

World-Wide-Walks: Glaciers in the age of global warming

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Walk: Perito Glacier © 2012 Peter d'Agostino

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Abstract

World-Wide-Walks have been performed by Peter d'Agostino on six continents over the past four decades to explore elements of natural, cultural & virtual identities: mixed realities of walking through physical environments and virtually surfing the web. Initiated as video "documentation/performances" in 1973, the Walk Series evolved into video/web projects during the 1990s, and mobile/locative media installations in the 2000s. During the past decade, the World-Wide-Walks / between earth & water projects have considered the dire crisis of climate change and its ominous threat to impact on human civilization by operating as part of a long tradition of walking practice as exploration, meditation, political activism, community engagement.

This paper focuses on Walks that explore the immediate peril of global warming. Melting ice has the capacity to raise sea levels and change the configuration of civilization in heavily populated coastal regions. These Walks record the real time deterioration of glaciers, while noting their historic loss. Recent books by Elizabeth Kolbert and Naomi Klein contextualize the challenges of climate change. Kolbert talks about the precariousness of species, exacerbated by human environmental abuse. Klein discusses how wealth, worldwide economics, and the negotiation of

geo-political differences challenge the mobilization to enact timely change.

The arts have a role to play on the cutting edge of these issues through the production of works of significant cultural resonance and art the transmission of urgent concerns about a world at risk.

Keywords

World-Wide-Walks, art, walking, climate change, global warming, glaciers, ecology, Anthropocene

Walk: Vatnajokull © 2012 pdA





Walk: Columbia Ice Fields 1965 marker
© 1992 peter d'Agostino

Walking in Changing Environments

Humanity, upright, went into the caves, made markings by leaving imprints of hands, painted bison, and created great ritualistic spaces. Young Aboriginal men came of age by walking to learn about country, history, politics, time and space, geography, horticulture, fauna, natural boundaries, language. In the virtual age, walkabout has diminished. Losing that profound contact with the environment, losing the stories shared, the Law, the community suffers. Identity disappears. Environmental memory disappears. Humanity stamps the landscape with an economically driven, utilitarian, self-engaged framework that distances other operative systems that offer insight, meaning, and an alternative.

The act of walking, literally and metaphorically, from first steps to daily routines, still holds a key to individual and collective human identity. Walking positions the individual within a world of empirical awareness, statistical knowledge, expectation and surprise - anticipation of unknown encounters around the bend.

In mediating the frontiers of human knowledge, walking and other forms of exploration remain a critical means of engaging global challenges. Walking also constitutes a political act, most notably now when traversing environmental boundaries undergoing radical and potential cataclysmic change.

In *The Sixth Extinction: An Unnatural History* (2014), Elisabeth Kolbert discusses predictions that almost half of all living species on earth might vanish within this century.

One of the defining features of the Anthropocene is that the world is changing in ways that compel species to move, and another is that it's changing in ways that

create barriers roads, clear-cuts, cities - that prevent them from doing so.

Thomas Lovejoy has written that "in the face of climatic change, even natural climatic change, human activity has created an obstacle course for the dispersal of biodiversity," the result of which could be "one of the greatest biotic crises of all time." [1]

In *This Changes Everything: Capitalism vs. The Climate*, Naomi Klein takes the issue head on today and for a not too distant future. Klein's exploration covers the geo-political terrain.

Klein also explores the meaning of individual human engagement with the environment. During a difficult pregnancy, she describes how walking became a meditative process enhancing political insight into traditional understanding, awakening consciousness.

What helped most was hiking, and during the final anxious weeks before the birth, I would calm my nerves by walking for as long as my sore hips would let me on a well-groomed trail along a pristine creek. [2]

Klein bridges the individual's growing singularity on the technological age with that of the individual reconnecting with the surrounding environment. She expands the metaphor through her own reproductive narrative:

If the earth is indeed our mother, then far from the bountiful goddess of mythology, she is a mother facing a great many fertility challenges of her own. Indeed, one of the most distressing impacts of the way in which our industrial activities affect the natural world is that they are interfering with systems at the heart of the earth's fertility cycles, from soil to precipitation. [3]

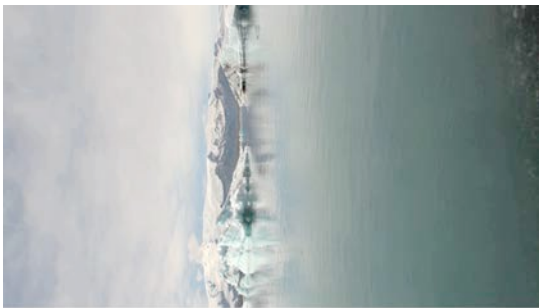
World-Wide-Walks

In their fragility, the World-Wide-Walks, over the past four decades, assemble a finite human figure's making of micro and macro meaning within natural and mediated cultural environments. Individual experience must continue to resonate to sustain a greater political awareness and mobilization.

