vantage point from which we can supposedly see our world and ourselves as they truly are. She argues that the Archimedean point in space will necessarily keep shifting ever more distant from earth in order to continue with the fantasy that if we get enough distance on our home planet, then we will see it as it really is and unlock its secrets. For

⁴² D. Cosgrove, *Contested Global Visions: One-World, Whole-Earth, and the Apollo Space Photographs*, cit., p. 287.

⁴³ B. Lazier, *Earthrise; or, the Globalization of the World Picture*, cit., pp. 610-611.

⁴⁴ R. Poole, *Earthrise: How Man First Saw the Earth*, cit., p. 142 (my emphasis).

once man finds a point from which to view the earth, he will need to move onto another one from which to view that point and the whole, ad infinitum until the «only true Archimedean point would be the absolute void behind the universe»⁴⁵. Arendt is critical of «our modern longing to escape what some call our imprisonment on earth»⁴⁶. From the distance of space, human activities, she warns, will not be recognizable as such; rather, we will look like rats and our cars will look like snail shells or turtle shells attached to our backs⁴⁷. She contends that we are earthbound creatures who mistakenly see ourselves as dwellers of the universe⁴⁸. We imagine that we could live in that Archimedean point, off world, apart from earth. Moreover, this race to escape the earth is also an attempt to escape the human condition, which she claims is essentially terrestrial. She maintains that our thinking itself is earthbound no matter where we are in space because «the human brain which supposedly does our thinking is as terrestrial, earthbound, as any other part of the human body»⁴⁹.

Commenting on Sputnik, she wrote to Karl Jaspers: «Most honored friend—What do you think of our two new moons? And what would the moon likely think? If I were the moon, I would take offense»⁵⁰. And the very first words of *The Human Condition* refer to Sputnik as the most important and the most dangerous event in human history. Arendt is deeply critical of what she saw as an the impulse to create an artificial world to replace the natural one, in large part because she saw it as an attempt to master the earth and the world by claiming the power to create even a second moon, and perhaps even a second earth and second world⁵¹. Resonant with Heidegger's criticisms of technology, Arendt claims that the desire to escape the earth and create a new one someplace else is the result of not only denying the human condition at our own peril but also evidence of a dangerous hubris. The illusion that we can master the earth, our world, and space leads to unchecked development and deployment of dangerous technologies that threaten all life of earth. Arendt sees this hubris in fantasies of space colonization and creating self-sustaining atmospheres for us elsewhere.

We might wonder what Arendt would make of *Biosphere 2*, the self-enclosed artificial environment set in the Arizona desert where in 1991 eight people were locked in to see if they could survive for two years independently (they couldn't), or current projects like the Netherlands based *Mars One* which plans to colonize Mars by 2023 with funding from a global reality TV show

⁴⁵ H. Arendt, *Between Past and Future*, New York 1954, p. 278.

⁴⁶ H. Arendt, *The Human Condition*, Chicago 1958, p. 1.

⁴⁷ Cfr. H. Arendt, *The Human Condition*, cit., p. 323; Id., *Between Past and Future*, cit., p. 278.

⁴⁸ H. Arendt, *The Human Condition*, cit., p. 3.

⁴⁹ H. Arendt, *Conquest of Space*, in Id. *Between Past and Future*, cit., p. 271.

⁵⁰ H. Arendt – K. Jaspers, *Briefwechsel Arendt / Jaspers 1926 – 1969*, ed. L. Köhler and H. Saner, *Sonderausgabe*, München 1993, p. 363.

⁵¹ Commenting on Sputnik, she wrote to Karl Jaspers: «Most honored friend—What do you think of our two new moons? And what would the moon likely think? If I were the moon, I would take offense», [H. Arendt and K. Jaspers, *Briefwechsel, 1926–1969*, cit., p. 363.] And the very first words of *The Human Condition* refer to Sputnik as the most important and the most dangerous event in human history.

documenting the astronaut selection process. Will the *Mars One* project fulfill Buzz Aldrin's dream of making human beings a two planet species? Or, like *Biosphere 2*, will it show that human beings have only one habitable home, *Biosphere 1*, the Earth? Whatever happens, Arendt would presumably share the belief that at least until human beings are born and raised on Mars, they will still be earthlings measuring everything according to Earth standards and using their terrestrial brains and bodies to understand their Martian environment. Furthermore, they will still have originated on Earth, which gave them life and sustained them so that they could explore space. And if they can make a life on Mars, and even if they find other life on Mars, insofar as they have a history and a past, a given from which they cannot escape, they will still be of earth.

