# **Thin Places**

# by

## Sandra Lockwood

B.F.A., Emily Carr University of Art and Design, 2007 B.A., University of Toronto, 1983

> Project Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Liberal Studies

> > in the

Graduate Liberal Studies Program
Faculty of Arts and Social Sciences

# © Sandra Elizabeth Lockwood 2013 SIMON FRASER UNIVERSITY Spring 2013

All rights reserved.

However, in accordance with the *Copyright Act of Canada*, this work may be reproduced, without authorization, under the conditions for "Fair Dealing." Therefore, limited reproduction of this work for the purposes of private study, research, criticism, review and news reporting is likely to be in accordance with the law, particularly if cited appropriately.

Approvai	
Name:	Sandra Lockwood
Degree:	Master of Arts in Liberal Studies
Title of Project:	Thin Places
Examining Committee:	Chair: Eleanor Stebner Associate Professor Department of Humanities
Stephen Duguid Senior Supervisor Professor Department of Humanities	
Michael Kenny Supervisor Professor Emeritus Department of Sociology ar	nd Anthropology
Robert Gordon External Examiner Professor School of Criminology	
Date Defended:	April 12, 2013

## **Partial Copyright Licence**



The author, whose copyright is declared on the title page of this work, has granted to Simon Fraser University the right to lend this thesis, project or extended essay to users of the Simon Fraser University Library, and to make partial or single copies only for such users or in response to a request from the library of any other university, or other educational institution, on its own behalf or for one of its users.

The author has further granted permission to Simon Fraser University to keep or make a digital copy for use in its circulating collection (currently available to the public at the "Institutional Repository" link of the SFU Library website (www.lib.sfu.ca) at http://summit/sfu.ca and, without changing the content, to translate the thesis/project or extended essays, if technically possible, to any medium or format for the purpose of preservation of the digital work.

The author has further agreed that permission for multiple copying of this work for scholarly purposes may be granted by either the author or the Dean of Graduate Studies.

It is understood that copying or publication of this work for financial gain shall not be allowed without the author's written permission.

Permission for public performance, or limited permission for private scholarly use, of any multimedia materials forming part of this work, may have been granted by the author. This information may be found on the separately catalogued multimedia material and in the signed Partial Copyright Licence.

While licensing SFU to permit the above uses, the author retains copyright in the thesis, project or extended essays, including the right to change the work for subsequent purposes, including editing and publishing the work in whole or in part, and licensing other parties, as the author may desire.

The original Partial Copyright Licence attesting to these terms, and signed by this author, may be found in the original bound copy of this work, retained in the Simon Fraser University Archive.

Simon Fraser University Library Burnaby, British Columbia, Canada

revised Fall 2011

### **Abstract**

This inquiry into the three great quests of the twentieth century—the South Pole, Mount Everest, and the Moon—examines our motivations to venture into these sublime, yet life-taking places. The Thin Place was once the destination of the religious pilgrim seeking transcendence in an extreme environment. In our age, the Thin Place quest has morphed into a challenge to evolve beyond the confines of our own physiology; through human ingenuity and invention, we reach places not meant to accommodate human life. The early Antarctic explorer Apsley Cherry-Garrard defined exploration as "the physical expression of intellectual passion." Our quests to explore the end of the earth, the top of the world, and into outer space exemplify this definition. Moreover, these quests have great metaphoric value; they are symbolic of supreme achievement, and help define what it means to be human.

**Keywords**: exploration; numinosity; twentieth century; South Pole; Mount Everest;

the Moon

In memory of my father

Kenneth Arthur John Lockwood

who found a thin place for our family

## **Acknowledgements**

I am most grateful for the encouragement and patience of Dr. Stephen Duguid, in guiding me through this project. I also greatly appreciate the time and assistance of Dr. Michael Kenny, Dr. Eleanor Stebner, Dr. Jerry Zaslove, and Dr. Heesoon Bai. I especially thank Dr. Robert Gordon for the piece of "Everest." I also thank Wendy Sjolin for her support and kindness.

I am grateful to my aunt, Penelope Vardy for her memories of "Scott of the Antarctic," and my mother, Frederica Anne Lockwood for her memories of the Apollo landings.

I could not have written this without the support and love of my husband Mark Jowett and my son, Liam Jowett-Lockwood, who have had to live with me through these cold, remote, thin places for so many years.

## **Table of Contents**

Approval	
Partial Copyright Licence	iii
Abstract	iv
Dedication	V
Acknowledgements	vi
Table of Contents	
List of Illustrations	
Chapter 1. The Thin Place: Towards a New Definition	1
Be Here Now	
Numinous Challenge	
Towards A New Definition	
The South Pole, Mount Everest, The Moon	
The South Fole, Would Everest, The Woot	0
Chapter 2. The South Pole, Antarctica	12
An Awful Place	
Our Own White South	
Terra Incognita	
The Heroic Age of the Polar Explorer	
Robert Falcon Scott	
Ernest Shackleton	
Roald Amundsen	
Douglas Mawson	
The Legacy of the Heroic Age	
Of Ice, and Ice Melting	38
Chantar 2 Mount Everant	42
Chapter 3. Mount Everest	
A Force of Nature	43
A Force of Nature	43 46
A Force of Nature	43 46 53
A Force of Nature	43 46 53
A Force of Nature  "X" Marks the Spot	43 46 53 59
A Force of Nature  "X" Marks the Spot	43 46 53 59
A Force of Nature  "X" Marks the Spot	43 46 53 59 <b>64</b>
A Force of Nature  "X" Marks the Spot	43 46 53 59 64 65
A Force of Nature  "X" Marks the Spot	43 46 53 59 64 65 70
A Force of Nature  "X" Marks the Spot	43 46 53 59 <b>.64</b> 65 70 77
A Force of Nature  "X" Marks the Spot	43 46 53 59 <b>.64</b> 65 70 77
A Force of Nature  "X" Marks the Spot	43 46 53 59 <b>64</b> 65 70 77 82
A Force of Nature  "X" Marks the Spot	43 46 53 59 65 70 77 82 88
A Force of Nature  "X" Marks the Spot	43 46 53 59 64 65 70 77 82 88
A Force of Nature  "X" Marks the Spot	43 46 53 59 64 65 70 77 82 88
A Force of Nature  "X" Marks the Spot	43 46 53 59 64 65 70 82 88 96 99
A Force of Nature  "X" Marks the Spot	43 46 53 59 64 65 70 82 88 96 99
A Force of Nature  "X" Marks the Spot Sacred or Desecrated? The Mountain of "Firsts"  Chapter 4. The Moon Once in a Blue Moon Of Moonlight and Light Bulbs The Heroic Age of Lunar Exploration Numinous Disconnection The First Earthrise  Chapter 5. In Search of Secular Hierophanies Thin Men Secular Hierophanies  References	43 46 53 59 64 70 77 82 88 96 99
A Force of Nature  "X" Marks the Spot Sacred or Desecrated? The Mountain of "Firsts"  Chapter 4. The Moon Once in a Blue Moon Of Moonlight and Light Bulbs The Heroic Age of Lunar Exploration Numinous Disconnection The First Earthrise  Chapter 5. In Search of Secular Hierophanies Thin Men Secular Hierophanies  References  Appendices	43 46 53 59 64 77 82 88 96 99
A Force of Nature  "X" Marks the Spot	43 46 53 59 64 77 82 88 96 99
A Force of Nature  "X" Marks the Spot Sacred or Desecrated? The Mountain of "Firsts"  Chapter 4. The Moon Once in a Blue Moon Of Moonlight and Light Bulbs The Heroic Age of Lunar Exploration Numinous Disconnection The First Earthrise  Chapter 5. In Search of Secular Hierophanies Thin Men Secular Hierophanies  References  Appendices	43 46 53 59 64 70 77 82 98 99 105

## **List of Illustrations**

Illustration 1.	Thin Planet. Pencil.	1
Illustration 2.	Aurora Australis, Coloured pencil	. 12
Illustration 3.	Climbing the Mountain. Colored pencil.	.42
Illustration 4.	The "Blue" Moon. Watercolour.	.64
Illustration 5.	Inexpressible Cold. Coloured pencil.	95

# Chapter 1. The Thin Place: Towards a New Definition

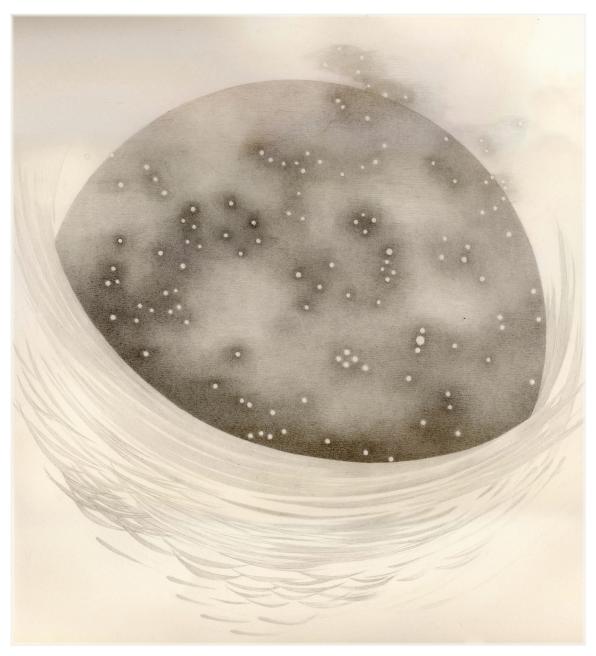


Illustration 1. Thin Planet. Pencil.

#### **Be Here Now**

The pilgrim's clothes hang in shreds; his skin is scratched and scabbed. He is immune to sensations of cold and hunger, and although exhaustion should cripple his stead, he stands exhilarated, having reached this most difficult place, a place scarcely of this earth. But then, he also is scarcely of this earth, so badly beaten by Nature, at its most visceral extreme.

All swords are drawn on this day of black rock and stinging salt as he waits for the sliver of receding light to slice sea from sky. For in that blade edge, in that shimmering in-between, he will catch a glimpse of his god.

All elemental poetry: the journey of the early Celtic pilgrim along the wind-scoured coasts of Scotland, Ireland, and even across the Atlantic to Iceland and Greenland. These pilgrims were monks mostly, seeking a religious experience through the harsh aesthetics of isolation and deprivation, in a cold, sharp landscape purified by nature's fury. They sought the "Thin Place," a place too cruel for survival, yet one of great spiritual potency. Manifesting as rocky outcrops or glacial caves, the Thin Place, according to Celtic tradition, is where the "veil" between worlds is thin. By virtue of the theophany—the appearance of the divine—that occurs when the veil falls, the Thin Place becomes hallowed ground. In the words of Mircea Eliade, the theophany "consecrates [the Thin Place] by the very fact that it makes it open above—that is in communication with heaven, the paradoxical point of passage from one mode of being to another."<sup>2</sup>

The journey has sorely tested the pilgrim; he has suffered, but his reward is great: a glance outside his human sphere into the forbidden, hidden, timeless beyond.

I have long been intrigued by the idea of the Thin Place. I know what it is to be struck by the power of an incredible landscape. I have even had a few of those so, this is

These pilgrims sought to establish hermitages in the seventh and eight centuries. They may have been led north following the path of Arctic geese. Although there is little written documentation to support their crossings to Iceland and Greenland, popular histories give support as do pre-Viking place names in Iceland.

<sup>&</sup>lt;sup>2</sup> Eliade, Mircea. *The Sacred and The Profane*. Trans. Willard R. Trask. Orlando: Harcourt, 1987. p. 26.

what it is all about type of moments that give meaning to life. However, I have never felt the transcendent awareness, the otherworldly elation found by people who journey to remote, difficult locations where the land's beauty is tempered by its life-taking capacity.

Perhaps, I have never been sufficiently motivated to undergo the prerequisite physical trials that prepare one for such an experience. When the veil is pulled back, it happens not in the physical world, but in the human mind. The body, broken down, cleans the mental canvas to receive a brilliant display of liminal colour. One must labour towards the exquisite visions afforded by the Thin Place. Although, sometimes it does happen by accident: in 1929, three sailors survived a violent shipwreck at the Karajak Fiord on the west coast of Greenland. The men crawled inland to discover a luminous, mountain-bound lake as round as the moon. Breathless and starstruck, one man exclaimed: "Maybe we have lived only to *be here now.*"

### **Numinous Challenge**

Angst, existential fear, fear of radical dissolution... How many people ever feel this today? You don't measure yourself against the sacred. You don't because there are just no calibrations small enough to notice you.

Willi Unsoeld <sup>4</sup>

One key element of the Thin Place is its *numinosity*. This term is the creation of philosopher and theologian Rudolf Otto who needed a word to describe the sublime, majestic, and overwhelming aspects of natural phenomena. Otto, in his seminal work **DAS HELIGE** (published in 1917), sought to analyze the often frightening and irrational aspects of religious experience. The sense of awe and terror man feels when submersed in a numinous landscape reduces him down to what Otto calls "creature-feeling," a state of nothingness. Man realizes his insignificance and his fragility in a world where he could so easily be annihilated, and yet, he rises above his fear to experience a

Lopez, Barry. Arctic Dreams. New York: Vintage Books, 2001. p. 392. My italics. One of the three men was American illustrator Rockwell Kent. He recounted this shipwreck in his memoir N by E. Kent was heavily influenced by the writings of Thoreau and Emerson. He spent extended periods of time in Greenland and Alaska, seeking a mystical experience in the Arctic wilderness.

Coffey, Maria. Explorers Of The Infinite. New York: Tarcher/Penguin, 2008. p. 37. Willi Unsoeld was a member of first American Expedition to Mount Everest.

moment of otherworldly exhilaration. French mountaineer Maurice Herzog describes such an experience on his 1950 ascent of Himalayan giant Annapurna:

I felt as though I were plunging into something new and quite abnormal. I had the strangest most vivid impressions, such as I had never before known in the mountains... this diaphanous landscape, this quintessence of purity–these were not the mountains I know: they were the mountains of my dreams.<sup>5</sup>

Herzog is unable to relate how he feels to any prior climbs he has done in the Alps where, he notes, the presence of human life and human activity is never far away. Despite the intense cold, isolation and the effects of altitude, he is compelled to ascend. He continues:

An astonishing happiness welled up in me but I could not define it... An enormous gulf was between me and the world. This was a different universe—withered, lifeless; a fantastic universe where the presence of man was not foreseen, perhaps not desired. We were braving an interdict, overstepping a boundary, and yet we had no fear as we continued upward.<sup>6</sup>

The power of the numinous landscape lies in its *mysterium tremendum*. This, according to Otto, is the wonderful, awful awareness of a divine presence, the Wholly Other. Scholar Linda H. Graber, in her work **WILDERNESS AS SACRED SPACE**, explains the presence of the Wholly Other as "a self-transcending experience that carries the mind to the edge of its limited plane of understanding." She notes that the Wholly Other "attracts and repels simultaneously, but whatever the mood, a mind in the grips of a numinous experience desires to keep contact as long as possible." A numinous event affirms our insignificance, yet, in the "privilege" of experiencing such an event, we transcend our insignificance.

Bernbaum, Edwin. Sacred Mountains of the World. San Francisco: Sierra Club Books. p. xv. Maurice Herzog was a member of French Expedition that successfully climbed *Annapurna* in 1950. *Annapurna* was the first of the Himalayan giants to be climbed—three years before Hillary and Norgay summated Everest.

<sup>6</sup> Ihid n xv

Graber, Linda, H. *Wilderness as Sacred Space*. Washington: Association of American Geographers, 1976. p.2.

<sup>8</sup> Ibid. p.2.

Maria Coffrey, in her book **EXPLORERS OF THE INFINITE**, examines what drives many extreme athletes to seek out numinous experiences and take death-defying risks in very dangerous places. She interviewed extreme mountain climber Maureen O'Neil, who described her own motivation:

In return for [the] extraordinary sacrifice of energy the climber receives visions of the earth. In the moment before a difficult move, she may turn her head away from what is directly in front of her, and the beauty—or is it the fear—lays her open. Her eyes are the eyes of God, the land flows in and through her like a river."9

A numinous experience happens in the mind; however, the physical world-the rocks, trees, ice, water-surrounding the person experiencing the event becomes imbued with a kind of sacred energy. Numinous experiences do not manifest in the "profane" built-up human world. As we humans colonize and spread out across the globe, we alter the land to make it more amenable to us. Geographer Yi-Fu Tuan has studied our capacity to change the natural world. He writes: "Human beings, when they have the power, seem disposed to strip the original mantle off the land and substitute one of their own design made up, often, of materials brought in from other corners of the earth."<sup>10</sup> However, numinous events do not happen in human-designed landscapes created from materials we have rearranged. Despite the numinosity that architects, engineers, and cathedral builders seek to imbue in their creations, they cannot compete with nature. Only landscapes not yet "defiled" by our presence can take on an aspect of the Wholly Other. Increasingly, the remaining wilderness areas of our planet have become precious, especially for those who seek them out, looking to put meaning into their lives. A place where a numinous event has occurred to one person often becomes a sought out destination for others. However, too many pilgrimages cause a place to lose its potency. Sacred spaces are easy to spoil.

The power of nature manifests in many ways: earthquakes, tsunamis, hurricanes, and volcanic eruptions. These events when they strike populated areas wreck havoc

<sup>&</sup>lt;sup>9</sup> Coffey, Maria. p. 27.

Tuan, Yi-Fu. *Man and Nature*. Washington, D.C.: Association of American Geographers, 1971. p. 9.

with our manufactured world. We fight back, and do our utmost to keep nature at bay. I note the seismic upgrades to buildings in my own city of Vancouver, and the new levees built in the city of New Orleans to guard against another Hurricane Katrina. However, for a person seeking a transcendent experience, these natural events are also manifestations of the Wholly Other, which is exceptionally "alive" in these moments. The natural energy becomes part of the experience to be "savoured." Naturalist John Muir sought sanctuary in the beauty of the Sierra Nevada in California. He revelled in nature's energy, although not everyone would react as he did when awakened by an earthquake in the early hours of the morning in his Yosemite retreat:

... and though I had never before enjoyed a storm of this sort, the strange thrilling motion could not be mistaken, and I ran out of the cabin, both glad and frightened shouting, 'A noble earthquake! A noble earthquake!"<sup>11</sup>

It is, however, now apparent to us living in the modern world that large-scale natural events are not always "natural" in origin. Man-made acts-often cumulative-that happen in one part of the world can affect even the remotest, wildest corners of out planet. In the words of philosopher Michel Serres:

[D]ecisive actions are now, massively, those of enormous and dense tectonic plates of humanity... this plate of humanity has long disturbed the albedo, the circulation of water, the median temperature, and the formation of clouds or wind–in short, the elements–as well as the number and evolution of living species in, on, and under its territory. 12

Through our sheer numbers we challenge and abuse the natural systems operating on our planet. Of course, this challenge—Man against Nature—is one we will lose. Planet Earth will continue even if our species does not. The man-made cataclysms of our time—global warming, the hole in the ozone layer, and the destruction of habitat—suck the numinosity out of the natural world. If we subvert the Wholly Other, if our Thin Places cease to fascinate what does this say about the state of humanity itself?

Muir, John. *The Yosemite*. New York: The Century Co., 1912. p. 78.

Serres, Michel. *The Natural Contract*. Ann Arbor: The University of Michigan Press, 1995. p.16.

#### **Towards A New Definition**

If you march your Winter Journeys you will have your reward, so long as all you want is a penguin egg.

Apsley Cherry Garrard <sup>13</sup>

This paper is a study of the Thin Place. I accept the original Celtic understanding—that of a numinous destination—but I expand the concept to position it within my own formative late twentieth-century experience. I note how we humans have an evolutionary imperative to push beyond the boundaries of our world: to explore. Thus, to the Celtic quest for transcendence, I add the desire for knowledge and the insatiable need to feed our curiosity. In the words of early Antarctic adventurer Apsley Cherry-Garrard, "Exploration is the physical expression of the Intellectual Passion." 14

In our modern, Western, and mostly secular age, the Thin Place is a reward for our intellectual passions. It is no longer the solitary pursuit of a single aesthetic. Thin Places flood our imaginations and fire our ambitions; they enjoy a global consciousness not as elusive sacred spaces where gods are revered, but instead, as places where man has triumphed. We worship human heroes who expand our notions of our own humanity, and who do so in the most inhumane environments. We are not trying to "cross over" into the divine, as envisioned by the ancient Celts; we are trying to breach the realm of our own limitations. We quest not to see spirits but to evolve out of the confines of our own physiology and environment.

We humans are our planet's most successful species. It is remarkable how well we have done when you consider the confines in which we thrive. We can only live on land; we can't breathe in water. We start to feel the negative effects of high altitude, rarefied air at a height of 2,500 metres. Although we can acclimatize to 5,000 metres, after a few months the body starts to disintegrate. We can live, gaspingly, at 8,000 meters, for only two days.

Cherry-Garrard, Apsley. *The Worst Journey in the World*. New York: Penguin Books 2005. p. 564.

<sup>&</sup>lt;sup>14</sup> Ibid. p.564.

Extremes of temperature also affect out survival. If our core body temperature rises just 4° above our normal core temperature of 37°C the results can be fatal. Conversely, extreme cold kills. Skin freezes instantly at -40°C. It takes longer for the whole human body to succumb, but our main chemical ingredient is water—over 60%—and water does turn to ice. Of course, there are many factors that affect our survival, everything from radiation to availability of food resources.

We are designed to inhabit the temperate zones on our planet, and we inhabit as much as we can. Two-thirds of our globe is covered with water. When we subtract out deserts, glaciers, mountain ranges, and lakes, we are left with just one-sixth of the planet's surface. Some groups of humans have adapted to extremes, such as the Himalayan Sherpa peoples to high altitudes and the Inuit to the Arctic cold, but by and large, we live poorly in geographically marginal regions. It is human ingenuity that allows us to exist where nature did not intend us to be.

#### The South Pole, Mount Everest, The Moon

I examine three iconic Thin Places of the twentieth century: the South Pole, Mount Everest, and the Moon. I am aware how the desirable "thinness" of each of these places has evolved from a very specific narrative. Therefore, although I pinpoint three precise places, I examine them *in situ*: I take into context what surrounds them, geographically, historically and politically. I do not isolate the South Pole from Antarctica, the top of Everest from the Himalayas, or the Moon from its orbit around the Earth.

All three of my Thin Places have much in common: they are cold, remote, and essentially "dead zones" where we humans are concerned, and yet, all three possess a formidable mystique. They are singular, one-of-a-kind places and they do not support life. To go, we must address all our needs for survival and where necessary create a protective capsule around us for food, fuel, shelter, air. Otherwise, these Thin Places will kill us. Fundamentally, these are environments where we humans, as a species, are not meant to be. Each place has extensive natural barriers to keep us at bay that require vast amounts of knowledge, expertise and financial resources to overcome. Yet, it would seem in our modern pursuit for the "meaning of life" that danger and risks are prerequisite. Often, we feel *most alive* in a *life-taking* place.

In my lifetime, the lustre of these Thin Places has waxed and waned. The barren, desolate South Pole may be the "End of the Earth," but it is also now home to a permanent scientific base. Mount Everest may be the "Roof of the World" but every year, hundreds of climbers labour breathlessly on its flanks. And the Moon, once a celestial sphere in heaven's vault is now known to be a pock-marked ball of dead rock. For these Thin Places, the elemental poetry has changed.

Nevertheless, all three have witnessed scenes of epic adventure that constitute significant human milestones. Moreover, there exists a strange interconnection between them. Why else take a rock, harvested from Tranquility Base to the summit of Everest, and a rock from Everest into space? Why hang a poster of Neil Armstrong's "first step" on a wall of a South Pole lab? They are disparate locations—the South Pole, Everest, and the Moon—but we join them together, for they are potent touchstones for human identity.

Importantly, I note that the motive for attaining these three Thin Places was never transcendence. NASA did not send astronauts to the moon to find the Wholly Other. Any numinous experience the first explorer/pilgrims may have felt was completely unforeseen. The quests to the South Pole, Mount Everest, and the Moon, were motivated by national prestige, political rivalry, economic and scientific inquiry. Nevertheless, these first explorer/pilgrims experienced "creature-feeling," that overwhelming sense of nothingness, of being swallowed whole by the land. Naturalist Barry Lopez explains how motives soon fall away and lose their significance during the great journey to achieve them:

They [the motives] are tempered by a mounting sense of consternation and awe. It is as though the land slowly works its way into the man and by virtue of its character eclipses these motives. The land becomes large, alive like an animal; it humbles him in a way he cannot pronounce. It is not that the land is simply beautiful but that it is powerful. Its power derives from the tension between its obvious beauty and its capacity to take life.<sup>15</sup>

9

.

Lopez, Barry. p.392. Lopez is writing about the early Arctic explorers but his comments resonate with my inquiry.

A trip to The South Pole, Mount Everest, or the Moon is life-changing not just for those who undertake the journey, but also for those who participate vicariously on the sidelines. I have no experience of these places: my knowledge of them has been filtered through the words and the lenses of those who have actually gone. Even so, I have invested in them a deep thoughtfulness, as have many who share my fascination. These three Thin Places are strangely tangible; they inhabit the human imagination. They live large on a metaphoric scale by which we measure our ideals. Nothing can replace Everest as the highest peak, the South Pole as the remotest place on Earth, or Tranquility Base as the site of our first landing on an alien world. Journeys to these places remain our highest, coldest, most daring achievements.

\*

In 1910, then 24 year-old Apsley Cherry-Garrard was the youngest expedition member of the British Antarctic Expedition. On 27th June 1911, in the total darkness and impenetrable deep freeze of the austral winter, he and two others, <sup>16</sup> set out for Cape Crozier, site of an Emperor penguin rookery to retrieve an egg. The conditions were atrocious: they spent the ensuing month crawling on their hands and knees through howling blizzards, falling into crevasses, and losing each other in the blindness of continual night, all the while barely able to communicate above the roar of the wind. But they continued, buoyed up by the belief that they were on the verge of attaining great knowledge: the penguin embryo was believed to hold a vital evolutionary secret, linking reptiles and birds. The night they reached the rookery, their tent was ripped from over them by a vicious gust of wind. All three lay in their sleeping bags, singing hymns as snow piled over their bodies and their teeth shattered. Cherry wrote, "Such extremity of suffering cannot be measured: madness or death may give relief." It was so awful that "a crevasse seemed almost a friendly gift." <sup>17</sup>

Miraculously, the men survived. They journeyed for what they thought was science but encountered far more. Cherry's self-described "worst journey in the world"

Cherry's companions were Edward Wilson and "Birdie" Bowers; both would die with Robert Scott on the return journey from the South Pole.

<sup>&</sup>lt;sup>17</sup> Cherry-Garrard, Apsley. p. 264.

nearly killed him many times over. And yet, his Thin Place did not disappoint. It informed the rest of his life and how he lived it, which is a lot to ask of a Thin Place, even if, at the time, his reward was only an egg.

# Chapter 2. The South Pole, Antarctica

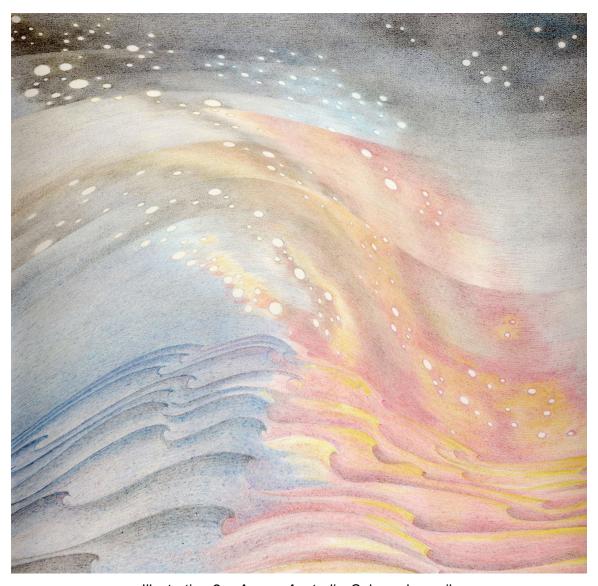


Illustration 2. Aurora Australis, Coloured pencil.

