

## **Manuscript Proposal Prospectus**

### **FAR FIELD: DIGITAL CULTURE, CLIMATE CHANGE, AND THE POLES**

**Edited by Jane D. Marsching and Andrea Polli**

Contact: Andrea Polli  
cel 718-909-5607 home 505-266-2327  
andrea@andreapolli.com skype: andreapolli

#### **Summary**

*Far Field* is a critical study of climate change, the poles and digital culture. Human understanding of the North and South Poles has been radically transformed by innovations in digital and networked technology, particularly in the last decade. The realities of the climate crisis have fueled new technologies in the fields of science, engineering, and art. This volume seeks to explore the transformation of cultural understandings of the unique position and rapidly changing environments of the North and South Poles through digital technology.

More remote than any place on Earth, the Poles have always been communicated to the public through some form of media. Despite this (or perhaps because of this), they have developed a deep psychological and spiritual meaning in culture. Early explorer stories were recounted in popular technologies of the time: printing presses, lithography, lantern slides, etc., but the Poles remained highly imaginary, beyond documentation. New technologies have now allowed, for the first time in history, a remote, real-time virtual experience of the Poles. This simulcast technological lens has shown us the shocking truth of climatic transformation. The Poles have become both the proving ground and the advanced warning system for scientific research related to global climate change.

In the middle of climate change media super-saturation, age-old narratives of exploration, myth and literary imagination yield to the data of satellites and ocean currents. What was once Shelly's Frankenstein lecturing about the quest for glory on the way to the North Pole in the popular imagination is now Al Gore on a elevating platform gesturing towards complex graphs of temperature fluctuations. Technologies of communication deployed by science, industrialization, and geopolitical concerns picture this territory now. What was once considered a wilderness foreign to Western culture is now a harbinger of the future, and so has become part of this culture. The natural, the technological, and the production of data are no longer in conflict, but exist in reciprocal need.

*Far Field* is a collection of essays in contemporary cultural studies combined with interview and diary excerpts exploring some of the most significant artistic, scientific, technological and philosophical interpretations of the Poles over the past decade.

### **Theoretical Framework and Methodology**

Society creates its environment as much as it adapts to it, and that technology has changed the environment into an increasingly synthetic produce of human activity. Perhaps there is no better example of “denaturalization” [quotes added] than the looming uncertainty regarding the effects of human activity on the global climate. [Hess, David. *Alternative Pathways in Science and Industry*. Cambridge: MIT Press, 2007. Page 9]

By drawing on historical and contemporary art, literature and cultural theory, accounts of Polar science, and interviews with contemporary Polar researchers, Far Field addresses the human dimension of global climate change.

In the quote above, David Hess identifies technology as playing a significant role in what he calls “denaturalized” environments, in which the anthropogenic impact is greater than any other. Humans have occupied nearly every landmass for hundreds of thousands of years, making identifying an environment untouched by human technology very difficult. The Poles have historically been one of these rare, unspoiled places. That is...until now. Global climate change is the greatest crisis humanity has ever faced, and according to the Intergovernmental Panel on Climate Change, is very likely due to anthropogenic greenhouse gas concentrations. Through the vast melting of the Arctic ice sheet and the resulting concerns about the Antarctic, these untouchable places now appear dramatically denaturalized.

Scientists have long had difficulty funding research at the Poles, but now are racing to set up research projects through all aspects of each unique Polar biome in an effort to document and understand the mechanisms by which climate change is transforming the environment. The technologies of communication and transportation, of geoengineering and harsh climate adaptation, among others, have not just allowed for research to flourish at the Poles, but even more so have altered the manner in which the results are communicated to the media and lay public. The result is an experience of the Poles that is unprecedented in our history: immediate, virtual, and continual.

Many contemporary environmentalists look to technology as a way to achieve authentic natural experiences without the danger of human impact. This is a radical departure from the philosophy of the traditional naturalist. The environmentalist movement born in the late 19th century stressed the importance of a direct, sensual and unmediated confrontation with nature. Emerson, Thoreau and the transcendentalists suggested that indirect mediated experience of nature robs humanity of a fundamental and universal human truth. But direct, human experience of nature inherently transforms it. Remote, dangerous and unavoidably mediated, the Poles offer a potential model for creating authentic, technologically transmitted experience.

