SCAR Action Group History of Antarctic Research

5th SCAR History Workshop
on
“History of International Spaces”

Antarctic Treaty Summit 50

Washington, D.C., 3 December 2009

Programme
Booklet of Abstracts

Venue: Grand Hyatt Washington
1000 H STREET, NW, Washington DC, USA
Chronology

“Steps of Foundation of Institutionalized Antarctic Research”

1st SCAR Workshop on the History of Antarctic Research
Bavarian Academy of Sciences and Humanities, Munich (Germany)
2 – 3 June, 2005

“Multidimensional exploration of Antarctica around the 1950s”

2nd SCAR Workshop on the History of Antarctic Research,
Ministry of Foreign Affairs of Chile, Santiago (Chile)

"National and transnational agendas in Antarctic Research from the 1950s and beyond"

3rd SCAR Workshop on the History of Antarctic Research
Byrd Polar Research Center; Columbus (Ohio, USA)
25 – 26 October 2007

„Polar History and Institutionalization of Polar Research: The International Polar Years“

Session during the SCAR/IASC 2008 Open Science Conference (OSC) on
“Polar Research – Arctic and Antarctic: Perspectives in the International Polar Year”
Parl Inn Pribaltiyskaya Hotel, St. Petersburg (Russia)
9 July 2008

“History of International Spaces”

4th SCAR Workshop on the History of Antarctic Research
during the Antarctic Treaty Summit
Grand Hyatt Hotel, Washington DC (USA)
3 December 2009
In connection with the Antarctic Treaty Summit celebrating the 50\textsuperscript{th} Anniversary of the Antarctic Treaty, the History Action Group of the Scientific Committee on Antarctic Research and the History Committee of the American Geophysical Union invited papers to be presented on the theme “History of International Spaces” at a workshop to be held in Washington, D.C., on 3 December 2009.

People have divided the Earth geographically for millennia. Some of the divisions have been political, as when nations set their boundaries and then extend those boundaries to create empires. Scientists have also divided the earth into spaces depending on a number of attributes or purposes including magnetic fields, temperature and humidity distributions, geomorphology, flight paths, and ocean currents. However, fifty years ago, one geographic space - Antarctica - was designated as an international space. Since then we have also seen the creation of the International Space Treaty. The future may bring other international spaces, to be shared and examined by all peoples without national claims. It is in this spirit, that we encourage papers that address scientific discovery, particularly geophysical, that surpasses national boundaries and takes place in international spaces.

Convenor:

Cornelia Lüdecke (SCAR History Group) <C.Luedecke@lrz.uni-muenchen.de>

and Kristine Harper (AGU History Group) <kcharper@fsu.edu>

Information about the Antarctic Treaty Summit is given at <www.atsummit50.aq>
Workshop Program
“History of International Spaces”
3 December 2009, Washington, DC

9:00-10:30 Session 1 Chair Cornelia Lüdecke

9:00-9:25 Erki Tammiksaar, Estonia: The reception of the Antarctic and the problem of its discoverer in the scientific literature of the 19-20th centuries

9:25-9:50 Bjørn L. Basberg, Norway: Conceptualizing the Economic History of the Antarctic Region

9:50-10:15 Peder Roberts, USA: Science and commerce on the high seas: the international waters of the Antarctic between the world wars

10:15-10:30 Discussion

Coffee Break (10:30-11:00)

11:00-12:30 Session 2 Chair Kristine Harper

11:00-11:25 Lize-Marié van der Watt, South Africa: Towards a history of South African involvement in Antarctica 1919 - 1965

11:25-11:50 Irina Gan, Australia: The evolution of Soviet Antarctic policy prior to the Antarctic Treaty

11:50-12:15 Simone Turchetti, United Kingdom: On Thick Ice: Antarctica, the Cold War and Scientific Internationalism

12:15-12:30 Discussion

Lunch Break (12:30-14:00)
14:00-15:35  Session 3  Chair Cornelia Lüdecke

14:00-14:25  John C. Behrendt, USA: The First Determination of the Configuration and Volume of the Antarctic Ice Sheet in the International Year (IGY), 1957-59

14:25-14:50  Dian Olson Belanger, USA: The Antarctic Treaty: Idealism, Parochialism, and the Art of the Possible

14:50-15:15  William B. McAllister, USA: Reconceptualizations of Antarctica and Other New Spaces at the Opening of the “Interdependency Age”: 1960-1980