#### An Awful Place

Great God! This is an awful place. Robert Falcon Scott, 17 January 1912, The South Pole<sup>18</sup>

Here it is as flat as the lake at Morgedal and the skiing is good.

Olav Bjaaland, 15 December 1911, The South Pole<sup>19</sup>

We identify the South Pole, technically at least, as latitude 90°S, longitude undefined. It is a symbolic point, where the invisible steel rod of the Earth's axis skewers out the southern end of the planet. Standing directly on the Pole, a man can turn and turn and always face north.

There is no great topographical feature to identify the Pole. Indeed, it is a featureless point, like the kind the early explorers had to mark with little black flags to stand out at a distance in the numbing white monotony of the landscape. The South Pole is situated on a vast plain, a snow desert where it rarely snows. Instead, brutal *katabatic* winds sweep across, carving out a great ocean of *sastrugi* waves, which radiate over a solid plate of ice, nearly three kilometres deep above the rock of the continent.<sup>20</sup>

The South Pole is 2,850 metres above sea level, one-third the height of Mount Everest, and because air pressure shallows at the Poles, it is a hypoxia-inducing height. There is no road to the South Pole. Getting there by land, invariably involves traversing crevasse-strewn glaciers and, depending on point of origin, the Trans-Antarctic Mountain Range. Nowadays, most people fly: the Pole is a three-hour flight by ski plane from McMurdo Bay.

The South Pole is inexpressibly cold; average temperature in summer is -21°C and in winter -78°C, however "summer" and "winter" are misleading, for the South Pole does not really have seasons. Instead, it has "day" and "night." Day, lasts a full six

Scott, Robert Falcon. Scott's Last Expedition. Vol 1.London: Smith, Elder & Co. 1913. p. 544.

Huntford, Roland. *Race for the South Pole.* London: Continuum International, 2010. p.184. Olav Bjaaland was a Norwegian ski champion and member of Amundsen's Polar Party.

A katabatic wind is a vicious, high density, cold air wind found at high elevations which can whip at hurricane speed. Sastrugi waves are ridges of snow, sometimes several metres high.

months, the sun wheeling around the horizon, followed by night, another six months, the moon, if visible, doing the same. In between the states of day and night, an indeterminate twilight takes hold, lasting several weeks as day and night swap places. "This is the period between life and death," wrote American naval officer and aviator Richard E. Byrd of this twilight. "This is the way the world will look to the last man when it dies." 21

The South Pole is a geographic location, unlike the South Magnetic Pole that wanders with the Earth's magnetic field and is now somewhere out over water off the coast of Adélie Land, near the Antarctic Circle. The geographic pole wanders too, between ten to fifteen kilometres a year due to the wobble in the earth's axis. As a thick plate of ice covers the Pole, any structures affixed to the ice also wander, floating in fact, for the ice is fluid, glacially slow but moving nonetheless. Every 1st of January, a member of the U.S. Geological Survey overwintering at the Amundsen-Scott South Polar Station restakes a small memorial, commemorating the two explorers for whom the station is named, that has drifted away.

Elsewhere, set off from the station buildings is the Ceremonial South Pole: it consists of a mirrored ball atop a candy-cane plinth, surrounded by a horseshoe arrangement of Antarctic Treaty nations flags. This satisfies as the location for the obligatory South Pole photo op, and no one bothers to restake its drift.

The Polar Station is an American installation, constructed by airlift to support the International Geophysical Year of 1957, a scientific cooperation project between nations. Prior to this, the last one to "see" the Pole was Richard Byrd, who flew over it in 1947, an experience he likened to flying in a "bowl of milk." The Pole's last guests were the fiveman British Polar Party led by Robert Falcon Scott who arrived and left on 17th January 1912. A glass photographic plate found in the last tent of the men—who succumbed on the return journey—records this moment: they stand, dead on their feet with frostbite-

Byrd, Richard E. Alone. G.P. Putnum and Sons. 1934. Transcribed online: "Astrophysics Group," *University of Leeds*. Web. 3 Nov. 2012. (ast.leeds.ac.uk/haverah/spaseman/alone) Byrd was the first man to overwinter alone on the Antarctic coast, manning a meteorological station in 1934. He nearly went mad as a result of the isolation and carbon monoxide poisoning from his stove.

Wheeler, Sara. *Terra Incognita*. New York: Random House. 1996. p. 118.

blackened faces, defeated men, the Norwegian Polar Party led by Roald Amundsen having beaten them to the Pole by a staggering 33 days. "All the day dreams must go," Scott wrote in his diary of their disappointment, and for the next 45 years, no one dared to dream of returning. Perhaps the reality of the "awful place" was too hard to absorb. Despite Olav Bjaaland's assessment of the good skiing conditions, the South Pole has nothing to recommend it.

#### Our Own White South

It was exhilarating to stand on the Barrier and contemplate the sky and luxuriate in a beauty I did not aspire to possess.... And it was a fine thing too, to surrender to the illusion of intellectual disembodiment, to feel the mind go voyaging through space.... Richard E. Byrd<sup>24</sup>

I am holding a satellite photo of Antarctica taken by NASA's Terra satellite. It is a composite image of many days, the clouds edited out so the continent floats unobstructed in a sea of dark blue. The ice-covered land mass resembles an upturned mother-of pearl palm of hand. The Antarctic Peninsula extends out like a thumb. The photo is serene: no storms to mar my contemplation of this immaculate white, brushed with hues of rosy-pink and sky-blue.

The photo dates itself with the inclusion of the Larsen Ice Shelf. This shelf had existed since the last major glaciation 12,000 years ago, but in 2002, it collapsed in its entirety releasing 720 billions tons of ice into the Weddell Sea. But here it is, not yet the casualty of global warming, the ice reflecting the magnificent composite skies of many beautiful days.

I can also make out the Ross Ice Shelf, and because this photo is an orthographic projection, it is easy in my mind to superimpose the dotted lines marking the legendary routes of the early explorers—Amundsen, Shackleton, and Scott—on their way to the South Pole. The shelf itself is now so depleted that either this year or next, the icy section holding the bodies of Britain's Robert Falcon Scott, "Birdie" Bowers, and

<sup>&</sup>lt;sup>23</sup> Scott, Robert Falcon. p. 543.

Byrd, Richard E. "from Alone." *Ice: Stories of Survival from Polar Exploration*. Ed. Clint Willis. New York: Thunder's Mouth Press, 1999. p.145. Byrd diary entry, 6 May 1934.

Edward Wilson will calve off into the Southern Ocean. These three men, 100 years after their tragic end, will finally be floating their way home.

Antarctica is an enigma. Living as I do in the Northern, Western hemisphere, it has always seemed far too far away to be a tangible preoccupation. I am sympathetic to travel writer Sara Wheeler's own admission, prior to her seven-month sojourn on the continent, that her relationship to Antarctica "was confined to the biannual reinflation of the globe hanging above my desk, its air valve located in the middle of the misshapen white pancake at the bottom." Wheeler adds "as far as I was aware, the continent was a testing ground for men with frozen beards to see how dead they could get." Having grown up on the story of "Scott of the Antarctic," I echo this sentiment.

However, I recognize Antarctica as a place of intense metaphor. It invites the extremes of expression. On one hand, it is a wasteland, an icy circle of hell, a white infinity, a blank death. On the other, it is all romance: a vision of beauty, of colours found nowhere else in the world, a landscape of purity and luminosity. It can be both extremes at the same time, for Antarctica is a "testing ground" for the imagination; the great white blank a screen for the theatre of our senses, playing out stories of both hope and fear. In the words of Sir Ernest Shackleton, "We all have our own white South."

On metaphor alone, Antarctica is a quintessential Thin Place. The Antarctic narrative is shot through with elemental poetry. It is the stage for the great duelling themes of life and death, light and dark, beauty and cruelty, as performed by the early explorers who fought their way across the land. Their diary and expedition records are rich with these themes. Two particular descriptive passages come to mind that illustrate the Antarctic "heaven and hell" dichotomy. The first is by Scott; it is his impression of the aurora australis, midwinter, June 1911. Scott has fallen under a most numinous spell:

The eastern sky was massed with swaying auroral light ...fold on fold arches and curtains of vibrating luminosity rose and spread across the sky, to slowly fade and yet again spring to glowing life.

<sup>&</sup>lt;sup>25</sup> Wheeler, Sara. p. xiii.

lbid. p. xiii.

Alexander, Caroline. "The Lure of the 'White South," *Wall Street Journal*, May 5, 2001. Web.

... It is impossible to witness such a beautiful phenomenon without a sense of awe, and yet this sentiment is not inspired by its brilliancy but rather by its delicacy in light and colour, its transparency, and above all by its tremulous evanescence of form. There is no glittering splendour to dazzle the eye, ... rather the appeal is to the imagination by suggestion of something wholly spiritual, something instinct with a fluttering ethereal life, serenely confident yet restlessly mobile.

...One wonders why history does not tell us of 'aurora' worshippers, so easily could this phenomenon be considered the manifestation of a 'god' or 'demon.' To the little silent group, which stood at gaze before such enchantment, it seemed profane to return to the mental and physical atmosphere of our house.<sup>28</sup>

Scott was still safe in his hut at Cape Evans when he wrote of the aurora's beauty. He would later experience the continent's demonic side. Ernest Shackleton could also wax poetic on Antarctica's charms, but in April 1916, Antarctica was cruelty incarnate. It had been nearly 500 days since he had last set foot on land when he set his hopes on reaching the rocky shore of Elephant Island. Pack ice had crushed his ship *Endurance*; he and his crew had been forced to live out in the open on the floe. He made a courageous decision to escape their icy prison, ordering his men into three small boats salvaged from the shipwreck and steered them through the narrow leads in the hope of open water. Here he describes the gatekeeper of the floe:

At the head of an ice-tongue that nearly closed the gap through which we might enter the open space was a wave-worn berg shaped like some curious antediluvian monster, an icy Cerberus guarding the way. It had head and eyes and rolled so heavily that it almost overturned. Its sides dipped deep in the sea, and as it rose again the water seemed to be streaming from its eyes, as though it were weeping at our escape from the clutch of the floes.<sup>29</sup>

Shackleton adds, as if to rationalize the icy Cerberus, "...We had lived long amid the ice, and we half-unconsciously strove to see resemblances to human faces and living forms in the fantastic contours and massively uncouth shapes of berg and floe." <sup>30</sup>

17

Scott, Robert Falcon. p. 233.

Shackleton, Ernest. "South." *Ice: Stories of Survival from Polar Exploration*. Ed. Clint Willis. New York: Thunder's Mouth Press. 1999. p. 270.

<sup>&</sup>lt;sup>30</sup> Ibid. p. 270.

The diary and expedition journals of the early South Polar explorers, especially those of Scott and Shackleton, are intrinsic to Antarctica's identity as a Thin Place. They tell of men in an alien landscape to which there was no precedent; they tell of triumph, tragedy, heroism and great suffering. A Thin Place necessitates a difficult journey, whereby a certain nobility of character is forged through the challenges of the brutal environment. Perhaps this is why the journals of Norway's Roald Amundsen fail to evoke the Thin Place like those of his British rivals. For Amundsen had a relatively easy time of it. His South Pole victory was, in Apsley Cherry-Garrand's words, a "quick dash." It was uneventful, which says a lot about Amundsen's extensive polar skills. However, his journal suffers as a result. Sara Wheeler writes that in Amundsen's account of the race to the Pole, "he makes it seem as arduous as a day at the seaside. The food depots were so plentiful that he describes the polar plateau as 'the fleshpots of Egypt."

The late Victorian, early Edwardian era in British history saw a renaissance of a chivalric code that hearkened back to the age of medieval knights. Wheeler writes, "heroism became more important than the intellectual forethought that would make heroism unnecessary." It is ironic that Amundsen's triumph, in its day, was eclipsed by the failure of his British rival, Scott, whose haunting journal won the race in people's hearts.

Both Scott and Shackleton conjured an image of Antarctica in all its elemental gore and glory. The conventional ideals of natural beauty in landscape—the bucolic rolling hills and flower meadows—so favoured in England recoiled beneath the dramatic testimony from these men of their newfound alien icescape. Unfathomable as it was to the public of the day, an embryonic vision of this supernatural place took hold in their minds. All physical reality aside, the mythic and metaphoric aesthetic of the White South captivated the early Twentieth-century imagination.

Cherry-Garrard, Apsley. *The Worst Journey in the World*. New York: The Dial Press. 1930. p.vi. Here is Cherry's full quote which gives a succinct assessment of polar leadership: "For a joint scientific and geographical piece of organization, give me Scott; for a Winter Journey, Wilson; for a dash to the Pole and nothing else, Amundsen: and if I am in the devil of a hole and want to get out of it, give me Shackleton every time."

Wheeler, Sara. p.109.

<sup>&</sup>lt;sup>33</sup> Ibid. 108.

### Terra Incognita

Antarctic was the last continent discovered, and unlike all the other continents on our planet with indigenous peoples, plant and animal life, Antarctica had none, and as such, was literally "discovered" by explorers. Prior to man's first footprints on the ice, Antarctica existed primarily as an imagined place. Ptolemy, back in the 1st century AD, was the first to hypothesize its existence. His reasoning was one of symmetry: *Terra Australis Incognita* must exist to balance the landmass of the Northern hemisphere. His theories were not popular with the "Earth is flat" crowd of the day and *Terra Incognita* languished as academic speculation really up until the 16th century and the global circumnavigation voyages of Ferdinand Magellan (1519-1522) and Francis Drake (1577-1580). Then, new dreams of an undiscovered paradise took form.

On 17th January 1773, James Cook became the first man to cross the Antarctic Circle. Cook made three sub-Antarctic voyages; his mandate, of course, was to build up the maritime empire of Britain. Notably, Cook took along perhaps the first scientific team—a naturalist, a biologist, and an astronomer—and Cook's own observations were tempered with scientific inquiry which would set the tone for future endeavours.

Cook had a great track record of keeping his crew alive—he is credited with discovering the "fresh food" cure for scurvy, crucial knowledge lost to subsequent British polar explorers—and his ships intact. So when Cook encountered "the whole sea in a manner covered with ice." <sup>34</sup> he turned back, daring anyone else to advance:

Should anyone possess the resolution and the fortitude to elucidate this point by pushing farther south than I have done, I shall not envy him the fame of his discovery, but I make bold to declare that the world will derive no benefit from it.<sup>35</sup>

For what Cook had discovered was a place, "condemned to everlasting rigidity by Nature, never to yield to the warmth of the sun." Cook did land on the "barren and

Kirwam, L.P. *The White Road.* London: Hollis & Carter, 1959. p. 67.

<sup>&</sup>lt;sup>35</sup> Ibid. p. 70.

<sup>&</sup>lt;sup>36</sup> Ibid. p. 71.

savage"<sup>37</sup> island of South Georgia–then the Isle of Georgia–to hoist the British flag. However, he made it clear to any remaining dreamers that the Southern realm was no paradise.

After Cook, other sub-Antarctic islands were discovered anonymously by sealers and whalers who considered it unprofitable to publish their discoveries lest it compromise their lucrative trade.

Generally, the first confirmed sighting of Antarctica is credited to Fabian Gottlieb von Bellingshausen, who captained an Imperial Russian Navy expedition in 1820. American explorer and naval officer Charles Wilkes is credited with the discovery of the "continent" itself; he sailed along 1,500 miles (2,414 kilometres) of coast in 1840, thereby giving the first substantial proof that Antarctica is an actual continent. That same year, Britain's James Ross made his first of three forays of discovery, mapping much of the coast and many landmarks. Ross sailed in two ships, *Erebus* and *Terror*; these ships would achieve fame as the namesakes for two Antarctic volcanoes, Mount Erebus, the larger still active one, and Terror its smaller extinct neighbour, and infamy as the ships later lost by Sir John Franklin while searching for the Northwest Passage in the Canadian Arctic in 1860. The Canadian government is still searching for these wrecks.

Ross was interested in discovering the South Magnetic Pole, a point vital for navigation. He was frustrated in his attempts by a great shelf of floating ice that now bears his name. He wrote, "we might with equal chance of success try to sail through the cliffs of Dover as to penetrate such a mass." The Ross Ice Shelf would be the launching point for British and Norwegian exploration in the next century; the "Ross Sector" is the most accessible, shortest route to the heart of the continent and the South Pole itself.

After the loss of the Franklin Expedition, Britain lost her appetite for exploration. The Franklin tragedy and subsequent rescue and recovering missions were futile and

<sup>&</sup>lt;sup>37</sup> Ibid. p. 71.

<sup>&</sup>lt;sup>38</sup> Ibid. p. 73.

expensive. It would be forty years before Britain would turn her attention south again, entering the Heroic Age of the Polar Explorer.

### The Heroic Age of the Polar Explorer

One hundred years ago, Antarctica was still an ill-defined coastline on the world map. The Antarctic quests were as significant in their day as the Apollo missions to the moon in our own. In the early 1900s, Antarctica might well have been the moon: it was the coldest, remotest, most desolate place on earth, still unclaimed and as such a frontier sought by many nations.

The late Victorian era through to the Great War is known as the "Heroic Age of the Polar Explorer." Polar quests were the embodiment of patriotic glory and because they were so difficult, they captivated human imagination. Russia, Japan, France, Germany and the United States were all pursuing dreams of placing that first symbolic footprint on the end of the earth. However, Britain, Norway and Australia are the nations whose expeditions made the biggest impressions on the ice.

It is, of course, not the nations but the men who give credence to the Heroic Age. As "heroes," they rose to mythological status, becoming the embodiments of such grand ideals of dignity, courage and self-sacrifice. In the collective psyche of many nations—in particular, those of the British Empire—they came to symbolize the "decent, noble human being," what every man should strive to be, all this at a time when young men were being marshalled to fight and die in the Great War. The Heroic Age explorers took on an aspect of the Wholly Other, sanctifying the Antarctic ice as a Thin Place, a grim life-taking place, but unlike the bloody, unholy mud of the battlefield trenches, a clean place, white, pristine, and pure of spirit.

The men of the Heroic Age elevated exploration to an art form, and the ensuing philosophy, exemplified in the "Man against Nature" dynamic; that of man surviving

The Heroic Age of the Polar Explorer does include Arctic explorations—best exemplified by those of the brilliant Norwegian explorer Fridtjof Nansen, who pioneered many of the cold weather survival techniques that benefitted Amundsen. His specially designed boat *Fram*, that "rode" the ice, rising above it, rather than being crushed by it, was the ship Amundsen would take South.

triumphant in the cruel wilderness, and if survival impossible, then dying heroically. The influence of these men resonated down through the twentieth century informing all those who would aspire to challenge the other great Thin Places of this age: Mount Everest and the Moon. I note how a young George Mallory, who would die just under the summit of Mount Everest, was obsessed with Robert Scott. 40 Mallory, in turn, would inspire a generation of Himalayan climbers, and be invoked by American President John F. Kennedy in a speech launching the space program.

There are four explorers who embody the Heroic Age: Robert Falcon Scott, Sir Ernest Shackleton, Roald Amundsen, and Sir Douglas Mawson, and because they contribute substance to Antarctica as a Thin Place, I examine some salient characteristics of each man.

#### Robert Falcon Scott

In the sunless winter of 1911, Scott wrote out from memory these lines by poet Percy Bysshe Shelley:

The cold ice slept below,
Above the cold sky shone,
And all around,
With a chilling sound,
From caves of ice and fields of snow
The breath of night like death did flow
Beneath the sinking moon.

Scott made a change to the original; in the first line Shelley wrote "cold earth." Scott changed it to "cold ice."

Scott was a romantic at heart. His journals often include lines of poets and writers he admired, Milton, Bunyan, and his contemporaries Hardy, Stevenson. I can't help but wonder if he had not been thrust into the Royal Navy at age 13, if he might have

Mallory wrote, after reading Scott's Last Expedition, "It's a solid rock of human experience and contains some observations which just sink right into me." As noted by Max Jones in his introduction to: Robert Falcon Scott. Journals. Oxford: Oxford University Press, 2005. p. xxxvii.

Wheeler, Sara. p. 300.

chosen a different career path. He was a sensitive, well-read man, attracted to creative, intellectual people; his wife, Kathleen was a sculptor of note and a student of Rodin, and his best friend J.M. Barrie was the author of Peter Pan.

Scott was also an agnostic and obsessed with Charles Darwin. On his first Antarctic foray (the National *Discovery* Expedition 1901-1904), while his colleagues brought Christian texts for spiritual solace, and he famously carried Darwin's **VOYAGE OF THE BEAGLE**. On the three-man inland trek he took with Edward Wilson and Ernest Shackleton, the men took turns reading aloud from this book in their tent before bed. He also had a particular interest in fossils—perhaps as a result of reading Darwin—which may explain his reluctance to part with 35 pounds of geological specimens gathered on his return from the Pole and found in his last tent, a weight he and his men could well have done without on their arduous sledging. 42

Scott was a champion of all things scientific, and determined that his second expedition (the British Antarctic *Terra Nova* Expedition of 1910-1913) would be recognized on many levels. To this end, he included two zoologists, three geologists, a meteorologist, a physicist, a physician, a biologist and a parasitologist on his team. He also took along a photographic artist and a watercolour/sketch artist to great effect: the haunting, iconic images of photographer Herbert Pointing and the sketches of Edward Wilson, particularly those done at the Pole, have long served to illustrate Scott's legend. For Edwardian England, viewing these otherworldly images of Antarctica for the first time was akin, in our age, to seeing those first images taken on the lunar surface.

Scott was a product of the Royal Navy and adhered to its hierarchical system of command. His leadership style contrasts with the more democratic style of Shackleton and Amundsen. Scott as Captain gave the orders and his men followed. To discuss his decisions with his men would have been seen as a sign of weakness. So his journal became his sounding board. He was often crippled with what his wife Kathleen would

The fossils proved valuable: they gave proof of Antarctica as Gondwanaland, the semitropical southern proto-continent, and Scott collected them from "Mount Darwin" no less.

Included in Scott's scientific roster was Norwegian ski expert Tryggve Gran, whose job it was to teach the British how to ski. Gran was among the search party that found Scott's body. He wore Scott's skis back to base to symbolically complete the journey for Scott.

call "the horror of responsibility." When things on the expedition went wrong, he agonized over them privately. He always felt himself to be caught in a machine "that grinds small" a man. <sup>45</sup>

It is generally recognized that Scott made mistakes that contributed to his tragic end. However, many hardships—such as the abnormally cold weather, even for Antarctica, he encountered on the return journey—were well beyond his control. Furthermore, a lack of knowledge—an aspect of all pioneering—is not an admission of failure. Perhaps Scott's most contentious decision of his leadership was to man haul the sledges. 46 Scott was philosophical about this:

In my mind, no journey ever made with dogs can approach the height of that fine conception which is realized when a party of men go forth to face hardships, dangers, and difficulties with their own unaided efforts, and by days and weeks of hard physical labour succeed in solving some problem of the great unknown.<sup>47</sup>

Scott decision to man haul is a great part of his legend. Timothy Noakes at Human Biology at the Sports Science Institute of South Africa claims that the greatest human performance of sustained physical endurance of all time was achieved by the Antarctic sledding expedition led by Scott. By the time the five-man Polar party reached their end, they had been man hauling 159 consecutive days, the last 60 in extreme cold for a total 1, 553 miles<sup>48</sup> I note that it is this aspect of Scott's trek that many of today's extreme athletes have sought to recreate. It forms part of the same argument that sees

<sup>44</sup> Preston, Diane. A First Rate Tragedy. New York: Houghton Mifflin Company, 1998. p. 231.

<sup>&</sup>lt;sup>45</sup> Ibid. p. 2. Scott made this comment to his wife prior to their marriage in a letter in 1908.

The British did take 16 Manchurian ponies, and 23 Siberian huskies. The Ponies were needed to transport the depot supplies to the foot of the Beardmore Glacier. They suffered so badly in the cold they all had to be shot. As for the dogs, Scott and his men didn't really know how to dogsled. If they had, perhaps he would have had a different view. Scott had taken dogs on his first expedition; they all sickened due to an inadequate diet and died. This had been such a bad experience for him it is surprising that he took dogs on his second expedition; these dogs all survived but one, ending up in happy retirement in New Zealand. In 1993, Antarctic treaty banned all dogs for fear that they might spread canine distemper to seal populations.

<sup>&</sup>lt;sup>47</sup> Coffey, Maria. p. 98.

<sup>&</sup>lt;sup>48</sup> Ibid. p. 99.

mountaineers ascent Mount Everest without the use of supplemental oxygen: that the unaided effort is a "purer" endeavour.

After reaching the Pole, the five men faced an 850-mile trek ahead of them into the upcoming winter. Scott first lost Edgar Evans to a brain haemorrhage, then, Lawrence "Titus" Oates, who, suffering incapacitating frostbite in his feet crawled out of the tent to his suicide rather than imperil the progress of his companions. Scott recorded his now very famous last words "I am just going out side and may be some time."

Although Scott and the remaining two struggled on they made scant progress, barely averaging a mile a day in the bitter cold, and then they ran out of food. Knowing the end was near, Scott wrote farewell letters. It is the poignancy of these letters that really packed the emotional punch when they were published in England. Although Scott did not know whether or not they would be found, he wrote a heartfelt "Message to the Public" explaining—or perhaps rationalizing—the expedition failures, ending with these lines: "Had we lived, I should have had a tale to tell of the hardihood, endurance, and courage of my companions which would have stirred the heart of every Englishman. These rough notes and our dead bodies must tell the tale..." They were just 11 miles short of a life-saving food depot when they died.

Scott's second expedition is often likened to a Greek Tragedy, with misfortunes and events compounding and impacting one upon the other until nothing was left but death. Scott's journal was recovered and published in 1913 as **Scott's Last Expedition**. It detailed the unearthly beauty of Antarctica and the adversarial extremes of a land never meant to accommodate human beings. Scott's fame rests not on his greatness as an explorer but rather on having penned this journal, often considered the greatest tome in exploration literature. This has led critics to scathingly refer to him as nothing more than a "literary creation." However, as Scott biographer David Crane notes, "Nobody has even matched Scott in his ability to make the physical and

<sup>&</sup>lt;sup>49</sup> Scott, Robert Falcon. p. 592.

<sup>&</sup>lt;sup>50</sup> Ibid. p. 607.

<sup>&</sup>lt;sup>51</sup> Huntford, Roland. p. 307.

psychological realities of the human experience in extremis accessible to the rest of us."  $^{52}$ 

For my argument, Scott is the quintessential Thin Place hero. It is impossible to read Scott without becoming emotionally involved with both the man and the land. He is the true architect of the Antarctic mystique. Under his pen, Antarctica comes alive, and that he had to die to accomplish this, is really the crux of his legend. Had he and his men lived, they would have been invalided back home, facing multiple amputations from frostbite. They would not have been the heroes, but instead pitied men, and faced the rest of their lives bitter and impoverished. Their Antarctic "martyrdom" sanctified the ice, upholding the Edwardian chivalric ideal of the heroic man. Ivan Morris, in his book THE NOBILITY OF FAILURE, examines the admiration for men of the failed quest. He writes:

[We] find vicarious satisfaction in identifying emotionally with these individuals who wage their forlorn struggle against overwhelming odds; and the fact that all their efforts are crowned with failure lends them a pathos which characterizes the general vanity of human endeavour and makes them the most loved and evocative of heroes.<sup>53</sup>

Sarah Moss notes how the timing of his death contributes to his legend. Scott, dying prior to and innocent of the Great War slaughter, "became an emblem of all that was lost." 54 She continues:

If he died partly because he insisted on regarding polar exploration as a mythic quest rather than a matter of warm shoes and good engineering, perhaps he is mourned because of rather than despite this romanticism. Others of his generation also thought themselves as capable of things that mattered, and their ambitions and personal achievements counted for nothing in front of bayonets and guns in the trenches. Scott's death is not obliteration, and so he can stand for those who had no chance of an idiosyncratic end. <sup>55</sup>

26

<sup>52</sup> Crane, David. Scott of the Antarctic. London: Harper Perennial. 2006. "P.S." text p. 27.