Far Field explores the question of authenticity in relation to inaccessible places, looking at the experience of place constructed through science, literature, art and new technologies.

There is no doubt that our planet—the climate, wilderness, all that is “natural”—is changing. It is vitally important for us as artists to redefine our somatic and experiential connection to what we are transforming. In the community of artists using new technologies in particular, an electric storm—of hybrid, interactive, and performative art—is brewing. [Shane Brennan, *Introduction to Arctic Listening Post: Works 2005-2009*, by Jane D. Marsching, p. 37]

Artists have responded to the urgency and rapid transformation of the Poles through work in a wide range of digital media in the last five years. Project such as London Fieldworks, Cape Farewell and ITASC, as well as projects by the book’s editors Jane D. Marsching and Andrea Polli, have sought to represent and communicate how the natural, the technological and human culture may not be, as earlier notions of ecological philosophy have formulated, in opposition to each other. Instead the natural and the technological in the vision of many digital media practitioners are seen in an increasingly fragile, yet essential relationship.

### **Background**

Co-editor **Andrea Polli** spent seven weeks in Antarctica during the 2007/2008 season, gathering material for several projects including an online blog and mapping project called 90degreessouth.org. The blog contains audio interviews with over 20 prominent Polar scientists, research assistants, professional meteorologists and support staff conducted at the South Pole, McMurdo Station and the Dry Valleys, Antarctica and in New Zealand, Switzerland and the US. Each interview has been transcribed and a series of excerpts have been selected for use in the book, including an in-depth discussion of how climate models are created, used and evaluated and how data is collected, from analysis of remote sensing from satellites to weather balloon launching to physical observations. In one case, a paleo-climatologist speaks about the analysis of geological evidence of past climate.

Through the course of the interviews, Polli was surprised to learn that a majority of weather monitoring done in Antarctica by the United States is done by human observations. These “weather observers,” often trained in meteorology, became a subset of interviews. In particular, interviews focused on teasing out the reason for human observations, especially in the harsh living environments of Antarctica. The question of human versus technological presence will serve as the unifying theme of several of the essays.

In addition to these specialized areas of discussion, all interview subjects were asked what aspects of their research are most difficult for the general public to understand and what is the role of scientists in the greater community. Some of the interview subjects were quite candid about the difficulties of communicating accurate information about climate change to the public. These excerpts will be used more generally throughout the book as appropriate.

Co-editor **Jane D. Marsching** has been working on an extended project exploring climate change and its past, present, and future impact on the Arctic and North Pole. Recent projects include a blog based project entitled: Deepnorth: A Virtual Expedition to the North Pole, and a multi-author networked conversation

entitled *Climate Commons: The Arctic, Climate Change, and Sustainability*. Excerpts from this blog will be used throughout the book. Other projects by Marsching have looked at Digital Elevation Models of disappearing glacial terrains, climate modeling of temperature changes at the North Pole, and architectural responses to sea level rise in port cities around the world. She has collaborated with a wide range of researchers from the scientific disciplines of glaciology, climatology, and many others. She is currently conducting interviews her scientific collaborators, which should be completed by the end of the summer 2009.

In addition, **both Marsching and Polli** have lectured and written extensively on their projects in the context of climate change and the Poles, including essays in *BiPolar* (Cornerhouse 2008), *NYFA Current* (The New York Foundation for the Arts, 2008) and *S&F Online: Gender on Ice* (Barnard College, 2008).

