



**EXCOM/COs Meeting 2011**  
**Edinburgh, 16,18,19<sup>th</sup> July 2011**

Agenda Item: 2.6.3  
Person Responsible: Sparrow

## **SCAR Social Sciences and Humanities**

# Executive Summary

**Title:** SCAR Social Sciences and Humanities

**Authors:** SCAR Action Group on the Human Element (AGHE): Toni Meloni (Italy, chair), Daniela Liggett (NZ, SCAR Social Sciences co-chair), Cornelia Lüdecke (Germany, SCAR History Group), Peter Suedfeld (Canada, invited expert), Bryan Lintott (UK, invited expert), Veronica del Valle (Argentina, invited expert), Mike Sparrow (SCAR Executive Director) and Renuka Badhe (SCAR Executive Officer).

## **Relevant URLs or references to other reports:**

SCAR History Group website: <http://www.scar.org/about/history/>

SCAR Social Sciences website: <http://www.scar.org/researchgroups/via/>

AGHE meeting website: <http://www.scar.org/members/humanelement/>

**Introduction/Background:** In recent years a community has developed with interests in the social sciences and the history of Antarctica. To date these initiatives have been approved on a case-by-case basis. As agreed by the SCAR Delegates in 2010, SCAR held a meeting to assess its activities in this area.

## **Recommendations/Actions and Justification:**

1. The AGHE recommends continuation of the Social Sciences Action Group up to and including 2012, with an agreed set of Terms of Reference (ToR). Several specific recommendations are included in this paper.
2. The AGHE recommends that the SCAR History Group become an Expert Group, with defined Terms of Reference. Depending on other financial constraints an increase in the History group's budget of up to \$5000 should be considered. Additional recommendations are included in this paper.
3. It is recommended that the Social and History groups be grouped under the umbrella "Social Sciences and Humanities"

**Expected Benefits/Outcomes:** The Social Sciences and Humanities are always likely to be a relatively small part of SCAR's portfolio. However, as recognized by ICSU, the complexity of the problems and questions that science, including Antarctic Science, attempts to find answers to warrants an interdisciplinary approach to enquiry. Inclusion of the Social Sciences and Humanities will provide added value to current "natural science" programmes.

**Partners:** IASC, International Arctic Social Sciences Association, International Social Science Council etc.

**Budget Implications:** \$3000 per year for the Social Sciences AG; \$3-5000 per year for the History Expert Group (request for additional \$2,000 a year cf with current budgets for 2011 and 2012).

# SCAR Social Sciences and Humanities

## 1. Introduction

In recent years a community has developed with interests in the social sciences and the history of Antarctica. To date these initiatives have been approved on a case-by-case basis. As agreed by the SCAR Delegates in 2010, SCAR held a meeting to assess its activities in this area. The emergence of this topic in the Antarctic community has been spurred by the inclusion of the “human dimensions” as a major theme during the International Polar Year 2007-2008. While this theme was of particular relevance to the Arctic, in recognition of the importance of indigenous peoples, it was evident that such activities are also significant in the Antarctic region and therefore to SCAR.

An Action Group on the Human Element (AGHE) was therefore assembled from the Antarctic research community and tasked with assessing the productivity of research activity in the Social Sciences and Humanities to date. Based on the relevance of these activities to SCAR’s Vision<sup>1</sup> and Mission<sup>2</sup>, the AGHE was asked to propose recommendations on whether and how SCAR might incorporate these activities in the future. The AGHE was to consider that these activities fall outside the scope of the current Standing Scientific Groups (Life, Geo and Physical Sciences) and bring additional demands on limited resources.

On the recommendation of the AGHE these activities are collectively referred in this document as “Social Sciences and Humanities”.

## 2. The Action Group Meeting

The Action Group consisted of Toni Meloni (Italy, chair), Daniela Liggett (NZ, SCAR Social Sciences co-chair), Cornelia Lüdecke (Germany, SCAR History Group chair), Peter Suedfeld (Canada, invited expert), Bryan Lintott (UK, invited expert), Mike Sparrow (SCAR Executive Director) and Renuka Badhe (SCAR Executive Officer). Veronica del Valle (Argentina, invited expert) was unable to attend but provided written input that was considered by the group and also commented on this report.

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<sup>1</sup> SCAR’s Vision is for a world where the science of Antarctica and associated systems is used for the benefit of all, excellence in science is valued, and scientific knowledge is effectively linked to policy making. SCAR has a key role to play in leading the international Antarctic science community, implementing new scientific initiatives, discerning emerging scientific themes, promoting international cooperation and partnerships, and engaging with policy-makers and other sectors of society to advance this vision. As an Interdisciplinary Scientific Body of ICSU, SCAR embraces and contributes to the strategic vision and mission of ICSU

<sup>2</sup> “SCAR’s Mission is to advance and promote scientific knowledge, understanding and education on any aspect of the Antarctic region\*, on the role of the Antarctic region in the Earth system and on the effect of global change on the Antarctic region. SCAR initiates, facilitates, co-ordinates and encourages international research activity in the Antarctic region, on the role of the Antarctic region in the Earth System, and on the effect of global change on the Antarctic region. SCAR provides objective and independent scientific advice to the Parties to the Antarctic Treaty and other organizations on issues of conservation affecting the management of the Antarctic region and the Southern Ocean.”

\* “Antarctic region” includes Antarctica, the offshore islands of Antarctica and the surrounding ocean including the Antarctic Circumpolar Current, the northern boundary of which is the Subantarctic Front, and the Subantarctic islands lying south of the Subantarctic Front as well as those which lie north of the Subantarctic Front but fall within the area of interest, namely Ile Amsterdam, Ile St Paul, Macquarie Island and Gough Island.

The meeting took place on Friday 4th March 2011 at Sidney Sussex College, Cambridge, UK (see Appendix A). The meeting was structured around answering the Terms of Reference of the AGHE (see Appendix B). Two background talks on the Structure of SCAR, including its Vision and Mission, were given and two presentations by the Social Sciences and History Action Groups were made to aid discussion. Background documents were made available on the SCAR website (<http://www.scar.org/members/humanelement/>).

### **3. The Social Sciences and Humanities within ICSU**

Closer integration of the natural and social sciences is a key element of ICSU's strategy for the coming years, in particular with regards to tackling the ICSU "Grand Challenges" as these two quotes illustrate:

*"It is important that social scientists, from the outset, be part of the broader agenda that includes engaging with physical observation, analysis and modelling systems. It is equally important that methods used in the social sciences be understood and appreciated by other scientific communities involved"* (ICSU, 2010)

*"[The ICSU Strategic plan] provides a Framework for the evolution of global environmental change research and the necessary integration of natural and social sciences...[and] the poles provide unique historical insights..."* (ICSU, 2011)

As an Interdisciplinary Scientific Body of ICSU, SCAR embraces and contributes to the strategic vision and mission of ICSU. SCAR contributes directly to the first two of the Grand Challenges<sup>3</sup> i.e. improving forecasts and observing systems and contributes to aspects of the others e.g. how to recognize abrupt global environmental change.

The AGHE discussed the proactive inclusion of Social Sciences and Humanities within ICSU. As ICSU outlines as part of the "Grand Challenges" document, the complexity of the problems and questions that science, including Antarctic Science, attempts to answer warrants interdisciplinary methods of inquiry. The inclusion of the Social Sciences and Humanities will provide added value to current "natural science" programmes.