15:15-15:20  Poster Presentation

Jason Davis, USA: Emerging Geopolitical Contexts for Antarctic Operations

15:20-15:35  Discussion

Coffee Break (15:35-16:00)

16:00-17:30  Session 4  Chair Kristine Harper

16:00-16:25  M.S. Race and J.D. Rummel, USA: Lessons Learned as related to outer space


16:50-17:15  Peggy Dillon, USA: The Role of the Beardmore South Field Camp in the History and Evolution of the Antarctic Treaty

17:15-17:30  Discussion

Closing Words
Conceptualizing the Economic History of the Antarctic Region

Bjørn L. Basberg, Norwegian School of Economics and Business Administration, Bergen, Norway, <bjorn.basberg@nhh.no>

The Antarctic region has a long history of resource exploitation, from the 19th century sealing industry and the 20th century whaling industry to the more recent fisheries and even bio-prospecting. Tourism, often considered a new activity in the Antarctic region, has already been a growth industry for almost 50 years. Even science, research and exploration – main historic activities in Antarctica, have economic aspects. Historically, these activities were often motivated by economic prospects. The activities in themselves also include economic aspects involving employment, equipment, support, logistics etc.

The paper will review the historic industries. The main purpose, however, is to discuss the peculiarities of Antarctica as a region – a region with no permanent population and no sovereignty in a traditional sense, and how that poses methodological difficulties and challenges when analyzing and defining the Antarctic as an economic region.

The First Determination of the Configuration and Volume of the Antarctic Ice Sheet in the International Year (IGY), 1957-59

John C. Behrendt, Institute of Arctic and Alpine Research, University of Colorado, Boulder, also U.S. Geological Survey, Denver, USA, <John.Behrendt@Colorado.EDU>

The only field projects of IGY in Antarctica were a series of oversnow geophysical traverses, mostly US and USSR, making seismic reflection measurements of thickness of the Antarctic Ice Sheet, surface elevation, mean annual temperature, gravity and magnetic fields, as well as geological reconnaissance of occasional mountains and nunataks. However, geology and topographic mapping were not included in the official IGY program because of the political sensitivity of mineral resources and competing territorial claims prior to the Antarctic Treaty of 1959. I participated in the Filchner Ice Shelf Traverse as a 25-year-old graduate student. Other US traverses operating out of Little America V on the Ross Ice Shelf and Byrd Station in West Antarctica and the USSR traverses in East Antarctica made similar measurements. In a few years we produced a first approximation of the volume and elevation of the Antarctic Ice sheet using what today seem very primitive techniques.

The Antarctic Treaty: Idealism, Parochialism, and the Art of the Possible

Dian Olson Belanger, USA, <dobelanger@comcast.net>

The Antarctic Treaty created the first internationalized space on Earth, dedicating an entire continent to peace and the cooperative pursuit of science. Its negotiators somehow managed to defuse, avoid, or bypass such deal-breaking issues as territorial claims, military rivalries, and political antagonisms active elsewhere — an achievement unique in world affairs.
How could twelve leery, fearful nations come to such a high-minded, far-sighted agreement in the depths of the Cold War? Could there have been a treaty at all without the International Geophysical Year? How were entrenched self-interests and mutual suspicions overcome? How did science do what politics could not? What did, and does, the treaty offer a nervous world?

This paper on a seminal, if limited, fragile, and imperfect success story will provide a useful, engaging foundation for the day’s focus on the meaning and uses of international spaces.

Emerging Geopolitical Contexts for Antarctic Operations

Jason Davis, The Ohio State University, Columbus Ohio, USA, <bigjmdavis@gmail.com>

The international science that takes place in Antarctica does not take place in a political vacuum. Previous scholars have investigated how colonization, the cold war, and resource struggles have all left their mark on Antarctic geopolitics. These studies have been limited by a tendency to focus on territorially bounded Westphalian state power. More recent political frameworks address the extension of power beyond the borders of the territorial state, particularly through the extension of state power beyond its borders and the ability of non-state groups to enact territorialities. Neoconservative theory tends to promote the extension of state power beyond its borders and sees non-state enactments of power as threats, while critical theories are more wary of state power extensions and celebrate non-state practices of power. A review of these geopolitical theories and their relevance to Antarctic practices should help us to understand how approaches to international spaces are currently framed.