Given that for Arendt Sputnik shares the same desire to control the natural world as totalitarianism, it is likely she would be appalled at both *Biosphere 2* and *Mars One*. In the words of Benjamin Lazier, «Arendt appealed to the same vocabulary to make sense of them both. For all their differences, Sputnik and totalitarianism, modern science and modern politics shared a common pathology. Each testified to the modern displacement of the grown by the made, of living organisms by technical artifacts»⁵². Perhaps even more threatening than the replacement of the natural with the artificial is the globalism inherent in both Sputnik and totalitarianism. Both manifest a desire take over the entire globe, the same desire evident in the One-World and Whole-Earth movements. Arendt is more than skeptical about such movements that claim to unite the entire world or the whole earth.

Martin Heidegger, too, forcefully delineates the dangers of globalism. On his account, globalism is inherent in the technological way of framing the world with its desire for world domination. Martin Heidegger was 68 when Sputnik circled the Earth and he died one year after Arendt in 1976. News of Sputnik and photographs of Earth from space profoundly affected both Arendt and Heidegger. And both warned of the dangers of severing our connection to earth in favor of interplanetary thinking. After seeing images of earth from *Lunar Orbiter I* in 1966, Heidegger warns, «...I at any rate was frightened when I saw the pictures coming from the moon to the earth. We don't need any atom bomb. The *uprooting* of man has already taken place. The only thing we have left is purely technological relationships. This is no longer *the earth* on which man lives»⁵³. Heidegger suggests that global technology (symbolized by images of the earth from the moon) is threatening to *uproot* man from the earth. Furthermore, the planetary impetus of technology threatens to uproot even the earth itself. Heidegger is opposing the planet and the earth. Technology aims its sites at ordering the entire planet through global communications and global markets. And, with the advent of colonies of settlers on Mars in the near future, if ventures such as *Mars One* succeed, the earth becomes just one planet amongst

⁵² B. Lazier, *Earthrise; or, the Globalization of the World Picture*, cit., p. 603.

⁵³ *Only a God Can Save Us: Der Spiegel's Interview with Martin Heidegger (1996)*, in R. Wolin, *The Heidegger Controversy: A Critical Reader*, Cambridge 1991, pp. 105-106 (my emphasis).

others rather than uniquely our home. This planetary way of thinking about our relationship to the earth is the result of the technological way of framing our experience. Planetary determined technics are not just any form of technology. Nor are they merely technologies that attempt to “go global.”

The technological way of approaching our relationship to both earth and world presupposes globalism, which threatens to destroy both⁵⁴. Contemporary technology threatens the earth literally in terms of climate change, nuclear accidents or warfare, along with various forms of pollution and waste, and conceptually in terms of embracing the idea that man can master the earth through technology, disavowing the ways in which earth resists or refuses to reveal itself to us, and positioning the technological relationship to the earth as the best, if not only, one possible. Contemporary technology threatens the world by turning the world into a world-view or world picture and thereby reducing our relationship to the world to one of subjects representing objects, again presupposing that we are the creators and masters of the world rather than participants in it.

Both the One-World and the Whole-Earth movements that resulted from the Apollo images from space are part and parcel of the technological world-view as totalizing and defining our relationship to the earth as creators and masters. Both are totalizing and global ideologies that promote managing the earth or mastering it, for the sake of global technology in the case of One-World and for the sake of the global environment in the case of Whole-Earth. Both of these totalizing movements depended on seeing the earth whole, or more to the point, imagining seeing the earth whole⁵⁵.

But, we have not seen the Earth whole. And we have not seen the Earth as it truly is isolated from everything around it. Indeed, without its atmosphere, the Earth would not look like the beautiful blue marble of the photographs. Furthermore, the Earth looks beautiful and unique relative to the black space around it and the gray surface of the moon and the reflection of light from the sun. This is to say, that the photographs are not just images of the Earth alone, but the Earth in relation to the elements that surround it. To take the Earth as an object apart from its relationships is the ultimate illusion of our own subjectivity, a subject so powerful and grand that it can take the whole Earth as its object. Yet, the Earth, even as seen from space, only appears in relationship to other elements, whatever those elements may be atmosphere, the finite limited human perspective of the astronaut's holding the cameras, and even what the astronauts refer to as the heavens. To see Earth as an object floating alone in nothingness is to interpret the photographs within the technological framework

⁵⁴ Mikko Joronen argues that the global and globalization are instantiations of technological enframing that turns the entire globe into standing reserve (M. Joronen, *The Technological Metaphysics of Planetary Space: Being in the Age of Globalization, Environment and Planning D: Society and Space* 26 (4), pp. 596–610). See also B. Lazier, *Earthrise; or, the Globalization of the World Picture*, cit.