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<sup>3</sup> ICSU's five Grand Challenges, which are laid out in the ICSU-ISSC document and have been identified after extensive worldwide consultation with the scientific community, are:

- Forecasting: Improve the usefulness of forecasts of future environmental conditions and their consequences for people.
- Observing: Develop, enhance and integrate the observation systems needed to manage global and regional environmental change.
- Confining: Determine how to anticipate, recognize, avoid and adapt to abrupt global environmental change.
- Responding: Determine what institutional, economic and behavioural changes can enable effective steps towards global sustainability.
- Innovating: Encourage innovation (coupled with sound mechanisms for evaluation) in developing technological, policy and social responses to achieve global sustainability

#### **4. The Social Sciences Action Group**

The Social Sciences AG has a current focus on “Values in Antarctica”. Its goal is to catalogue the range of human values associated with the southern polar continent, including both intrinsic values (such as symbolic and spiritual) and extrinsic values (such as economic and scientific). A secondary objective is to show the ways in which these values may have an impact on the level and nature of human activity in Antarctica. Connected to both of these objectives is the specific aim of compiling a list of social scientists and humanities researchers who are interested in, and can actively contribute to, the intersection of societal and polar activities. This network of Antarctic social and human scientists will result in greater transparency in these fields and, it is hoped, stimulate cooperative and innovative approaches to social and human science research questions. At the end of a 3-year period, a meta-database containing relevant publications and some key research results will have been created and a comprehensive report will discuss the implications of the research outcomes produced within aforementioned sub-themes. For further details see Appendix C.

##### *Expected Benefits/Outcomes:*

The benefits expected to arise from the work of the Social Sciences Action Group include:

- increased knowledge about some of the main influences on human decision-making regarding polar issues;
- increased knowledge about past and probable future human reactions to global environmental change originating in and/or affecting Antarctica;
- increased awareness of the diversity of values associated with Antarctica;
- increased public awareness of the social sciences and humanities research taking place in Antarctica; and
- compilation of a list of social scientists and humanities researchers involved in polar research, with the aim of initiating and strengthening collaborative networks.

The AGHE was impressed by the progress made by the Social Sciences group in a relatively short period of time (the group only stated in mid 2010), which includes publications in peer-reviewed literature. The AGHE also noted the group’s ambitious plans for a state of the art website, which should be encouraged.

**RECOMMENDATION: That the Social Sciences Action Group should continue to be funded for its full 3-year time period, i.e. up to and including 2012. Depending on progress, the Delegates should then decide whether to continue the activity as a SCAR Expert Group.**

The AGHE also made the following suggestions to the Social Sciences Group:

**ACTION: The Social Sciences Action Group needs clearly defined Terms of Reference and, with SCAR’s help, should identify potential members from previously unrepresented countries (in particular from Asia and Latin America) (*Liggett and Sparrow*)**

**ACTION: As the work of the Social Sciences Action Group progresses, additional effort could be made to improve Communication and Public Outreach (e.g. FaceBook groups, synergies with APECS). (*Liggett*)**

**ACTION: The Social Sciences Action Group should explore synergies with Social Sciences in IASC in the general framework of polar sciences. (Liggett)**

### **5. The History Action Group**

The original aim of the History Action Group was to obtain insight into the development of how Antarctic research was institutionalized within SCAR. The goal was to study to what degree research in the Antarctic has been driven by scientific criteria and to what extent compromises were made in the light of political barriers and logistical limitations. It is the only existing group offering the unique opportunity of sharing archival work referring to Antarctic history with personal experiences of polar researchers from all continents. The group has held many workshops (see Appendix D) and its work has contributed directly to the work of several PhD students. The History Group plans to increase collaboration in terms of involving more nations and increasing participation of students and early career historians.

The AGHE felt the History Group should be congratulated on the volume of work that the group had produced on such a limited budget. The AGHE felt that the work of the History group should be allowed to continue into the future, subject to the normal reviews. The AGHE also noted that the group did tend to act very much on a case-by-case basis, for example with the topic of a future workshop being decided during a current workshop. Terms of Reference and a more strategic approach to planning future areas of research would be beneficial to the group's work.

**RECOMMENDATIONS: (i) That the History Action Group become a History Expert Group. (ii) That strong consideration be given to the request to increase the History Group's budget, in particular to allow more member countries to participate in the History Group's work.**

The AGHE also made the following suggestions to the History Group:

**ACTION: The History Group to provide Terms of Reference for the History Expert Group (Luedecke)**

**ACTION: The History Group to work on a plan for future workshops etc., taking into account interactions with both Arctic Historians and Social Scientists (Luedecke)**

### **6. The Social Sciences and Humanities within SCAR**

The Social Sciences and Humanities are always likely to be a relatively small part of SCAR's portfolio, but their role should be recognized and encouraged. As stated earlier, Antarctic science addresses complex matters that often require an interdisciplinary approach, and inclusion of the Social Sciences and Humanities can often provide added value to current SCAR programmes. It should also be noted that Annex V of the Environmental Protocol, that establishes the current 'protected area' system for Antarctica specifies that such protected areas may be designated "...to protect outstanding environmental, scientific, **historic, aesthetic or wilderness values...**" Thus the Social Sciences and Humanities provide another link across to the Antarctic Treaty System.

The AGHE considered the current SCAR Structure (see e.g. <http://www.scar.org/about/introduction/organization/>) and how the Social Sciences and

Humanities could best fit in. The AGHE believes that it would be advantageous to include the Social Sciences and Humanities in SCAR's current organizational model, which displays the Standing Scientific Groups on Geo, Physical and Life Sciences as overall 'umbrellas' with the various Action, Expert and SRPs underneath. Although it was felt that including a fourth SSG on Social Sciences and Humanities was currently a step too far, the AGHE suggests that a Social Sciences and Humanities group might be a well-placed umbrella for the Social and History Groups in SCAR's organizational model.

The "Social Sciences and Humanities" umbrella group would have ToRs as listed below. The chairs would be the current chairs of the Social and History groups. The creation of such an umbrella group would entail significant advantages for SCAR:

- (i) It would allow a more strategic approach to Social Sciences and Humanities, including future planning of activities (e.g. the importance of the media)
- (ii) it would give the Social Sciences and Humanities a higher profile and
- (iii) it would allow some merging of funding of the groups if joint activities were proposed.

It was also suggested that when SCAR National Committees are asked to nominate SSG representatives, that *voluntary* representatives to the Social Sciences and Humanities group could be asked for, allowing more countries to become involved.

**RECOMMENDATION: That a Social Sciences and Humanities umbrella group be formed with ToRs to (i) explore synergies between the Social Sciences and History Groups (ii) to identify possible future Social Sciences and Humanities that SCAR should consider as part of its portfolio, taking into account funding limitations, and (iii) to explore possible sources of funding external to SCAR.**

The AGHE also made the following suggestions:

**ACTION: The SCAR Open Science Conferences should actively involve the Social sciences and Humanities, including the possibility of a Social Sciences and Humanities keynote lecture to increase the disciplines' profile. (*Sparrow to discuss with chairs of OSC*)**

**ACTION: News drafts of the SCAR Organization Chart showing the Social Sciences and Humanities to be produced for consideration by EXCOM. (*SCAR Secretariat*)**

**ACTION: That the Social Sciences and Humanities meet together during the SCAR Business Meetings to work on a future strategy (*Liggett and Luedecke*)**

The AGHE felt the meeting had been a worthwhile experience and helped clarify how the Social Sciences and Humanities can best be included in the SCAR portfolio of activities.

### ***References***

ICSU (2010). Regional Environmental Change: Human Action and Adaptation. International Council for Science, Paris. ISBN: 978-0-930357-82-5

ICSU (2011), ICSU Strategic Plan II, 2012-2017 (*draft*)



## **Appendix A: Agenda for the SCAR AG on the Human Element Meeting**

*Friday 4th March at Sidney Sussex College (Sidney Street, Cambridge, CB2 3HU) in the Knox-Shaw Meeting Room*

**Attendees:** Toni Meloni (Italy, chair), Daniela Liggett (NZ, SCAR Social Sciences co-chair), Cornelia Lüdecke (Germany, SCAR History Group), Peter Suedfeld (Canada, invited expert), Bryan Lintott (UK, invited expert), Mike Sparrow (SCAR), Renuka Badhe (SCAR)

**Apologies:** Veronica del Valle (Argentina, invite expert) (may attend via Skype)

Note that relevant documents (including logistical information) are available from the Human Element webpage:

<http://www.scar.org/members/humanelement/>

Username: scarmember Password: mcmurdo.