**Scientist interviews completed and in-progress include:**

1. Rick Aster, Seismologist, New Mexico Institute of Mining and Technology
2. David Carlson, Director of the International Polar Year 2007-2008 International Programme Office
3. John Cassano, Atmospheric Scientist, CIRES, The University of Colorado Boulder
4. Sharon Collinge, Biologist, The University of Colorado Boulder
5. Jeff DeRosa, Meteorologist, Admundsen Scott South Pole Station
6. Peter Doran, University of Illinois Chicago Earth and Environmental Sciences
7. Andreas Fischlin, Coordinating lead author of the Intergovernmental Panel on Climate Change and co-recipient of the 2007 Nobel Peace Prize
8. Andrew Fountain, Lead principal investigator of the Antarctic Dry Valleys Long Term Ecological Research (LTER) Project
9. Adam Lewis, Antarctic Paleo-climatologist, North Dakota State University Geosciences
10. Matt Nolan, Glaciologist, University of Alaska, Fairbanks
11. Jim Overland, Head of the NOAA's North Pole Project, PMEL
12. Wolfgang Rack, Glaciologist, The University of Canterbury Christchurch New Zealand
13. Mark Serreze, Arctic climatologist, NSIDC
14. Kevin Trenberth, Atmospheric Scientist, The National Center for Atmospheric Research and Coordinating lead author of the Intergovernmental Panel on Climate Change and co-recipient of the 2007 Nobel Peace Prize

### **Structure**

Approximately 100,000 words in 7 essays with an introduction by Jane Marsching and Andrea Polli. Approximately 10 original illustrations per chapter.

### **Outstanding Features**

Far Field is the first text that brings together aesthetic and theoretical issues from the discipline of media art with the most recent thinking on communications technology and environmental science at the Poles. The book is also unique in that the authors themselves are artists working with new media and environmental issues who have both done significant work related to the Poles.

### **Audience/Market**

This book is intended for professional artists, scientists, students at postgraduate and advanced undergraduate levels, academics and the college-educated general public. It should interest audiences from the fields of art and design, geography and environmental sciences, media and technology, humanities, cultural studies and science and technology studies.

Primary bookstore shelving subjects are: new media theory, environmental writing, contemporary art. Other bookstore shelving subjects might include travel/journalism, science and environment, polar writing and earth sciences.

### **Current Status of the Manuscript**

A majority of interviews completed and transcribed, essays selected and abstracts completed. Full essays and image selection in process.

### **Expected Completion Date**

August 1, 2010

## **Essays**

### **1] TRIPLE A: THE ARCTIC, THE ANTARCTIC, AND THE ANTHROPOCENE by William L. Fox**

The Anthropocene is the geological period beginning in the 1790s that supersedes the Holocene, an era during which humans became the most powerful geomorphological force on the planet. The term was coined by Nobel Prize laureate Paul Crutzen in 2000, who had found evidence, in part from polar ice cores, of a change in global geochemistry. His term is a recent addition to the lexicon of Earth systems science, which as a discipline can be said to begin also in the 1790s with Alexander von Humboldt, who discovered the correlations between altitude, temperature, and biotic assemblages, and then extended his observations through isotherms to other continents. He promulgated his prototype for a global ecology through images that in turn influenced the landscape art of the nineteenth century.

The Anthropocene can be described as having three stages: the first starting in the late 1700s with the increased consumption by industry of coal; the second commencing after World War II with the accelerated use of fossil fuels worldwide. The third stage is when humanity becomes “a self-conscious and active agent in the operation of its own life support system economies.” The first stage provoked the rise of Romanticism, and the second an artistic counterweight in environmental art. The third stage is manifested by land arts.

These three stages in the Anthropocene and art are paralleled by developments in imaging technology and polar exploration. Romanticism was an age of painting, and photography was the dominant medium of the early environmental movement. Land arts as practiced in the polar regions are often engaged with climate change, and the works are produced, documented, and distributed via digital means. This can be viewed as parallel to the three eras of exploration proposed by historian Stephen Pyne.

### **2] SUBLIME ICE: GLOBAL WARMING AND THE NEW POLAR REGIONS by Lisa Bloom and Elena Glasberg**

Global warming now exceeds its localizations as data, representation, or as narrative. The topic itself has become overwhelming and even terrifying, markers of what we can only recognize as the sublime. We propose to reconsider the place of the poles, so often spatialized in Europe and America as extreme, the ends of the earth, or as otherworldly locations outside the global system. In looking at how photographers represent the poles as ever-more enmeshed with the concerns of rest of the world, we are engaging a “critical distance” through which we want to reference both the historical fact of the poles’ remoteness from European and American centers of power and their gradual and sudden integration into a world system which they, in turn, are now changing. Global warming we propose has become a complex discourse through which geopolitical, aesthetic, and environmental science-based systems cohere, conflict, and refigure.