Many years later, as he faced the firing squad, General Aureliano Buendia was to remember that distant afternoon when his father took him to discover ice. [4]

The news of Gabriel García Márquez's passing in 2014 rekindles the memory of these opening lines to *One Hundred Years of Solitude*, the saga of a family in a village on "the bank of a river of clear water."

While walking in California's Sierra Nevada mountains during the summer months, there are experiences of drinking clear water flowing directly from the melting snow pack at the higher elevations. Other walks through the Canadian Rockies to the Columbia Ice Fields in 1972 set a baseline for witnessing glacial retreat. On revisiting the ice fields two decades later, a video walk records strategically placed signs at five year intervals - beginning in 1965 and proceeding to 1990 - marking the path toward rapidly receding glaciers.



Walk: Vatnajokull © 2012 pdA

World-Wide-Walks / between earth & water / ICE

Recent walks at the edge of glaciers at the top and bottom of the globe - in Iceland, Alaska, and Tierra del Fuego, Argentina - were performed to witness the consequences of man-made global warming.

Juxtaposed with the ICE Walks and a sound score of evolving glacial dynamics composed by Reese Williams, cautionary texts serve as a counterpoint to the sheer beauty of these places - reminders of the fragility of massive glaciers during this current era of accelerating climatic changes. Informed by scientific studies and local knowledge, this project focuses on direct physical experiences of dramatically receding glaciers to address 'glocal' - global / local ecological concerns for a sustainable future.

Iceland Walks

Iceland marks a place of coexisting 'fire and ice', where the European and North American

continental shelves meet, characterized by factual and mythic histories, (notably the remarkable sagas.) Icelandic sagas (13th century) provide the first written documentation of geographic names of Iceland's glaciers although most of the glacier names originated after 1890. "During the last half of the 20th century, 6 named glaciers 'disappeared,' 3 mountain glaciers melted and 2 distributary outlet glaciers and 1 outlet glacier receded into the parent outlet glacier or ice-cap margin." [5]

Two of the most significant sites for the Walks are rapidly receding glaciers: Snæfellsjokull and Vatnajokull. Snæfellsjokull sits on top of an active volcano believed by some to be one of the 'seven primary energy centers' of the earth, and the setting for Jules Verne's novel *Journey to the Center of the Earth*. Vatnajokull, in southeast Iceland, is Europe's largest glacier. In 2009 a leading glaciologist at the University of Iceland explained the outcome of continued global warming. "The glacier ice will melt. The water that runs off will go to the sea. The sea level will rise about 7 metres, which means we'll have catastrophic effects on the highly populated areas all over the globe." [6]



Walk: Grand Pacific © 2013 pdA

Alaska Walks

Alaska harbors more than 100,000 glaciers. The Alaska Walks focus on Glacier Bay ranging from Bartlett Cove to the Grand Pacific Glacier (sites of walk performances). The Bay epitomizes the natural, cultural and virtual issues related to effects of climate change on the glaciers.

Although a handful of Alaska's large glaciers are, surprisingly, advancing, more than 99 percent of them are retreating. In the past decade, Alaska's coastal glaciers have added as much (or more) melt water to the global ocean as the ice sheets of Greenland or

Antarctica, making these glaciers a significant factor in global sea-level rise. [7]

The Ecological Society of America argued that establishing Glacier Bay as a national park in 1923 would help with the study of the natural processes of glacial advance and retreat within the confines of the bay.

Unlike many park service sites that commemorate a single event or significant features, Glacier Bay celebrates change and natural processes. However, no natural cycle can explain the current warming of our planet. [8]

The park recognized the history of the bay and its associations with British explorer George Vancouver (1791) and naturalist John Muir (1879). Before his research in Alaska, Muir's original studies of glacial trace history in Yosemite supported the designation of this California valley as a National Park in 1890. Two years later, Muir helped found the Sierra Club, which has perpetuated his legacy as a naturalist and ecologist well into the 21st century.

The cultural history of Glacier Bay, however, begins with the aboriginal peoples who populated the area well before the arrival of Muir, Vancouver or the Russian explorers, who first arrived in Southeast Alaska in 1741.

Eskimos from the west initially pushed into lands bordering on the [Glacier Bay] park's northwest boundary. Athabascans later migrated from the interior headwaters of the Alsek River toward the river's mouth at Dry Bay. The Alsek eventually served as a transportation corridor, linking the Athabascans with their neighbors the Tlingit Chilkat tribe. [9]

In addition to these significant natural and cultural histories of Glacier Bay, the Walks explore important virtual issues related to the present state of global climate change. Beyond direct ground level experiences at Glacier Bay, mediated by the use of video/web and GPS systems, the walks reference the Satellite Image Atlas of Glaciers of the World, which forms the basis of glacial studies by the U.S. Geological Survey.