### **Meeting Agenda**

**8.45 Arrival at Sidney Sussex College** (see webpage for directions)

**9.00 Introductions**

**9.15 Aims/structure of the Meeting** (Toni Meloni, Mike Sparrow)

The structure of the meeting will be based around answering the Terms of Reference (ToRs) of the group, outlined in the Appendix. The morning will focus on background information to SCAR and ICSU, then on the specific roles of the SCAR Social Sciences and History groups. The afternoon will consider the general question of SCAR's involvement with the "Human Element".

**9.30 SCAR: Structure, Mission and Goals** (Mike Sparrow)

Mike Sparrow will briefly update the meeting attendees on SCAR's structure (including where the History and Social Sciences currently fit in the SCAR structure and their financing) and SCAR's mission and goals.

**10.00 ICSU and the Human Element** (Mike Sparrow)

Mike Sparrow will give a brief overview of the ICSU Grand Challenges and the emphasis on the importance of the Social Sciences within ICSU.

**10.30-10.45 Coffee/Tea**

**10.45 SCAR Social Sciences**

Short ppt presentation by SCAR Social Sciences, based on their submitted document (Daniela Liggett)

Committee to review the outcomes of the Social Sciences Action Group's activities, evaluate progress, and decide on continuance to 2012 (taking into account that this is a relatively new activity). If it is recommended that this activity continues, the Group's terms of reference are to be reviewed, membership evaluated and adjusted as needed, and synergies with IASC explored.

**12.00 SCAR History Group** (continued after lunch)

Short ppt presentation by SCAR History group, based on their submitted document (Conny Lüdecke)

Committee to consider whether advancement of the History Action Group to an Expert Group is desirable. If it is recommended that this activity continues, the Group's terms of reference are to be reviewed, membership evaluated and adjusted as needed, and synergies with IASC explored.

**12.30-13.30: Lunch****13.30 SCAR History Group** (continued)**14.30-14.45 Tea/Coffee**

**14.45-17.00 Discussion of ToRs (1)-(3)** (See appendix B) i.e. (1) is the addition of social/history and other humanities a desirable addition to SCAR activities, taking into account funding limitations (2) how does this align with ICSU, (3) if they should be included what the best structure for these activities would be (to be continued later in afternoon). See Appendix for details.

**17.00 Any other business:** For example are there other "Human Element" activities that SCAR should be involved in?

**17.30 Final Summary of Actions and plan for production of final report.**

**18.00 Meeting Close**

**19.00 Dinner at the Eagle** (see group webpage for further information)

**Post Meeting**

SCAR will draft a meeting report based on the discussions that will include concrete recommendations as much as possible. The aim will be to keep this report as succinct as possible. The wording of the report will be open to discussion, in particular to involve Veronica, until an agreed form of words is reached. The idea will be to have a final report by the end of the month.

## **Appendix B: Guidance Terms of Reference for the SCAR AG on the Human Element**

The group will:

- Consider whether humanities and social sciences (jointly to be referred to as the “Human Element”) is a desired addition to the SCAR portfolio of activities taking into account limited resources and the need to first support the core activities of SCAR.
- If agreed that this is a desirable initiative for SCAR to undertake, consider how, or if, this initiative would bring SCAR into closer alignment with the ICSU Grand Challenges with explicit cross-mapping of SCAR activities with ICSU’s Grand Challenges (see Appendix).
- If agreed that this is a desirable initiative for SCAR to undertake, recommend a structure for these activities (e.g., is the current AG/EG model optimal or should efforts be combined within a single group), how this new activity can be accommodated within the SCAR organizational structure recognizing that these activities fall outside of the SSG framework, a terms of reference for such a group(s) consistent with SCAR’s vision and mission, the mixture and expertise that should be represented on this group(s), and a strategy for nurturing and furthering these activities within SCAR (to include consideration of financial ramifications and potential sources of funding).

On issues before the Delegates and within the context of the above discussions, this Group is to:

- Consider whether advancement of the History Action Group to an Expert Group is desirable. If it is recommended that this activity continues, the Group’s terms of reference are to be reviewed, membership evaluated and adjusted as needed, and synergies with IASC explored.
- Review the outcomes of the Social Sciences Action Group’s activities, evaluate progress, and decide on continuance to 2012. If it is recommended that this activity continues, the Group’s terms of reference are to be reviewed, membership evaluated and adjusted as needed, and synergies with IASC explored.

***Appendix C: Report submitted by the Social Sciences Action Group to the AGHE*****Social Sciences Action Group**  
**“Values in Antarctica: Human Connections to a Continent”*****Background***

The International Polar Year has increased people's awareness of the polar regions and stimulated high-quality scientific cooperation between participants from more than 60 countries. Media coverage has brought information about the Antarctic continent to millions of people around the world and has prompted them to consider the benefits that humankind receives from the time, effort, and money invested in Antarctica. In other words, they have been given reasons to consider the value of Antarctica. In addition, the costs of human activities in Antarctica, not merely from an economic perspective but also from environmental and social points of view, are increasingly acknowledged. Consequently, and in light of the coverage of the many aspects of human endeavour in the Antarctic, policy-makers, educators, scientists and the wider public are asked to weigh multiple costs and benefits against one another. The outcome of such deliberation rests on the relative values one places on those costs and benefits.

The balancing of Antarctic values influences a wide range of decisions. Some of these decisions will be limited to a local impact, while others may affect entire global systems, primarily via their effects on climate, culture, and international policy. Thus, understanding the extent and nature of the values that human beings place on Antarctica has large-scale and very serious implications. It was this concern that gave rise to the recognition that an action group was needed to study and report on those values. Social scientists and humanities researchers have the expertise and tools to lead an academic assessment of Antarctic values. They can offer different perspectives to those of stakeholders more directly involved in Antarctic science and policy.

***Proposal and subsequent mandate***

To date, there have been very few research findings published on the impact of human values relating to Antarctica. The research that has been done lacks any substantial consideration of alternative disciplinary perspectives or findings. In light of these concerns, a proposal was made to SCAR to establish an action group that would investigate and report on these values from an inclusive, interdisciplinary point of view. In late 2009, SCAR chose to support this group which was officially established in January 2010.

***Objectives***

The Social Science Action Group focuses on cataloguing the range of human values associated with the southern polar continent, including both intrinsic values (such as symbolic and spiritual) and extrinsic values (such as economic and scientific). A secondary objective is to show the ways in which these values may have an impact on the level and nature of human activity in Antarctica. Connected to both these objectives is the specific aim of compiling a list of social scientists and humanities researchers who are interested in the intersection of society and polar activities. This

network of Antarctic social and human scientists will result in greater transparency in these fields and is hoped to stimulate cooperative and innovative approaches to social and human science research questions. At the end of a 3-year period, a meta-database containing relevant publications and some key research results will have been created and a comprehensive report will discuss the implications of the research outcomes produced within aforementioned sub-themes.

### ***Expected Benefits/Outcomes***

The benefits expected to arise from the work of the Social Sciences Action Group include:

- increased knowledge about some of the main influences on human decision-making regarding polar issues;
- increased awareness of the diversity of values associated with Antarctica;
- increased public awareness of the social sciences and humanities research taking place in Antarctica; and
- compilation of a list of social scientists and humanities researchers involved in polar research, with the aim of initiating and strengthening collaborative networks.

### ***Structure***

The Social Sciences Action Group's general structure is similar to that of the History Group. It is anticipated that the group will create a network of social and human scientists who contribute to the group's project on Antarctic values. However, in contrast to the History Group, a steering group consisting of ten experts with different academic backgrounds stimulates, coordinates and oversees the work of the group. The duties of the chair are shared between Dr. Gary Steel and Dr. Daniela Liggett, who handle the group's correspondence. The chairs are also responsible for coordinating the meetings and workload, for ensuring progress is made, for chairing the meetings or designating other core group members to do so.