Morris, Ivan. *The Nobility of Failure*. New York: Meridian. 1975. p. xiv.

<sup>&</sup>lt;sup>54</sup> Moss, Sarah. *The Frozen Ship.* Oxford: Bluebridge, 2006. p.116.

<sup>&</sup>lt;sup>55</sup> Ibid. p. 116.

#### Ernest Shackleton

It is the 27th October 1915, and a ship is sinking in the Weddell Sea. Twenty-seven men watch as their captain throws his personal belongings onto the ice. He tosses his gold watch, a handful of sovereigns, and even the ship's Bible, a gift from Queen Alexandra, but not before tearing out and pocketing this verse from Job:

Out of whose womb came the ice? And the hoary frost of heaven, who hath gendered it? The waters are hid as with a stone, And the face of the deep is frozen.<sup>56</sup>

The men then follow suit, divesting themselves of everything that will not aid their survival. Soon a pile grows of dress uniforms, books, tools, diaries, and personal mementos, like an offering for the ice maw. The *Endurance* has been their home for the last 10 months ever since they left Grytviken on South Georgia Island, but now the grinding pressure of the pack ice is crushing the wooden hull. The men pitch tents on the ice and pass "a terrible night;" listening horrified, as the ship emits "the cries of a living creature." <sup>57</sup>

Of all the polar heroes, Shackleton is remembered for his exemplary leadership, and, as this episode above shows, leading by example. Shackleton never pulled rank or took advantage of his position. "The Boss," as his men knew him, had earned their unqualified respect and devotion. 58 His leadership was marked by many small acts of

Alexander, Caroline. *Endurance*. New York: Alfred A. Knopf, 1999. p. 95. Job 38: 29-30. Shackleton also kept the flyleaf with the Queen's inscription, and the 23rd Psalm.

<sup>&</sup>lt;sup>57</sup> Alexander, Caroline. p. 93.

There is one recorded episode of insubordination. Ship carpenter Harry "Chippy" McNish had brought his wife along for the voyage. Mrs. Chippy was a cat (and a male cat at that). After Shackleton gave the "abandon ship" order he had Mrs. Chippy shot. It was probably the most humane gesture under the circumstances for she would not have survived on the ice floes. McNish was furious with Shackleton, which led to an unfortunate incidence of rebellion—that of McNish refusing to pull a sledge. Shackleton never forgot this seemingly petty insubordination, withholding the honour of the Polar Medal from McNish once back in England. Many of the crew thought this was most unfair, as McNish had made some brilliant modifications to the *James Caird* that allowed Shackleton to make the journey to South Georgia. McNish didn't care about the metal. However, he never forgave Shackleton for "killing his wife."

personal kindness such as giving his last biscuit to a starving man<sup>59</sup> when he similarly starving, and giving up his only pair of mittens, saving the hands of another man, and thus suffering frostbite to his own.<sup>60</sup>

Shackleton's greatest gift was his ability to maintain the morale of his 27 men in such appalling circumstances; first trapped in the ice, then cast adrift on the floes, and finally marooned on the exposed rock of Elephant Island with only their upturned dinghies for shelter. Shackleton and his crew were lost to the world for over 22 months. Yet the men never succumbed to irreparable depression, descended into madness or took knives to each other's throats. They all survived.

Shackleton's legend is based in large part on this outstanding ability to take charge and impart optimism, even in the most hopeless situations. It helped that he was a hugely charismatic man with a magnetic personality that was a legend in itself. Over 5,000 men vied for a position on his crew after reading a recruitment ad:

Men wanted: For hazardous journey. Small wages. Bitter cold. Long months of complete darkness. Constant danger. Safe return doubtful. Honour and recognition in case of success. E. H. Shackleton. <sup>61</sup>

This ad is most likely apocryphal. However, it illustrated that, even if an urban myth, an adventure with Shackleton would not disappoint.

Shackleton had four voyages South. His first was as a lieutenant on Scott's *Discovery* expedition. Scott thought highly of him, and included him on the first inland reconnaissance of the continent. However, Shackleton was severely incapacitated with

Shackleton gave the biscuit, the one remaining in his own meager rations to Frank Wild on the return trek, *Nimrod* expedition. Wild famously recounted, "Shackleton privately forced upon me his one breakfast biscuit... I do not suppose that anyone else in the world can thoroughly realize how much generosity and sympathy was shown by this; I do, and by God I shall never forget. Thousands of pounds would not have bought that one biscuit." Allen, Emily. "That Really Takes the Biscuit" *Mail Online*.16 Sept. 2011. Web. (A biscuit from the *Nimrod* expedition sold at auction in 2011 for €1,250.)

Shackleton gave his mittens to Frank Hurley, the photographer for the *Endurance* expedition.

<sup>&</sup>lt;sup>61</sup> Coffey, Maria. p. 99.

scurvy on this trek and was invalided home on a relief ship, a great humiliation for him. <sup>62</sup> He sought to rehabilitate his image with his own expedition, the *Nimrod* 1907-1909, which was a great success, and he was knighted for his efforts. He led a small team to within 90 miles of the Pole, a new record "farthest South," however, extreme cold and the deteriorating condition of his team turned him back; he wrote to his wife, "A live donkey is better than a dead lion, isn't it?" Herein lies another glimpse into Shackleton's greatness: he knew when to stop. He valued survival over the trophies of exploration.

Shackleton's third foray south, the grandly named Trans-Antarctic Expedition 1914 cemented his legend. His objective was the first crossing of the Antarctic continent form Vahsel Bay on the Weddell Sea via the Pole to McMurdo Bay on the Ross Sea, a feat that had not yet been done. He and his men aboard *Endurance* left Grytviken on 5th December 1914. They entered the floe two days late, and skillfully steered to within 75 miles of the continent. They were just a day's journey away, but landfall would elude them. On 18th January, *Endurance* was beset. They drifted trapped in solid ice northwest until October of that year when the ice pack started to break up. The ship, unable to endure the massive blows of the breaking ice, was crushed and sunk. Shackleton wrote, "This is the beginning of the end." It was the end of *Endurance* but the beginning of a far greater ordeal.

The men would spend the next 170 days adrift, living out in the open on the ice before reaching the shores of Elephant Island, but this was small consolation. Elephant Island was uninhabited. Shackleton, knowing his men would not survive another winter, took five of his strongest in the *James Caird*, a small dingy salvaged from the wreck, and made a desperate run for the whaling station on South Georgia Island, the closest source of help. This involved an 800 mile (1287 kilometre) journey through Southern

A bitter rivalry would develop between the two men that started after Scott published his expedition record, *Voyage of the Discovery*, which Shackleton felt showed him in a poor light. Scott would later feel humiliated after Shackleton was knighted following his *Nimrod* expedition; Scott was promoted to Captain following the *Discovery* Expedition, but it was not the honour he had been hoping for.

Jones, Max. intro. Robert Falcon Scott. *Journals*. p. xxv.

Alexander, Caroline. p. 86.

Ocean-notorious as the most dangerous water in the world. Miraculously they reached the island, but still had a hellish overland march to reach the whalers, who took fright at their savage appearance. It would take four attempts over five months before the men were rescued.

The men left behind on Elephant Island survived, in part, because they never gave up: they trusted that their "Boss" would come back. Caroline Alexander writes:

The mystique that Shackleton acquired as leader may partly attribute to the fact that he elicited from his men strength and endurance they had never imagined they possessed; he ennobled them.<sup>65</sup>

It is this quality, his "ennobling," that shows Shackleton's real heroic nature. Their trial was of Biblical proportions, their survival elevated them to divine heights. If Scott's story inspired a generation of young men headed for the trenches, Shackleton's story assuaged the grief and gave hope of impossible survival. Shackleton was Hope.

Back home in England, Shackleton had trouble finding his place in a country that, after the Great War, was very different. He suffered through a series of dismal business failures. Despite his Antarctic ordeal, he could not shake it from his being. He confessed to his wife, "Sometimes I think I am no good at anything but being away in the wilds..." In 1921 he ventured south again on the *Quest* expedition. His ship was still moored in South Georgia when he was felled by a massive heart attack. He is buried in a small graveyard there among the Norwegian whalers. It is perhaps a resting fitting place as South Georgia played a large part in his legend.

While alive, Shackleton suffered under Scott's shadow. However history and the passage of time have given him his well-deserved recognition, and his grave, despite being so far away, is now a place of pilgrimage. Like Scott, he left behind a compelling legacy in print, The Heart of the Antarctic (*Nimrod*), and South (*Endurance*). The latter is richly illustrated with Frank Hurley's iconic photography that gives absolute visual proof of Antarctica as a Thin Place. Shackleton himself leaves this numinous description:

66 Ibid. p. 193.

<sup>65</sup> Ibid. p. 194.

In memories we were rich. We had pierced the veneer of outside things. We had 'suffered, starved and triumphed, grovelled down yet grasped at glory, grown bigger in the bigness of the whole.' We had seen God in His splendours, heard the text that Nature renders. We had reached the naked soul of man.<sup>67</sup>

#### Roald Amundsen

Up here among the fjords I have my native land. But-but-but where do I find my homeland. Ibsen<sup>68</sup>

If there is a villain of the Heroic Age, it is—and unjustly so—Roald Amundsen. He won the South Pole but lost the race in the hearts and mind of the British public whose recognition he craved. His accomplishment is recognized today, but in 1912, his win was controversial. He arrived back in *Framheim*, his base camp on 16th January, just as Scott was nearing the Pole, but he did not know this, and hurriedly set sail for Hobart to send that all important telegraph of his win, for, as Amundsen biographer Roland Huntford points out, "The Pole meant nothing until it had been made into news." His first telegraph was to the Daily Chronicle, London; he needed an English paper to announce his victory, and the Chronicle did, on the front page, paying £2,000 (£150,000 today) for the "scoop."

Congratulations and accolades poured in, but were short lived. When news of Scott's death reached England, a tidal wave of grief drowned Amundsen's triumph.<sup>71</sup> His

<sup>67</sup> Ibid. p. 165.

Huntford, Roland. p. 265. Huntford makes note of this line from Ibsen as an example of how Amundsen must have felt upon his return to Norway, after his victory "soured."

In the early 20<sup>th</sup> century, England was the centre of the modern world and the British Empire still a powerful force. Norway was recently independent from Denmark, and although Amundsen's victory was a coup for Norwegian self-esteem, Amundsen when he changed direction did not tell any powers that be in Norway. He was afraid that he would lose backing for his plans as Norway would not want to "step on British toes" diplomatically.

Huntford, Roland, p. 300.

A modern day equivalent of the public reaction to Scott's death can be found in the hysteria that followed the death of Diana, the Princess of Wales. Scott and his comrades were given a memorial at St Paul's Cathedral, the King in attendance. This public lamentation would be repeated for George Mallory and Sandy Irvine in 1924.

victory in his home country was further muted after the suicide of expedition member Hjalmar Johansen in 1913, for which he was blamed.<sup>72</sup>

Amundsen's real problem was that he did not fit the ideal of the chivalrous knight; his character was called into question. In 1909, he had received the necessary permission from the Norwegian King, the financial resources, and the ship *Fram*, to conduct an Arctic mission. Amundsen's ambition was the North Pole, but that very year, the Americans beat him to it: both Robert Peary and Frederick Cook claiming victory. So Amundsen turned his attention South, and he did so secretly. He waited till he was safely out at sea and in a position where he could not be called back before assembling his crew and announcing his true objective. He sailed into the Spanish port of Madeira to send Scott a warning telegram: "Am going South, Amundsen." 73

Of course, when news of Amundsen's change of course reached England it was met with howls of outrage. Amundsen was "duplicitous," and in the words of the president of Royal Geographic Society, "He has not played the game." This would ultimately allow England to denigrate his achievement at the South Pole as "an opportunistic Viking raid."

Amundsen's telegram reached Scott in New Zealand as he was making final preparations to sail. He chose to ignore it. But the telegram effectively made what the British had assumed to be a *fait accompli* into a bitter race.

Amundsen was a career explorer, and, in David Crane's words, "unfettered by science and unburdened by any of the gentlemanly baggage of the British explorer." He already had one historic achievement to his name: the first complete expedition through the North West Passage in the Arctic (1903~1906). Amundsen had lived with

Johansen was a highly skilled and experienced polar explorer who had accompanied Fridtjof Nansen on his historic "Farthest North" march in the Arctic in 1895. Amundsen included Johansen in the expedition but excluded him in the Polar Party–a great humiliation for the polar veteran.

Preston, Diane. p. 127.

<sup>&</sup>lt;sup>74</sup> Ibid. p. 5.

<sup>&</sup>lt;sup>75</sup> Ibid. p. 191.

<sup>&</sup>lt;sup>76</sup> Crane, David. p. 427.

the Inuit, fathered a child with an Inuit woman, and was thus well experienced in extreme cold survival. He did not have an aversion to fur clothing that the British had, preferring their man-made, "superior," Burberry windbreakers.

Amundsen looked at his quest for the South Pole as a sporting event. It was a race: get there and get back as fast and efficiently as possible. All the Norwegians were crack skiers; Amundsen recruited a contingent of athletes, all accustomed to long distance skiing and all experienced with the extreme cold. He also had 112 dogs, and all the men were proficient at dog sledding. But herein lies another problem for Amundsen that can be seen in Henry "Birdie" Bowers last letter to mother:

It is sad that we have been forestalled by the Norwegians, but I am glad that we have done it by good British manhaulage. That is the traditional British sledging method and this is the greatest journey done by man.<sup>77</sup>

Amundsen's win was further denigrated by the British because he used dogs.<sup>78</sup> Moreover, Amundsen allowed for a certain "attrition" in his dog ranks: using dogs for meat to feed other dogs and his men meant less food supplies to carry. The British were suitably horrified, but the fresh meat kept scurvy at bay, and all five of the British Polar Party suffered from scurvy. The Norwegians were incredulous to the British decision to manhaul; Helman Hansen, who reached the Pole with Amundsen wrote, "What shall one say of Scott and his companions who were their own sledge dogs?"

Another critical error of Amundsen's that would cost him dearly was a failure to provide compelling documentation. Scott had the brilliant photography of Herbert Ponting to record his endeavours, and although Ponting did not journey to the Pole, he spent hours teaching Scott how to use his camera, which Scott kept, along with the heavy glass plates right to the end. Amundsen couldn't be bothered with a photographer, and although Bjaaland did take some "snapshots" they pale in comparison with the rich

<sup>&</sup>lt;sup>77</sup> Preston, Diane. p. 185.

According to Nancy Mitford, the Royal Geographic Society held a dinner in Amundsen's honour; the RGS President Lord Curazon ended his congratulatory speech with "I think we ought to give three cheers for the dogs," which annoyed Amundsen no end. Mitford, Nancy "A Bad Time." *Ice*. Clint Willis ed., New York: Thunder's Mouth Press, 1999. p.55.

Preston, Diane. p. 216.

record of the British. In the Norwegian photos, the men's faces are unrecognizable, often obscured with a blurry mess of dogs.

The minutiae of both Amundsen's and Scott's expeditions have been thoroughly dissected. Perhaps the most astounding feature of the Norwegian expedition was their speed. The Norwegian polar party returned back to base before the onslaught of the unseasonably cold weather that would be the real downfall of the British team. It is clear that Amundsen had the skill and expertise that rendered the British expedition amateurish. However, Amundsen did himself no favours. In his victory interview with the Daily Chronicle he declared, "There was little that was adventurous about the trip." Europe was about to explode into war and such an uninspiring comment did not a hero make.

Amundsen was maligned for being deceitful and unsportsmanlike. His real crime was more a failure of the imagination: his Antarctica was devoid of the requisite *sturm und drang*. Amundsen did not create a Thin Place.

### **Douglas Mawson**

Anglo-Australian explorer Sir Douglas Mawson contributes another survival story to the Antarctic canon. I note how physical suffering is requisite for the Thin Place pilgrim and certainly Mawson took physical agony to new levels.

Mawson was first and foremost a scientist with a background in geology and glaciology. He first journeyed to Antarctica as part of Shackleton's *Nimrod* Expedition. While Shackleton focused on obtaining the geographic South Pole, Mawson, one of a three-man team, set out to find the South Magnetic Pole, successfully reaching it on 16th January 1909. They had already manhauled sledges for over 1,260 miles (2,027 kilometres) when team leader T.E. David fell ill on the return journey. He asked Mawson to take over, and later wrote, "Mawson was the real leader who was the soul of our expedition to the Magnetic Pole. We really have in him an Australian Nansen of infinite

34

<sup>&</sup>lt;sup>80</sup> Huntford, Roland. p. 310.

resource, splendid physique and astonishing indifference to frost."<sup>81</sup> On this same expedition, Mawson was also a member of the first party to summit Mount Erebus, Antarctica's largest active volcano.

In 1910, Robert Scott asked Mawson to join his *Terra Nova* Expedition but he declined. He has set his sights on leading his own expedition. Mawson had no interest in the Pole; his mission was purely scientific, focusing on geology, meteorology and marine science. The Australasian Antarctic Expedition set sail in December 1911, setting up base at Cape Denison at the head of Commonwealth Bay, a location notorious, in Mawson's words, for its "Herculean gusts." <sup>82</sup>

The three-man "Far Eastern Party" sledging trip, which Mawson led, is remembered for being a Herculean nightmare. Mawson, along with Belgrave Ninnis and Xavier Mertz set out to map the unknown coastal regions west of Cape Adare. Their expedition started well and they made great inroads. However, they were a good 310 miles (500 kilometres), and over thirty days from base when disaster struck. Ninnis fell to his death down a large crevasse, taking most of the dogs and provisions with him. Mawson and Mertz were left with just nine days food rations and a few dogs, which they had to kill to eat for meat. Although they did not know it at the time, dog livers are lethally high in vitamin A. Mertz was most certainly suffering the effects of this toxicity, along with exposure and starvation, when he descended into madness gnawing off a finger.

After Mertz's death, Mawson faced a 100-mile (160 kilometre) solo trek back to base. As if the psychological blow of losing his two teammates was not enough, the physical agonies he endured are not for the faint of heart; his description of "repairing" his feet is not easily forgotten: an investigation of a disquieting squelching sound in his boots revealed his socks to be swimming in pus. Mawson wrung out the fluid only to find two thick casts of dead skin that had once been the soles and heels of his feet. Using lanolin, Mawson "glued" them back on. He had no bandages, and as he later explained,

Jacka, F. J., "Mawson, Sir Douglas (1882–1958)," *Australian Dictionary of Biography*. Australian National University. Web. 22 October 2012.

Cape Denison holds the Guinness World record for the windiest coastal place on earth. Mawson titled his biography *Home of the Blizzard*, as his base was often wracked with 200 mph winds.

the dead casts "were the softest things I had available to put next to raw tissue." How he was able to walk is one of the great Antarctic mysteries. Sir Edmund Hillary described Mawson's journey as "probably the greatest story of lone survival in Polar exploration."

The details of Mawson's solo trek are gut wrenching. However, it is the physical horrors of his journey that really cement his legend.

Although Mawson is recognized in the pantheon of polar heroes, he is often overlooked, Scott, Shackleton and Amundsen receiving the lion's share of glory. However, in his native Australia, Mawson is considered by far the most significant explorer of the Heroic Age. Historian J. Gordon Hayes gives this assessment:

Sir Douglas Mawson's expedition, judged by the magnitude both of its scale and of its achievements, was the greatest and most consummate expedition that ever sailed for Antarctica. The expeditions of Scott and Shackleton were great, and Amundsen's venture was the finest Polar reconnaissance ever made; but each must yield the premier position, when fairly compared with Mawson's magnificently conceived and executed scheme of exploration.<sup>85</sup>

### The Legacy of the Heroic Age

...Antarctica suffered our passing as a giant that allows a fly to crawl across his face.

Ranulph Fiennes<sup>86</sup>

In 1962 English novelist Nancy Mitford felt compelled to write a memorial essay "fifty years to the day that Scott died," with the wonderfully understated title "A Bad Time." She mused on the many innovations since his death, and that although he lived "in our century" his equipment was not much different than that of Captain Cook. She noted how vitamin pills, a wireless transmitter, and an electric torch would have eased his

Bickel, Lennard "Mawson's Will." *Ice: Stories of Survival from Polar Exploration*. Ed. Clint Willis. New York: Thunder's Mouth Press. 1999. p. 29.

Bickel, Lennard. *Mawson's Will: The Greatest Polar Survival Story Ever Written.* Hanover, New Hampshire: Steerforth Press, 2000. p. x.

<sup>&</sup>lt;sup>85</sup> Jacka, F. J. Web. n.p.

<sup>&</sup>lt;sup>86</sup> Fiennes, Ranulph. *Mind Over Matter*. London: Sinclair Stevens, 1993. p. 227.

misery and "how many things which we take completely as a matter of course had not yet been invented, such a little time ago!" 87

As I write, now 100 years on, I cannot help but consider the technological advances of my own age. Materials such as fibreglass could have replaced Scott's heavy wooden skis; satellite communication and GPS would have helped him locate his depots, and knowledge about nutrition and human physiology would have enable him to calculate the necessary caloric intake for his team to avoid starvation. In spite of this, the British Polar Party may still have lost their lives. Antarctica remains a formidable foe, as Ranulph Fiennes found out on his cross-continent trek: "We, like Scott, found ourselves starving, freezing, and in danger of falling into crevasses without hope of rescue." Antarctica cannot be tamed; crevasses sealed or blizzards stopped from blowing—at least not yet.

Despite the harrowing ordeals of the Heroic Age, men and women have not been deterring in Antarctic quests. Many have sought to recreate the epic adventures of the pioneers. Dr Vivian Fuchs teamed up with Edmund Hillary, fresh from his Everest triumph, to accomplish Shackleton's dream of a trans-Antarctic crossing (The 1955-58 Commonwealth Trans-Antarctic Expedition). In 1985, Robert Swan, Roger Muir and Gareth Wood travelled to the Pole, a journey of 70 days, over 1,400 kilometres of terrain. They manhauled their sledges, just as Scott has done, lending their expedition the title "In the Footsteps of Scott." In 1990, Himalayan veteran Reinhold Messner crossed Antarctica via to the South Pole by manhaul, resupplied by air. "Most people think Antarctica is the worst place in the world," Messner said of his adventure. "I enjoyed Antarctica because I could walk for (miles) without finding anything." In 1994, Norway's Liv Arnesen became the first woman to ski to the South Pole. In 1992, Ranulph Fiennes and Michael Shroud, set out on the awkwardly titled "The Unsupported Antarctic Continent Expedition." In his post-expedition account Fiennes supplied "before" and "after" photos documenting the physical toll on his body: it would seem the desire to get

Mitford, Nancy. "A Bad Time." *Ice: Stories of Survival from Polar Exploration*. Ed. Clint Willis. New York: Thunder's Mouth Press. 1999. p. 44.

<sup>&</sup>lt;sup>88</sup> Fiennes, Ranulph. p. 92.

Kragthorpe, Kurt. "Messner Makes Antarctica His New 'White Wilderness." *Desert News*. June 3, 1990. Web. Oct 12, 2012.

a frozen beard and see how dead you can get is still a draw. Fiennes set out again in March 2013, hoping to be the first to make a crossing of Antarctica on foot through the dead of the southern winter; his "Coldest Journey" expedition was cut short by frostbite.

The adventure industry has taken note of the desire for an Antarctic experience, especially among the extreme athlete/mountaineering community. However, Antarctica lacks the infrastructure to support the kind of development that has sprung up on Everest's flanks, and it is unlikely it will ever see an alpine tourist centre such as those of Chamonix and Whistler any time soon. This being said, it is possible to heliski in the trans-Antarctic mountains, and dozens of companies advertise South Polar excursions: "Ski All The Way to the Heart of Antarctica," promises Australian based IceTrek Expeditions. In summer months, cruise ships ply the coastal waters, full of eager tourists waiting to disembark for a photo op with a seal or penguin. In fact, Antarctica's seals and penguins are a huge draw. As wildlife photographer Colin Montheath notes they are "the last remaining really prolific and wide-ranging populations of unmanaged wild animals on the planet." Moreover, he adds, "By living outside the boundaries of artificial reserves, Antarctic's wildlife does not face the vagaries and inconsistencies of human control." No wonder Antarctica is becoming popular: we humans haven't messed it up yet.

### Of Ice, and Ice Melting

One hundred years is the upper limit of human lifespan but just the blink of an eye in geological time. Several generations have now lived since the Heroic Age, and in this time, the vast tectonic plate of humanity has unwittingly altered many natural systems on Earth that took eons to evolve. Antarctica may still be the coldest, most desolate continent but it is also the most fragile. Temperatures have risen two degrees since Scott's time, and although this may not seem like much, it is sufficient to unhinge the great ice shelves and allow two species of flowering plants to take hold and spread amid the mosses and lichens on the peninsula. In a further 100 years, the White South may

Montheath, Colin. Antarctica: Beyond the Southern Ocean. Auckland: Warwick, 1996. p. 124.

<sup>&</sup>lt;sup>91</sup> Ibid. p. 124.

be more "green" than white as both the ice that hides and the Antarctic Treaty that limits man's intrusion become things of the past.

In 1961, sixty-seven nations signed the Antarctic Treaty, setting aside the continent as a "World Park," and science reserve. Antarctica is politically neutral, although territorial jockeying exists among the sub-Antarctic islands as the Falkland war well demonstrated. Antarctic itself remains the only place on the planet that had not been fought over; Ranulph Fiennes attributes "this happy state" to Antarctica's remoteness, although he notes "technology has increasingly trivialized the word remote." 92

Antarctic ice is melting; as our seas rise and human population increases, the temptation to claim and exploit the continent's mineral wealth may be irresistible.

Barry Lopez has written extensively on the fate of the Arctic in the last century. He notes how the explorers of the Arctic's Heroic Age-Vilhjalmur Stephansson and Robert Peary in particular-left the land vulnerable in their wake. This may be Antarctica's fate. Lopez asks:

What will be the disposition of the landscape? Will it be used, always, in whatever way we will, or will it one day be accorded some dignity of its own? What does the nature of the heroic become, once the landscape is threatened?"

Although the 1991 Protocol on Environmental Protection extends the moratorium on oil and mineral extraction to 2041, by then, the planet will be a very different place. The marine and terrestrial ecosystems the Protocol also seeks to preserve operate within global systems and just staying away is insufficient protection when the momentum of global warming is difficult to arrest. Sarah Moss makes a similar observation:

While Antarctica is better protected from direct pollution and destruction, it cannot be physically separated from the rest of the world as it may be in

a.

<sup>&</sup>lt;sup>92</sup> Fiennes, Ranulph. p. 303.

<sup>93</sup> Lopez, Barry. p. 390.

the Western imagination. ... It is changing so fast that some species and landscapes will be gone before we can know about them, but the desire to know is also part of the problem. We burn oil in order to travel further and faster than we could without it, so that more people can see and know more about more of the world, and the result is that there is less of the world to see and know.<sup>94</sup>

Antarctica is defined by ice. Its sheet of 39 billion cubic yards is spread out over an area twice the size of Australia. Except for the peninsula and the rocky windswept peaks in the Trans-Antarctic Mountains, Antarctica is ice all the time. "Master of such a forbidden environment, ice forces us to ponder our fragility and vulnerability," writes Montheath, "In Antarctica it is humbling to realize that ice makes all the rules." <sup>95</sup>

Antarctica is the World's Thermostat. Our planet is governed by a complex interdependent system of "spheres:" the atmosphere, the hydrosphere, and the biosphere. Changes in one sphere affect all the others. Antarctica may be isolated, but it has a critical influence on global weather systems and circulation of ocean currents. Scientists estimate the warming rate in Antarctica is ten times that of the rest of the globe. If the entire ice sheet melts, sea levels will rise 73 meters, swallowing up many of the world's low lying and heavily populated areas. The influx of melt water will change the salinity, affecting species that rely on salt water. Moreover, just a one degree change water temperature is, in itself, a sufficient catalyst to destroy the Antarctic food chain; killing first the phytoplankton, then the krill and the krill dependent fish, on upwards to the large mammals: squid, penguins, and whales.