Contemporary photographers Anne Noble, Connie Samaras, Subhankar Banerjee, Joyce Campbell, and An-My Lê have all traveled to the poles and all engage with the discourses of science and global warming.

Their various visual media – both film and digital photography, video, and daguerreotype designed for fine art reproduction and museum shows -- counter and challenge the overproduction of polar images and commercialization on internet and through the tourism industry, and most importantly, the reassertion of the polar regions' geopolitical salience. Though at first glance it might seem that recent territorial claims as well as contemporary discourses on global warming are gender and race neutral, a feminist analysis of representations of the Arctic and Antarctic suggests a re-emergence of interest in polar narratives promoting imperial masculinities. This surge of interest since the late 1990s is exemplified by recent reprintings of original exploration narratives, new biographies of 19th and early 20th century explorers, and even 'reality TV' simulated re-enactments of their journeys. In contrast to the images that tourists bring home of the poles as a pristine and epic landscape, the artists that we will be examining present the polar regions as a techno-social space of representation and in both the “real world” and within media.

These photographs evoke questions of representation and power; they disrupt the ideological narratives of scientific progress, empire and masculinism that preceded them and they rework the genres of science fiction, silent film and horror as well as aesthetic traditions of the sublime and nostalgia. Intercutting the lingering fascination with sublime nature as awesome, overwhelming, and simultaneously humbling, these photographs offer a different relation to the poles – creating what might be termed a “techno-sublime” that critically marks the changes of what it means to live in, work in, visit, and represent these regions as well the changes in our perception of these regions as a former heroic and pristine landscape now transformed by global warming.

### **3] POLAR MEDIA by Peter Krapp**

The sheer inaccessibility of the North and South Poles makes them a crucible for the persistent questions of access and data visualization that characterize the information age. The Arctic and Antarctic have become increasingly topical in popular cinema as well as in media art in recent years. As representations of polar regions grapple with the fictions that characterize representations of science, they illustrate the perils and perks of polar travel in the age of digital media.

As a title for this chapter, *Polar Media* does not lay claim to a discovery. Rather, its titular claim is to situate representations of the Arctic and Antarctic as a topic in media history. To this day, the attraction of South Pole and North Pole remains one of heroic detection: certainly they have been discovered, certainly they have inspired myth, literature, science, and art, but nonetheless the polar regions remain inaccessible, unrepresentable, dark, devoid of contrast; there to be found and rediscovered. This is especially true for the kind of art history that hews to the patterns of the detective novel, reconstructing from traces a grammar of objects and authorship; but it applies equally to film and media art in the age of eco-tourism, where discovery remains the motive, following snow-blown trails into nothingness, even and especially after the preceding discoverers had imprinted the landscape with their names and deaths.

On one hand, polar media exhibit what Jameson calls the properly utopian structure as a kind of world reduction in which not merely breathable atmosphere but custom, human relationships, and finally political choices are pared down to the essentials. On the other hand, as polar expeditions attempt to fill in the last blank spaces of cartography by reaching the only territories left on the globe without any traces of human life and history, they play on an original emptiness without a trace. From the accounts of Pytheas and Pliny about travel in the margins of the known world to contemporary science fiction set in the near future that illustrates the perils and perks of polar travel in the information age, polar media raise complex issues of mapping cultural space from colonialism to post-industrial globalization. One trajectory of what one ought to be able to excavate as the historical logic of polar media indicates a shift, in the 19th century, from a pronounced emphasis on race to a growing concern with environmental factors, with weather, and with the global meteorological consequences of melting polar ice caps in the course of the 20th and into the 21st century. This chapter seeks to trace the contours of that trajectory.