#### Steering group members:

- Dr. Kees Bastmeijer: Conservation Law
- Dr. Paul Berkman: Governance and Science Policy
- Dr. Sanjay Chaturvedi: Geopolitics
- Dr. Alan Hemmings: Environmental Management Policy
- Dr. Bernard Herber: Economics
- Dr. Elizabeth Leane: Arts and Humanities
- Dr. Daniela Liggett (co-chair): Tourism
- Dr. Juan Francisco Salazar: Anthropology
- Dr. Gary Steel (co-chair): Psychology and Sociology
- Dr. Emma Stewart: Human Geography

## ***Progress***

Since its formal inception in January, 2010, the steering group has met online five times, and had two in-person meetings with several of the group's members at the IPY Oslo Science Conference in June 2010 and at the Symposium on the Politics of Antarctica in July 2010.

The inaugural meeting in January 2010 established the core membership (i.e. the steering group) and discussed feasible milestones and timelines, communication processes within and outside the group. A need to broaden the geographic and academic disciplinary representation of the action group, possibly with the addition of a polar historian and a humanities researcher with specific expertise in interactions between art and society, was also noted in the inaugural meeting. To this end, it was decided to seek closer collaboration with the History Action Group and to recruit at least one additional steering group member from South America.

Further online meetings in April, July, August and December 2010 delved deeper into the various definitions of value, what the range of polar values might encompass, and whether there were certain metavalues that ought to be examined. Steering group members provided an outline of how the concept of values is approached in their respective disciplines, which will form the foundation for further exploratory work. There was also discussion about communication with other social scientists and humanities researchers, about the best ways to build a transparent community, and about the mandate of the Social Sciences Action Group. Later in the year, the steering group welcomed Juan Francisco Salazar, a Chilean anthropologist, as a respected representative of his discipline and of the South American social science community.

The following paragraphs outline some concrete achievements of the group to date and plans for the future:

### ***1. SSAG plenary session at the IPY Oslo Science Conference 2010***

During the Oslo Science Conference (IPY) 8-12 June 2010, the SCAR SSAG convened a business meeting to discuss the "Values in Antarctica" project of the working group. The meeting was attended by Gary Steel, Daniela Liggett, and Emma Stewart from SSAG, as well as social scientists in the fields of Antarctic governance, policy, environmental management, tourism and economics. Items for discussion included: (a) the contested and multi-dimensional nature of 'values' in the context of different social science disciplines (b) the methodological approach of the "Values in Antarctica" project and (c) broadening the membership of the SSAG working group. Aside from assisting in the search for a wider view of 'values', this plenary session furthered a discussion surrounding the future of Antarctic social and human science. It was suggested that the group organise regional workshops and seminars for data gathering purposes, and to establish a greater sense of community. This idea has been pursued by the group, as outlined under Item 4, below.

### ***2. Progress on website development***

The SCAR website hosts an information page about the Social Science Action Group (see <http://www.scar.org/researchgroups/via/>) but, in order to reach a wider audience and encourage a greater breadth of opinions, the group is working towards the development of an interactive website. Aspects surrounding the most suitable structure and format for this website have been explored during the last three steering group meetings and involved the consultation of an independent expert in media and communication systems. Furthermore, a website developer has been contacted and presented with a project brief. It was decided that the website should have news section containing information on upcoming conferences and events (including RSS feeds), a home section containing information about SSAG and the "Values in Antarctica" project, an

interactive database allowing researchers to enter project and contact details, a discussion forum that allows postings in different formats, and a contact details section. It is anticipated to have the website running by March 31, 2011.

### ***3. Active research projects stimulated by the SSAG mandate***

Currently, a group of four postgraduate students studying towards their Postgraduate Certificate in Antarctic Studies (PCAS), at Gateway Antarctica (University of Canterbury), are working on an Antarctic values research project as part of their course work. This group's research project includes a self-reflective component (examining how their and their peers' perception and values of Antarctica changed as a result of visiting the Ross Sea) and focuses on a limited number of case studies. The students will present their work at the University of Canterbury in late January 2010 and will work towards publishing their research in a peer-reviewed journal. Another student in this course is completing an empirical study of values before and after the students' field trip to the Ross Sea Region.

Stimulated by the Social Sciences Action Group's profile on the SCAR website, a doctoral research project was proposed by a student with a background in human geography and sociology. An offer of place at the University of Canterbury has already been accepted by the student, who will commence her research in March 2011. The proposed project will focus on the identification and categorisation of values held by a range of Antarctic stakeholders.

Another doctoral student is currently working on an Antarctic values research project, in collaboration with Gary Steel. Initial findings from the project's first season at Scott Base have indicated that there is a wide range of values attached to the concept of Antarctica, and that these values occasionally connect to behaviour in surprising ways. It is expected that the work on this project will add to the student's own PhD thesis, which deals with the 'sense of place' associated with Antarctica.

### ***4. Planned conference presentations and workshops***

An interdisciplinary workshop with the title "Exploring linkages between environmental management and value systems – the case of Antarctica" has been proposed by the steering group for the 25<sup>th</sup> International Congress for Conservation Biology (ICCB 2011). This conference is scheduled to take place from 28 November to 2 December 2011 in Christchurch, New Zealand. This workshop will focus on the connection between the values attributed to a certain environment and its management. Building Antarctica's unusual historical and political status -- a continent without an indigenous human population and a conservation-conscious regulatory regime -- the workshop will discuss how the human impressions of the continent inform environmental management decisions. The workshop will also allow for networking and the establishment of strong research collaborations among a group of people with different disciplinary backgrounds but common interests.

An abstract titled "Adding 'value' to Antarctic research, management and policy: A project-driven approach towards creating a community of Antarctic social and human scientists" has been submitted by Daniela Liggett and Gary Steel to the Seventh International Congress of Arctic Social Sciences (ICASS VII) in Akureyri, Iceland (22-26 June 2011). With this paper, the authors intend to document the genesis and development of the "Values in Antarctica" research project, the prospects of greater cohesion and cooperation among Antarctic human and social scientists and the challenges involved in working across disciplinary and national boundaries.

***Partners***

The formation of partnerships with other SCAR Action Groups (History, CBET) as well as non-SCAR polar social science institutions and agencies is currently being explored. It is hoped that by establishing these ties, a greater breadth of perspectives and knowledge can be included.

***Budget Implications***

\$ 3,000 per year.



## **Appendix D: Report submitted by the SCAR History Action Group to the AGHE**

### **DRAFT Report of the SCAR History Action Group 2005-2010**

by Cornelia Lüdecke  
Chair of the SCAR History Action Group

**Relevant URLs or references to other reports:** <http://www.scar.org/about/history/>

#### **History of the SCAR History Action Group**

The first SCAR history workshop on "Steps of Foundation of Institutionalized Antarctic Research" was held at the Bavarian Academy of Science and Humanities in Munich, Germany from 2 - 3 June, 2005, With 12 paper and two poster prepared by participants from Australia, Chile, Germany, The Netherlands, Russia, Sweden, and USA.

The second workshop on "Multidimensional exploration of Antarctica around the 1950s" was organized with the help of INACH in Santiago de Chile from 21-22 September 2006. We had 13 paper and two book presentations presented by speakers from Argentine, Australia, Chile, Germany, The Netherlands, Sweden, and USA.

The third SCAR History Workshop on "National and transnational agendas in Antarctic Research from the 1950s and beyond" took place at the Byrd Polar Research Center, Columbus, Ohio, USA, from 25 - 26 October, 2007. Participants came from Australia, Chile, Germany, Great Britain, Sweden and USA and presented 13 paper.

The 4<sup>th</sup> SCAR History Workshop on "Polar History and Institutionalization of Polar Research The International Polar Years" was part of the SCAR/IASC Open Science Conference in St. Petersburg, Russia from 8 - 11 July, 2008. The session comprized Six papers and three poster by speakers from Germany, Norway, Russia, Sweden and USA.