What defines Antarctica now is ice. We need to rethink this ice as water. There is a reason why we get excited over the prospect of the *Curiosity* rover sending back evidence of Martian stream beds, and why we crashed a rocket into the moon to analyse the debris spray for the presence of water. Water is life. A full two thirds of all the water on Earth is in Antarctica. Crucially, the water that exists on Earth now is the same water that existed when the oceans coalesced and the continents formed back in Deep Time. The hydrosphere is a closed system; all the water on earth is all the water there is and

<sup>&</sup>lt;sup>94</sup> Moss, Sarah. p. 234.

<sup>95</sup> Montheath, Colin. p. 35.

ever will be. Increasingly, as is often noted, this water is in the wrong places at the wrong times and in the wrong amounts. Although we can pump out ancient aquifers beneath the Sahara desert and build colossal hydroelectric dams over rivers, we really have very little control over water. It controls us.

Antarctica is the largest reserve of fresh-albeit frozen-water on the planet, and we need it to remain in its frozen state: the melting of Antarctica has catastrophic implications for the world at large and Antarctica as it now exists. Of course, the horrible thought that Antarctica may one day melt away only fuels our desire to see it. Yet, as Sarah Moss writes, "It is not possible to travel without participating in the destruction of the imagination's most precious destination." Perhaps we are already powerless to resist the momentum of climate change. If this is indeed the case, then the Antarctic Heroic Age is truly and disastrously over and the White South is dissolving like a sugar cube in the mouth of the Southern Ocean.

<sup>&</sup>lt;sup>96</sup> Moss, Sarah. p. 235.

# Chapter 3.

## **Mount Everest**

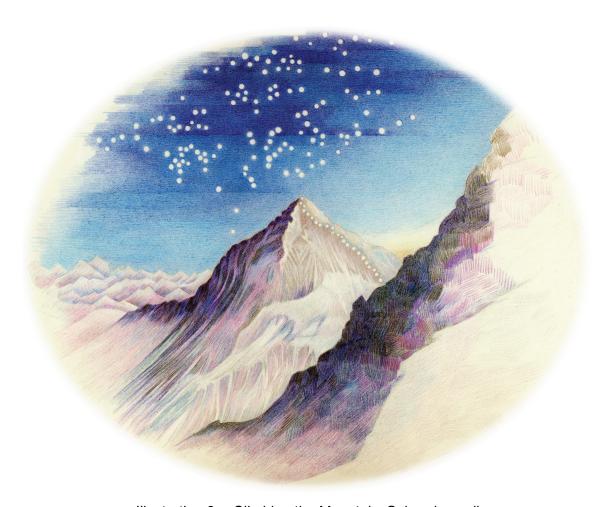


Illustration 3. Climbing the Mountain. Colored pencil.

### A Force of Nature

# I can do it! -Shriya Shah-Klorfine 97

I am looking at a luminous picture of Mount Everest at night taken in May 2012. It shows the mountain's pyramid summit silhouetted by stars. I can make out the handle of the Big Dipper over the mountains left shoulder while over the right starts the first glow of sunrise. Along one of Everest's sharp ridges is a trail of stars, single file to the summit: a curious display of cosmic mountaineering. Of course, it doesn't take long to discover that this parade of stars is actually a line of headlights from more than one-hundred-and-fifty climbers, all piled up behind the "bottleneck" of the Hillary Step, a sheer fifteen metre wall of rock and ice where a single rope serves both the climbers going up and down, and where during this particular climbing season, the wait in both directions surpasses two hours.

The celestial shot of the summit glows a little less, as I try to envision the cold, still, dark forms of human beings, all unable to alleviate the suffering of their situation, where telling the climber ahead to "hurry up" serves no purpose when just putting one foot in front of the other is excruciating. And so they stand, at the same altitude as the flight path of an intercontinental jet, but this is not some runway to the stars; they wait in a death trap. To get this far, all the one-hundred-and-fifty odd climbers will have had to pass three bodies left in the past week, still clipped into the line but frozen solid. One of these bodies belongs to a 33-year-old Canadian woman who died six days earlier. Shriya Shah-Klorfine reached the summit on 19 May after spending nearly a day in the Death Zone, waiting her turn to summit, running out of oxygen a few hours into her descent, succumbing to the numbing extremes of the mountain.

I reflect on Shah's Mount Everest quest: the Canadian media have been all over her story as both a cautionary tale and a study of personal determination. Shah was born in Nepal, in the shadow of Everest, and had nurtured, secretly, a desire to return to the land of her birth and climb the mountain. When she announced her intentions to her

<sup>&</sup>lt;sup>97</sup> "Everest: Into the Death Zone" *The Fifth Estate*. CBC Television. 14 Sept 2012. Web.

family and friends they were dumbfounded. "She never even liked walking," a cousin remarked. 98 Why would she want to climb a mountain? Where did this sudden obsession come from? Gradually they came to accept her goal, as she trained herself, climbing indoor rock walls at Toronto gyms and hiking in rural Ontario, "not known," as CBC journalist remarked, "for its mountainous terrain." She was, in the words of a friend, "A force of nature." Who better then to take on a mountain itself a force of nature?

What Shah lacked in experience she made up for in determination. "I can do it," she told everyone. Yet, despite her great confidence, she lacked judgment in choosing a guide/outfitter to take her up the mountain. She chose a "start-up" company, one with zero experience on Everest, one that had never taken a single client to the mountain. Still, her money was generous, and they assured her that they could teach her everything she needed to learn–from putting on crampons to navigating across ice ladders.

Compounding this lethal combination of inexperience was the mountain itself: the weather that May was especially awful and Everest was plagued with avalanches and collapsing seracs. The adverse conditions shortened the climbing window down to a couple of weeks—an insufficient number of climbing days to accommodate the hundreds of climbers.

Yet, against all the odds, at 2:30 p.m. on 19 May 2012, Shriya Shah-Klorfine did what she said she could. She stood on the summit, unfurling a Canadian flag. "At this moment, "recalled journalist Bob McKeown, "no one on Earth stood closer to the sun." <sup>101</sup> However, that sudden adrenaline rush that had propelled her to the top quickly evaporated beneath the sun's cold blaze. She was already past the point of no return; her guides knew it, and perhaps she did too.

<sup>98</sup> Ibid. Web.

<sup>99</sup> Ibid. Web.

<sup>100</sup> Ibid. Web.

<sup>101</sup> Ibid. Web.

Patience on Everest is "a valuable and hard-earned skill," says Everest veteran Ed Viesturs. On the day Shah summited many climbers turned around, including the highly experienced Conrad Anker, the man who had discovered the body of legendary climber George Mallory in 1999. "If it's your first trip," Viesturs says, "you feel like it's your only chance." Shah had rebuffed all efforts to turn her around, insisting, "I am going to the top." 104

Her husband allows that his wife was "searching for something on Mount Everest." When she returned, she would "always have that notch in her belt." Everest, he reflects, is "something that everyone relates to. ... There was substance to her determination." <sup>105</sup>

In the early hours of 25 May, Mark Jenkins, a climber and writer for National Geographic gazed up from his Camp 4 tent to the very scene of that luminous photograph that had so entranced me on the National Geographic website. He saw "pinpoints of light, all in a vertical line going straight into the stars." He, and his teammates soon join those pinpoints, passing the body of Shriya Shah-Klorfine both ways. Returning to his summit camp later that day he radioed down his success. "We did it" is the caption for Dispatch #54. Yet, in the breathless recording of his triumph he seems unsure of what he has done:

None of us gets more than a few minutes on the summit. The irony and absurdity of which, I admit, we are all fully aware. Climbing Mount Everest makes absolutely no sense at all. Why do we do it? Well, we all need some deep sleep before we can answer that. Assuming we ever can. 108

Than, Ker. "Everest Climb Successful, Despite Crowds, Unrelenting Winds." *National Geographic Magazine*. May 26, 2012. Web. 10 Mar. 2013.

<sup>103</sup> Ibid. Web.

<sup>&</sup>lt;sup>104</sup> "Everest: Into the Death Zone" *The Fifth Estate*. Web.

<sup>105</sup> Ibid. Web.

This photo, "Everest Night Climbers" is by Cory Richards, one of Jenkins' teammates. It inspired my illustration on page 42.

Jenkins, Mark. "Field Test: On Everest" Dispatch #54. National Geographic Magazine. 25 May 2012. Web.

<sup>108</sup> Ibid.

## "X" Marks the Spot

We were not kept waiting for the supreme effects; the curtain was withdrawn. Rising from the bright mists Everest above us was immanent, vast, incalculable—no fleeting apparition of elusive dream-form; nothing could have been more set and permanent, steadfast like Keat's star, 'in long splendour hung aloft the night,' a watcher of all nights, diffusing, it seemed universally, an exalted radiance.

George Leigh Mallory 109

How did the climbing of Mount Everest come to be such an obsession for so many? The history of its discovery is worth revisiting as it helps to explain how the mountain became such a force in the minds and hearts of so many.

In the mid-nineteenth century, one in four people lived as subjects of the British Empire, a great many of them in India. Colonial India was frequently described as the brightest 'jewel' in Queen Victoria's imperial crown. How did England, such a small island nation in the North Atlantic, keep such a jewel burnished? There are many reasons, including military might and a mastery of psychological subjugation. However, control, or rather the illusion of control, was achieved in a large part, due to the British ability to draw really good maps. Scholar and explorer Wade Davis explains:

India was itself a British invention, an imagined place defined by the everchanging and expanding boundaries of political and commercial interests, which in turn, were woven into reality by the mathematicians and technicians of the Survey of India. Maps were the key to the very notion of India. They codified into two dimensions the geography and cultural features of a subcontinent, even as they created the rationale for Occupation. India the imagined landscape became concrete and meaningful when reduced to a map sheet.<sup>110</sup>

Starting in 1806, the Survey of India sent out small armies of men, hauling giant 500 kilogram theodolites across the subcontinent to take angle readings, which then were decoded through trigonometry to give accurate height, depth, and distance to topographic features.

. .

Davis, Wade. Into the Silence. New York: Knopf, 2011. p. 242.

<sup>&</sup>lt;sup>110</sup> Davis, Wade. p. 43.

In 1854, the brilliant Indian mathematician Radhanath Sikhdar crunched the numbers to discover that Peak XV, across the Darjeeling border in Tibet, was 29,002 feet high (8,839 metres). Sikhdar was very slightly off, by 33 feet, but a remarkable calculation when atmospheric refraction and distance are taken into account. He had discovered, on paper, the highest point on earth. I draw attention to this because Everest is not yet a concrete place, it is just a number, an "x" on a map. Save for a few men in the original survey party, who had taken readings of a rather non-descript peak mostly hidden behind a closer and thus more physically impressive range of mountains, Everest, for the British, was sight unseen. Everest's existence was not grounded in any kind of real experience. Yet, knowledge of its existence alone—this two-dimensional "x"—was sufficient to light a fire in the British imagination.

The Himalayas lay in the domains of Nepal and Tibet, both hostile to British interests. They resisted any attempts to be sucked into the pink-coloured bits demarking the Empire on World Maps. The British secretly agonized over the Himalayas, over their mystery and what lay beyond. How maddening to discover, from their survey results, that the highest mountain in the world was out of their reach. Despite Peak XV being beyond their realm, they named it "Everest" after the first chairman of the Survey. Naming something implies a sense of ownership.

The British turned their attention to exploring their new obsession. However, it would take decades of diplomatic arm wringing and finally, in 1904, an armed march into Lhasa to forcibly open up channels of communication. <sup>111</sup> In 1919, Tibet acquiesced, granting permission for a reconnaissance team to go to the mountain.

By then, the world was a very different place. The brutality and carnage of the Great War left the English psyche deeply traumatized. Moreover, the Empire was starting to unravel. The quest for Everest became both an act of solace and an exercise in morale rehabilitation. Furthermore, Britain had lost the race to both poles—the North

This march–more military invasion–was led by then Captain Francis Younghusband (pre RGS). The Tibetans were so easily slaughtered by the superior British weaponry that a British correspondent described the battle at Guru as "the butchering of thousands of helpless and defenseless natives a manner most repulsive to any man who is a man." Davis, Wade. p. 58.

Pole to the Americans in 1910, and the South Pole to the Norwegians in 1911. Everest was the "Third Pole," and having been denied the other two, the honour and glory of reaching this one first became imperative.

Thus, Everest, entered the British imagination in feverish, mythic proportions, as a noble and necessary challenge. In 1919, Francis Younghusband took over the helm of the Royal Geographic Society and made it his mission to send a man to the top of the world. In his widely published inaugural address to the Society he explained his motivation:

The accomplishment of such a feat will elevate the human spirit. It will give men a feeling that we are really getting the upper hand on the Earth, that we are acquiring a true mastery of our surroundings...If man stands on Earth's highest summit he will have an increased pride and confidence in himself and in his struggle for ascendancy over matter. This is the incalculable good which the ascent of Mount Everest will confer. 112

In 1921, a nine-man team, consisting mostly of shell-shocked Great War survivors, assembled in Darjeeling to begin the five-week trek to the foot of Everest. Among the men was George Leigh Mallory, a veteran of the Somme, and considered to be the greatest climber of his generation. He had honed his skills in the Alps, successfully climbing the highest European peak, Mont Blanc.

Mallory had a reputation for risk-taking. He has extraordinary balance and seemed immune to the dangers of thin ledges at great heights. "The reassurance of a rope never meant anything to Mallory," noted his climbing friend Geoffrey Winthrop Young. "[He] was a sure footed and as agile in recovery as the proverbial chamois." 113

Mallory was also known for his forgetfulness and inability to pay attention to details. "He is a great dear but forgets his boots on all occasions," 114 was the

<sup>&</sup>lt;sup>112</sup> Davis, Wade. p.110.

Firstbrook, Peter. *Lost on Everest: The Search for Mallory and Irvine*. McClelland & Stewart, Toronto, 1999. p. 21.

<sup>&</sup>lt;sup>114</sup> Ibid. p. 23. George Bruce was in command of the 1924 Everest Expedition.

assessment of General George Bruce, 115 which is perhaps why, despite his exceptional climbing abilities, people were wary of trusting him with the position of "climbing leader."

A psychologist would no doubt point to Mallory's "character flaws" as being a result of war trauma. Mallory had seen lots and lots of death—many of his friends and army colleagues slaughtered before his eyes. He had been invalided out of the trench hell when an old climbing injury—not a war wound—flared up. He must have had "survivor's guilt." If he was immune to risk, perhaps it was because he had come to accept life as sometimes being very short, and if he was "scatterbrained," perhaps it was because he couldn't tolerate the idiotic meaninglessness of polishing buttons or tidying bedrolls as British military discipline dictated.

The nine men that set out from Darjeeling were practically giddy with excitement. As Everest veteran Eric Shipton describes, "Imagine the thrill of setting out to find the highest mountain in the world." However, the trek was gruelling; the expedition doctor died on route, and two others turned back due to health problems. The entire team was unprepared and ill equipped for the extreme cold and the thin air environment of Everest. Wade Davis writes, "They simply had no reference points in their experience for mountains of such scale. No one did. Heading for the summit of Everest in 1921 was as exotic as heading for the surface of the moon." 117

This first expedition was more of a reconnaissance mission than anything else. "These were early days on Everest," Peter Firstbrook points out, "and an understanding of the physiology and the limits of endurance at high altitudes was virtually non-existent. The climbers knew they had underestimated the mountain." However, gazing up at the Northeast ridge, Mallory found the "doorway" to the mountain which would later prove to be the key to the summit; Mallory wrote to his wife, "Suffice to say [Everest] has the most stupendous ridges and appalling precipices that I have ever seen and all the talk of an easy snow slope is a myth." He was impressed; the mountain did not

George Bruce lead of the 1924 Expedition; he was not one of the climbers.

Shipton, Eric. *The True Book About Everest*, London: Frederick Muller, 1955. p.19.

<sup>&</sup>lt;sup>117</sup> Davis, Wade. p. 242

<sup>&</sup>lt;sup>118</sup> Firstbrook, Peter. p. 102.

<sup>&</sup>lt;sup>119</sup> Davis, Wade. p. 263.

disappoint. He was also philosophic of their first attempt. "We must remember, he wrote, "that the highest of mountains is capable of severity, a severity so awful and so fatal that the wiser sort of men do well to think and tremble even on the threshold of their high endeavor." The British team mentally mapped out an approach to the summit, laying groundwork for another expedition the following year.

The second expedition of 1922 was a mixed success. Upon reaching the Rongbuk Valley, the men were summoned to an audience with the Lama of the Rongbuk Monastery, Dzatrul Rinpoche, who expressed his concerns about their motivations for such a cold, dangerous climb, "with nothing useful to be done save the practice of the dharma." The British assured him the climb was a pilgrimage, the highest point on earth being "closest to heaven;" however, this explanation may not have reassured the lama, Buddhists having no concept of "heaven." 122

The 1922 expedition also fell short of its objective. It is, however, noteworthy for two reasons. Firstly, the team pioneered the use of bottled oxygen, a recent innovation intended to aid Royal Air Force pilots. Mallory objected to its use as "unsporting;" he argued "the use of 'English air' offended his romantic notion of the purity of man's struggle against a mountain." However after the comparative analysis of two ascents, one "with" and one "without" the bottled gas, he reluctantly came to believe that the summit was only attainable "with." 124

Secondly, this expedition recorded the first fatalities on Mount Everest: seven Shepas aiding the British expedition lost their lives in an avalanche.

The British set out again in 1924, and it is this third expedition that has become the stuff of legends, inspiring much of the fanaticism and obsession that still holds true today. Mallory himself was so possessed with "summit fever" that his teammates

<sup>&</sup>lt;sup>120</sup> Ibid. p. 371.

<sup>&</sup>lt;sup>121</sup> Ibid p. 405.

<sup>&</sup>lt;sup>122</sup> Ibid. p. 405.

Firstbrook, Peter. p. 94.

Mallory and Somerville, climbing without oxygen ascended from Advanced Base Camp to 8,120 metres in fourteen and three-quarter hours. Finch and Bruce ascended from the same start to 8,320 metres in twelve and one-half hours.

deemed him to be mentally ill. Mallory, not unlike Ernest Shackleton returning from his Antarctic ordeal, found himself unable to integrate back into English society. Despite a happy marriage and three small children, he couldn't settle or resume a teaching career; the mountain had taken over his life. Mallory also, like Shackleton, was in chronic financial distress, and the year previous to this third expedition saw him out on the lecture circuit, trying to talk up his adventure and raise money to resume his quest. It was at a speaking engagement in Boston that he uttered his now immortal retort to a persistent journalist's query: Why do you want to climb Mount Everest? *Because it is there*.

"Mallory knows he is leading a forlorn hope," was the assessment of teammate Edward Norton, when on the morning of 6 June, Mallory and his climbing companion Andrew "Sandy" Irvine 126 left their high altitude camp for a push to the summit. They were spotted by teammate Noel Odell through binoculars near the "Second Step" at around 8,000 metres, within striking distance of the summit. Then fog rolled in, Odell lost sight, and the two men were never seen again.

Mallory was intent on the summit no matter what. He was incredibly driven; he wrote to his friend Tom Longstaff shortly before he set off: "We're going to sail to the top this time, and God with us, or stamp to the top with our teeth in the wind." And to his wife he wrote, "I can't see myself coming down defeated." He told her that the "victory telegram" would precede his letter, and that it would not mention names: "How you will hope that I was one of the conquerors! And I don't think you will be disappointed." Peter Firstbrook notes how, "the mountain consumed Mallory, and it is this exceptional state of mind that can ultimately carry a climber far beyond the limits of human resource

<sup>&</sup>lt;sup>125</sup> Firstbrook, Peter. p. 130.

Many have queried why Mallory chose Irvine as his climbing partner that day. Irvine was just twenty-four years of age, and not an experienced climber. However, Irvine was exceptionally fit, and also technically adept—he could fix the oxygen equipment that kept breaking down. Irvine would also defer to Mallory's decisions.

<sup>&</sup>lt;sup>127</sup> Davis, Wade. p. 495.

<sup>&</sup>lt;sup>128</sup> Ibid. p. 497.

and endurance ... Such relentless tenacity in a climber should never be underestimated; in Mallory's case it could have taken him to the summit." <sup>129</sup>

There was a lot riding on Mallory's victory, not just his own personal ambitions, but also those of England as a nation. Not unlike Robert Scott having "lost" the South Pole race, had Mallory returned to England after "failing" on Everest, life would have been unbearable. In a sense, he committed "suicide by Everest," and it is just tragic that he had to take Irvine with him. News of their deaths was met back in England with a national outpouring of grief not seen since the deaths of Scott and his companions in Antarctica.

Mallory and Irvine were not the first to die on Everest, but were the first to die near the summit, and herein lies the real mystery: did they succeed? To this day, this question is debated, while the "ghosts" of the two men haunt the Northern route, as apparitions and voices presenting themselves to the chemically altered brains of hypoxic climbers struggling in their footsteps.<sup>130</sup>

Because Mallory's death is cloaked in mystery, the British could not let go. Their obsession with Everest proved contagious; other nations began to express interest in the world's highest mountain and climbing expeditions began in earnest. In the 1930's, the British sent up three more expeditions, all unsuccessful. The Second World War put an end to climbs in the 40's, and China's annexation of Tibet closed the Northern route in 1950. For the next three decades until China lessened restrictions, all expeditions were based in Nepal, climbing the Southeast route.

In 1953, the British launched a military style assault on the mountain: lots of gear, lots of manpower, establishing a series of well-equipped camps at increasing altitudes up the mountain. It was from Camp 6 on the morning of 29 May that New Zealander

Firstbrook, Peter. p. 196.

Reinhold Messner chose to climb the Northern route for his solo summit partly in hope of finding Mallory and Irvine: "The First and Second Step now lie above me. There, Mallory and Irvine live on. The fate of the pair is now free from all speculation and hopes. It is alive in me." Messner, p. 233. As he neared the Second Step he heard voices: "I jump frequently ... perhaps it is Mallory and Irvine?" Messner. p. 236. I note that Messer climbed without bottled oxygen, and had a vivid "Third Man" experience just prior to hearing these voices.

Edmund Hillary and Nepali Tenzing Norgay finally stood on top of the world. Hillary, returning to Camp 6 greeted him teammate George Lowe with the now infamous confirmation of their achievement: "Well, George, we knocked the bastard off." <sup>131</sup>

#### Sacred or Desecrated?

Everest? Don't forget it's really just a big pile of rocks.

David Breashears 132

The six decades following Hillary and Norgay's climb have seen great changes on the mountain. Increasingly, climbing Everest has become a commercial venture. It is no longer solely the domain of the elite mountaineer; now anyone with good fitness and sufficient cash can take a crack at the summit.

Everest is undeniably the world's most famous peak, and despite its relative remoteness on the Nepali/Tibetan border, demand for access has led to the construction of new roads, bridges, hotels and helipads to enable a steady supply of tourists, pilgrims and climbers. Thin places maintain a certain elusive "thinness" in seclusion. Yet, every climbing season, Base Camp at the foot of Everest on the Nepali side, turns into a huge tent city. Expeditions from around the globe jostle and queue for position on the mountain and the "windows" of good weather. Many climbing pioneers mourn the loss of Everest's sublimity to a "theme park" atmosphere. When in 1993, after 40 climbers reached the summit in one day, Hillary quipped: "They might as well have provided a bus." 133

Hillary is not the only one to lament the popularity and subsequent exploitation of his beloved mountain. No more in pristine isolation, Everest is acquiring infamy for its alarming collection of refuse. Fifty years of climbing have littered Everest with expedition garbage, creating both an eyesore and an environmental concern. Near the top, where every gram of extra weight can affect a climbers' mobility, unneeded items from spent

Campbell, Murray. "Everest." *The Globe and Mail.* 24 May 2003. Globe Travel: T1.

Breashears, David. *High Exposure*. New York: Simon & Schuster, 2000.

Fickling, David. "Portrait: Sir Edmund Hillary." *The Guardian News*. 13 Mar. 2003. Web. 15 Apr. 2012.

oxygen tanks to tent poles are discarded, along with plastic food containers, medicines, candy wrappers and human waste. To be fair, in recent years, awareness of the human toll on the mountain has increased, and although tons of garbage still foul the mountain, great efforts have been taken to clean it up. Climbers, also, are now conscious of their individual impact on the mountain.

Garbage aside, Everest, like Antarctica, is beleaguered with another far more damaging human-created affliction. The Himalayan glaciers are the repositories for fresh water that feeds some of the world's greatest rivers. In 2007, The United Nation Climate Change panel warned that global warming is melting these great glaciers at an alarming pace, and that they are in danger of disappearing altogether by the year 2035.

In winter, wind rakes bare Everest's summit; during the monsoon season, it is thick with snow. It seems a great indignity that through global warming Everest will lose its snowy mantle, and that an already dangerous mountain should become more so due to climate change. Climbers are well aware of avalanche hazards, but no climber expects to be swept away by an "outburst flood" of glacial meltwater.

Everest is famous for its glaciers, especially the hallucinatory beauty of the Khumbu Icefall, a jumbled collection of seracs and gigantic ice blocks that tumble down from the mountain's southeast face. This icefall is treacherous; four members of the first Canadian expedition in 1982 lost their lives here before even establishing their first camp up the mountain. Recent warming has destabilized the ice boulders so that they now roll and crush together, buckling the aluminum ladders strung between them that the climbers must use to traverse across.

Global warming is also creating the bizarre phenomenon of high altitude meltwater lakes. In 2010, British environmentalist and endurance swimmer Lewis Gordon Pugh swam one-kilometre across a meltwater lake high on the mountain, risking his life to draw attention to this phenomenon.

Between all the people and the melting, Everest is starting to exude fragility at odds with its formidable, unforgiving reputation. Still, Everest remains a very dangerous place. Technological advances in climbing gear can mitigate the extreme cold; bottled oxygen can help in the thin air; fixed ropes and ladders aid the climb, but the mountain

still kills. Every year life is lost. The odds are, consistently, that one in ten climbers will die. Of course, the risk of death is part of the attraction, and it's a strange, unearthly place to die on the roof of the world. Those who succumb in the "Death Zone," above 8,000 metres are often irretrievable. The logistics of recovering bodies from this altitude—where every breath, every footstep can be an agony—are near impossible. Bodies lie where they fall like aliens cast down from deep space, while the living, with hypoxic detachment, navigate around these frozen forms in the world's most exposed, high altitude graveyard. Elite climber and Everest veteran David Breshears writes, "Wherever they lie, the dead mutely testify to the sinister ease with which a day on Everest can come undone." 134

There are some two hundred bodies on Everest, most above Advanced Base Camp at 6,400 metres. Some are lucky to get a tarp burial, but most lie uncovered, looking in Breashears words, "like the ancient iceman discovered in an Italian mountain pass." Some bodies are more fortunate. Traditionally, all expeditions climbing the North Col route on the Tibetan side kept an eye out for the bodies of George Mallory and Sandy Irvine. Mallory's body was found in 1999, and images of the beautifully preserved, porcelain white skin on his back were published around the world. His body was buried with loose scree and an Anglican prayer service read over his remains. Most of the dead rarely receive such attention. Graveyards are hallowed ground, but not on Everest.

Climbers that fall into glaciers do have a chance to return to earth. Due to global warming, the glaciers are transporting the dead with increasing speed, the Khumbu glacier at a rate of thirty-five metres a year. Filmmaker Diane Whelan chose to publicize her Everest film, "40 days at Base Camp," with an image of a desiccated hand emerging from ice. During a question and answer session that followed a screening of her film in

Breashears, David. p. 24.

<sup>&</sup>lt;sup>135</sup> Ibid. p. 24

American climber Conrad Anker discovered Mallory's body in 1999. A Chinese climber had sighted it previously; he was killed in an avalanche before he could relay any details. Anker was struck by the paucity of Mallory's clothing, just 6mm in thickness, consisting of a Burberry "Shackleton" jacket, a woolen cardigan, and underclothes of silk and cotton. Ankers' own high tech thermal layering and down suit was approx.10 cm thick. Mallory was wearing hobnail boots.