#### **4] AIRSPACE by Andrea Polli**

This chapter investigates art and science transmission-based projects related to the Arctic and Antarctic. Starting with an historical background of amateur long-distance radio, this chapter examines at the use of radio at field sites in the Arctic and Antarctic and art and science projects using this and other distributed forms of media transmission including Internet radio. Like independent news agencies, transmission-based projects including radio and Internet broadcasts by individuals and small groups provide a direct alternative to the mass media. Specifically at the extremes of the Arctic and Antarctic, how have such transmission-based projects developed, and how do these works use inter-disciplinarity and systems thinking to help us better understand environmental issues?

In 2008, the author created the Sonic Antarctica project from a personal experience of the Antarctic environment. The work combines soundscape recordings and sonifications by members of the Antarctic community with audio interview excerpts, and this work will be discussed in the context of the other transmission science and art works.

#### **5] NETWORKED ECOLOGIES: TOWARDS AN INFORMATION AESTHETICS OF CLIMATE CHANGE, by Tom Corby**

This paper proceeds from the assumption that new media arts can play an important role in nurturing a change in public consciousness of the effects and causes of climate change. It makes a number of overlapping arguments:

1. Any attempt to broker new subjectivities around climate change will need to encourage publics to link the social and emotional shapes of their lives to the wider material world. Gregory Bateson's 'ecology' has described this cause and effect as a sensibility to systems, feedback mechanisms and the modulation of ecological patterns. So eco-systems are *myriad couplings* between the subcomponents of natural materials, forces and human agency.

2. That creative affordances accrue from ostensibly scientific digital imaging and data gathering technologies (e.g. Climate Models, GIS etc.), therefore going beyond cognitive and analytical approaches to the use of data to image climate change.

In making this claim I discuss approaches developed in my own art practice that use ecological data as the basis for interactive artworks and installations. Using case studies of previous and current work produced collaboratively with the British Antarctic Survey and drawing on the theories of Guattari, and Dudgeon amongst others, I develop the concept of the *hybrid image* as a cultural-scientific form capable of containing cognitive and analytical, and affective and aesthetic elements. This work strives to articulate an aesthetic of *system-ness* – a metonym of the interconnected forces operative between the ecosphere and lived human behaviour that both writes into the natural environment whilst simultaneously writing out to and moulding social and political realities.

Specific artworks discussed include - *Coriolis Drift* - that uses climate models and real-time data from the Antarctic to produce an installation that models the Circumpolar Tide - a current that girdles the regions shoreline. Mapped into the tidal structures of the work is a mixture of text conversations streamed in real time from Internet chat rooms, that debate anthropogenic climate change and other ecological data taken from the region. Audiences tracked by infra-red systems enter the work which responds to their physical presence by redistributing energy exchange between visible eco-data, tidal forces and internet conversations in the space. The physical presence of the audience situates them as agent of change in a natural system that causes it to modify in relation to bodily presence. Interaction is thus both metaphoric of human impact on the environment as a complex interplay between informational, social and material patterns and provides a mechanism for prototyping ways of knowing the world differently.

These critical and aesthetic approaches enable audiences to construct “emotional relations” with heterogeneous data to actualise a haptic reality of ecological and social complexity as embodied, sensed experience.

## **6] ANTARCTIC DIARIES excerpt by Simon Faithfull**

Several days of excerpts from Faithfull's 2004/2005 online Antarctic Diaries will be included in this section, for example:

24th December: Halley Research Station

12.05am and the sun is arcing off the sparkling, undulating snow. Frail, spidery bits of humanity are scattered around a few, flat kilometers. Radio masts, buildings on stilts, snow cats and skidoos buzzing and levitating across white space. All the orange boiler suits busy carrying things from place to place - like an endless wide shot of the evil empire HQ.

But beyond this circle of silhouettes - nothing.

Pure, undiluted 'nothing' as far as the eye can see. Except that I have no way of gauging how far my eyes are seeing - between the flimsy bits of Halley there's no-'thing' to see.