The 5<sup>th</sup> workshop on "History of International Spaces" was part of during the Antarctic Treaty Summit (ATS50) in Washington DC (December 3rd, 2009) with twelve speakers representing six nations. In addition, two papers from the 4th workshop.

In 2010 the SCAR History Action Group organized two meetings. Firstly, the bipolar session on "History of polar exploration, cooperation, research and logistics" during the IPY Oslo Science Conference (8-12 June 2010). One objective of this session was to broaden the scope of these history sessions to include historians of Arctic as well as Antarctic polar research. Secondly, for the SCAR OSC in Buenos Aires (3-6 August 2010) we have organized the 6<sup>th</sup> workshop as session 49 on "History of Antarctica and scientific research".

#### **Important Issues or Factors**

The SCAR History AG is the only existing group offering the unique opportunity of sharing archival work referring to Antarctic history with personal experiences of polar researchers from all continents. It has already helped three PhD students to ventilate several parts of the results of their research during our workshops and sessions, and three more members will graduate in the near future.

The global network of the SCAR history Group is expanding step by step as we move with our workshops from continent to continent to attract new (local) members. This happened in Santiago (Chile) and St. Petersburg (Russia) and we continued with the same effect during the IPY OSLO Science Conference in Oslo (Norway) and the SCAR OSC in Buenos Aires (Argentine).

The SCAR History AG is already well recognized in the Antarctic community as can be seen by the invitation to organize the 5<sup>th</sup> workshop within the framework of the Antarctic Treaty Summit ATS 50 in Washington D.C., where the AG chair, Cornelia Lüdecke, was asked to give the historical paper during the first plenary session and to take part in the following panel discussion.

### **Future Plan**

During the SCAR OSC in Buenos Aires, Steven Chown invited the SCAR History AG to hold its next workshop on "Antarctic history probing the unknown" at Stellenbosch University (South Africa) together with the launch of the database on primary resources of South African Antarctic research.

In the future we plan to work together with IASC and to include bipolar topics, because many polar researchers had their first polar experiences in the Arctic (e.g. Ross, Filchner).

### **Recommendations/Actions and Justification**

We recommend that the Action Group be upgraded to an Expert Group, because the activities are ongoing rather than limited to a short time. A primary aim is to intensify collaboration with IGY veterans, senior polar experts, young scientists, and PhD students (APECS) in the field of history of polar research, and to include as many different nations as possible. Until now we had 92 presentations from 63 participants representing 17 nations.

### **Expected Benefits/Outcomes**

Annual workshops and ensuing publications serve as public outreach for SCAR, for example as shown during the ATS 50.

### **Partners**

Polar researchers, social scientists, historians and historians of science / members of IASC.

### **Budget Implications**

\$3000 for continuing as an AG; \$5000 for continuing as an EG.

## **Publications of the SCAR History AG**

### **Workshop 2005**

#### **Proceedings**

Lüdecke, C. (ed.), 2007, Steps of Foundation of Institutionalized Antarctic Research. Proceedings of the 1st SCAR Workshop on the History of Antarctic Research, Munich 2-3 June 2005, *Berichte zur Polar- und Meeresforschung = Reports on polar and marine research*, Alfred Wegener Institute of Polar and Marine Research, Bremerhaven, Nr. 560, 228 pp.  
<http://epic.awi.de/Publications/Lde2007b.pdf> (reviewed)

#### **Reports**

Bennekom, J. van, 2005, 1st SCAR Workshop on the "History of Antarctic Research", *History of Oceanography*, No. 17, 2005

Lüdecke, C., 2005, *Polarhistoriker tagen in der Akademie*. *Akademie Aktuell* 03/2005, p. 60-61

Lüdecke, C., 2005, Antarctic research - No longer a historic matter in the science community. On the establishment of an new action group and its first workshop. *Earth Science History* 24

(2), p. 281-286.

- Lüdecke, C., 2005, 1. SCAR Workshop zur Geschichte der Institutionalisierung der Antarktisforschung, 2.-3.6.2005, München. Deutsche Gesellschaft für Polarforschung, Ak Geschichte der Polarforschung,, Rundbrief 14/05, Schwerpunkt: Biographien, p. 21-23
- Lüdecke, C., 2006, Der erste Workshop zur Geschichte der Antarktisforschung. Nachrichten aus dem Institut für Geschichte der Naturwissenschaften, Mathematik & Technik, Universität Hamburg, 36 (April 2006), 40-42
- Lüdecke, C., 2006, Geschichte der Institutionalisierung der Antarktisforschung. In: Berichte zur Wissenschaftsgeschichte 29 (2006), 159-160
- Lüdecke, C., 2005, Erforschung der Antarktis in Vorbereitung des Internationalen Geophysikalischen Jahres (1957-1958). Polarforschung 75 (2-3), 151-153 (erschienen 2006)

### Workshop 2006

#### Proceedings

- Lüdecke, C. (ed.), 2009, 2nd SCAR Workshop on the History of Antarctic Research. Multidimensional exploration of Antarctica around the 1950s. Boletín ANTÁRTICO Chileno, Instituto Antártico Chileno, Punta Arenas, 82 pp.  
[http://www.inach.cl/InachWebNeo/Controls/Neochannels/Neo\\_CH6231/deploy/boletin%20historico.pdf](http://www.inach.cl/InachWebNeo/Controls/Neochannels/Neo_CH6231/deploy/boletin%20historico.pdf) (**reviewed**)

#### Paper

- Moore, J.K., 2008, Particular generalisation: the Antarctic Treaty of 1959 in relation to the anti-nuclear movement. Polar Record 44 (229), 115-125. (**reviewed**)

#### Reports

- Lüdecke, C., 2007, 2. Workshop der SCAR History Group, 21.-22. September 2006, Santiago, Chile. Deutsche Gesellschaft für Polarforschung, Ak Geschichte der Polarforschung, Rundbrief 15/06, 22-24.
- Lüdecke, C., 2007, "Multidimensional exploration of Antarctica around the 1950s". Report of the 2nd SCAR Workshop on the History of Antarctic Research. International Commission of the History of Geological Sciences, Newsletter No. 39 for 2006, 13-14.
- Lüdecke, C., 2007, Erforschung der Antarktis um 1950. 2. Workshop der SCAR History Group, 21.-22. September 2006, Außenministerium in Santiago, Chile. Berichte zur Wissenschaftsgeschichte 30 (1), 73-74.
- Lüdecke, C., 2007, Bericht über den 3. Workshop der SCAR Action Group on the History of Antarctic Research am Byrd Polar Research Center in Columbus, Ohio, USA In: Polarforschung 77 (2-3), 123-124, erschienen 2008.

### Workshop 2007

#### Proceedings

- Lüdecke, C., 2010, National and transnational agendas in Antarctic Research from the 1950s and beyond. Proceedings of the 3rd workshop on, Byrd Polar Research Center, Columbus (Ohio, USA,) 25-26 October 2007. In print (**reviewed**)

#### Paper

- Howkins, H., 2008, Defending polar empire: opposition to India's proposal to raise the 'Antarctic Question' at the United Nations in 1956. Polar Record 44 (228), 35-44. (**reviewed**)

#### Reports

- Lüdecke, C., 2008, National and trans-national agendas in Antarctic Research from the 1950s and beyond. International Commission of the History of Geological Sciences, Newsletter No. 40

for 2007, 25-26.