Vancouver in the fall of 2011, an audience member admonished her for choosing such a sensational image. She replied that it wasn't sensationalism so much as reality. She had shown only part of one body; but, in fact, there were four bodies at Base Camp the year she filmed, all carried down by melting glaciers, slowly disentembing from ice. All the various climbing expeditions camped and went about their preparations among them.

Despite the loss of life, environmental degradation, garbage, and commercialism, Everest continues to fascinate. The mountain has a magnetic allure that draws people across the globe to worship, to obsess, to spend vast sums and resources, to knowingly take great risks, all, just to touch the peak. Everest is a modern pilgrimage destination imbued with a fierce kind of secular sanctity that gives it an enduring appeal. Perhaps the question should not be is Everest a sacred or desecrated place, but rather, can it be both at the same time?

It is not Everest, the physical mountain that is in play here, rather Everest the idea, just like the "x" on the early British maps. The mountain exists in the imagination of so many–albeit, mostly in the West–that even if the literal mountain is not treated as sacred space, the Everest-of-the-Mind is an evocation of the sacred. Everest is synonymous with the impossible achievement and supreme challenge.

People climb Everest for countless reasons. Tyrolean climbing legend Reinhold Messner ascended Everest solo in 1980; he explains his motivation thus:

On our battered planet, there is scarcely space left in which we can forget our industrial society and, undisturbed, put to the test our innate powers and abilities. In us all the longing remains for the primitive condition in which we can match ourselves against Nature, have the chance to have it out with her and thereby discover ourselves. And this is the real reason that for me there is no more fascinating challenge than this: one man, one mountain. 137

Messner is the modern prototype for the Twentieth century version of the "extreme athlete," seeking a kind of transcendence through punishing physical challenges of which Everest was a pure expression. Many climbers take up his "Man

Messner, Reinhold. *The Crystal Horizon*. Trans. Jill Neate & Audrey Salkeld. Ramsbury: Crowood Press, 1989. p. 40-41.

against Nature" contest on Everest because it is such a clear, elemental quest. For some, Everest is a "Life or Death" challenge. Polish mountaineer Voytek Kurtyka reveled in, "the classical opposition of the urge for self-preservation and the need to test mortality." <sup>138</sup>

Other climbers seek the challenge of Everest as a gesture of ennoblement, dedicating their climbs to people and personal causes they value. The motivation for Canadian climber Dan Culver's 2007 Everest ascent was to draw awareness to the Khutzeymateen and Tsitika Valleys in British Columbia. He added banners representing these two beautiful but threatened valleys to the streams of prayer flags blowing from the expedition stupas at Base Camp, and he carried and photographed himself holding them atop the mountain.

Everest ennobles even if only by association. In recognition of an Everest challenge, individuals, organizations, and corporations will go out of their way to sponsor an expedition. American climber Doug Hansen—who would die on the mountain during the tragic 1996 climbing season chronicled in Jon Krakauer's bestseller **Into Thin Air**—had an elementary school in Washington State behind him. He spent his spare time at Base Camp writing individual postcards to each child. Krakauer noted Hansen's words of inspiration to a child called Vanessa: "Some people have big dreams, some people have small dreams. Whatever you have, the important thing is that you never stop dreaming." 139

An expedition to Everest is rarely taken lightly, and there is always a reason to climb, not just George Mallory's because it is there. "Expeditions to Everest," Edwin Bernbaum writes, "stand out as symbols of supreme efforts; of attempts by men and women to overcome their limitations and attain transcendent goals." Unlike journeying to the moon, which requires a vehicle and considerable technology, Everest is an adventure that can be accomplished through one's own physical efforts. Journeying to

<sup>&</sup>lt;sup>38</sup> McDonald, Bernadette. *Freedom Climbers*. Victoria: Rocky Mountain Books, 2011. p.144.

Krakauer, Jon. Into Thin Air. New York: Villard, 1997. p. 69.

<sup>&</sup>lt;sup>140</sup> Bernbaum, Edwin. p.xiii.

the top of Everest is the closest we can come to leaving the earthly boundaries of our home planet by our own two feet.

Great quests are accomplished on more than a just a physical level. There is a spiritual component to climbing Everest, although it operates on a personal, individual level. However, in terms of religious appeal, Everest is lacking. In the great Himalayan chain to which Everest belongs, the honour of "holiest" peak is given to Mount Kailash. It is the ultimate sacred mountain for half a billion people: revered by the Bön, Buddhists, Sikhs, Jains, and Hindus in Tibet, Nepal, and India. Kailash is the home of Lord Shiva and his consort Parvati; it is where the Tibetan yogi Milarepa, the champion of Tantric Buddhism, challenged his adversary Naro Bön-chung. The adventures of gods, saints, and bodhisattvas are woven into the collected snows of Kailash. Moreover, Kailash is near the source of four major life-giving rivers including the sacred Ganges, which further enhances its holiness. It doesn't hurt that Kailash is an unequivocally beautiful mountain: a symmetrical white dome with a remarkable gulley of "steps" ascending its south face, and rising, with unimpeded sight lines, from the Tibetan plateau.

In the great Himalayan pantheon of sacred mountains Everest barely merits a mention. It's Tibetan name, *Chomolungma* means "Lady of the Wind." However, in the West, *Chomolungma* is translated as "Mother Goddess of the World." This is an important distinction. Everest has little religious value to the valley peoples who live near its flanks. Their sacred peak is Mount Khumbila, home to local deity and central to the Khumba Valley and the main villages. For the Tibetan and Sherpa communities, Khumbila is far too sacred to climb. In Nepal, Everest is known as *Sagarmatha*: "Forehead of the Sky." This is a modern name, created by the Nepali government under pressure from outside—Western—interests to name a mountain for which they had previously attached little importance.

Everest's visual appeal lies in its sheer awfulness. Everest is an angular, jagged colossus, its summit often obscured by storms whipped by hurricane force winds. What it lacks in beauty and symmetry it makes up for in its imposing presentation. Unlike Kailash, it is difficult to see Everest in its entirety from a distance. The foot of the

<sup>&</sup>lt;sup>141</sup> Ibid. p. 7, Note: *Chomo/jomo* =lady, *lung/lungma* = wind

Rongbuk valley on the Tibetan side offers one of the few good sight lines, and it was here Mallory recorded his first impression of the peak, that of "a prodigious, white fang, excrescent from the jaw of the world." <sup>142</sup>

Seeing Everest from below and experiencing Everest underfoot are entirely different things. Peter Firstbrook notes that, "from a distance, Everest looks like a giant monolith of granite; in reality, it is a crumbling ruin of rotten limestone." One of the great ironies of Everest is that its fragmented summit was once a seabed. Fossils confirm its marine origins, the result of two massive tectonic plates slamming together 60 million years ago, creating a 2,400 kilometre-long collision of mountains. The Himalayas are the youngest mountains on Earth, and still growing. The plates still push up; and, despite its disintegrating summit, Everest grows two centimetres a year.

The Himalayas, including the Karakoram and Hindu Kush ranges, consist of thousands of peaks, but are most famous as the home of the "Eight-Thousanders," the fourteen tallest mountains on Earth, all above 8,000 metres, with Everest topping out at 8,848 metres. Does height matter? Yes, a lot, as Bernbaum explains:

[Everest's] importance as a sacred peak derives primarily from its supreme height, which has made it a symbol of transcendent attainment for foreigners, who dwell far from the mountain itself. 144

#### The Mountain of "Firsts"

And up on the mountain we began our ant-like labours. What is a man on an ice-world up in the sky? At that altitude he is no more than a will straining in a spent machine.

Gaston Rébuffat<sup>145</sup>

We humans—especially those of us who dwell far from the mountain—have an obsession with the Olympian Tripartite motto of greatness: Faster, Higher, Stronger. We value the

<sup>&</sup>lt;sup>142</sup> Shipton, Eric. p. 21

<sup>&</sup>lt;sup>143</sup> Firstbrook, Peter. p. 185

<sup>&</sup>lt;sup>144</sup> Bernbaum, Edwin. p. 7.

Rébuffat, Gaston. *Mont Blanc to Everest*. trans. Geoffry Sutton. London: Thames and Hudson, 1956. p. 83. Mentioned by Bernbaum p. xv-xvi. Rébuffat was on the French expedition, along with Maurice Herzog, that ascended Annapurna in 1950.

superlatives of achievement of which Everest is the epitome. These Olympian values transcend the sport of mountaineering to reach into the hearts of anyone who has ever yearned to achieve a "life goal," transcendent or not.

Everest is the mountain of "firsts." After Hillary and Norgay, came many more "firsts." They can be classified by nationality, gender, route taken, season, endurance, and level of physical difficulty. After the initial round of "firsts," more divisional "firsts" were created with increasingly selective increments. It is impossible to be the first man, then how about the first man from Canada; and if that "first" is taken, then how about the first man from British Columbia; and if that "first" is already claimed, then how about the first from Vancouver, and so on. I note how the Canadian press latched on to Shryia Shah-Klorfine as the "First South-Asian Canadian woman" to take up the challenge. It is possible to create a "first" for just about anybody who climbs Everest, because, after all, nobody remembers the "seconds." 146

Beyond merely climbing the mountain, Everest has become the testing ground for those seeking to prove themselves beyond their physical limitations, such as blindness and loss of limbs. Thus amputees and the blind, and those with incurable physically debilitating diseases, are enabled to the top by small armies of Sherpas.

Climbing Everest has also taken a more disturbing turn, whereby climbers seek to establish new records in such things as age, speed (fastest ascent), and endurance (time spent on summit). In 2005, a 63 year-old Ottawa professor died on Everest trying to break the record for the "oldest Canadian." In 2011, an 82 year-old former foreign minister from Nepal died while trying to break the current "oldest person" record, then held by a 77 year-old Japanese. In 2010, a 13 year-old American boy became the youngest person to summit the mountain. This event was widely criticized in the media around the world due to the risks associated with hypoxia on the child's still growing brain.

I note how Buzz Aldrin's father lobbied hard to have his son on equal footing as Neil Armstrong, as the "first men on the moon." He used the precedent of Hillary and Norgay who refused to reveal which one had actually taken the first step on top and took the honour together.

Everest has also become the staging ground for audacious new sporting challenges. In recent years attempts have been made to descend the mountain on skis and by paragliders. It would seem that in the race to break new records and create novel performances, that spiritual goals, and even the "Man against Nature" challenge of the early mountaineers is losing ground to those seeking to make personal history. Which in itself may be fine: these small personal histories rarely achieve any kind of international attention—except when things go wrong. It's no doubt that it was this parade of "firsts" that led Hillary—never one to mince words—to decry: "It's all bullshit of Everest these days."

Yet, this culture of "firsts" is not a new phenomenon. Reinhold Messner, himself a holder of many firsts on Everest (first to climb without bottled oxygen, first solo climb, first man to climb all fourteen "Eight-Thousanders") often received stinging criticism for his achievements. Upon returning triumphant from his solo ascent in 1980, the Munich newspaper "Quick" wrote:

What does it matter if Messner the fanatic climbs Everest or wherever, alone, in record time and without oxygen gear... This tremendously clever utiliser of the human body brings nothing back to the valley other than the enhancement of his own dubious fame, combined with some variable degree of monetary gain... To achieve something new this climbing giant must take risks and set up records which point the way to a terrible future. 148

What indeed is the future for Everest? Its appeal remains undiminished, and the parade of "firsts," and now anniversaries of "firsts," continued unabated. The curse of the novice, the thrill seeker, and the world record breaker, have many asking the Nepalese government to impose restrictions on just who and how many people can climb. However, in a country where Everest is a vital industry, this is economically unappealing.

The 2012 climbing season saw ten deaths in all; it was a bad season, but it also might just be the new norm. Journalist Grayson Shaffer, who witnessed the carnage from Base Camp, believes that from now on "every year, there will be a slow bloodletting

<sup>&</sup>lt;sup>147</sup> Fickling, David. Web.

<sup>&</sup>lt;sup>148</sup> Messner, Reinhold. p. 262.

of people who shouldn't be there but go anyway, who don't listen to reason, and who end up walking until they die." <sup>149</sup>

Do people really need to climb Everest? I ask his question from my position of armchair explorer, satisfied in my safe, virtual climbs. Everest fulfills my requirements for a quasi-numinous experience. But what of the many, for whom a climb in the imagination is not enough, who need the reality of the physical Thin Place. In the end, is standing on the top of Everest an illumination, a breathtaking moment of transcendence? Everest is indeed "breathtaking;" Messner became "nothing more than a single narrow gasping lung, floating over the mists and summits." Jon Krakauer felt very far away from transcendent attainment. He wrote of his 1996 summit experience:

I understood on some dim, detached level that the sweep of earth beneath my feet was a spectacular sight. I'd been fantasizing about this moment, and the release of emotion that would accompany it for many months. But now that I was finally here, actually standing on the summit of Mount Everest, I just couldn't summon the energy to care. <sup>151</sup>

Krakauer's reaction of disappointment is not uncommon. By the time the climber reaches the summit the twin demons of hypoxia and hypothermia are menacingly at hand. It would seem that if the climber is unable to rhapsodize about Everest at the moment of supreme achievement, it is because the acute physical demands at that very moment make poetry impossible. Moreover, the summit of Everest is often enveloped in cloud, so even if physical agonies are kept at bay, the climber may feel disheartened, denied the great visual reward.

For many, the real enjoyment of the achievement of Everest exists not on the summit but back at Base Camp where summit photos can be admired, emails sent, phone calls made, and blogs updated. I think back to Shyria Shah-Klorfine, and how she yearned to bask in the congratulatory glow of her accomplishment. In a way, she did have her moment: like most climbers these days, she kept a video diary and electronic blog. The video of her at the summit shows a jubilant young woman, resplendent in her

<sup>&</sup>lt;sup>149</sup> "Everest: Into the Death Zone" *The Fifth Estate*. Web.

Messner, Reinhold. p. 246.

<sup>151</sup> Krakauer, Jon. p. 5

red climbing suit and yellow boots, the red and white maple leaf flag curling around her body by the force of the wind. She doesn't look cold or hypoxic; she looks brilliant. If Everest had a gift for Shah it was that moment, one of pure sun, blue sky, and a crystal clear view. She savoured that moment for a full half an hour before turning around. Already the email in-boxes of her sleeping friends in Toronto were filling up with news of her success: she was standing at the top of the world; she did it, just like she said she would.

# Chapter 4.

# The Moon



Illustration 4. *The "Blue" Moon*. Watercolour.

## Once in a Blue Moon

Art thou pale for weariness
Of climbing heaven and gazing on the earth,
Wandering companionless
Among the stars that have a different birth,
And ever changing, like a joyless eye
That finds no object worth its constancy?
Percy Bysshe Shelley<sup>152</sup>

I was sure [the Moon] would be a hospitable host. It had been waiting for its first visitors for a long time.

Neil Armstrong 153

It is the 31<sup>st</sup> of August 2012, and a rare *blue moon* is climbing into the night after a day that saw the funeral of Neil Armstrong, the first man to walk on the moon. The media are full of tributes to Armstrong, and quick to suggest the serendipitous happenstance of this, the second full moon in a month, is the moon's own way of honouring its first human visitor.

It is early evening, and I am out walking with my teenage son trying to escape the humid Toronto heat. The moon rises above us, a brilliant gold ball, and we choose our route to keep its beauty within our sights. I turn to my kid and ask him why his generation seems to have zero resonance for what was for me such a seminal event of my childhood: the Apollo 11 moon landing, 20 July 1969. I recount my memory of watching—along with 600 million fellow earthlings—the grainy transmission, beamed through over 240,000 miles of space, of Armstrong descending the nine rungs of the Lunar Module ladder, and, of course, uttering one of the most famous lines ever spoken "That's one small step for man, one giant leap for mankind." Surely even my kid has heard this. It was such a strange, singular line of poetry from a man notoriously taciturn, and no doubt a huge relief to the American powers that be, that such a momentous occasion was sealed with such a line. Apollo 16's Charlie Duke confessed, had he been first, he's sure

Shelley, Percy Bysshe. "To the Moon" [fragment] as noted by Melvin Bragg "In Our Time newsletter: The Moon." *BBC.co.uk/blogs*. Nov 7, 2011. Web.

<sup>&</sup>lt;sup>153</sup> Nelson, Craig. *Rocket Men*. New York: Viking. 2009. p. 227.

Armstrong meant to say "That's one small step for a man..." but the "a" got lost in transmission.

he would have jumped up and down yelling, "Yahoo! Hey man, I'm here!" Apollo 12's Pete Conrad's first word on the moon was "Whoopee!" 156

The excitement was palpable, infectious. That Halloween everybody was an astronaut. That December, my elementary school teacher wheeled a television on a trolley into the classroom (TV in school!), so we could watch the Apollo 12 launch. A little over four months later, I remember curling up with my mother on our old cat-trashed sofa anxiously watching the newscasts as the Apollo 13 drama played out.

Those first Apollo missions unleashed a global wave of euphoria. They had the effect of uniting humanity behind a few brave men riding atop a ballistic missile into space. The effect was almost on a molecular level–people were buzzing with a kind of pride and wonder that surpassed national ambitions, boundaries and hostilities. Apollo 11's Michael Collins remembers the reaction: "People, instead of saying, 'Well, you Americans did it,' everywhere they were saying, 'we did it! We humankind, we the human race, we people did it!" Journalist and Space historian Craig Nelson sums up the reaction: "It was the most extraordinary thing anyone had seen in human memory: a revolutionary moment that seemed to bathe the world in a manifest sense of achievement in a future of unlimited potential." 158

This collective euphoria bathed the globe in Hope: affirmation that we, the human race, we the people of Earth, could achieve the impossible. We, the people of Earth, would end poverty, oppression, inequality, racism, and above all, war. All this high hope played out against the backdrop of the Cold War, with the memory of the Second World War still fresh. In the States, it was further cast against the spectre of Vietnam, both Kennedy assassinations, and that of Martin Luther King Jr.

President Richard Nixon picked up on this theme of unity and peace in a call Houston patched through to moon. "Because of what you have done," he told the

In the Shadow of the Moon. Dir. David Sington. DOX Productions, 2008. DVD. (Interviews with Apollo astronauts Aldrin, Collins, Duke, Gene Cernan, and others.)

<sup>&</sup>lt;sup>156</sup> Thimmesh, Catherine. *Team Apollo: How 400,000 People Landed Apollo 11 on the Moon*, New York: Houghton Mifflin, 2006. p. 77.

<sup>&</sup>lt;sup>157</sup> Nelson, Craig. p. 321.

<sup>&</sup>lt;sup>158</sup> Ibid. p. 275.

astronauts, "the heavens are now part of man's world, and as you talk to us from the Sea of Tranquility it inspires us to redouble our efforts to bring peace and tranquility to Earth. For one priceless moment, in the whole history of man, all the people on this earth are truly one." Werner von Braun, the brain behind the Saturn V rocket that propelled the men out of Earth orbit considered the moon landing "equal in importance to that moment in evolution when aquatic life came crawling up on land." Thus it would seem, on that summer day in 1969, the human race had turned an evolutionary corner and a wondrous future was in store all because men had walked on the moon.

How shocking then that this elation was so short lived, but we humans have proven ourselves to be shockingly short-sighted. Perhaps it was too daunting an idea to assume that such an event would elicit such profound change. And really, why would it? By the time Apollo 13 took flight the following April, our interest was already waning. Apollo missions had become seen to be routine, as if going to the moon could ever be routine! The major television networks decided not to broadcast an in-flight transmission from the astronauts of Apollo 13; their wives watched from Mission Control. Interest only re-ignited after an explosion crippled the Command Module, and Apollo 13 became an extraordinary saga of survival.

Although most of my generation can recall the names Armstrong, Aldrin, and Collins, few can remember the names of astronauts on subsequent missions, or even what they accomplished. For the record then, here are the bare stats: between 1968 and 1972, nine US spacecraft voyaged into lunar orbit. Six of those craft landed; twelve men walked on lunar soil. Only twelve men have ever had the opportunity to gaze back at planet Earth in it's entirely from the vantage of alien world. Those twelve men are old now and some have died, and no one has followed in their footsteps.

My son's ambivalence to Apollo is partly generational. Charlie Duke recalled how his own son, then five years old at the time of his own moonwalk, considered it to be "no big deal." Yet it was a big deal, a very big deal, and therefore how very depressing to

<sup>&</sup>lt;sup>159</sup> Ibid. p. 281.

<sup>&</sup>lt;sup>160</sup> Ibid. p. 85.

<sup>&</sup>lt;sup>161</sup> *In the Shadow of the Moon.* DVD. (Charlie Duke interview)

learn of a recent survey conducted in the States that found 27 percent of the eighteen-to-twenty-six-year-old demographic of young people express serious doubt that man ever went to the moon, and that a further ten percent indicate that it was indeed "highly unlikely." Perhaps this is not surprising in an age of CGI and hyper-realistic special effects that permeates the entertainment products of our consumer culture.

However, it is an even bigger deal when one considers the technology of the day. The Apollo 11 Command Module computer had the memory capacity of 36 kilobytes. That is less than a modern mobile phone or a pocket calculator. Both Armstrong and Lunar Module pilot Buzz Aldrin packed slide rules in case they needed to do their own sums. It astonishes then, what with the technological leaps of the past 40 years that humankind has not gone back to the moon. Many people lament this fact, but that perfect set of circumstances that coalesced to bring those missions to life has never again occurred. In words of Robert Godwin, "Apollo 11 was the result of an unprecedented symbiosis of political will and technological capacity." This symbiosis has proved impossible to repeat. Not that subsequent achievements in space have been lacking: Skylab, the Shuttle Programs, the Hubble telescope and recently the robotic rover *Curiosity* that is now roaming over Martian soil, have taken the place of lunar ambitions.

I ask my kid about *Curiosity*—is it discussed in science class, are kids interested? Another shrug and he says, "Well, I guess if it discovers aliens, people will be pretty stoked." I can't help but think that aliens is exactly what *Curiosity* is hoping to find, or at least life molecules—carbon, hydrogen, oxygen, nitrogen—although no one is under any illusion a living creature will greet the rover. But then, in 1969, NASA harboured no illusions of life on the moon. Still, they prepared just in case: one function of gold-plated helmet visors was to hide the astronauts' faces from alien gaze. <sup>164</sup> Not that all the

Nelson, Craig. p. 337. Dittmar Associates study, 2006. Note: this poll was taken after the 2001 Fox TV special "Conspiracy Theory: Did We Land on the Moon?"

Godwin, Robert. ed., *Apollo 11: The NASA Mission Reports, Vol. One.* Toronto: Apogee Books, 1999. p.4.

The main purpose of the gold visors was to filter the sun's UV rays. However, NASA was suspicious of "aliens" in the form of organic/bacterial material returning for the moon. I note the stringent decontamination procedures for moon rocks and the long quarantine of the astronauts to guard against any "moon bugs."

astronauts would have minded an alien encounter. In an interview with Space historian Andrew Chaikin, Apollo 13's Jim Lovell confessed:

I would have loved to, on Apollo 13, had I landed, to land and discover the remains of an old Martian spaceship, and the skeletons of some old Martians that didn't make it. Wouldn't that be great? I mean, if you brought back something that was entirely different, you know, some evidence of some other people *being* there before, or the remains of an old camp of some sort... <sup>165</sup>

In this spirit, the astronauts made sure to leave evidence of their visit behind. "Wanted to leave something of everything we had that was meaningful," explained Apollo 15's Dave Scott:

We left a bit of everything... flora, fauna, Bible, coins, flag, checklist. Can somebody reconstruct who we were? Yes. Because we consciously thought about that before we left.... It seemed to me that we should leave a trail. Leave a trail of who we were and what we were, for whomever someday." 166

I can't help but think that this "leaving a trail" is a vital component of the Thin Place. It is not just the discovery or the attainment of a Thin Place, but the mark left behind that is important. However, before leaving this trail, the Thin Place heroes reward their own efforts: snapping victory photos, raising flags, and pocketing rocks, whether on Everest, at the South Pole, or on the Moon, as proof of accomplishment. It is a basic compulsion of human nature to take a piece of the Thin Place home; I am guilty of this myself, pocketing shells, pebbles from meaningful places as touchstones.

After taking their piece, the Thin Place heroes reward the Place itself with "gifts." And it is with these gifts we constitute our trail, a measure of immortality, an "I was here" carved into rock. Some trails—more often as not the good ones—disappear. Everest has long since consumed that little piece of chocolate Tenzing Norgay buried at the summit—

Chaikin, Andrew with Victoria Kohl. Voices from the Moon. New York: Viking Studio, 2009. p. 174.

Ibid. p.192. Among items left by Apollo 11 were a set of miniature flags of all the U.N. nations—in part to offset the raising of the American flag so as not to be seen as "claiming" lunar territory for the United States. They also left a tiny disk containing microfilmed messages of goodwill from leaders of many nations.

an offering to the mountain gods. The moon, without atmosphere, erosion, or tectonic activity will not bury any secrets. Unless bombed by an meteorite, that small colour photo, encased in a clear plastic bag, of Charlie Duke, his wife and two kids, posed on the grass in their back garden is exactly where he left it. "This'll be there for a billion years. Somebody will go back and pick it up. Why not leave a story?" 167

# Of Moonlight and Light Bulbs

The glow of the moon is less a light than a darkness rendered visible...

Erazim Kohák<sup>168</sup>

In 2012, to commemorate the 40<sup>th</sup> anniversary of the famous "Blue Marble" <sup>169</sup> photograph taken by Apollo 17 coming back from the moon, NASA released a remarkable series of "Black Marble" photos of our planet. Composite images taken by the SUOMI satellite <sup>170</sup> these photos are all of the earth at night with any atmospheric interference such as clouds stripped off, revealing deep blue icecaps and deeper blue continents swimming in the inky-black of the oceans. The detail is astounding, and what is most startling are the displays of high concentrations of human population, visible as 'stars'–pinpoints of artificial light–that when viewed from satellite distance appear as constellations, the biggest star clusters being in Europe and along the eastern seaboard of the United States.

"Entertainment for astronauts," is how science journalist Bob McDonald characterizes these stars. He notes how "useful light shines down to our feet... light that shines up is thrown away." <sup>171</sup> This "entertainment" then is a display of waste.

<sup>&</sup>lt;sup>167</sup> Ibid. p. 192. (Dave Scott)

Kohák, Erazim. *The Embers and the Stars*. Chicago: Univ. of Chicago Press. 1984. p. 31.

The Blue Marble is one of the most famous and recognized photos of the Earth. It shows the planet as a shining blue sphere with white swirls of clouds reminiscent off a child's glass marble.

The National Polar-orbiting Operational Environmental Satellite is an earth-observing satellite launched 28 Oct. 2011. It is designed to track weather systems and climate change. It was renamed SUOMI to honour Verner E. Suomi, a meteorologist considered to be the father of satellite meteorology.

McDonald, Bob. "The Black Marble: Humanity at night." CBC News, Technology and Science, Quirks and Quarks Blog. Dec 7, 2012. Web. Jan. 3 2013.

These Black Marble images are undeniably beautiful, but disquieting at the same time. They represent a unique capsulation of the current state of our civilization, unimaginable even a hundred years ago. Back in the time of Scott and Shackleton, electric light did exist, but it was not yet taken for granted. Back then, we were still entertained by looking up into the night sky—not to say that we no longer are—but living as I do, in a large city, the stars are drowned out by light pollution. Still, I can usually find Polaris, but I don't need to; I don't need to navigate by it. I admire the moon, but I don't need it for light, to follow the seasons or tell time.