The Role of the Beardmore South Field Camp in the History and Evolution of the Antarctic Treaty”

Peggy Dillon, Department of Communications, Salem State College. Salem, MA, USA, <pdillon@salemstate.edu>

In January 1985, a quarter century after the Antarctic Treaty was signed, a workshop was held at the Beardmore South Field Camp in Antarctica. From January 7 to 13, the 57 participants from 25 countries—who met to help determine Antarctica’s future—freely shared their views about the continent’s resource management, day-to-day logistical operations, related political and legal issues, and the evolution of the Antarctic Treaty System. The workshop’s purpose was to stimulate open discussion and camaraderie rather than to produce conclusions or recommendations. Indeed, the workshop set the stage for continued discussion about the Treaty, criticism of the Treaty by environmental and international parties, and ways to improve the Treaty system. This paper will examine the major talking points and conclusions of that January 1985 workshop. It will also place the Beardmore South Field Camp, and the Beardmore Glacier itself, in the context of Antarctic history and scientific research.
The evolution of Soviet Antarctic policy prior to the Antarctic Treaty

Irina Gan, Institute of Antarctic & Southern Ocean Studies, University of Tasmania, Hobart, Australia, igan@postoffice.utas.edu.au

The USSR was an active participant in negotiations leading to the signing of the Antarctic Treaty, yet little is known about its interests in the Antarctic during the 1940s and 1950s prior to the signing of the Treaty. This paper examines the evolution of Soviet activities in the Antarctic which assisted the USSR in getting to the negotiating table. It discusses the practical steps taken by the Soviets and the thinking of political and scientific decision makers that helped mould Soviet Antarctic policy during this time. It examines the motives which drove its Antarctic activities, with the political imperative to gain an ongoing voice in any international decision about a regime for the Antarctic being predominant. The paper demonstrates that the Soviets viewed their objectives as ongoing and permanent.


Adrian Howkins, Department of History, Colorado State University, USA, <Adrian.Howkins@ColoState.EDU>

This paper will examine the use of scientific and environmental rhetoric in the political discussions of Antarctica at the United Nations in the early-to-mid 1980s. In late 1983, the Secretary General of the United Nations requested the views of all UN member states on the “Question of Antarctica.” The Chilean government concluded its reply with a section entitled “The Danger of New Utopias.” The Chileans argued that the Utopian speculation of the Non-Aligned Movement threatened to undermine the two pillars which sustained the Antarctic Treaty System: peace and science. “This is a risk,” the Chileans concluded, “for the sake of all humanity must be avoided at all costs.” Almost every member of the Antarctic Treaty System used similar rhetoric to defend the Treaty. The paper will argue that the use of science and conservation to defend political rights to the continent has a long history associated with imperial claims.

Reconceptualizations of Antarctica and Other New Spaces at the Opening of the “Interdependency Age”: 1960-1980

William B. McAllister, Office of the Historian, U.S. Department of State, USA, <mcallisterwb@state.gov>

Between 1960 and 1980 a variety of developments made it possible to exploit the Antarctic continent in new ways that paralleled novel opportunities in the oceans and outer space. National governments and non-governmental actors, especially scientific communities and emerging ecological constituencies, contested the definition, ownership, and use of these
spheres. This paper explores how diverse communities reconsidered notions of “interest” to accommodate human activity in these previously “uninhabitable” spaces. Arguments for and against envisioning these new regions as “commons” featured prominently in the deliberations as contestants wrestled to occupy rhetorical or physical manifestations of the “high ground.” These encounters led to new conceptions of interdependence across an expanded geospatial continuum. This heightened awareness of the interconnectedness of humans with each other and the planet made it possible for decision makers, scientific advisers, activists, and the general populace to “see” the globalized world that has now become commonplace.

**Updating Policies for Scientific Exploration and Protection in Outer Space: Borrowing from the Antarctic Treaty Experiences**

Margaret S. Race, SETI Institute, Mountain View, CA, USA, <mracemom@aol.com>
John D. Rummel*, Institute for Coastal Science & Policy, East Carolina University, Greenville, NC, USA, <rummelj@ecu.edu>

The Outer Space Treaty of 1967 requires that exploration of other worlds be conducted without “their harmful contamination.” To protect future scientific study by preventing biological contamination, ICSU’s Committee on Space Research (COSPAR) provides policy guidance for exploring the solar system. In 2006, an NRC study on forward contamination of Mars recommended reexamination of COSPAR’s policy to determine if “ethical implications” should be integrated into the policy along with science protection. Support has grown within the international scientific community for an international workshop to examine the issues and implications of integrating ethical considerations into policy (e.g., preservation of planetary environments). An international forum planned for mid-2010 will gather scientists, legal/policy experts, and ethicists to examine questions relative to the potential revision of the existing science-based policy. Comparative studies and lessons learned from the Antarctic Treaty can provide useful information and approaches for the deliberations ahead.