### Workshop 2008

#### Papers

- Bulkeley, R., 2009, Politics at the first Comité Spécial de l'Année Géophysique Internationale (CSAGI) Antarctic conference. *Polar Record* 45 (4), 381-383 **(reviewed)**
- Elzinga, A. 2009, Through the lens of the polar years: changing characteristics of polar research in historical perspective. *Polar Record* 45 (4), 313-336. (reviewed)
- Gan, I., 2009, Will the Russians abandon Mirny to the penguins after 1959 ... or will they stay?' *Polar Record* 45 (2), 167-175 **(reviewed)**
- Lüdecke, C., and J. Lajus, 2010, Second International Polar Year (1932-1933). In: Barr, S. and C. The History of the International Polar Years (IPYs). Series: From Pole to Pole, Vol. 0, Springer-Verlag, Berlin, Heidelberg, 135-173 **(reviewed)**

#### Report

- Lüdecke, C. 2009, Polar History and Institutionalization of Polar Research - The International Polar Years. International Commission of the History of Geological Sciences, Newsletter No. 41 for 2008, 17-18

### Workshop 2009

#### Papers

- Lüdecke, C, Parallel Precedents for the Antarctic Treaty. In: Berkman, P.A., Lang, M.A., Walton, D.W.H., and Young O.R. (eds.), *Science Diplomacy: Antarctica, Science and the Governance of International Spaces*. Proceedings of the Antarctic Treaty Summit: Science-Policy Interactions in International Governance, 30 November - 3 December 2009 at the Smithsonian Institution, Washington DC. In print **(reviewed)**
- Gan, I., 2009, The reluctant hosts: Soviet Antarctic expeditions ships visit Australia and New Zealand in 1956. *Polar Record* 45 (1) 37-50 **(reviewed)**
- Bulkeley, R., 2009, The political origins of the Antarctic Treaty. *Polar Record* 46 (1), 9-11 **(reviewed)**

### Workshop 2010

#### Paper

- Gan, I., 2010, Soviet Antarctic plans after the International Geophysical Year: changes in policy *Polar Record* 46 (2), 244-256 **(reviewed)**

**Members from all SCAR history meetings 2005-2010**

	<b>Name</b>	<b>Institution</b>	<b>Country</b>
1	Abbink, Peter B.	Arctic Centre	The Netherlands
2	Anderson, David	University of Tromso	Norway
3	Basberg, Bjørn	Norwegian School of Economics and Business Administration	Norway
4	Behrendt, John C.	University of Colorado also U.S. Geological Survey	USA
5	Bennekom, Johan van	retired from the Netherlands Institute for Sea Research	The Netherlands
6	Belanger, Dian Olson		USA
7	Berguño, Jorge	Chilean Antarctic Institute	Chile
8	Berkman, Paul Arthur	University of Cambridge	United Kingdom
9	Robert Bird		USA
10	Bulkeley, Rip	Exeter College	United Kingdom
11	Chernouss, Sergey, A.	Arctic Atmosphere Laboratory	Russia
12	Cooper, Alan	U.S. Geological Survey	USA
13	Davis, Jason	The Ohio State University	USA
14	Diesen, Jan Anders	(Lillehammer University College)	Norway
15	Dillon, Peggy	Salem State College	USA
16	Ronald Doel	Florida State University	USA
17	Dood, David	University of Melbourne	Australia
18	Dozier, Ann M.	University of Rochester	USA
19	Elzinga, Aant	University of Göteborg	Sweden
20	Funder, Svend	University of Copenhagen	Denmark
21	Gan, Irina	University of Tasmania	Australia
22	Genest, Eugenio	Instituto Antártico Argentino	Argentina
23	Granqvist, Karin	Independent scholar	Sweden
24	Hornig, Helmut	Bavarian Academy of Science	Germany
25	Houltz, Anders	Royal institute of technology	Sweden
26	Howkins, Adrian	Colorado State University	USA
27	Indermuehle, Balthasar T.	University of New South Wales	Australia
28	Jara Fernández, Mauricio	Universidad de Playa Ancha	Chile
29	Krause, Reinhard	Alfred Wegener Institut	Germany
30	Lajus, Julia	Russian Academy of Science	Russia
31	León Wöppke, Consuelo	Universidad Marítima de Chile	Chile
32	Lewander, Lisbeth	University of Göteborg	Sweden
33	Ling, Xiaoliang	Polar Research Institute of China	China
34	Llanos Sierra, Nelson	Universidad de Playa Ancha	Chile
35	Luedtke, Brandon	Colorado State University	USA
36	Lüdecke, Cornelia	University of Hamburg	Germany
37	McAllister, William B.	U.S. Department of State	USA
38	Moore, Jason Kendall	University of Tasmania	Australia
39	Moskalevsky, M Yu.	Russian Academy of Science	Russia
40	N. Pyrtsov	St. Petersburg State University	Russia
41	Race, Margaret S.	SETI Institute	USA
42	Rack, Ursula	Canterbury University	New Zealand
43	Roberts, Peder	Stanford University	USA
44	Rousset, Thierry	University of Cape Town	South Africa
45	Salerno, Melissa	IMHICIHU-CONICET	Argentina
46	Senatore, María Ximena	Universidad de Buenos Aires	Argentina
47	Shadian, Jessica M.	Barents Institute	Norway

48	Southcott, Chris	Lakehead University	Canada
49	Sverker Sörlin	Royal Institute of Technology	Sweden
50	Stafford, Julianne	U.S. Geological Survey	USA
51	Stonehouse, Bernard	University of Cambridge	United Kingdom
52	Tammiksaar, Erki	Estonian University of Life	Estonia
53	Thiede, Jörn	University of Copenhagen	Denmark
54	Turchetti, Simone	University of Manchester	United Kingdom
55	Vance, Terry	San Francisco State University	USA
56	van der Watt, Lize-Marié	University of Stellenbosch	South Africa
57	Wade, Terry	Texas A&M University	USA
58	Walton, David W. H.	emeritus fellow, BAS	United Kingdom
59	Wormbs, Nina	Royal Institute of Technology	Sweden
60	Urban Wråkberg	Urban Wråkberg (Barents Institute,	Norway
61	Zaitsev, Alexander	IZMIRAN	Russia
62	Zarankin, Andrès	Universidade Federal de Minas Gerais	Brazil
63	Suzanne Zeller	Wilfrid Laurier University	Canada

**Report on the 1<sup>st</sup> SCAR History Workshop**  
**”Steps of Foundation of Institutionalized Antarctic Research”**  
**Bavarian Academy of Science and Humanities in Munich, Germany, 2 - 3 June, 2005**

The Action Group on the ”History of the institutionalisation of Antarctic Research within the Scientific Committee of Antarctic Research (SCAR)” was established in October 2004 under the chairmanship of Cornelia Lüdecke. It is the first international and interdisciplinary group devoted to the history of polar research. In the course of annual workshops the group wants to investigate the engagement, realisation, and co-operation in Antarctic research, as well as the leading figures in the context of different national settings and perspectives.

To answer some of these questions the 1st SCAR Workshop on the History of Antarctic Research took place at the Bavarian Academy of Science and Humanities in Munich on 2 - 3 June, 2005, under aegis of the SCAR Action Group and the Commission for Glaciology of the Academy.

18 participants came from Australia, Chile, England, Germany, The Netherlands, Sweden and USA to give nine papers and to present three posters. The posters were on display throughout the workshop. Abstracts describing the Australian and Russian activities were received also.

Adrian Howkins (USA) and Aant Elzinga (S) explained the early involvement in Antarctic research of Argentina and of Sweden respectively, while Johan van Bennekom (NL) talked about the Dutch interest in Antarctica. International cooperation long before the Antarctic Treaty was highlighted by Jorge Berguño (RCH) and by Cornelia Lüdecke (D). John Behrendt (USA) took us along on dangerous early traverses to measure ice thickness during the IGY (1957/58) while Reinhardt Krause (D) gave a biography of Georg von Neumayer (1826-1909), after whom the German Antarctic station was named. Peter Abbink (NL) discussed the changes in the Antarctic Treaty in the 1980’s, when the number of consulting parties nearly doubled. Lüdecke explained why the privately organized German expedition of the physician and mountaineer Karl Maria Herrligkoffer (1916-1991), failed due to opposition from scientific bodies in the 1950’s. The workshop finished with Balthasar Indermuehl’s (AUS) lecture on the history of Astrophysics in Antarctica from the first meteorite find in 1960 till the use of the ice as gigantic particle detector.