⁵⁵ D. Cosgrove, *Contested Global Visions: One-World, Whole-Earth, and the Apollo Space Photographs*, cit., p. 271.

that renders everything, even Earth itself, as an object for us, an object that can be grasp, managed and controlled, an object ripped from its contextual home.

We haven't seen the earth whole and (unless something drastically changes in the constitution of human perception) we will never will. Thus, we must question our investments in the whole earth fantasy. Given the turbulence of the late 1960's and early 1970's in the U.S., the Apollo photographs along with the fantasies of the unity of mankind, One-World and Whole-Earth that they fuel, act to quell anxieties about the possibility of nuclear war and civil unrest. On the other hand, the environmental movement, hatched in the wake of these photographs, signals an investment in saving the earth from the devastation caused by humans. Certainly, many are invested in "saving the planet" by correcting or compensating for environmental damage that humans have caused that may destroy our atmosphere, dramatically change our climate, and perhaps even render the earth uninhabitable for us. The fantasy of the whole earth allows us to continue with illusions of mastery and globalism, but now in the service of saving rather than destroying the planet. Yet, the notion that we can control and master our environment and our globe are part and parcel of the technological worldview that got us in the environmental mess in the first place. The mastering gaze that imagines itself taking the whole earth as its object, through the Apollo photographs, perpetuates and emboldens a notion of human subjectivity as standing apart from its objects--in this case the earth--and over against them as the agents controlling the destiny of those objects. Imagining the earth as a body amongst others, as an object of our perception like others, is to imagine seizing it, controlling, and making it our own. Yet, as the most rudimentary foray into phenomenology reveals, we never see the whole of any object, but rather arrive at our sense of wholeness through processes of induction and deduction that are in themselves born out of our embodied experience as earthlings.

Why then the fantasy of wholeness surrounding the photographs of Earth from space? Psychoanalysis might suggest that the fantasy of wholeness is a defensive reaction against the sense of fragmentation that we experience⁵⁶. In the context of the Cold War, and in the face of the threat of nuclear and environmental disaster, the photographs of Earth from space fuel a defensive reaction against such dangers through a fantasy of wholeness. Perhaps this is why *Blue Marble* is the most reproduced photograph in history, and why the image of the whole Earth has become the symbol for globalization⁵⁷. The danger of globalism and planetary thinking is the homogenization of the world into a globe, and more perilous, into a "world picture." A globe connotes something that we can control and manage like the manufactured globes that we can hold in our hands, globes that we produce and possess. The photographs of earth

⁵⁶ For one psychoanalytic approach to analyzing the fantasy of wholeness inspired by the photographs of earth, see Peter Bishop, *The Shadows of the Holistic Earth*, in *Spring Journal*: 59–71, 1986.

⁵⁷ Benjamin Lazier gives an illuminating account of reactions to the photographs of Earth from space, which includes some discussion of logos and icons based on the photographs (B. Lazier, *Earthrise; or, the Globalization of the World Picture*, cit.).

from space turn earth into a globe that we imagine we can control and possess. Global thinking emerges after these first images of Earth from space. And with it comes totalizing discourses of uniting the entire planet through technology or through environmental management. More recently, global economy and global markets attempt to unite all of humankind through consumerism, which not only incorporates and assimilates differences but also makes everything fungible. Everything has a price tag. Even saving Earth is reduced to offsetting one's "carbon footprint" by paying for it. Indeed, the planetary or the global operates in opposition to both Earth and World by fixing them into one and only one possible worldview.