James Attlee has written a book inspired, "by the *absence of moon*." <sup>172</sup> In **NOCTURNE**, he examines our changing relationship with our satellite and how "the celestial light show [is] rendered spectrally pale today by the intensity of our self regard." He writes:

For countless millennia humankind has lived in step with the cycles of the moon, planting crops, wooing lovers, and gathering harvest according to its celestial clockwork. It is scarcely more than a century since this connection was decisively broken, since we turned our back on the sky and our faces towards the brilliantly illuminated interiors of our own homes.<sup>173</sup>

Electric light is, arguably, the defining invention that changed our relationship to the moon, the stars, and indeed, the night. Philosopher Erazim Kohák has though deeply about the "gift" of the night, and, like Attlee laments the loss of our natural relationship to darkness. Kohák uses even stronger language, "In the global city of our civilization," he writes, "we have banished night and abolished dusk." We use electric light "generically," he continues, "we flood our rooms with it, even unoccupied ones and surround our dwellings with floodlight, creating the illusion of perpetual day." In defiance of this perpetual day, Kohák removed himself from the artificial, constructed techné world of civilized man, to live on a rural property off the grid; all the better to welcome back the banished and abolished light and reconnect with the natural

<sup>&</sup>lt;sup>172</sup> Attlee, James. *Nocturne*. London: Hamish Hamilton, 2011. p. 3.

<sup>&</sup>lt;sup>173</sup> Ibid. p. 3.

<sup>174</sup> Kohak, Erazim. p. 33.

<sup>&</sup>lt;sup>175</sup> Ibid. p. 34.

movement of our planet through space. "Seldom do we have the chance to see virgin darkness," he writes, "unmarred by electric light, seldom can we recall the ageless rhythm of nature..." 176

The ageless rhythms–like the moon's phases and the pull of the moon on tides–are lost in our urban societies. The terms "Harvest Moon" and "Hunters' Moon" are not poetic inventions. They hark back to a time when the light of the full moon was welcomed, cherished and valued. Lost also, is the deep metaphoric pull of the moon on our imaginations. Moonlight, back then, was not reduced down to syrup sticking to the pop songs and vampire films of popular culture. Attlee laments, "[Moonlight] is a subject almost universally regarded as off-limits to contemporary writers, too kitsch, debased and sentimental to be worthy of serious consideration." 178

Undeniably, humanity has given the moon serious consideration since the dawn of human consciousness. Contemplation of the moon is considered to be the starting point for intellectual thought, with pre-historic "notes" on the moon's phases being our first intellectual activity. Some 25,000 years ago, in the Dordogne valley in France, one of our ancestors saw fit to inscribe a small piece of bone with two cycles of the moon's phases—carved notches—yet unmistakable for what they represent. This bone was the world's first pocket calendar/time keeper. The precise purpose is unknown, but this early being was nonetheless compelled to record the changes of the shining orb in the night sky and see the pattern in these changes.

The world's earliest calendars were lunar, based on twelve periods of twentynine and one half days, the time it takes the moon to cycle through its phases. We can trace the etymology of the word "month" to the ancient Greek word for moon (men/mene), and such words as "metre" and "measure" also share this origin. Early astronomers soon realized the limitations of lunar calendars: the solstices wander, and

<sup>&</sup>lt;sup>176</sup> Ibid. p. x.

A Harvest Moon is the full moon that occurs closest to the autumnal equinox. It rises soon after sunset allowing farmers extra illumination in the fields to bring in the crops. Likewise, a Hunter's Moon–usually in October or November, allows hunters to continue hunting late into the night.

<sup>&</sup>lt;sup>178</sup> Attlee, James. p. 6.

the number of combined days of lunar months falls short of the solar year. Julius Caesar instituted the West's first solar calendar in 45 BCE; the name for our seventh month, July (Julius), reminds us of his involvement.

However, calendars have always been more than secular timekeepers. They are religious documents. The moon still holds sway in establishing the dates of many religious events such as *Diwali* (the thirteenth day of the "dark fortnight" of the Hindu lunar month of *Ashwin*) and Easter (the first Sunday following the first full "Paschal" moon that follows the spring equinox.)

The moon is of crucial importance in Islam, a faith that does follow a lunar calendar. Islamic months start at the sighting of a new moon. Islam holds special respect for the moon and moonlight, perhaps, as a faith originating from a desert region of the globe where the cooler nights offered relief from the searing heat of the day. Darkness, too, engenders special respect. Sociologist Fatema Mernassi calls attention to the Arabic concept of *Samar*, "one of the Arabic languages' magic words." It has no Western equivalent. She describes it as "[a concept] that weaves together the sense of 'dark colour,' with the pleasure you get from opening up to the mysterious 'other,' all the while being stimulated by moonlight." *Samar*, then, the luminous moon in the numinous night.

Throughout the ages, poets and philosophers, scientists and scholars have debated the moon's role in human lives. It is a constant, as David Whitehouse notes, "The moon has accompanied us since the dawn of time. Every creature that has ever lived has done so under the moon." Perhaps its greatest role is that it mirrors the birth-to-death arc of human life. As Jules Cashford describes:

Like human beings, the Moon is born out of the dark and grows to the peak of its powers, when, unaccountably like them, it begins to wither and

Mernissi, Fatema. "Seduced by 'Samar' or How British Orientalist Painters Learned to Stop Worrying and Love the Darkness." *The Lure of the East: British Orientalist Painting*. London: Tate Publishing, 2008. 33-39. As mentioned by James Attlee in *Nocturne*. p.42.

<sup>&</sup>lt;sup>180</sup> Ibid. p. 33.

Whitehouse, David. *The Moon: A Biography*. London: Headline, 2001. p.3.

decay  $\dots$  until it dies, vanishing back into the darkness from whence it came.  $^{182}$ 

However, unlike human beings, after a period of three black nights, the moon reappears as a slender crescent, and its life cycle begins anew. This elemental, transformative ability is what gives the moon such power. It is no wonder that so many ancient cultures deified the moon; the Egyptians worshipped the moon god *Khonsu*, the Sumerians, *Nanna*, the Mesopotamians, *Ishtar*, in China, the moon goddess *Kwan Yin*. The Greeks and Romans recognized a triple manifestation: the dark-faced moon was the goddess *Hecate*; waxing, she was *Artemis* (Diana); in full face, she was *Selene* (Luna). Together with the sun, the moon forms the backbone of many creation myths, and holds a dominant presence in many folklore traditions and superstitions. Moonlight itself, has always held special properties. It is often powerful, magical, and sinister. I note the original meaning for *lunacy*: madness brought about by sleeping in moonlight.

The moon is also a science fiction staple. The first recorded science fiction tale is by the Syrian writer Lucian of Samosato, who in 125 AD, flew a man to the moon on the back of an eagle.

It is not my intent to delve into these stories; suffice to say, up until the modern age the moon maintained its allure as a mysterious creature, wrapped in layers of ambiguity and fascination. The first real lunar unravelling came in 1609, when Galileo Galilei pointed his new invention in its direction. Is I found the surface of the moon not to be smooth, even or perfectly spherical, he wrote, but uneven, rough, and crowded with depressions and bulges. And it is like the face of the Earth itself which is marked here and there with chains of mountains and depths of valleys. In many ways, his telescope marked the beginning of the moon's numinous end. Galileo left the moon, in Attlee's words stripped of mystery, obfuscation and philosophical debate, naked,

<sup>&</sup>lt;sup>182</sup> Cashford, Jules. *The Moon*. New York: Four Walls Eight Windows, 2003. p.15.

English mathematician and astronomer Thomas Harriot is believed to have been the first to observe the moon through a telescope, beating Galileo by about four months. Harriot's telescope had a magnification of 6x, cruder that Galileo's. Although Harriot did complete a rough sketch, he possessed none of the draughtsman skills—nor the ambition—of Galileo.

<sup>&</sup>lt;sup>184</sup> "The Moon." Narr. Melvin Bragg. *In Our Time*. BBC Radio. Nov. 7, 2011. Radio.

shivering perhaps through the transmitted trembling of his hand." <sup>185</sup> Galileo observed the surface of the moon to be *like the face of the Earth itself*, a particularly devastating observation, crushing centuries of Aristotelian beliefs of a perfect sphere, perfect in the heavens. Subsequent improvements to his telescope allowed him to achieve a magnification of 20x, sufficient for him to make rudimentary calculations on crater depth and mountain height from the length of shadows.

The telescope opened up the moon to the ignominious gaze of the lunar cartographers. In 1647, astronomer Johannes Hevelius drew and named most of the lunar mountain ranges after those on Earth: thus, we have the lunar Alps, Pyrenees, Apennines, and Carpathians. In 1651, Giovanni Riccioli detailed and named the large craters-mostly after fellow astronomers-thus giving us Hipparchus, Kepler, Aristarchus, and Tycho. He also named the dark-coloured plains that he took to be water, the *mare*. NASA chose the Mare Tranquilitatis, the Sea of Tranquility, as the site for the first human lunar landing. These names of lunar features engender familiarity and kinship. In his pre-Apollo book, THE DOUBLE PLANET, Isaac Asimov notes how "[these] names kept alive the notion that the moon was a world as friendly to life as ours was." 186 More importantly, names imply a sense of ownership. By naming the moon's features, humanity could exercise a kind of control. One key exercise of discovery is the naming and claiming of new lands, whether mountain tops or sheets of ice. The moon could only be owned through an eye and a lens, but humanity did its best. After space probe Lunik III flew and photographed the far side of the moon in 1959, the Soviets delighted in naming the new features. Lunar cartography is now a well-developed discipline. By general convention, the large craters are named after famous men and women, usually scientists and scholars. I note that Shackleton, Scott, and Amundsen have all been immortalized with, appropriately, South Pole lunar craters, although none of the notable Mount Everest alumni have been so honoured with any lunar feature.

It was not the intent of the lunar cartographers to rob the moon of any numinosity. Nevertheless, just as a physical place loses its "thinness' with prolonged human contact, so the moon's special place in our hearts eroded through scrutiny.

<sup>&</sup>lt;sup>185</sup> Attlee, James, p.16.

<sup>&</sup>lt;sup>186</sup> Asimov, Isaac. *The Double Planet*. London: Abelard-Schuman, 1967. p.121.

However, the moon's reputation has always been championed in artistic circles. After the scientific scrutiny of the 17<sup>th</sup> century's Age of Enlightenment, the English Romantics did much to resurrect the moon's numinosity. I note John Keats poem *Endymion*, a retelling of an ancient Greek love story between *Selene* (the moon) and a shepherd: "What is there in thee, Moon! That thou should'st move/ My heart so potently." William Blake, Samuel Palmer, and the Pre-Raphaelites, also sought to resurrect, in Attlee's words, "a conscious, proactive and beneficial moon, its potency undiminished by the increasing knowledge science was bringing of its physical nature."

The biggest scientific blow against "moonlight" is that there is no such thing. The moon is a not a light source but a dead piece of rock. Moonlight is not the *moon's light*. It is reflected sunlight. However, this did not stop Scottish artist Katie Paterson.

In 2008, Paterson created a room of perpetual moonlight. She developed her conceptual piece "Light Bulb to Simulate Moonlight" in conjunction with the lighting company OSRAM. They developed a halogen bulb identical to the quality of light reflected by the full moon, matching the colour, temperature, wavelength and amperage. Paterson suspended the bulb in a gallery room where it's spilled an eerie silvery-blue glow over the floor. Her installation included a box of replacement bulbs, 289 bulbs to be exact—enough for a human lifetime, calculating 2000 hours of light per bulb, over an average human lifespan of 66 years. Although her piece was essentially a meditation on the finite nature of human existence it was also a disquieting critique of our manufactured civilization.

Paterson's invention does not yet seem to be commercially available. I, for one, will eagerly visit my local hardware store to purchase a bulb of artificial moonlight if it ever comes to market. I can't help but wonder how Erazim Kohák would view this artifice, as an affront to the real thing, or as a wistful method of trying to get us to look up and appreciate the gift of moonlight while we can.

Keats, John. *Endymion*. London: Taylor and Hessey, 1818. Project Gutenberg EBook.14 Jan 2008. Web. 12 Dec. 2012.

<sup>&</sup>lt;sup>188</sup> Attlee, James. p. 58.

# The Heroic Age of Lunar Exploration

But why, some say, the moon? Why choose this as our goal?
And they may well ask why climb the highest mountain?

Pres. John F. Kennedy<sup>189</sup>

Perhaps it is too soon to speak of a Heroic Age when it comes to lunar exploration. "We came in peace for all mankind," states the plaque Apollo 11 left behind. Will our future selves landing on lunar shores embrace this spirit? The wonder of discovery that so marked the Apollo missions will, no doubt, succumb to economic realities. After all, it is prohibitively expensive to go to the moon for the sake of discovery alone. Our next missions will be to establish settlement sites for mining operations, probably close to ice deposits discovered in South Polar craters—Shackleton's crater has particular promise. The Moon will morph from a Thin Place into a resource base-an extension of the Earth-with many nations staking territory, seeking mineral wealth in the grey regolith. One day, the familiar face of the "man-in-the moon" will be topographically altered by too many men on the moon strip mining for Helium-3 to feed fission reactors back home. 191 I am being cynical, but I do believe our motives for future lunar exploration may well find our future selves looking longingly back to a period of human history, from the late 1950s through to the early 1970s, as a Heroic Age-despite the toxic politics of the time-when romantic ideals of discovery prevailed. Returning to Apsley Cherry-Garrard's definition of exploration "the physical expression of intellectual passion," I believe our early forays into space fit this definition perfectly, for their combination of ingenuity and death-defying bravado, and for their success in attaining the ultimate Thin Place.

Kennedy, John F. "We Choose to go to the Moon." Rice University, 12 Sept. 1962. *The History Place: Great Speeches Collection*. Web. 30 Aug. 2012.

Apollo 11 Plaque Inscription: Here Men From The Planet Earth First Set Foot Upon The Moon July 1969, A.D. We Came In Peace For All Mankind.

Apollo astronaut and astro-geologist Harrison Schmitt is a passionate advocate for lunar Helium-3 extraction. Fission of this Earth-rare isotope found in abundance on the moon produces a clean fuel. Schmitt has written a book, *Return to the Moon*, outlining scenarios for the creation of self-sufficient, life sustaining environments "ecological niches away from home planet which expand our envelope for species survival," as mining outposts for Helium-3. Schmitt, Harrison. *Return to the Moon*. New York: Praxis. 2006. p.18.

"I called the Moon my home for three days of my life," recalled Apollo 17's Gene Cernan, "And I am here to tell you about it. That is science fiction." Certainly a layer of unreality clings to Apollo; just thinking about going to the Moon invokes science fiction. These missions were unfathomable adventures, completely off the scale of going to the South Pole or Mount Everest. Unlike those earth-bound quests that were marked by a few individuals pushing the limits of their physical endurance, the lunar quests pushed the limits of intellectual endurance. Of course, journeys to the South Pole and Mt. Everest were not feats attained in isolation. Both had many behind-the-scenes players giving financial and material support to the men. However, the sheer scale of the Apollo program stands it apart. There was no precedent for the designing and construction of spaceships to carry men to new planets. All told, Apollo harnessed the brainpower of some 400,000 individuals, all to achieve Pres. John F. Kennedy's 1961 goal of "landing a man on the moon and returning him safely to the earth by the end of the decade." and the carry is series of the decade."

This colossal intellectual exercise involved the skills and labour of everyone from engineers and theoreticians to welders and spacesuit seamstresses. Because failure at any step along the way could translate into a deadly chain reaction, NASA demanded a reliability requirement of near perfection: numerically "0.99996" or a maximum of four failures per 100,000 operations. Moreover, NASA instituted strict quality control for every component. The aluminum in the metal neck rings on the spacesuits could be traced back to a single piece of ore and the very mine where it originated. Only 12 men walked on the moon, but 400,000 contributed to pull this science fiction off the page into reality.

The Apollo missions were not pure exercises in intellectual passion. Like the South Pole and Mount Everest, the quest for the moon was also a race. It involved two ideologically incompatible superpowers, the Soviet Union and the United States of America, and this race had chilling ramifications. For every rocket fired triumphantly into space, another was readied with a nuclear warhead to ignite the Cold War.

<sup>&</sup>lt;sup>192</sup> In the Shadow of the Moon. DVD. (Eugene Cernan interview)

Pres. John F. Kennedy, in a speech to a joint session of Congress on May 25, 1961.

<sup>&</sup>lt;sup>194</sup> Thimmesh, Catherine. *Team Apollo.* p. 37

At heart, the annihilating reality of nuclear war was something both nations were desperate to avoid. It is often said, "The Space Race kept the Cold War cold," for the clash of ideologies and the technological one-up-man-ship played out at a very safe distance. The Soviets had the early advantage with a series of spectacular successes that shocked the United States. "The American Space Program," writes Jim Lovell, "was not born of ambition, or passion, or some celestial wanderlust but rather of something closer to fear–fear of being second best." 196

What kick-started the Americans into action was a silvery 184 pound ball with spidery legs launched from Soviet soil into Earth orbit on 4 October, 1957. *Iskustvenniy Sputnik Zemli*, "travelling companion of the Earth," was the world's first artificial satellite—a new little moon visible to the naked eye and audible to anyone with a ham radio. Sputnik's innocuous *meep-meep-meep* was a battle cry as it circled above every 96 minutes.

Sputnik should not have come as a surprise. The Soviets had made their satellite intentions known—as had the Americans themselves—as a project for the International Geophysical Year. The IGY involved 64 nations and the efforts of some 5,000 scientists all trying to "unlock the secrets of the physical world." Hubris on the part of the United States, had led them to assume that they were the principal power in science and technology, with no nations close to their lead. So, to be "scooped" by the Soviets was a bitter humiliation, especially since Sputnik caught the attention of the whole world.

In the words of Sputnik historian Paul Dickson, the satellite was both "a stunning engineering achievement," and "a validation of Marxist-Leninism." Sputnik was nothing less than an assault on American intellectual and ideological supremacy. The Soviets may have aimed their rocket into Space, but as Dickson writes, "It drove home the fact that the USSR had the firepower to deliver intercontinental multistage ballistic

<sup>&</sup>lt;sup>195</sup> Nelson, Craig. p. 91.

Lovell, Jim and Jeffrey Kluger. Apollo 13. New York: Houghton Mifflin, 2000. p. x.

Dickson, Paul. *Sputnik*. New York: Walker and Co. 2001. p.10. The establishment of the Amundsen-Scott South Pole Station by the Americans was another part of their IGY program.

<sup>&</sup>lt;sup>198</sup> Ibid. p. 132.

missiles to United States soil or any other part of the world, and suggested that outer space would become a new arena of warfare." <sup>199</sup>

Then Senate Leader Lyndon B. Johnson was aghast, "I'll be damned if I have to sleep by the light of a Red Moon. Soon they [the Soviets] will be dropping bombs on us from space like kids dropping rocks on cars from the freeway overpass" Johnson, like many in America, believed that control of outer space equalled world domination:

The Roman Empire controlled the world because it could build roads. Later—when it moved to the sea, –the British Empire was dominant because it had ships. In the air age, we were powerful because we had airplanes. Now the communists have established a foothold in outer space."<sup>201</sup>

Sputnik unleashed a wave of paranoia in the States, many believed the satellites *meep-meeping* was actually bleating out secret code. If this satellite had a voice, then maybe it had ears and eyes as well, and was spying into everyone's backyard.

A month later, the Soviets upped the ante with the launch of Sputnik II. This satellite, nicknamed "Muttnik," carried a living payload—the little dog Laika. The Soviets had not yet figured out how to return the dog alive, although the US did not know this. Laika had life support for ten days, but died much sooner when the thermal shield damaged during lift-off caused the capsule to overheat.

I note that Laika's sacrifice has recently been repeated. It seems to be a curious, coming-of-age ritual that many nations feel compelled to engage in—that of launching ballistic missiles. On 28 January 2013, Iran launched a monkey into earth orbit and jubilantly celebrated its return. American observers were quick to point out that the "before" and "after" photos of the monkey do not match, suggesting that the poor little creature did not survive, and that the Iranians substituted a different animal to save face.

<sup>&</sup>lt;sup>199</sup> Ibid. p. 246.

<sup>&</sup>lt;sup>200</sup> Nelson, Craig. p. 122.

<sup>&</sup>lt;sup>201</sup> Ibid. p. 152.

On 6 December 1957, the Americans finally launched their response to Sputnik: the Vanguard TV3 rose a few feet off the tarmac and burst into flames. This national humiliation played out on TV and newsreels around the world, The New York Times derisively naming it "Sputternik."

The Soviets perfected the return of a living payload when, on 12 April 1961, Major Yuri Gagarin went up into space for a 89 minute orbital flight in Vostok I, 202 reentering the atmosphere and splashing down safely. For Americans, it was with great relief, when on 5 May of the same year Alan Shepard broke free of the Earths' gravitational pull to become the first American in space. His flight lasted just fifteen minutes, with five minutes of weightlessness. Nonetheless, it paved the way for John Glenn's first orbital flight that November, and America did not look back. The success of the Mercury (one-manned) spacecraft and the Gemini (two-manned) spacecraft programs allowed Americans to dream impossible dreams.

It is no coincidence that American successes coincided with the election of Pres. John F. Kennedy. The Space Race was a key element of his election campaign, and it clearly resonated with the American people. However, during this period, the level of mistrust between the United States and the Soviet Union was particularly acute, with neither side sure of what the other was capable of doing. It did not help that Kennedy's first real test in office was the Cuban Missile Crisis—a nuclear close call between the United States and the Soviet-backed Cubans.

For many Americans, it must have seemed that Kennedy was asking for the impossible in asking for the Moon. On 12 September 1962, he gave a remarkable speech at Rice University. He outlined his challenge to the American people—to put a man on the moon and return him safely to Earth—and he couched this challenge not in the toxic rhetoric of the Space Race, but rather, he framed it within the context of other great adventures, evoking the ghost of Mallory no less:

21

I note the Russian (formerly Soviet) research base in Antarctica is called Vostok. It is the coldest place on earth, with the lowest recorded temperature of −89.2 °C

Many years ago the great British explorer George Mallory, who was to die on Mount Everest, was asked why did he want to climb it. He said, 'Because it is there.'

Well, space is there, and we're going to climb it, and the moon and the planets are there, and new hopes for knowledge and peace are there. And, therefore, as we set sail we ask God's blessing on the most hazardous and dangerous and greatest adventure on which man has ever embarked.<sup>203</sup>

And so the stage was set for the most dangerous and the greatest adventure, and the American people rose to the challenge. Despite the initial setbacks, NASA developed and perfected a series of rockets and spacecraft becoming, in the words of Craig Nelson, "a shining legend to the American people, a Valhalla of heroic astronauts and genius engineers" NASA came to be seen, the world over, as "a factory of miracles," and the astronauts themselves became "the ultimate examples of American manhood (daring courageous, and with a strong moral character.)" In this light, it is easy to see how this period in American history can be viewed as a Heroic Age.

Although Kennedy would not live to see his challenge through to fruition, it became his legacy. The technological legacy of this age is something we all engage with today. The research and development that went into the creation of the Saturn V rocket and the space modules cross-fertilized many industries. The Internet, micro-electronics, avionics, wireless technology, and a myriad of inventions can all be traced back to a time when people worked to put men on the moon.

## **Numinous Disconnection**

[The moon is] a pulverized pile of dirty beach sand.... The poets have hated my guts–[l've gotten] hate mail from poets. Bill Anders, (Apollo 8)<sup>206</sup>

Kennedy, John F. "We Choose to go to the Moon." Rice University, 12 Sept. 1962.

<sup>&</sup>lt;sup>204</sup> Nelson, Craig. p. 180.

<sup>&</sup>lt;sup>205</sup> Ibid. p. 142.

<sup>&</sup>lt;sup>206</sup> Chaikin, Andrew. p. 180.

"The best crew for the Apollo mission," according to Michael Collins "would be a philosopher, a poet and a priest. Unfortunately they would kill themselves trying to fly the spacecraft." Despite becoming America's shining knights in space armour, the astronauts possessed little ability to articulate their extraordinary experiences. They returned from the moon to find people uninterested in the spacecraft or the technical details of the flight. No, what everyone really wanted to know was how did it *feel*? Were they *scared*? What were they *thinking*? The astronauts of Apollo 11 had it the worst; the press and public–ravenous for the minutiae of this first lunar adventure–were confounded by the unsatisfactory fashion in which the men responded to their queries. Collins did his best to explain:

We were trained to transmit vital pieces of information. If someone had said from the ground to me in space, 'Well how do you feel about that,' I would have said, 'What? Huh?' ... It was not within our ken to share emotions of utter extraneous pieces of information. <sup>209</sup>

Apollo 14's Edgar Mitchell confessed, "I didn't know what feelings were." 210

The Apollo program astronauts were picked from an elite group of men who were both engineers and test pilots.<sup>211</sup> They required this dual skill set as they took part in the design process of the spacecraft–unique machine for which there was no precedent. They all lived about as far into their left-brains as they could get.

Upon returning from the Moon, the men of Apollo 11 were sent off on a World Tour, an excruciating public relations exercise that they found far more difficult than the actual mission. Craig Nelson writes:

They were expected to become mediagenic spokesmen, delightful after dinner speakers, statesmen who always knew exactly what and what not to say, philosophers with profound notions of the cosmos, poets with

<sup>&</sup>lt;sup>207</sup> White, Frank. *The Overview Effect*. Boston: Houghton Mifflin, 1987. p. 204.

Nelson, Craig. p. 24. Michael Collins: "What [the press] really wanted to know was: beyond all the technical crap, what did the crew feel?"

<sup>&</sup>lt;sup>209</sup> Ibid. p. 24.

<sup>&</sup>lt;sup>210</sup> Chaikin, Andrew. p. 163.

Harrison Schmitt was a geologist, not an engineer. With the exception of Neil Armstrong, who was a civilian, all the astronauts were in the military.

lyrical talents and extraordinary sense memory for describing their journey and all around agency pitchmen. <sup>212</sup>

These disparate roles proved agonizing, as did the daily press conferences. Their descriptions of the lunar environment–grey, cratered, bleak, dead–were at odds with the celestial orb glowing in the night sky. Moreover, their often one-word answers, "Super" or "Cool," to the ubiquitous "How did it feel?" question failed to quell the journalists desperate to find a numinous connection. The astronauts themselves became frustrated; the world seemed to have no appetite for their scientific and engineering achievement, as Collins describes:

It didn't seem right somehow for the press to have this morbid, unhealthy, persistent, probing preoccupation with the frills, when the silly bastards didn't understand how the machines operated or what they accomplished. It was like describing what Christiaan Barnard wore while performing the first heart transplant.<sup>213</sup>

Fellow astronaut John Glenn answers Collins' lament about this preoccupation with the frills: "People are always fascinated by anything new, new work, new explorations, especially if one risks losing his life by them. Risk always arouses their imagination." <sup>214</sup>

Neil Armstrong was the astronaut everyone wanted a piece of most. "Extraordinarily remote," was how Norman Mailer described him, "[a man] apparently in communion with some string in the universe others did not think to play." The questions often seemed to sail right past him. When asked by a journalist what it was like to walk on the moon Armstrong replied, "Pilots take no special joy in walking. Pilots like flying." The great irony was that Armstrong would never fly again. He was a

Nelson, Craig. p. 24.

<sup>&</sup>lt;sup>213</sup> Ibid. pp. 25-26.

<sup>&</sup>lt;sup>214</sup> Ibid. pp. 33-34.

Mailer, Norman. *Of a Fire on the Moon.* Boston: Little, Brown. 1970. p.22. Mailer also commented that Armstrong "surrendered words about as happily as a hound allowed meat to be pulled out of its teeth." As noted by Harlen Makemson, *Media, NASA, and America's Quest for the Moon.* New York: Peter Lang, 2009. p. 181.

<sup>&</sup>lt;sup>216</sup> Nelson, Craig. pp. 47-48.

national treasure and no one was going to risk losing him by letting him return to testing fighter jets, a job he had loved.