During the poster presentation, Jason Davis (USA) explained the changes to Antarctic identity rhetoric as demonstrated by papers published in the National Geographic Magazine. David Michael Dodd (AUS) addressed the Australian context of the history of Antarctic research. Helmut Honik’s (D) and Lüdecke’s poster focussed on the Bavarian officer Wilhelm Filchner (1877-1957), leader of the second German Antarctic expedition (1911-12) to the south eastern part of the Weddell Sea and his estate, which is placed in the Filchner-Archive of the Bavarian Academy of Science and Humanities in Munich.

Summing up the workshop it can be said that the mixture of PhD and graduate students, historians, Antarctic veterans, and historians of science, as well as profound experts of the Antarctic Treaty System led to very lively and interesting discussions. Between single sessions nice coffee breaks right next to the conference room facilitated the continuation of the discussions. During lunch breaks typical Bavarian dishes were served at the same place. A nice summer evening made the visit of a beergarden in Munich very pleasant.

**Report on the 2<sup>nd</sup> SCAR History Workshop**  
**“Multidimensional exploration of Antarctica around the 1950”**  
**Instituto Antártico Chileno, Santiago, Chile, 21 - 22 September 2006**

The second workshop of the Scientific Committee on Antarctic Research (SCAR) History Action Group took place at the Ministry of Foreign Affairs in Santiago de Chile. José Retamales, Director of the Instituto Antártico Chileno in Punta Arenas welcomed 21 participants coming from Argentina, Chile, Germany, The Netherlands, Sweden, Tasmania (Australia), and the United States.

Thirteen different papers covering a great range of perspectives were given. In the beginning, Eugenio Genest (Instituto Antártico Argentino) dealt with the development from exploration to co-operation during the international polar years. Jorge Berguño (Instituto Antártico Chileno, Chile) handled the intellectual sources of the Antarctic Treaty, while Jason Kendall Moore (University of Tasmania, Australia) showed the long way required to progress from the French Encyclopédie to the Antarctic Treaty. Peter Abbink (Arctic Centre, The Netherlands) focussed on the policy behind the Belgian-Dutch Antarctic co-operation in the 1960s. Adrian Howkins (University of Texas at Austin, USA) presented his analysis of Chilean Antarctic science in the period 1946–1959 and Mauricio Jara (Universidad de Playa Ancha, Chile) discussed India and Antarctica in 1956. At the same period, headlines like "When Titans Clash, Something has to Give" described the U.S. Antarctic mindset in the mid-1950s, as seen from the contemporary Chilean point of view. Those interactions were analysed by Consuelo León Wöppke (Universidad Marítima de Chile). Later Cornelia Lüdecke (University of Hamburg) discussed German naming in Antarctica, and a new Antarctic map in the early 1950s, in the framework of a planned German expansion to the Southern Continent. Irina Gan's (University of Tasmania) paper on "Preparation for the first Soviet Complex Antarctic Expedition 1955-1957" and the Australian response was contrasted by Nelson Llanos Sierra's (Universidad Marítima de Chile) paper on "Chile and Australia: Antarctic Relations in the mid-1950s," referring to politics and science. Within this framework a paper on "The logic of risk assessment in the planning for the IGY" prepared by Lisbeth Lewander (University of Göteborg, Sweden) was also relevant. The early European attempt to launch an Ice Coring Project in Antarctica (the European Antarctic Project, EAP) long before the European Project for Ice Coring in Antarctica (EPICA) was the subject of Aant Elzinga's (University of Göteborg, Sweden) paper at the end of the meeting.

Besides we also had two book presentations: Adolfo E. Quevedo Paiva (Argentinean Army) on his bilingual (Spanish and English) book on Argentinian geographical discoveries in Antarctica—Discoveries south of the Weddell Sea and Alberto Sepúlveda (Diplomatic Academy of Chile) on the new book edited by Consuelo León Wöppke et al. on *La Antártica y el Año Geofísico Internacional: Percepciones desde fuentes chilenas, 1954–58*. The mixture of Ph.D. students, historians, historians of science, and Antarctic veterans, as well as profound experts on the Antarctic Treaty System resulted in very lively and exciting discussions and comments. The workshop was sponsored by SCAR, the Chilean Antarctic Institute, and the German Society for Polar Research.

**Report on the 3<sup>rd</sup> SCAR History Workshop**  
**"National and transnational agendas in Antarctic Research from the 1950s and beyond"**  
**Byrd Polar Research Center, Columbus, Ohio, USA, 25 - 26 October 2007**

The third Workshop of the Action Group of the Scientific Committee on Antarctic Research on the History of Antarctic Research, was organised by Raimund E. Goerler, Assistant Director and his team in the Byrd Polar Research Center (Columbus, Ohio, USA) from 25-26 October 2007. This year the workshop discussed "National and transnational agendas in Antarctic Research from the 1950s and beyond". About 20 participants came from Australia, Chile, Germany, Great Britain, Sweden and USA.

After the welcome speeches and a review on the history of the action group, which was founded in 2004, the first session of the workshop started with Peder Roberts (Department of History, Stanford, USA), who asked the question "What Has All This Got To Do With Science?" and presented the "Rhetoric of Scientific Devotion in the Planning of the International Geophysical Year" (IGY, 1957-1958). His answer showed that on the surface, everything functioned as an emblem of international co-operation in scientific endeavour. However people have to ask how and why the IGY came to possess that symbolic value, and to consider it as an integral part of a broader



political picture.

Jason Kendall Moore's (Centro de Estudios Hemisféricos y Polares, Viña del Mar, Chile) paper was titled "Playing Dice: Toward a Scientific Explanation of U.S. Leadership in the Formation of the Antarctic Treaty of 1959". Moore focused on inconsistency of the American leadership with a number of other factors which nearly led to the treaty's non-ratification, and which exposed the non-commitment of U.S. officials to their own policy.

In the second session Rip Bulkeley (Exeter College, Oxford, United Kingdom) analysed "The Role of Antarctic Diplomacy in the Origins and Conduct of the IGY", which culminated in France being the first and still the only country with an Antarctic claim to install a permanent station outside 'its' sector 46 years from the signing of the Treaty.

After lunch break outside in the sun, Jorge Berguño (Chilean Antarctic Institute, Santiago, Chile) explained "The Search of an Organisational Framework for Antarctic Research (1948-1985)". The course of IGY demonstrated that binding undertakings and concerted action in scientific programmes could be achieved without transferring all the authority to a single scientific body. In 1958, ICSU established the Special (later Scientific) Committee for Antarctic Research (SCAR). In 1985 SCAR was fully incorporated as a permanent observer into the mainstream of the Antarctic Treaty System (ATS).

In this context M. Consuelo León Wöppke (Universidad Marítima de Chile, Chile) presented an interpretive analysis of "The state of Chilean science before and during the International Geophysical Year", before the Chilean emphasis shifted to the role of political and scientific elites in shaping public opinion.

Cornelia Lüdecke (SCAR History AG, Munich, Germany) referred to a country which did not actively take part in the today called 3rd International Polar Year in talking about "The International Polar Year (1957-1958) as Reflected in German Media". The time of the Cold War was characterised by the use of military terms to describe interests in Antarctica. This was clearly visible in the analysed western German newspapers and even in popular books on Antarctic research of the 1950s.

Ann M. Dozier (University of Rochester, Rochester, New York, USA) gave a lively report of her investigation of "Getting the Science Done: Perspectives from McMurdo" during three austral summers between 2002 and 2005. She observed how organisational bureaucracy and the scientists' professional autonomy created inherent tensions and how these were exacerbated by the uncertainties of conducting science in a polar environment.

The first day finished with a workshop dinner and a pleasant dinner speech by Tim H Baughman, (University of Central Oklahoma, USA) on "Amundsen, Cook and the Belgica, the first international scientific and multi-national expedition to the Antarctic".