I walked out to CASlab - the 4th building set slightly apart so that they can measure the pure air blowing across 1000's of miles empty Antarctic continent. Following the rope handline (for when you can't see further than your feet) I was walking steadily towards the building that was just there in front of me. I walked... and I walked... and I walked... but the building didn't seem to get any bigger. I looked back and the Simpson Platform was slightly smaller. I walked some more, overheating in all my Antarctic gear. The untouched snow (unbearable to look at without goggles) was alive with crystal fireflies of light but for all my clown-walking in huge moon-boots, the shimmering building ahead only grew a tiny amount - floating through infinity white. An evil angel was playing with me - blowing the building away across the featureless plain of white. If your eyes tell your brain things that don't make sense, your brain tries to fill in.

Distance is totally screwed, space is warped and time packed up and went home. Nothing seems real - I think I'd better draw the blinds as tight as I can and try and sleep.

## **6] GROUND TRUTH by Andrea Polli**

Many Polar climate scientists speak about the importance of non-quantitative knowledge. For example, Dr. Andrew Fountain, the head of the Dry Valleys Long Term Ecological Research Group, said: "Just because you have the data doesn't mean you understand the system. It's important to come down and view the landscape and in our case view the glaciers, and see how the glaciers are reacting to these changing environments. And that feeds into our understanding and our non-quantitative knowledge."

Why, with sophisticated instrumentation and remote sensing, do we depend upon human observers on the ground, doing what the scientists call 'ground truthing'? What is it that the machines are missing and what is the human role in understanding what is unfolding? What is the meaning of 'ground truth' and can it inform and enhance our relationship with the poles? These are the questions to be explored in the chapter

Ground Truth. People who do field work in the Arctic and Antarctic do so at considerable physical risk, and stories of danger and hardship have characterized the historic mythos of the Poles.

In *Re-Thinking Science*, Helga Nowotny describes the rise of scientific uncertainty in the public consciousness as creating a “risk” society, and asks how a perpetual state of risk has transformed societies. Emerging from a complex system, risk and uncertainty has played a major role in the climate crisis. Because responding to the crisis requires significant changes in social behavior and structure, in many cases uncertainty has been highlighted in the media and other public presentations of the climate issue in order to discredit the science. This has happened in particular to the high profile work of some of the Arctic and Antarctic scientists interviewed for this chapter.

This essay will include excerpts from interviews with scientists who have done fieldwork in the Arctic or Antarctic.

### **7] MAGNET FOR THE FANTASTIC by Jane D. Marsching**

The Poles have long been imaged as extreme environments conquered by hardy Western men in search of fame, national pride, heroism, and spiritual achievement. Today these images have been replaced by graphs and data about climate change, endless images of imperiled polar bears, animated penguin movies, and scientific data in scientific, fictional, and documentary discourse. The prevalence of digital technologies in the hands of every explorer, researcher, and tourist has shifted our cultural imagination of the Poles, yet still only a tiny fraction of our population has set foot in the polar regions. This essay examines the Poles as mythological places, variously defined as magnets for the fantastic, unrepresentable terrain, essential climate, sublime wilderness, conquerable territory, and resource rich landscape ripe for plundering. How do the Poles constitute unique terrains that occupy a complex balance between real and imaginary, particularly as we move forward into a future where the polar biospheres are radically and irreversibly changing?

Our understanding of the Poles has been communicated almost entirely through media technologies from printing presses on ships to lantern slide lectures to newspaper accounts to webcams in isolated terrains. How have the inventions of these technologies told the stories of the polar landscapes? Drawing on previous research into the relationship between the paranormal and technology, I will draw a connection between the imaginary landscape and a technological presence. As we negotiate a new world in an uncertain climate, how are technologies today used to confirm, magnify, or dismiss our fears and hopes for our future?

### **8] VOICES, LINES, CRACKS, AND DATA-SETS: FORMATIONS OF A NEW ‘IDEA OF THE CANADIAN NORTH by Leslie Sharpe**

A new ‘idea of North’ is proposed to be derived from cultural representations, histories and data sets (of real and media-accessed experience and knowledge by both outsiders and insiders). Examples include representations from those passing through, and/or from those who access knowledge of place from a distance

via media and information. such as Zacharias Kunuk's film *Atanarjuat*, lines created by data gathered from telemetry or history, and examples from my own artwork and travels in the Canadian Arctic.