Buzz Aldrin had the roughest time with all the attention. In his memoir **RETURN TO EARTH**, he recounts one particularly brutal interview session with an NBC newscaster who asked, "Now that almost two years have gone by, why not tell us how it *really felt* to be on the moon." Aldrin writes:

If any one question was an anathema to me, that was it. ... It has always been almost impossible for me to answer with any sort of decent response. My throat went dry and I became dizzy. ... I remember little more of that interview. When it was over I stepped down and stood before about fifty chamber of commerce members and their wives, all waiting for autographs. I signed a few and when the shaking became uncontrollable, I grabbed [my wife] Joan and ran for the door. In the privacy of an alley near the auditorium I choked back my emotions and quietly wept.<sup>217</sup>

Eventually the astronauts would develop coping strategies for dealing with that question. Although in this interview segment, Apollo 12's Pete Conrad can barely contain his annoyance:

The last thing in the world is to get on an airplane or be someplace, and here comes some guy or gal that's gonna beat your ear and (emotional voice), 'Oh, What was it like on the moon?' And usually if I tell 'em the truth, then they don't believe me. 'Cause they've got some preconceived notion that I should tell 'em I was frightened or I was awe-inspired or I saw the Lord or–I don't know. ... Usually I tell them, 'It was super. Really enjoyed it.' ... And they don't want to hear that. I've had people get mad at me! They think I am insulting them.<sup>218</sup>

Sometimes Conrad might have done well to keep his mouth shut:

85

Aldrin, Edwin E. "Buzz" and Wayne Warga. *Return to Earth*. New York: Random House, 1973. pp. 281-282.

<sup>&</sup>lt;sup>218</sup> Chaikin, Andrew. p. 154.

People don't understand that this isn't some great fucking experience that, you know is mystical, magical, changes your whole life. ... It's just a fucking pile of rocks that happen to be 250,000 miles away. 219

However, the mystical, magical life-changing experience was exactly what the billions of people left behind on Earth desperately craved. By and large, the astronauts were unable to draw on any imaginative powers. "There are only analogies," explained Apollo 15's Dave Scott, "It's like the moon. It's dramatic like the moon. You say 'How is it dramatic?' It's like the moon."220 However, Buzz Aldrin's spontaneous exclamation of "Magnificent desolation," as he stood surveying the lunar panorama remains the most elegant, satisfying, and heartfelt description by any astronaut.

The astronauts may have come up short on poetry, but they told it as they saw it, with a raw honesty. When Cap. Com. called up to Apollo 10 asking: How's the view 10? Gene Cernan replied: "Charlie, it might sound corny, but the view is really out of this world."221 Mission Control listened in to every breath and sigh, and recorded every conversation. The astronaut chatter may not have waxed poetic, but their running descriptions of the brand new world rolling out beneath their capsule windows had a refreshing candour and a certain charm all its own. Here is a snippet of Apollo 11's impressions of the lunar far side; they are looking down on a particularly impressive crater:

Collins: God, it is huge! It is enormous! It is so big I can't even

get it in the window. ... Oh, boy, you could spend a

lifetime geologizing that one crater alone, you know that?

Armstrong: You could.

Collins: That's not how I'd like to spend my lifetime, but picture

that. Beautiful!

Aldrin: Yes, there's a big mother over here, too.

Collins: Come on now, Buzz, don't refer to them as big mothers;

give them some scientific name.

Ibid. p. 154.

Ibid. p. 163.

In the Shadow of the Moon. DVD. (Eugene Cernan interview) The Capsule Communicator (Cap Com) was always a fellow astronaut. Here it is Charlie Duke talking to Apollo 10 as it goes around the moon for the first time

Aldrin: It sure looks like a lot of them have slumped down.

Collins: A slumping big mother? Well, you see those every once in

a while. 222

There is an undeniable difference in what we see, earthbound, looking up, and what the astronauts experienced. As Bill Anders said, "When other people say. 'Oh what a beautiful moon,' I'll think to myself, Heh, if they could just see it up close." <sup>223</sup>

The real genius of the Antarctic's Scott, Shackleton, and Cherry-Garrard was their ability to communicate their Thin Place "up close" to the world beyond. Mount Everest has no shortage of writer/climbers who have brought it into sharp focus. Jon Krakauer's INTO THIN AIR is a particularly vivid account. Everest is also the most "blogged" about adventure; there is a ready appetite for the blow-by-blow minutiae of tackling the world's highest peak that serves to fascinate and inspire others to take up the challenge. The Moon, however, remains an out of reach adventure. Although there are space tourism projects in development, none have lunar destinations.

At the time, the astronauts struggled with the gargantuan task of translating their unique experience into words and feelings. In the intervening decades, many have found their voice. More importantly, poets, visual artists, writers, filmmakers, and musicians have stepped in to translate their experiences for them.

The Apollo missions permeate our popular culture whether we realize it or not. Few children enjoying the Pixar animation *Toy Story* know that the astronaut character "Buzz Lightyear" had a real human inspiration in Buzz Aldrin (much to the real Aldrin's delight). Although Hollywood still churns out a steady stream of preposterous *Star Wars/Star Trek* type fantasy films, the actual lunar landings do occasionally inject a level of authenticity into the genre. Director Duncan Jones 2009 film *Moon*, about a moonmining operation, stands out for its realism. Visual artists, from Robert Rauschenberg to Andy Warhol have also contributed Apollo's artistic oeuvre.

<sup>&</sup>lt;sup>222</sup> "Mission Transcripts. Apollo 11 Onboard Voice Transcription-Command Module, August 1969." *NASA*: jsc.nasa.gov/history/mission trans/apollo11. Pdf file. p. 72-73. Web.

<sup>&</sup>lt;sup>223</sup> Chaikin, Andrew. p. 180.

Perhaps more than other media, the Apollo experiences live in the lyrics of popular songs. Two examples immediately spring to my mind: Kate Bush's 1985 song *Hello Earth*, "With just one hand, held up high/I can blot you out/out of sight," which echoes both Lovell and Armstrong's realization that they could hide the Earth behind their hand through the capsule window. Swedish songwriter Stina Nordenstam's *The Return of Alan Bean*, "It's not a game to return from a trip to the moon," tackles the experience of coping after a life changing experience.

Incidentally, Alan Bean, the "fourth" man on the moon, has weathered the angst of return far better than many of his contemporaries. Bean left NASA in the early 1980s to devote himself to oil painting. In the last few decades he has built up a remarkable portfolio of work, all of it paintings of astronauts and moonscapes. His paintings belie the moon's monochromatic landscape with their vivid, impressionistic palette of colours. Bean sculpts the surface of each canvas using the actual tools he used to collect lunar rocks and dirt. He claims his specialty is "lunar dirt," and he jokes that one day it will be written, "He wasn't much of an astronaut, but boy, his dirt was great." He also found a way to answer that most prickly of questions: a painting of an astronaut, emerging from a violet-blue fog of lunar dust, his spacesuit an incandescent yellow, is titled "That's How it Felt to Walk on the Moon."

#### The First Earthrise

God, that blue looked pretty...
Bill Anders<sup>227</sup>

A man must rise above the Earth to the top of the atmosphere and beyond for only thus will he fully understand the world in which he lives.

Socrates, 399 BCE<sup>228</sup>

Bush, Kate. "Hello Earth." Hounds of Love. EMI, 1985. CD.

<sup>&</sup>lt;sup>225</sup> Nordenstam, Stina. "The Return of Alan Bean." *Memories of a Colour*. EastWest, 1991. CD.

In the Shadow of the Moon. DVD. (Alan Bean interview)

<sup>&</sup>lt;sup>227</sup> Chaikin, Andrew. p. 45.

Jacobs, Robert, Michael Cabbage, Constance Moore & Bertram Ulrich. Ed. *Apollo Through the Eyes of the Astronauts*. New York: Abrams, 2009. p. 53. Thomas Stafford (Apollo 10) was reminded of this saying when he looked down on the Earth.

The astronauts had difficulty conveying the essence of the Moon as a Thin Place. However, they had no such trouble conveying the numinosity of the Earth. The Apollo 8 crew—their mission, the first lunar orbit—were the first men to see the Earth in its entirety. Prior to this, astronauts and cosmonauts, had only been in Earth orbit (as are current visitors to the International Space Station), and although the curve of the Earth is clearly discernable, our planet still fills the entire capsule window. That first trip out to the moon gave birth to a tangible, concrete awareness of the Earth as an actual planet in the Solar System.

On Christmas Eve, 1968, as Apollo 8 rounded the far side of the moon, the Earth arose, a blue jewel suspended above the desolate lunar horizon. Bill Anders remembers the moment:

That was the most beautiful thing I had ever seen. ... The Earthrise. Totally unanticipated. Because we were being trained to go to the moon. We were trained to get there. So getting there was the big event. ... It wasn't going to the moon and looking back at the Earth. I never even thought about that!<sup>229</sup>

The three astronauts were awestruck; they nearly missed taking a photo they were so captivated with what they were seeing. On the recorded mission transcript, Frank Borman is the first to express his astonishment: "Oh my God! Look at that picture over there! Here's the earth coming up. Wow, is that pretty." Jim Lovell, years later, looking at the photo of that moment, recalled:

This photo [of the Earthrise] brought forth out our whole reason for being. We saw for the first time a fragile planet orbiting a normal star, tucked away in the outer edge of a galaxy; the Milky Way–only one of millions of galaxies in the universe.<sup>231</sup>

Anders was instantly struck by how "very delicate" the Earth seemed, just like "a Christmas tree ornament," and it immediately occurred to him how "we only live in that

<sup>&</sup>lt;sup>229</sup> Ibid. p. 45.

<sup>&</sup>lt;sup>230</sup> "Apollo 8 Onboard Voice Transcription-Command Module, January 1969." *Mission Transcripts, Apollo 8, Jan. 1969.* Web file: AS08\_CM.PDF file. p. 113.

<sup>&</sup>lt;sup>231</sup> Jacobs, Robert, p.33.

tiny little skin on the outside."<sup>232</sup> His most vivid impression was of colour: "The only color you could see in the whole universe. Everything else was black or white or grey. But here was the only color: blue. God, that blue looked pretty."<sup>233</sup>

The astronauts, for once, did not need to dig deep for poetry. The photo, now know as "The First Earthrise," was poetry itself. Mythologist Joseph Campbell went even further: "The Earth is a heavenly body, most beautiful of all, and all poetry now is archaic that fails to match the wonder of this view." 234

The impact of the Earthrise photo is immeasurable. It has embedded itself into human consciousness in a way few images ever had, and many of those images—the mushroom cloud of the atomic bomb springs to mind—are often negative. The Earthrise is sublime. Campbell continues:

Now there is a telling image: this earth, the one oasis in all space, an extraordinary kind of sacred grove, as it were, set apart for the rituals of life, and not simply one part or section of this earth, but the entire globe now a sanctuary, a set-apart Blessed Place. <sup>235</sup>

This Blessed Place, this oasis, this fragile blue sphere... this was an entirely new way of thinking about the planet. Although Rachel Carson's seminal work **SILENT SPRING** is credited with launching an ecological awareness of the planet, the Earthrise photo is really the catalyst that ignited the global environmental movement, leading to the creation of the first Earth Day in 1970.

The Earthrise photo has graced postage stamps, calendars, posters and T-shirts. Al Gore used it as the promotional image for his climate change call-to-action film "An Inconvenient Truth." The image resonates on an emotional, gut-level; we feel for our planet, we empathize with this shiny life-filled ball hanging in the black, lifeless void.

<sup>&</sup>lt;sup>232</sup> Chaikin, Andrew. p.45.

<sup>&</sup>lt;sup>233</sup> Ibid. p.45.

<sup>&</sup>lt;sup>234</sup> Dickson, Paul. p. 221.

<sup>&</sup>lt;sup>235</sup> Ibid. p. 221.

Only a handful of people have had the opportunity to witness the Earth from the vantage point of deep space. Frank White notes, "our 'world view' as a conceptual framework depends quite literally on our view of the world from a physical place in the universe." What the astronauts experienced, White argues, is an example of what he calls "the overview effect." He defines this as "a different philosophical point of view as a result of having a different physical perspective," which, in turn, results in a change of consciousness.

We don't need to leave Earth orbit to understand the overview effect. Philosopher and geographer Yi-Fu Tuan gives this earthbound example:

From the Eiffel Tower, people look like ants—moving dots, abstractions. Reality, from that height, is map rather than scene or landscape. One is removed both physically and psychologically from the concerns and turmoils of life. The loss of warmth and heat in direct human involvement is compensated by the contemplative gains with their own emotional temperature and quale. One gain is a sense of the sublime, as a person moves from familiar multisensory spaces to what Marshall McLuhan calls the 'vast, swallowing distances of visual space.'<sup>238</sup>

For astronauts, their extreme physical perspective heightens the overview experience. The Earth becomes an abstraction in itself. The astronaut can no longer identify with a city, or even a country, but instead comes to identify with the Earth as a whole. Apollo 9's Rusty Schweickart explains:

When you go around the Earth in an hour and a half, you begin to recognize that your identity is with the whole thing. That makes a change. You look down there and you can't imagine how many borders and boundaries you cross, again and again and again, and you don't ever see them. There you are—hundreds of people in the Mideast killing each other over some imaginary line that you're not even aware of and that you can't see. <sup>239</sup>

White, Frank. p. 3.

<sup>&</sup>lt;sup>237</sup> Ibid. p. 3.

<sup>&</sup>lt;sup>238</sup> Tuan, Yi-Fu. *Passing Strange and Wonderful*. New York: Island Press, 1993. p.14.

White, Frank. p.11.

From the vantage point of space, earthbound conflicts appear futile and irrational. Astronauts, forced to confront the "big picture," become acutely aware of their own insignificance. Neil Armstrong recalled, how, on the surface of the moon, he could hold out his arm and hide the earth behind the thumb of his glove. Asked if this made him feel like a giant he replied, "No, it made me feel really small." From this vantage point, Armstrong also came to view the Earth a spacecraft: "It's an odd kind of spacecraft, since it carries its crew on the outside instead of the inside. But it's pretty small. ... From our position on Earth it is difficult to observe where the Earth is and where it is going, or what its future course might be." He argues that if human beings are the crew, then we must "reconsider our mission in the universe." He says, "If you're going to run a space ship, you've got to be pretty cautious about how you use your resources, how you use your crew, and how you treat your spacecraft."

That the Earth is precious, not to be taken for granted, is a shared feeling among the astronauts. Alan Bean remembers, "one of the things I did when I got home—I went to shopping centers, just go round and get an ice cream cone or something and just watch people go by and think, Boy, we are lucky to be here! People complain about the Earth. We are living in the Garden of Eden." Dave Scott is conscious of the ecological, stewardship role that astronauts must take, advocating on behalf of the planet: "[the Earth] is truly an oasis and we don't take care of it, and I think the elevation of that awareness is the real contribution to saving the Earth."

Michael Collins, however, remains somewhat sceptical. Can the astronauts' experience really influence any kind of collective change? He writes,

Seeing the earth from a distance has changed my perception of the solar system as well. Ever since Copernicus' theory gained wide acceptance, men have considered it an irrefutable truth; yet I submit that we still cling

Nelson, Craig. p. 274.

<sup>&</sup>lt;sup>241</sup> Ibid. p. 327.

In the Shadow of the Moon. DVD. (Alan Bean interview)

<sup>&</sup>lt;sup>243</sup> Ibid. (Dave Scott interview)

emotionally to the pre-Copernican, or Ptolemaic notion that the Earth is the center of everything.<sup>244</sup>

Rather, "humanity" is really the centre of everything; it is going to take more than a trip to the moon to change or human-centered preoccupations. Nevertheless, the images of Planet Earth, taken from deep space, have made an impact, resonating with some of the most influential thinkers of today. I note how James Lovelock's Gaia hypothesis owes much to images brought home by the Apollo missions. He has crafted a vision of a holistic, conscious, living Earth (Gaia), both independent and interdependent of humanity. He writes:

The evolution of homo sapiens, with his technological inventiveness and his increasingly subtle communications network has vastly increased Gaia's range of perception. She is now through us awake and aware of herself. She has seen the reflection of her fair face through the eyes of astronauts.  $\dots^{245}$ 

Edgar Mitchell, out of all the astronauts, experienced the closest thing to a spiritual epiphany during his lunar mission. In an interview, he described how his "biggest joy" was seeing the Earth, the Moon, the Sun, in his cockpit window every two minutes, and how he felt physically integrated into the universe:

And suddenly I realized the molecules of my body and the molecules of the spacecraft and the molecules in the body of my partners were prototyped, manufactured in some ancient generation of stars. And that was an overwhelming sense of oneness, of connectedness. It wasn't them and us; it was, 'That's me. That's all of it. It's one thing.' And it was accompanied by an ecstasy, a sense of Oh my God! Wow. Yes. An insight. An epiphany! <sup>246</sup>

I cannot help but think, if more of us were able to have a first hand experience of seeing Planet Earth from space, that so many of the destructive ills that plague our world, whether environmental or political, would be solvable. We would find the

93

<sup>&</sup>lt;sup>244</sup> Collins, Michael, *Carrying the Fire*, New York: Farrar Strus & Giroux, 1974. p. 462.

Lovelock, James E. Gaia: A New Look at Life on Earth. Oxford: Oxford University Press, 1979. p. 148.

<sup>&</sup>lt;sup>246</sup> In the Shadow of the Moon. DVD. (Edgar Mitchell interview)

motivation and a real collective will to resolve the miseries that threaten our continued habitation of our home planet.

Sadly, "The First Earthrise" seems, for my son's generation, to have been reduced down into a cool image for computer screen wallpaper. Is it now, an image "from the past;" has its sublimity so drained out that its significance fails to move us? I wonder what it will take to generate the same emotions that this image did at its time for men and women born after it was taken. Perhaps a human journey to Mars will do it; when we see our planet shrinks to the size of a star and when a photo taken from Martian soil reveals the Earth as just a pale blue dot on the horizon. Perhaps a trip beyond our solar system, when our "reference" in the sky is completely gone, when our home, our touchstone in the universe, is swallowed whole by the void of space.

# Chapter 5. In Search of Secular Hierophanies

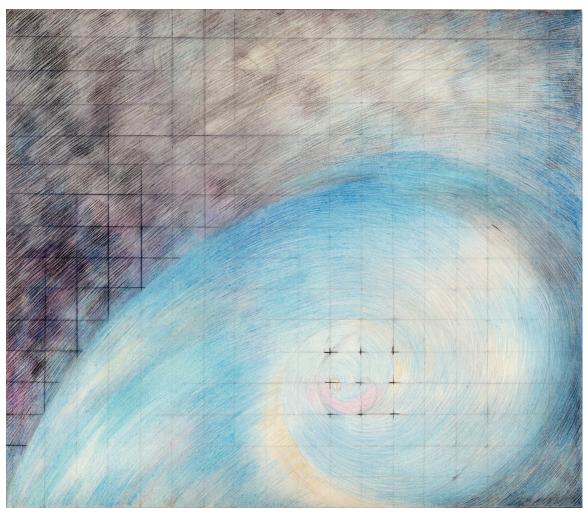


Illustration 5. Inexpressible Cold. Coloured pencil.

#### Thin Men

What we get from this adventure is sheer joy, and joy is, after all, the end of life.

George Mallory<sup>247</sup>

Numinosity is a salient feature of the Thin Place; that inherent power of the natural world to render a human being down to a state of "creature-feeling" or nothingness, when faced with both the subliminal majesty and the terrifying awe of a landscape infused with the Wholly Other.

In a traditional reading, numinosity forms the basis for a religious experience. In my modern application, it informs the intellectual passion of the explorer/hero who undertakes the difficult and dangerous journey as an expression of *what it means to be human*. For these intrepid individuals, venturing out into extreme environments, whether across polar ice, up into thin air, or to alien shores, they accept great risk for unknown returns. If they are successful, they are rewarded with a vision so rare few others will ever share in it.

In the beginning, a complex set of motives sends these explorer/heroes forth on their quests. Economic benefit, personal wealth, scientific knowledge, fame, prestige, national glory, adventure, physical tests, priority—to be "first," or simply "doing one's job" may all have factored into their decisions. In the end, they are drawn—often unknowingly— to the pull of another motive, one that Yi-Fu Tuan explains, "is something rarely stated in the open—a yearning for sublime experience, the loss of pedestrian consciousness in the vastness of nature which is a kind of death." <sup>248</sup>

Upon reaching their destination, the pedestrian motivations are swallowed by the enormity of what is spread out before them. And yet, before they can properly take it all in, they must turn around and leave. The experience is essentially ephemeral for it can only be endured for the briefest of time. The explorer/hero cannot linger; these Thin Places are inherently murderous.

Kress, Scott. "The Sheer Joy of Climbing Everest." *National Post*. October 14, 2012. Web. Mar. 11, 2013. Mallory quoted in "True Patriot Love" mission blog.

<sup>&</sup>lt;sup>248</sup> Tuan, Yi-Fu. *Passing Strange and Wonderful*. New York: Island Press, 1993. p. 115.

The early Celtic pilgrims navigating the rocky shores of the North Atlantic were seeking a place where the "veil" between worlds was "thin." After preparing themselves physically, through deprivation and hardship, they would be worthy to receive a glimpse of a scared reality that would validate their reason for living. However, as religions scholar Karen Armstrong points out:

To say that they sought the meaning of life could be misleading. ... In fact, the goal of the religious quest has always been an experience not a message. We want to feel truly alive and to fulfill the potential of our humanity, living in such a way that we are in tune with the deeper currents of existence.<sup>249</sup>

I would agree that the Thin Place pilgrims of my inquiry–Scott, Shackleton, Mallory, and the Apollo astronauts–were also fulfilling the "potential of humanity." However, in embarking on these dangerous and unprecedented missions, they sought not only to *fulfill* human potential but also to *expand* it. The Thin Place quests of the Twentieth century have a quasi-evolutionary imperative. They exemplify that peculiar Olympian drive of our species, to be stronger, faster, to aim higher. In pushing out into the unknown, challenging the limits of our physiology, harnessing our intellectual ingenuity, we are looking to breach the bounds of our own reality. In essence, these Thin Place heroes were not looking for gods; they were challenging gods; perhaps even *supplanting* gods. What better vantage point to assert a new human reality than from the end of the earth, the top of the highest peak, and the surface of another world.

The Thin Place heroes are, in essence, *Thin Men*. They are the secular saints of our age. What sets them apart from their peers, from the societies in which they lived, was their desire to step outside the comfort zone of family and community to journey into that great unknown. People may aspire to follow in their footsteps, if only for the sheer romance of adventure. However, in reality, few are really willing to manhaul across Antarctica, brave the Himalayan altitude, or develop the skill set needed to become an astronaut and leave Earth orbit. We human beings are essentially "homebodies," choosing to live in families and social groupings. Yi-Fu Tuan writes:

97

<sup>&</sup>lt;sup>249</sup> Armstrong, Karen. *A History of Jerusalem*. London: Harper Collins, 1996. p. 8.

Whereas love of home is universal, the willingness to risk life itself for experiences of the sublime in places both remote and desolate is unique to a small number of individuals in Western society and culture.<sup>250</sup>

The Thin Men of the Twentieth century's Thin Place quests find themselves as members in a curious pantheon of men and women of history, who, transcend their flesh and blood mortality to live on as symbolic creations of near supernatural achievement. This rarely happens in their lifetimes. The Thin Place heroes of both the South Polar and early Everest quests had to fight hard to fulfill their ambitions. The often had to resort—in Kathleen Scott's terminology—to "begging tours" to raise the money and supplies to fund their expeditions. Many died in poverty; the elevation to Thin Man status happened after their death.

For many of the men-like Edmund Hillary and the Apollo 11 astronauts—their new status was a curse. The celebrity machine that hounded Armstrong, Aldrin and Collins was a bitter experience: Armstrong retreated; Aldrin suffered a breakdown; and Collins developed a particularly sharp tongue to keep the autograph hounds at bay. Hillary was able to harness his celebrity for his considerable philanthropic endeavours and aid to many charitable foundations.

In the grand scheme of history, very few men and women ever rise to be remembered beyond the few generations in which they live their lives. Whether, in the centuries to come, the Thin Men of my inquiry will remain in human imagination remains to be seen. Still I note the brisk trade in South Polar memorabilia associated with Scott, Shackleton, Amundsen, and Mawson now a full century on. Personal effects, in particular, reach high price at auction.<sup>251</sup> They exists a peculiar human compulsion to touch, to possess a piece of these men. This is the case for all historic figures, and this compulsion is taken to extremes for religious saints whose personal effects are worshipped; whose chips of bone and tufts of hair come to be reverently enshrined in elaborate reliquaries. It was no doubt the horrific idea of finding parts of himself so

<sup>&</sup>lt;sup>250</sup> Tuan, Yi-Fu. p.118.

Some of the items listed in Bonhams South Polar Sale auction catalogue, 30 March 2012: Barometer belonging to Shackleton, estimate £18,000-20,000; Waterproof matchbox bag belonging to Amundsen, sold for £10,000; Farewell letter written by Scott, found in his last tent, sold for £163,250

enshrined that caused Neil Armstrong, in an uncharacteristic display of emotion, to furiously denounce his barber in Lebanon Ohio who was selling clippings of his hair.

## Secular Hierophanies

In the pre-modern era, Thin Places formed around natural phenomena–like rocks and trees–that took on a sacred aspect. These rocks and trees "stood out," in Karen Armstrong's words, "ran counter to the natural order." She writes:

A rock of valley that was particularly beautiful or majestic might indicate the presence of the sacred because it could not be easily fitted into its surroundings. Its very appearance spoke of *something else*.<sup>253</sup>

Mountains, by their very nature, towering above the earth, have long evoked the sacred. Edwin Bernbaum writes:

In the fierce play of natural elements that swirl about their summits—thunder, lightening, wind, and clouds—mountains also embody powerful forces beyond our control, physical expressions of an awesome reality that can overwhelm with feelings of wonder and fear.<sup>254</sup>

The sport of mountaineering is a recent invention. Mountains were climbed in pre-modern times to visit the abode of the gods. The pilgrim in climbing "ascended to a different plane, midway between heaven and earth." <sup>255</sup>

Mount Kailash in Tibet is an example of a sacred peak that speaks of *something* else. Removed from other surrounding peaks by its symmetry, by its beautiful white dome and gulley of ascending steps, it easily took on an aspect of the sacred.

Uluru or Ayers Rock in the central Australian outback is another example of a natural phenomenal that speaks of *something else*. Uluru rises inexplicably from the flat plain of the surrounding landscape, its vivid red sandstone skin glowing beneath the sun.

<sup>254</sup> Bernbaum, Edwin. p. xiii.

<sup>&</sup>lt;sup>252</sup> Armstrong, Karen. p. 9.

<sup>&</sup>lt;sup>253</sup> Ibid. p. 9.

<sup>&</sup>lt;sup>255</sup> Armstrong, Karen. p. 9.

Kailash and Uluru are both hierophanies. A hierophany is a manifestation of the sacred; literally, "something sacred shows itself to us." Hierophanies are inherently paradoxical; Mircea Eliade explains, "By manifesting the sacred any object becomes *something else*, yet it continues to remain *itself*, for it continues to participate in the surrounding cosmic milieu." Thus, the sacred rock remains a rock, but for the believer, it has become part of a supernatural reality.

The object in its hierophantic state establishes a fixed or central point for the people who live nearby, effectively detaching it, and them, from the profane surround. The fixed point then becomes the centre of their universe. As Eliade notes, "The manifestation of the sacred ontologically founds the world." Civilization coalesces round these points: temples, monuments, and cities spring up around them. The Black Stone in Mecca is an example of this. By legend, given to Abraham, kissed by the Prophet Mohammad, this glassy, obsidian-like stone is enshrined in the Ka'bah, the holiest site in all Islam, and it is the focal point of the *Hajj* pilgrimage. The Black Stone is said to have fallen from the sky; it is most likely a meteorite. Of course, it is not possible to chip off a piece for analysis, but that is entirely beside the point.

Not all hierophantic points are practical. The cliff-top monastery clinging precariously to rock is not an arbitrary location. Humanity seeks to establish itself physically around a hierophany despite its topographic inaccessibility. The hierophany drives a sacred geography that precedes any kind of map-making; it defies any kind of scientific rationale as to a suitable or logical location.

Hierophanies also can take on a living aspect, such as John Muir's sacred Yosemite Valley. "No temple made with hands can compare with Yosemite," Muir writes. "Every rock in its walls seems to glow with life." Moreover, Muir describes Yosemite's Half Dome peak as "a majestic living creature clad... in gauzy wind woven drapery." 259

Eliade, Mircea. p. 12.