French philosopher Jacques Derrida rejects even the words *globalism* and *globalization*. He too warns of the totalizing nature of globalism, which seeks control of the whole world without remainder. Jacques Derrida, who died in 2004, was only 27 when Sputnik made its appearance. He gave his last seminars in Paris in 2002 just as the United States went after Al Qaeda in Afghanistan and waged war against Saddam Hussein for a second time, using the most technologically advanced military arsenal on the planet. And one of Derrida's last texts published before his death was *Philosophy in a Time of Terror*, his response to the attacks on the World Trade Center on September 11, 2001, in which he criticizes globalization for widening the gap between the rich and the poor while embracing the rhetoric of unification and equality⁵⁸. He argues that globalism reaches a certain zenith with terrorism insofar as terrorism is not tied to nation-states or citizenship, but rather is global in the sense of being able to strike almost anywhere and in the sense of threatening to destroy the entire world, no longer necessarily from a state sanctioned military strike but «from anonymous forces that are absolutely unforeseeable» that threaten «nothing less than the existence of the world, of the worldwide itself»⁵⁹.

Just as Arendt worries about the totalitarian tendencies of globalism, and Heidegger warns of the totalizing discourse of technology as globalism, Derrida suggests that terrorism is an outgrowth of what he calls "the logic of autoimmunity" operating within techno-science that makes the destruction of the whole world possible. But now, in addition to the threat of nuclear war between nation-states, we have the threat of a terrorist atomic bomb or nuclear attack that, thanks to the proliferation of technology, could strike at any time and in almost any place on earth. Techno-science has changed our relationship to both Earth and World. Now, thanks to technology, we not only can see our planet from space but also can destroy our planet. Technology equalizes even access to weapons of mass destruction. And yet, even as technology seems to give equal access to all, it simultaneously increases inequities between peoples and nations. This is why Derrida rejects the term *globalization*, because it implies that the entire globe has access to communication technologies or military

⁵⁸ J. Derrida, *Autoimmunity: Real and Symbolic Suicides*, in *Philosophy in a Time of Terror: Dialogues with Jürgen Habermas and Jacques Derrida*, ed. G. Borradori, Chicago 2003, pp. 85–136.

⁵⁹ Ivi, pp. 98-99.

technologies or so-called global markets⁶⁰. But, this is far from true. At the same time that globalization appears to be equalizing access to global technologies or global markets, it is also increasing the divide between “haves” and “have nots”⁶¹.

Just as we interpreted the photographs of Earth from space as pictures of the Whole Earth, what we call *global* or *globalization* are merely fantasies of planetary wholeness. And, as Heidegger argues, the fantasy of planetary totality is dangerous in that it positions itself as the only way to relate to the world⁶². The danger of this totalizing discourse is that it does not allow for differences or even history, but rather insists on dominating everything that is. When we imagine ourselves masters of the entire globe, and we imagine other creatures as resources to be exploited, we disavow not only the singularity of each but also its singular bond to the earth, a bond that we share. Moreover, we ignore, at our own peril, the ecosystems that sustain us through bio and cultural diversity. If global technologies and market-based forces threaten our earthly existence, attention to the tensions between worldly politics and an earth-bound ethics helps recover our earthly belonging and thereby care for other creatures and our shared earthly home.

The possibility of ethics begins at the end of this totalizing worldview. Ethics is not a system of moral rules or universal principles that we can know through reason and exercise through an autonomous will. Rather, ethics is responsiveness to others and the environment by virtue of which we not only survive but also thrive. This responsiveness is based on our earthly existence as embodied creatures sharing a planet even when we do not share a world. In my forthcoming book, *Earth and World*, I suggest that, rooted in the earth's unearthly strangeness, which can never been known or mastered, this ethics necessarily takes us beyond reason and beyond recognition and towards poetic dwelling and ultimately towards the responsibility of love.

With hope, we embark on this voyage in order to navigate sharing the Earth even if we do not share a world. Inspired by Arendt when she says, «education is the point at which we decide whether or not we love the world enough to assume responsibility for it and by the same token save it from that ruin which, except for renewal, except for the coming of the new and young, would be inevitable», we ask, can we love the earth enough to assume responsibility for it?⁶³

⁶⁰ Ivi, p. 121.

⁶¹ For a philosophical discussion of globalization in relation to global economies see B. Schroeder, *The Inoperative Earth*, *Studies in Practical Philosophy* 4 (1), pp. 126–145, 2004. There, Brian Schroeder argues for an alternative way of viewing the earth as the starting point of cosmopolitan community.

⁶² Cfr. M. Heidegger, *Bremen and Freiburg Lectures: Insight Into That Which Is and Basic Principles of Thinking*. Trans. A. J. Mitchell, Bloomington 2012 [1949], p. 121.

⁶³ H. Arendt, *Between Past and Future*, cit., p. 196.