### **Author and Contributor Bios**

**Tom Corby** is the deputy Director of the Centre for Research in Education Art and Media (CREAM) at the University of Westminster. His work as an artist and writer is concerned with exploring how scientific imaging and modelling tools can be redeployed in art practice. His artworks (produced in collaboration with Gavin Baily and Jonathan Mackenzie) have won numerous awards including: the Japan Media Arts, the Priz Ars Electronica and the International Media Art Award, at the Zentrum fur Kunst und Medientechnologie (ZKM). Work has been exhibited widely including at the ICA, the V&A, the ICC in Tokyo, and the Metropolitan Museum of photography Tokyo. Reviews include Art Monthly, Art Review, and Artists Newsletter.

Funded by the UK Arts Council, Tom is currently collaborating with the British Antarctic Survey on a series of art works that visualise Southern Ocean data. In 2009 he was awarded a research fellowship at the BBC by the Arts and Humanities Research Council to explore how to visualise BBC data streams.

In 2005 he produced "Network Art: Practices and Positions" (Routledge 2005), an edited monograph which explores how artists have extended the Internet's social and digital architectures, and has published in numerous periodicals including Leonardo and the Journal of Visualisation.

**William L. Fox**, Director of the Center for Art + Environment at the Nevada Museum of Art in Reno, Nevada, has published numerous books on cognition, art, and landscape, most of which are set in the extreme environments of the Antarctic, the Arctic, Chile, Nepal, and other locations. He has also published fifteen collections of poetry, exhibited visual text works in seven countries, and is the author of more than two dozen essays in exhibition catalogs. Fox is the recipient of fellowships from the Guggenheim Foundation and the National Endowment for the Humanities, and was a National Science Foundation Antarctic Visiting Writer in 2001-02. He has been a visiting scholar at the Getty Research Institute, Clark Art Institute, the Australian National University, and National Museum of Australia. His most recent book is *Acreality: On the World from Above*, and he is currently engaged in two new projects, both book-length studies in art and environment. Fox is a fellow of both the Royal Geographical Society and Explorers Club.

**Peter Krapp** (<http://www.krapp.org>) is an Associate Professor of Film & Media, Visual Studies, and English at the University of California, Irvine, where he also holds a courtesy appointment in Informatics. His research interests include digital culture, media history, and cultural memory. He is the author of *Déjà Vu: Aberrations of Cultural Memory* (University of Minnesota Press 2004), and editor of *Medium Cool*, a special issue of the South Atlantic Quarterly (Duke University Press 2002).

**Andrea Polli** (<http://www.andreapolli.com>) Andrea Polli is currently an Associate Professor with joint appointments in the Colleges of Fine Arts and Engineering and is the Director of the Interdisciplinary Film and Digital Media Program at The University of New Mexico. She is co-chair of the Leonardo Education Forum, an affiliate of the MIT Press and the College Art Association of America (CAA) that promotes the advancement of research and academic scholarship at the intersections of art, science, and technology. Her work with science, technology and media has been presented widely in over 100 presentations, exhibitions and performances internationally including the Whitney Museum of American Art's Artport and the Field Museum of Natural History, and has been recognized by numerous grants, residencies and awards including UNESCO and the National Science Foundation. Her work has been reviewed by the *Los Angeles Times*, *Art in America*, *Art News*, *NY Arts* and others. She has published two book chapters, several audio CDs, DVDs and many papers in print including MIT Press and Cambridge University Press journals.

**Simon Faithfull** (<http://www.simonfaithfull.org>) Simon Faithfull's drawings, videos and installations have been in numerous national and international solo and group exhibitions. In recent pieces, Faithfull has experimented with blowing up the scale of the palm pilot pixels, and as an extension of this practice, he has also regularly undertaken video projects also involving notions of observation. Faithfull's video works can be found in the Arts Council Collection, The Government Art Collection and the V22 collection. In 2004/5 Faithfull made a two-month journey to Antarctica with the British Antarctic Survey having been selected by Arts Council for their International Fellowships. In 1996 Faithfull made the part-animated *Isle of Dogs* short film for the BBC's 10×10 series. He is a lecturer at the Slade School of Art and lives in Berlin and London.