<sup>&</sup>lt;sup>257</sup> Ibid. p. 21.

<sup>&</sup>lt;sup>258</sup> Muir, John. p. 8.

<sup>&</sup>lt;sup>259</sup> Ibid. p. 53.

"The completely profane world, the wholly desecrated cosmos," writes Eliade, "is a recent discovery in the history of the human spirit." The hierophanies that once provided fixed points for humanity to gather around have now—with some exceptions—been stripped of their numinous energy and made into tourist destinations. These hierophanies may once have been part of the natural landscape, but our human civilization has so obliterated and trampled their original "sacred energy" that many now harbour a dark side. In the shadow of Uluru, the Anangu aborigines, the traditional custodians of the great monolith, live in poverty and squalor, and are steadily poisoning themselves to death by sniffing gas. Their settlement is just 300 yards away from Australia's premier tourist destination, a place that sees hundreds of thousands of tourists every year, and yet "No one gives a damn," says Bob Randall, the director of the local health clinic, "Everybody comes here to see the rock."

Mircea Eliade believes the sacred cosmos is a thing of the past:

Properly speaking; there is no longer any world, there are only fragments of a shattered universe, an amorphous mass consisting of an infinite number of more or less neutral places in which man moves, governed and driven by obligations of an existence incorporated into an industrialized society. <sup>262</sup>

Nevertheless, many of us mark our lives in these "neutral places" by establishing personal, individualized holy places around personal—albeit secular—hierophanies.

We all make "privileged places quantifiably different from all others." Places that are unique to us individually, sites of great personal memory. They could be such places as where we were born or wed, or where we experienced a life-changing relationship. The site of the World Trade Centre disaster in New York is now a powerful personal hierophany for many who experienced loss at this site. For each individual these places are vital. Eliade writes:

101

2

Eliade, Mircea. p. 13.

Squires, Nick. "Shameful secret in the shadow of Uluru." The Telegraph. Aug 13 2005. Web. Mar. 3. 2013.

<sup>&</sup>lt;sup>262</sup> Eliade, Mircea. pp. 23-24.

<sup>&</sup>lt;sup>263</sup> Ibid. p. 24.

These places still retain an exceptional, a unique quality; they are the "holy places" of his private universe, as if it were in such spots that he had received the revelation of a reality *other* than that in which he participates through his ordinary life."<sup>264</sup>

The Thin Places of my inquiry were not formed around the manifestation of the sacred. However, they are qualitatively different from the surrounding cosmic milieu. Moreover, they surpass the realm of the "personal holy place" as they have accrued a collective privilege on par with the pre-modern sacred sites. We "worship" these places; they flood our imaginations not because the *sacred was made manifest* but because they are symbolic of great human achievement. They astound us; fill us with reverential awe because we have *dared* to reach them.

On 20 May 2009, NASA astronaut Scott Parazynski carried a moon rock-harvested by Neil Armstrong in the Sea of Tranquility— to the summit of Mount Everest. He then "joined " it with a rock from Everest's peak. Together, these two specimens were then flown into space via the Space Shuttle and now reside in a specially designed cupola in the International Space Station. George Zanka, commander on the mission that "returned" the moon rocks to space, says this about them:

These rocks have already done more than a human being can do in a lifetime. For four million years they were on the moon undisturbed. They got into a spaceship, travelled to Earth, went up to Mt. Everest. So in a way they have tremendous history, and now they're going to travel 17,500 mph back to space where they will reside in the cupola of the Tranquility node. <sup>265</sup>

The rocks are there to inspire astronauts, to remind them, as Zanka says, about "what human beings can do." <sup>266</sup> I can't help but think that if these rocks were tossed on top of a pile of glacial scree they would be impossible to distinguish from the other, "neutral" rocks of their surround.

<sup>&</sup>lt;sup>264</sup> Ibid. p. 24.

<sup>&</sup>quot;Space Rocks! Moon and Mt. Everest Rocks Find a Home in Orbit." NASA: Shuttle Missions: STS-130. Publisher: NASA.Gov., Page Ed. Amiko Kauderer. 16 Feb. 2010. Web. 1 Dec. 2012.

lbid. np.

These rocks, both the lunar specimen and the piece of Everest limestone, may not have "manifested the sacred," but they are a manifestation of human potential, achievement and ingenuity; they are secular hierophanies.

A secular hierophany is easy to understand. Many of us cherish touchstones from a personal Thin Place, like a beach shell or pressed leaf, that helps us to recall a particularly poignant and vivid memory that speaks directly to our own hearts. However, these personal secular hierophanies, unless heavily annotated as to their significance, cannot be passed down. I inherited a small rock that belonged to my grandmother. It was found among her cache of treasures uncovered after her death, and is thought to date back to her childhood. No one knows where it came from or what it means, other than it was obviously important. My grandmother's stone now lives in one of my drawers; I have no emotional attachment to it other than a nagging sensation that I must keep this small, now neutral, object as it was a manifestation of *something else* to her. This kind of secular hierophany lasts but a single lifetime.

One person's hierophany is not easily transferable, as Apsley Cherry Garrard so rudely found out. Cherry Garrard returned from the ill-fated British Antarctic Expedition in the early months of 1913. He survived intact, as did the three "sacred" penguin eggs recovered during the "Worst Journey in the World;" his two companions on that journey, Edward Wilson and "Birdie" Bowers did not.

Shortly after his return, he presented himself to the Chief Custodian at the Natural History Museum in Knightsbridge. He has come to relinquish his precious eggs to a higher authority. Despite the colossal interest in Antarctica and the massive scenes of mourning following the news of Captain Scott's death, the relevance of the eggs was lost on the Chief Custodian who reluctantly took them "into custody without a word of thanks." Cherry, incredulous at the frosty reception given his treasures, dared to ask for a receipt. He was told not to wait, that it was not necessary. He insisted, and was curtly told again he needn't wait; the receipt was unnecessary. However, he could not part with these eggs, the "reward" for a horrendous journey and by now, sacred touchstones for an expedition that had cost him so dearly, without some

<sup>&</sup>lt;sup>267</sup> Cherry-Garrard, Apsley. p. 289.

acknowledgment. Only after a significant wait, during which time his countenance took on an increasingly "murderous" aspect, was a receipt finally proffered.

A few weeks later Cherry returned, escorting the sister of Captain Scott, to view the sacred eggs: "Thereupon the custodian flatly denied that any such eggs were in existence or in their possession." Cherry responded with a "profanely emphasized threat," that if he "did not receive satisfaction in writing within twenty-four hours as to the safety of the eggs England would reverberate with the Tale."

In the end the eggs were found, and their embryos subjected to scientific analysis. Alas, the vital evolutionary link between replies and birds, which the Worst Journey travelers had so desperately sought in undertaking their horrific adventure, was unable to be established. Although, the examining professor, clearly enamoured of the eggs, did allow that "the worst journey in the world in the interests of science was not made in vain."

<sup>&</sup>lt;sup>268</sup> Ibid. p. 290.

<sup>&</sup>lt;sup>269</sup> Ibid. p. 290.

<sup>&</sup>lt;sup>270</sup> Ibid. p. 294.

## References

- Aldrin, Edwin E. "Buzz" and Wayne Warga. *Return to Earth*. New York: Random House, 1973. Print and Web (*alexanderstreet.com.proxy.lib.sfu.ca*).
- Alexander, Caroline. *Endurance*. New York: Alfred A. Knopf, 1999. Print.
- Alexander, Caroline. "The Lure of the 'White South," *Wall Street Journal*, 5 May 2001. Web. 6 June 2012.
- Allen, Emily. "That Really Takes the Biscuit" *Mail Online*.16 Sept. 2011. Web. 17 July 2012.
- "An Audience with Neil Armstrong." Host: Alex Malley. *The Bottom Line*. evoTV, CPA Australia. Web. 30 Dec. 2012.
- "Apollo 8 Onboard Voice Transcription-Command Module, January 1969." NASA Mission Transcripts, Apollo 8, Jan. 1969. Web file: AS08 CM.PDF.
- "Apollo 11 Onboard Voice Transcription-Command Module, August 1969." NASA Mission Transcripts, Apollo 11. Aug. 1969. Web file: AS11–CM.PDF.
- "The Apollo Missions" NASA. NASA.gov. n.d. Web. 5 Jan. 2013.
- Armstrong, Karen. A History of Jerusalem. London: Harper Collins, 1996. Print.
- Asimov, Isaac. The Double Planet. London: Abelard-Schuman, 1967. Print.
- Attlee, James. *Nocturne*. London: Hamish Hamilton, 2011. Print.
- Bean, Allan. Apollo. Connecticut: Greenwich workshop press, 1998. Print.
- Becker, Kraig. "Youngest on Everest: Worst Fears Realized?" *The Adventure Blog.* 8 June, 2010. Web. 17 Apr. 2012.
- Bernbaum, Edwin. Sacred Mountains of the World. San Francisco: Sierra Club Books, 1990. Print.
- Bickel, Lennard "Mawson's Will." *Ice: Stories of Survival from Polar Exploration*. Ed. Clint Willis. New York: Thunder's Mouth Press. 1999. 11-42. Print.
- Bickel, Lennard. *Mawson's Will: The Greatest Polar Survival Story Ever Written.*Hanover, New Hampshire: Steerforth Press, 2000. Print.
- "Breakup of the Larsen Ice Shelf, Antarctica." NASA Earth Observatory. Mar. 20 2002. Web. Oct 12. 2012.

- Breashears, David. High Exposure. New York: Simon & Schuster, 2000. Print.
- Burgess, Al, and Jim Palmer. *Everest: The Ultimate Challenge*. New York: Beaufort Books, 1983. Print.
- Bush, Kate. "Hello Earth." Hounds of Love. EMI, 1985. CD
- Byrd, Richard E. *Alone.* G.P. Putnum and Sons. 1934. Transcribed online: "Astrophysics Group," *University of Leeds*. ast.leeds.ac.uk. Web. 3 Nov. 2012.
- Byrd, Richard E. "from Alone." *Ice: Stories of Survival from Polar Exploration*. Ed. Clint Willis. New York: Thunder's Mouth Press, 1999. 137-156. Print.
- Campbell, Murray. "Everest." The Globe and Mail. 24 May 2003. Globe Travel: T1. Print.
- Cashford, Jules. The Moon. New York: Four Walls Eight Windows, 2003. Print.
- Chaikin, Andrew with Victoria Kohl. *Voices from the Moon*. New York: Viking Studio, 2009. Print.
- Cherry-Garrard, Apsley. *The Worst Journey in the World*. New York: The Dial Press. 1930. Print.
- Cherry-Garrard, Apsley. *The Worst Journey in the World*. New York: Penguin Books 2005. Print.
- "Climbers Launch Expedition to Clear Everest Trash." *AOL News*. Associated Press, April 6, 2011. Web. 17 Apr. 2012.
- Coffey, Maria. Explorers Of The Infinite. New York: Tarcher/Penguin, 2008. Print.
- Collins, Michael, Carrying the Fire, New York: Farrar Straus & Giroux, 1974. Print.
- Cortright, Edgar M. Ed. *Apollo Expeditions to the Moon*. New York: Dover Publications, 2009. Print.
- Crane, David. Scott of the Antarctic. London: Harper Perennial. 2006. Print.
- Culver, Dan. My Little Everest. Victoria: Sono Nis Press, 2000. Print.
- Davis, Wade. Into the Silence. New York: Knopf, 2011. Print.
- Dickson, Paul. Sputnik. New York: Walker and Co. 2001. Print.
- Dillon, Brian. "Katie Paterson, the Cosmicomical Artist." *The Guardian*. 6 Apr. 2012. Web Pdf. 5 Jan 2013.
- Duncan, David Ewing. *The Calendar*. London: Fourth Estate. 1998. Print.

- Eliade, Mircea. *The Sacred and The Profane*. Trans. Willard R. Trask. Orlando: Harcourt, 1987. Print.
- "Everest: Into the Death Zone" The Fifth Estate. CBC Television. 14 Sept 2012. Web.
- "Everest 2012: The Expedition." National Geographic. n.d. Web. 17 Apr. 2012.
- "Everest History Time Line." Everest News. n.d. Web. 10 Feb. 2013.
- Fiennes, Ranulph. *Mind Over Matter*. London: Sinclair Stevens, 1993. Print.
- Fickling, David. "Portrait: Sir Edmund Hillary." *The Guardian News.* 13 Mar. 2003. Web. 15 Apr. 2012.
- Firstbrook, Peter. Lost on Everest: The Search for Mallory and Irvine. McClelland & Stewart, Toronto, 1999. Print.
- 40 Days at Base Camp. Dir. Dianne Whelan. Rebel Sister Productions. 2011. DVD.
- Gerke, Paul. "Climbers Take 1,100 Pounds Of Trash Off Mount Everest," *Yahoo! Voices*. Reuters, 29 May 2007. Web. 20 Apr. 2012.
- Godwin, Robert. Ed., *Apollo 11: The NASA Mission Reports, Vol. One.* Toronto: Apogee Books, 1999. Print.
- Graber, Linda, H. *Wilderness as Sacred Space*. Washington: Association of American Geographers, 1976. Print.
- Huntford, Roland. *Race for the South Pole*. London: Continuum International, 2010. Print.
- In the Shadow of the Moon. Dir. David Sington. Interviews with Edwin Aldrin, Michael Collins, Alan Bean, Eugene Cernan, Dave Scott, Edgar Mitchell. DOX Productions, 2008. DVD.
- Jacka, F. J., "Mawson, Sir Douglas (1882–1958)," *Australian Dictionary of Biography*. Australian National University. Web. 22 October 2012.
- Jenkins, Mark. "Field Test: On Everest" Dispatch #54. *National Geographic Magazine*. 25 May 2012. Web. 20 Nov. 2012.
- Jones, Cass. "Neil Armstrong, first Man on the Moon dies aged 82." *The Observer.* The Guardian. 26 Aug. 2012. Web. 20 Sept. 2012.
- Kauderer, Amiko. Page Ed. "Space Rocks! Moon and Mt. Everest Rocks Find a Home in Orbit." *NASA: Shuttle Missions*: *STS-130*. Publisher: NASA.Gov.,16 Feb. 2010. Web. 1 Dec. 2012.
- Keats, John. *Endymion.* London: Taylor and Hessey, 1818. Project Gutenberg EBook.14 Jan 2008. Web. 12 Dec. 2012.

- Kennedy, John F. "We Choose to go to the Moon." Rice University, 12 Sept. 1962. *The History Place: Great Speeches Collection*. Web. 30 Aug. 2012.
- Kirwam, L.P. The White Road. London: Hollis & Carter, 1959. Print.
- Klapper, Bradley. "U.S. Questions Iran's Space Monkey Claims." *The Globe And Mail.* February 5, 2013. Print.
- Kohák, Erazim. *The Embers and the Stars*. Chicago: University of Chicago Press. 1984.
- Koentges, Cris. "The Postmodern Age of Adventure." *The Globe and Mail.* 2 Feb. 2002. Globe Travel: T1, T7. Print.
- Krakauer, Jon. Into Thin Air. New York: Villard, 1997. Print.
- Kragthorpe, Kurt. "Messner Makes Antarctica His New 'White Wilderness." *Desert News*. June 3, 1990. Web. Oct 12, 2012.
- Kress, Scott. "The Sheer Joy of Climbing Everest." *National Post*. October 14, 2012. Web. Mar. 11, 2013. Mallory quoted in "True Patriot Love" mission blog.
- Lopez, Barry. Arctic Dreams. New York: Vintage Books, 2001. Print.
- Lovell, Jim and Jeffrey Kluger. *Apollo 13*. New York: Houghton Mifflin, 2000. Print.
- Lovelock, James E. *Gaia: A New Look at Life on Earth*. Oxford: Oxford University Press, 1979. Print.
- Jacobs, Robert, Michael Cabbage, Constance Moore & Bertram Ulrich. Ed. *Apollo Through the Eyes of the Astronauts*. New York: Abrams, 2009.
- Jones, Max. intro. Robert Falcon Scott. *Journals*. Oxford: Oxford University Press, 2005. Print.
- Mailer, Norman. Of a Fire on the Moon. Boston: Little, Brown. 1970. Print.
- Makemson, Harlen. *Media, NASA, and America's Quest for the Moon.* New York: Peter Lang, 2009. Print.
- McDonald, Bernadette. Freedom Climbers. Victoria: Rocky Mountain Books, 2011. Print.
- McDonald, Bob. "The Black Marble: Humanity at night." *CBC News, Technology and Science, Quirks and Quarks Blog.* Dec 7, 2012. Web. Jan. 3 2013.
- Messner, Reinhold. *The Crystal Horizon*. Trans. Jill Neate & Audrey Salkeld. Ramsbury: Crowood Press, 1989. Print.

- Mernissi, Fatema. "Seduced by 'Samar' or How British Orientalist Painters Learned to Stop Worrying and Love the Darkness." *The Lure of the East: British Orientalist Painting*. London: Tate Publishing, 2008. 33-39.
- Mitford, Nancy. "A Bad Time" *Ice: Stories of Survival from Polar Exploration*. Ed. Clint Willis. New York: Thunder's Mouth Press, 1999. 43-57. Print.
- "The Moon." Narr. Melvin Bragg. In Our Time. BBC Radio. Nov. 7, 2011. Radio.
- Montheath, Colin. *Antarctica: Beyond the Southern Ocean*. Auckland: Warwick, 1996. Print.
- Morris, Ivan. The Nobility of Failure. New York: Meridian. 1975. Print.
- Moss, Sarah. The Frozen Ship. Oxford: Bluebridge, 2006. Print.
- "Mount Everest History and Facts." MntEverest Net. 2003. Web. 20 Apr. 2012.
- Muir, John. *The Yosemite*. New York: The Century Co., 1912. Print.
- Nelson, Craig. Rocket Men. New York: Viking. 2009. Print.
- Nordenstam, Stina. "The Return of Alan Bean." *Memories of a Colour*. EastWest, 1991. CD.
- Otto, Rudolf. *The Idea of the Holy*. Trans. John W. Harvey. New York: Oxford University Press, 1957. Print.
- Paterson, Katie. "Light Bulb to Simulate Moonlight." *Katie Paterson.org*. Web. 3 Jan. 2013.
- Piantadosi, Claude A. "Biology of Human Survival: Life and Death in Extreme Environments." Cary, N.C.: Oxford University Press, 2003. Accessed online: ebrary.com. Web. Sept. 3, 2012.
- "Polar Sale: Scott and Amundsen Centenary" *Bonhams*, May 30 2012. Web. Sept. 3, 2012.
- Preston, Diane. *A First Rate Tragedy*. New York: Houghton Mifflin Company, 1998. Print.
- Rébuffat, Gaston. *Mont Blanc to Everest*. trans. Geoffry Sutton. London: Thames and Hudson, 1956. Print.
- Ross, Helen, E. *Behaviour and Perception in Strange Environments*. New York: Basic Books, 1975. Print.
- Schmitt, Harrison. Return to the Moon. New York: Praxis. 2006. Print.

- Scott, Robert Falcon. *Scott's Last Expedition*. Vol 1.London: Smith, Elder & Co. 1913. Print.
- Scott, Robert Falcon. Journals. Oxford: Oxford University Press, 2005. Print.
- Serres, Michel. *The Natural Contract*. Ann Arbor: The University of Michigan Press, 1995. Print.
- Shackleton, Ernest. "from South." *Ice: Stories of Survival from Polar Exploration*. Ed. Clint Willis. New York: Thunder's Mouth Press, 1999. 257-284. Print.
- Shelley, Percy Bysshe. "To the Moon" [fragment] as noted by Melvin Bragg "In Our Time newsletter: The Moon." BBC.co.uk/blogs. Nov 7, 2011. Web.
- Shipton, Eric. The True Book About Everest, London: Frederick Muller, 1955. Print.
- Squires, Nick. "Shameful secret in the shadow of Uluru." *The Telegraph*. Aug 13 2005. Web. Mar. 3. 2013.
- Than, Ker. "Everest Climb Successful, Despite Crowds, Unrelenting Winds." *National Geographic Magazine*. May 26, 2012. Web. Mar. 10. 2013.
- Thimmesh, Catherine. *Team Apollo: How 400,000 People Landed Apollo 11 on the Moon*, New York: Houghton Mifflin, 2006. Print.
- Tuan, Yi-Fu. *Man and Nature*. Washington, D.C.: Association of American Geographers, 1971. Print.
- --- Passing Strange and Wonderful. New York: Island Press, 1993. Print.
- Wheeler, Sara. Terra Incognita. New York: Random House. 1996. Print.
- White, Frank. The Overview Effect. Boston: Houghton Mifflin, 1987. Print.
- Whitehouse, David. *The Moon: A Biography*. London: Headline, 2001. Print.
- Willis, Clint. ed. *Ice: Stories of Survival from Polar Exploration*. New York: Thunder's Mouth Press. 1999. Print.

**Appendices** 

# Appendix A.

# **Antarctica "Heroic Age" Explorations**

National Antarctic Expedition 1901-1904

Leader: Robert Falcon Scott Expedition ship: *Discovery* 

Base camp: "Hut Point" Cape Evans, Ross Island

Inland march by R. Scott, E. Shackleton and E. Wilson reaches latitude 82° 17'S

**British Antarctic Expedition** 1907-1909

Leader: Ernest Shackleton Expedition ship: *Nimrod* 

Base Camp: Cape Royds, Ross Island

New "Farthest South" achieved, latitude 88° 23'S, 112 miles from Pole; discovery of

Beardmore glacier; first to venture onto Polar Plateau

Norwegian South Pole Expedition 1910-1912

Leader: Roald Amundsen Expedition ship: *Fram* 

Base camp: Framheim, Bay of Whales

Norwegian Polar Party first to reach South Pole on 14 December 1911

**British Antarctic Expedition** 1910-1913

Leader: Robert Falcon Scott Expedition ship: *Terra Nova* 

Base camp: Cape Evans Hut, Ross Island

British Polar Party reach South Pole on 17 January 1912; all die on return journey

Australasian Antarctic Expedition 1911-1914

Leader: Douglas Mawson Expedition ship: *Aurora* 

Base camp: Cape Denison, Commonwealth Bay Exploration of Adelie Land and King George V Land

Imperial Trans-Antarctic Expedition 1914-17

Leader: Ernest Shackleton Expedition ship: *Endurance* 

Endurance crushed in pack ice before reaching Antarctic coast; crew trapped on Elephant Island; Shackleton makes 800-mile open boat journey across Southern Ocean to South

Georgia Island; all men rescued

Shackleton-Rowett Expedition 1921-1922

Leader: Ernest Shackleton Expedition ship: Quest.

Shackleton dies of a heat attack while Quest moored at South Georgia Island before

expedition can begin

## Appendix B.

## Mount Everest: Some Notable Expeditions and "Firsts"

#### 1921 First British Reconnaisance Expedition

George Mallory and Guy Bullock site a Northern approach to the mountain and ascend to approx.7,000 metres

#### 1922 Second British Expedition

George Finch and Geoffrey Bruce climb to an elevation of 8,329 metres via North Ridge using bottled oxygen; first recorded deaths on Everest: seven Sherpas in an avalanche

#### 1924 Third British Everest British Expedition

George Mallory and Sandy Irvine disappear below the "Second Step" just under the summit

#### 1933 Fourth British Expedition

Sandy Irvine's ice axe found at 8,440 metres Eric Shipton and Frank Smythe spend two nights in "Death Zone" without bottled oxygen

#### 1953 First Successful Summit

Edmund Hillary (new Zealand) and Tenzing Norgay (Nepal) reach the summit of Mount Everest via the South Col Route

### 1960 Chinese National Expedition

Wang Fu-Chou first to summit successfully from North (Tibet) side of Everest

#### 1963 First American Expedition

Willi Unsoeld and Tom Hornbein climb the West Ridge and North Face; first traverse of Everest

### 1975 First Ascent by a Woman

Junko Tabei (Japan) via the South Col Route

#### 1978 First Ascent Without Bottled Oxygen

Reinhold Messner (Italy) and Peter Habeler (Austria) via the South-East Ridge

#### 1980 First Solo Ascent

Reinhold Messner (Italy) via North Col/North Face route

#### 1980 First Winter Ascent

Krzystof Wielicki (Poland)

#### 1988 First Descent by Paraglider

Jean-Marc Boivin (France)

#### 1996 "Worst Disaster"

15 climbing deaths in one season; basis for Jon Krakauer's book INTO THIN AIR

#### 1999 Mallory and Irvine Research Expedition

Mallory's body found at 8,155 metres by Conrad Anker (USA)

#### 2001 First Descent from Summit on a Snowboard

Stefan Gatt (Austria)

#### 2004 Fastest Ascent

Pemba Dojie (Nepal) in 8 hours, 10 minutes, via the South-East ridge

#### 2010 Youngest Person to Summit

Jordan Romero (USA), age 13

# Appendix C.

## **Manned Apollo Lunar Missions**

**Apollo 1** 27 January 1967

Commander: Virgil "Gus" Grissom Command Module Pilot: Edward E. White Lunar Module Pilot: Roger B. Chaffee

First crewed flight of Apollo; fire during pre-flight test kills astronauts

**Apollo 7** 11-22 October 1968

Commander: Walter Schirra, Jr. Command Module Pilot: Donn F. Eisele Lunar Module Pilot: R. Walter Cunningham

Earth-orbital engineering test flight of command and service modules

**Apollo 8** 21-27 December 1968

Commander: Frank Borman

Command Module Pilot: James A. Lovell, Jr. Lunar Module Pilot: William A. Anders

First lunar orbit; first humans to see far side of moon; "Earthrise" photo

**Apollo 9** 3 March 1969

Commander: James A. McDivitt Command Module Pilot: David R. Scott

Lunar Module Pilot: Russell (Rusty) Schweickart

Earth-orbital engineering test flight of first crewed lunar module;

First rendez-vous docking with command module

**Apollo 10** 18-26 May 1968

Commander: Thomas P. Stafford Command Module Pilot: John W. Young Lunar Module Pilot: Eugene A. Cernan Lunar landing "Dress Rehearsal"

**Apollo 11** 16-24 July 1968

Commander: Neil A. Armstrong

Command Module Pilot: Michael Collins Lunar Module Pilot: Edwin E. (Buzz) Aldrin

First lunar landing in Sea of Tranquility; Armstrong, "first man on the moon"

**Apollo 12** 14-24 November 1969

Commander: Charles (Pete) Conrad, Jr. Command Module Pilot: Richard F. Gordon, Jr.

Lunar Module Pilot: Alan L. Bean

Second lunar landing in Ocean of Storms; visit to unmanned Surveyor 3 probe

**Apollo 13** 11-17 April 1970

Commander: James A. Lovell, Jr.

Command Module Pilot: John L. Swigert, Jr. Lunar Module Pilot: Fred. W. Haise, Jr.

Third lunar landing attempt, aborted after explosion of oxygen tank in

service module

#### Apollo 14 31 January-9 February 1971

Commander: Alan B. Shepard, Jr.

Command Module Pilot: Stuart A. Roosa Lunar Module Pilot: Edgar D. Mitchell

Third lunar landing in Fra Mauro highlands

### Apollo 15 26 July-7 August, 1971

Commander: David R. Scott

Command Module Pilot: Alfred M. Worden

Lunar Module Pilot: James B. Irwin

Fourth lunar landing in Hadley-Apennine region; first mission to

visit lunar mountains; first deployment of lunar rover

#### **Apollo 16** 16-27 April 1972

Commander: John W. Young

Command Module Pilot: Thomas Ken Mattingly II

Lunar Module Pilot: Charles M. Duke, Jr.

Fifth lunar landing in Descartes Highlands; exploration of central highlands

### **Apollo 17** 7-19 December 1972

Commander: Eugene A. Cernan

Command Module Pilot: Ronald E. Evans Lunar Module Pilot: Harrison H. (Jack) Schmitt

Sixth and final lunar landing in Taurus-Littrow valley;

Longest mission duration of 12 days with three days on moon