**Science and commerce on the high seas: the international waters of the Antarctic between the world wars**

Peder Roberts, Stanford University, Stanford, CA, USA, <peder.roberts@stanford.edu>

Scholars invariably associate science in an international space with the Antarctic of the 1950s rather than the interwar years. But when Antarctic whaling moved from shore stations to the high seas in the late 1920s, the Southern Ocean became a space in which science functioned as a powerful (and flexible) source of legitimacy for making judgments on what constituted appropriate commercial activities. This helps explain why Britain continued its state-sponsored Discovery Investigations even after the end of colonial rule eliminated their original mission of aiding rational imperial administration, and is essential for understanding the vicious debates within Norway at this time over the merits of state versus private science in Antarctic waters. Science increasingly provided the symbolic as well as the material basis
for demonstrating authority in an international space – a familiar dynamic to historians of more recent Antarctic science.

**The reception of the Antarctic and the problem of its discoverer in the scientific literature of the 19-20th centuries**

Erki Tammiksaar, Estonian University of Life Sciences, Centre for Science Studies, Tartu, Estonia, <Erki.Tammiksaar@zbi.ee>

What is situated in the area of the South Pole: a continent, a group of islands, or an ocean? One could only speculate about this question in the 18th and the 19th centuries as there was too few reliable observation data on this region, mainly, because of the too few expeditions carried out to this region. As a result, e.g., the Germans preferred to suppose that there was an ocean, the British supposed that there was a continent, and the Russians shared neither one nor the other supposition. It was an attempt of Ernest Shackleton to reach the South Pole in 1907 that convinced everyone that there was an icy continent there.

Who discovered the Antarctic continent? This question could be given a more reliable answer only after the discovery of the presence of a continent in the south. It was not the discovery of America or Australia, but the discovery of ice. In the 19th century, the discovery of firm land, not of immovable ice, was accepted as a discovery. This fact made and makes it complicated even today to establish who discovered the Antarctic and to what extent was politics involved in the solving of this problem after 1945.

**On Thick Ice: Antarctica, the Cold War and Scientific Internationalism**

Simone Turchetti, Centre for the History of Science, Technology and Medicine (CHSTM) University of Manchester, UK, <simone.turchetti@manchester.ac.uk>

The signing and ratification of the Antarctic Treaty have been perceived in the past as attempts to set Antarctica out of the Cold War. By establishing an international regime that privileged scientific collaboration over political rivalries, the frozen continent was set aside for peaceful science by a condominium of nations. Yet, newly released archive material has helped to open this portrayal up to question. In particular, the examination of diplomatic activities that anticipated the transition to the Antarctic Treaty System reveals that placing scientific internationalism at the centre of Antarctic affairs was a response by the US and its allies to specific concerns about the establishment of Soviet bases in Antarctica. In turn, these concerns instigated concerted diplomatic activities in which several options were considered on the basis of geopolitical urgencies. The outcome was a proposal that emphasised the strategic benefits of establishing a international regime based on scientific collaboration over those of militarising Antarctica. The paper thus shows how scientific internationalism was advocated by the ‘free world’ diplomats in the Cold War context mainly because of the Soviet threat in the Antarctic.
Towards a history of South African involvement in Antarctica 1919 - 1965

Lize-Marié van der Watt, University of Stellenbosch, Matieland, South Africa, <lmvdwatt@sun.ac.za>

This paper seeks to address the history of South African involvement in polar research from 1919, (when the first South African Antarctic expedition was proposed), to 1965, (when the first major scientific expedition was sent to the Prince Edward Islands). It will start to address the question of why and how South Africa became involved in Antarctic research and how this was received domestically. When South Africa is included in histories of Antarctica, it is usually simply to illustrate much broader international developments. This paper begins the process of writing history of South African involvement in Antarctica, scientific and otherwise, from the South African viewpoint. Although scientists in South Africa had been interested in Antarctic research since the beginning of the 20th century, the South African government only allocated significant funds towards it by 1948. Contemporary press articles reveal that the pursuit of science in Antarctica was a factor in legitimising South African involvement in the Antarctic to the public. Eventually, South Africa became one of the original signatories of the Antarctic Treaty.