**Jane D. Marsching** (<http://www.janemarsching.com>) Digital media artist, Jane D. Marsching's recent project, *Arctic Listening Post*, explores our past, present and future human impact on the Arctic environment through interdisciplinary and collaborative practices, including video installations, virtual landscapes, dynamic websites, and data visualizations. Recent exhibitions include: the ICA Boston; MassMoCA; North Carolina Museum of Art; San Jose Museum of Art, CA; Photographic Resource Center, Boston, MA; and Sonoma Museum of Art, CA. She has received grants from Creative Capital, LEF Foundation, Artadia and Artists Resource Trust. Recent publications include: *BiPolar* (Cornerhouse 2008), *Gothic* (Whitechapel Press, London, 2008), and *S&F Online: Gender on Ice* (Barnard College, 2008. With Mark Alice Durant in 2005, she curated *The Blur of the Otherworldly: Contemporary Art, Technology, and the Paranormal*, at The Center for Art and Visual Culture, Baltimore, MD; a catalog of the exhibition was published in June 2006 with essays by Marsching, Durant, Marina Warner and Lynne Tillman. She is a cofounder and member of *Platform2: Art and Activism*, an experimental forum series about creative practices at the intersection of social issues. She is

currently Associate Professor at Massachusetts College of Art in Studio Foundation. She received her MFA in photography from The School of Visual Arts, New York City, in 1995.

**Lisa Bloom's** interdisciplinary research and pedagogical interests cut across numerous fields including critical gender studies, media and film studies, cultural studies, visual culture and the history of art. She is the author of *Gender on Ice: American Ideologies of Polar Expeditions* (University of Minnesota Press, 1993), which is the first critical book to date on the Arctic and Antarctic written from a feminist perspective. Since the publication of *Gender on Ice*, Bloom has re-engaged the topic by writing about how artistic practices are re-visualizing the Arctic and Antarctic. She co-edited with Laura Kay and Elena Glasberg a special issue on the topic in *The Scholar and Feminist* (Issue 7.1: Fall 2008). Other publications include an edited anthology entitled *With Other Eyes: Looking at Race and Gender in Visual Culture* (University of Minnesota Press, 1999), and her more recent book, *Jewish Identities in American Feminist Art: Ghosts of Ethnicity* (Routledge, London, 2006). Her current book project is tentatively titled, "Melting Ice and Melting Markets: Feminist Visual Culture and Economic and Environmental Crisis." She currently teaches in the Communication Dept. at the University of California, San Diego.

**Elena Glasberg** approaches the fields of American Studies, textual, and gender and sexuality studies from "outside" locations such as the non-nationalized and unpopulated and problematically historical polar regions. Her articles have appeared in journals across the fields of geography, anthropology, and literature. In 2008 she co-edited a special issue of *The Scholar And Feminist* called "Gender On Ice" and is presently completing a book project *Final Arrivals on US Nationalism and Representation in Antarctica*. Since 2005 she has taught in the Writing Program At Princeton University.

**Leslie Sharpe** divides her time between Bloomington, Indiana, where she teaches and Northern Alberta, Canada, where she was raised. Her recent works address memory, history and politics of place, drawing on physical aspects of site and data related to site. She is current working on: "Northern Crossings," a sculpture-sound-video installation using data and content from the Canadian North, (Northern Alberta and the Canadian Arctic); "Speculations at the Remote," a video work on the Alberta Tar Sands; and "Fever," a locative walk for the sites of Marconi's first transatlantic wireless transfer from Poldhu, UK to Newfoundland, Canada. Her work has been shown internationally, including Kiasma Museum, the Pompidou Centre, and Kunstverein Stuttgart, the Banff Centre, PS1, Exit Art, Artists Space, and the Center for Visual Culture. Sharpe has held artist's residencies at the Banff Centre's New Media Institute, and at PS1 Institute of Contemporary Art in New York.