The Atlas remotely sensed images, primarily from the Landsat 1, 2, and 3 series of spacecraft, are used to study the glacierized regions of our planet and to monitor glacier changes. [10]

Changes in the volume of glacier ice on land produces changes in global (eustatic) sea level. Seasonal changes in sea ice and snow cover and decadal changes in glacier area can be monitored regionally and globally with



Walk: Martial Glacier © 2012 pdA

image and other data from Earth-orbiting satellites. [11]

Argentina Walks

Walking glaciers at the top of the globe in Iceland and Alaska led to an interest in pursuing several parallel natural and cultural features in Tierra del Fuego, Argentina, at the southern tip of South America.

Framed by the Straits of Magellan and the Beagle Channel, this archipelago is referred to as the 'Uttermost Part of the Earth' by E. Lucas Bridges in his memoir of the same title (1947). He recounts his life as a European settler growing up with the indigenous Fuegian Indians.

L. Bergreen documents the first written account of glaciers in this region in *Over the Edge of the World*:

Magellan pauses at Santa Cruz because of storms and comes upon the Strait of Magellan, Oct 21, 1520. He sees fires in the distance, and calls the land Tierra del Fuego (Land of Fire). They pass glaciers with deep blue ice, view the Southern Cross in the heavens. Consisting of packed snow and ice, the glaciers never rested; they cracked, they groaned, they roared, and they threatened to decompose and tumble onto the beaches and water below. [12]

The Walks were performed in Tierra del Fuego at the Martial Glacier and at the Perito Moreno Glacier, located in the Andes on the border with Chile. Perito Moreno is one of 48 glaciers in the Patagonian ice field, the world's third largest fresh water reserve.

South America is perhaps most often associated with the Amazon jungle. But along its western edge, from Ecuador to southern Chile and Argentina, it also harbors huge glaciers, which are rapidly melting due to global warming. The melting of the glaciers

means the loss of vast reserves of fresh water for human consumption, and for the rivers that provide hydroelectric power. [13]

Argentine government agency researchers issued warnings that the Martial Glacier was rapidly disappearing. Jorge Rabassa, a geologist associated with the National Scientific and Technical Research Council (CONICET) proclaimed that "by 2050, 'nothing' will remain of it." [14]

Re-Discovering the meaning of ICE

The memory of "discovering ice," while facing a "firing squad," as portrayed in the Marquez tale, suggests an apt metaphor for the global climate situation.

Is this the kind of perceived threat necessary for a call to action as humanity stands on a precipice at the edge of an abyss - a tipping point of no return as a direct consequence of man-made global warming ?

Countries, individual citizens must now mobilize against complacency and economic expediency for the sake of the earth and its future inhabitants. Our survival depends upon it.

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Authors Biographies

Peter d'Agostino's pioneering photography, video and interactive projects have been exhibited internationally. Surveys of his work include: Interactivity and Intervention, 1978-99, Lehman College Art Gallery, New York; the World-Wide-Walks projects at the University Art Gallery, Bilbao, Spain (2012); and the University of Paris I Partheon-Sorbonne (2003), Major group exhibitions include: The Whitney Biennial, Sao Paulo Bienal, Brazil, and Kwangju Biennial, Korea. His works are in the collections of The Museum of Modern Art, New York, University Art Museum, Berkeley, and is distributed by Electronic Arts Intermix. D'Agostino has been awarded grants and fellowships and awards from: the NEA, Japan Foundation, Onassis Foundation, Pew Trusts, Fulbright Program, MIT's Center for Advanced Visual Studies, Banff Centre for the Arts, Rockefeller Foundation's Bellagio Center, Italy, the American Academy in Rome, the Art / Sci Center, University of California, Los Angeles. He is Professor of Film and Media Arts, Temple University.

David I. Tafler is Professor of Media and Communication at Muhlenberg College in Allentown, Pennsylvania. As a consultant for the Irish Red Cross Society (IRCS) in Banda Aceh (the ground zero site of the 2004 Tsunami) in 2009, he co-developed and authored a manual on communication and new communication technologies for the support of beneficiary populations in disaster prone regions. David Tafler has worked with the Pitjantjatjara, Yankunytjatjara, and Ngaanyatjarra people in central Australia since 1991 as a consultant, writer, and web designer/administrator. Tafler has authored and published many articles on interactive media, camcorder activism, avant-garde cinema, electronic art, and community media. His publications include journals such as *Afterimage*, *Wide Angle*, *Media Information Australia*, *Continuum*, *Kunstforum*, and a book that he co-edited with Peter d'Agostino, *Transmission: Toward A Post-Television Culture*.