The 3rd session on the next day started with Jason David (The Ohio State University, Columbus Ohio, USA), who dealt with "The development of biology as a discipline in Antarctica", its growth in the amount undertaken particularly on the Antarctic continent and its connection to larger trends in both the history of biology and the context of Antarctic science.

Adrian Howkins (University of Texas at Austin, Austin, USA) talked about "British Antarctic Science, 1944-1959", which first was increased on the Antarctic Peninsula, before it co-operated with international research efforts. Finally Britain sought to harness the scientific goodwill generated by the IGY to bring about political change in Antarctica leading to the Antarctic Treaty of 1959.

Then the IGY veteran John C. Behrendt (University of Colorado, Boulder, CO, USA) reminded us to the "First (1957-58) Geophysical Investigation of the Filchner-Ronne Ice Shelf (FRIS)". He discussed the results including the determination of maximum ice thickness of the southernmost area of the FRIS of 1300 m which was in significant contrast to a re-measurement of this area in the 1990s of only 1100 m suggesting significant melting during the interval.

Aant Elzinga (University of Göteborg, Göteborg, Sweden) focussed on the discussion of the European Antarctic Project (EAP) abandoned in 1975 and the multinational European Project for Ice Coring in Antarctica (EPICA) starting up in 1995 seen as "The shaping of a European Effort in

Paleoclimatology”.

In the 4th session after lunch break in the polar library, Irina Gan (University of Tasmania, Australia) led us ”To the great unknown: Soviet IGY Antarctic Expeditions 1955-1958”. The setbacks and obstacles encountered by the 2nd Russian Antarctic expedition in particular almost resulted in failure of the whole Soviet IGY commitment. Nevertheless obstacles were overcome and plans finally concluded successful.

The last paper was given by Lisbeth Lewander (University of Göteborg, Göteborg, Sweden) on ”Swedish Polar Politics 1955-1970”, when Cold War developments in the Far North were severe concerns, which had an impact on Swedish undertakings in polar areas. Archive studies showed that occasionally decision makers were hesitant on what course of action to depart upon, such as in the case of the political status of Antarctica in the 1950’s.

After the workshop participants left home with very good memories of interesting discussions and exchange of various aspects of the history of polar research around the IGY.

The third SCAR workshop was supported by the Scientific Committee on Antarctic Research Cambridge (UK); the Byrd Polar Research Center and the Friends of the Byrd Polar Research Center, Columbus (USA); the Frederick A Cook Society (USA); Schimank-Stiftung, Hamburg (Germany); and Deutsches Zentrum für Luft und Raumfahrt, Oberpfaffenhofen (Germany).

**Report on the 4<sup>th</sup> SCAR History Workshop  
“Polar History and Institutionalization of Polar Research  
The International Polar Years”**

**SCAR/IASC Open Science Conference, St. Petersburg, Russia, 8 - 11 July, 2008**

History and institutionalization of polar research in context and during the International Polar Years was the theme of five oral papers and three posters in session 5.7 during the SCAR/IASC Open Science Conference in St. Petersburg, Russia, on 9 July 2008. Unfortunately three contributions of the 18 planned were withdrawn and one author had died before the conference. In addition, one speaker and six posters failed to show up, possibly due to the high cost of the overall conference, circumstances regretted by the actual participants. Here follow some highlights regarding the papers presented and the main thrust of the poster session.

Aant Elzinga (University of Gothenburg, Sweden) gave a very well structured survey of the historical and epistemological changes in polar research as seen through the lens of the four International Polar Years (IPY). Long time series of meteorological and magnetic data of the 1st IPY (1882-1883) gathered in an inductivist mode, provided a base line data set of the Arctic. The 2nd IPY (1932-1933) combined hypothesis-driven research with new Arctic data to test hypotheses on physical processes, while the 3rd IPY (International Geophysical Year 1957-1958) expanded this approach and applied systematic measurements to Antarctica and the upper atmosphere, opening up new avenues for science. Finally the 4th IPY of today includes social and cultural sciences and interdisciplinary as well as bipolar approaches, global modelling and integrative Earth-system science, making it epistemologically systemic, constructivist, realist and predictive.

Cornelia Lüdecke (University of Hamburg, Germany) described the development of trans-Arctic air-routes by airship as an important background factor and context in the case of the 2nd IPY (1932-1933). She demonstrated convincingly that the idea of launching the 2nd IPY actually had its origins in a discussion within the International Society for the Exploration of the Arctic by Means of Aircraft (Aeroarctic) in the latter half of the 1920s during the planning of the expedition with the airship LZ 127 "Graf Zeppelin". The idea was supported by the German Naval Observatory (Deutsche Seewarte) in Hamburg, but not by Alfred Wegener who was just in the process of planning a cross-sectional survey of the meteorological conditions over Greenland by means of aerological measurements at three stations in 1930-1931. Indeed there were three separate

programmes in the offing at the time, all of them enjoying the support by the same constituency of the German science community.

Adrian J. Howkins (University of Texas at Austin, USA) examined the US contributions to Antarctic research in the Antarctic Peninsula between 1946 and 1959, when Great Britain, Argentina, and Chile intensely disputed the issue of territorial sovereignty in the region. Using a number of hitherto little known archival sources he brought forward new historical evidence that confirmed how, far from the often told story of a harmonious process in which science lived its own life and singly gave birth to a multinational political regime, the actual historical record reveals mutual entanglements and deep dynamic interaction of science, environment, and politics as important definitive factors in the process that led up to the signing of the Antarctic Treaty in 1959.

Alexander Zaitsev (IZMIRAN, Troitsk, Russia) reported vividly on the US-Soviet exchange programme during the IGY (1957-1958) and its character as well as many interesting events that took place within its framework at two different sites - 1253 km apart - on the Antarctic continent. The one collaborative site was the American station at the Geographic South Pole, the other was the Russian station Vostok at the Geomagnetic South Pole. In the wake of the IGY and thanks to the formation of the new political regime that followed it, involving 12 nations as Consultative Parties, between 1964 and 1986 joint US-USSR programmes were set up and operated at Vostok and McMurdo. This was seen as a significant testimony of the peaceful use of Antarctica under the auspices of the Antarctic Treaty.

The final paper was by Jessica M. Shadian (Barents Institute, Kirkenes, Norway). Her thesis was that since 1882 the global political context has transformed the role of the polar regions in global politics. Taking a long-term historical perspective she interpreted the history of the IPYs and governance of science as examples of a reinvention of politics and science at the Poles in the Post-Westfalian era. A comprehensive analysis of the polar programme of the IPYs, she demonstrated, helps to illuminate a better understanding of the contextual relationship between science and politics. She furthermore discussed questions as, how does the IPY reflect shifting power and authority of scientific knowledge over time?

The history session had an audience of more than 40 people who participated in very interesting discussions.

During the poster session Jason M. Davis (The Ohio State University, Columbus, USA) displayed the development and practice of Antarctic systems of property. He distinguished and characterized three primary models of property ownership (state-controlled, community-managed, and privatized), illustrating the differences with salient examples of assumptions and principles implicit in different International Antarctic Agreements as well as a case study of how the issue of property ownership was perceived and managed at an Antarctic base.

Julia A. Lajus (St. Petersburg Branch of the Institute for the History of Science and Technology, Russia) described the interplay of internationalism and nationalism in Soviet Arctic research in the period from 1920 and onward into the 1930s. She discussed the controversies among scientists on the issues of international co-operation especially in polar oceanography and meteorology. Especially she considered the 1926–1927 debates around the organization of a joint Soviet-German research enterprise in the Barents Sea, and the character and conditions of Russian participation in international organizations as well as in the course of the 2nd International Polar Year.

Finally Paul A. Berkman focussed on peace and science "in the interest of all mankind". He presented hitherto unknown documentation from historical archives of the Eisenhower Administration in the USA of the 1950s. These documents reveal that prior to the Antarctic Treaty there was a more general precursor agreement respecting the international use of outer space, an agreement that essentially embodied the same spirit whereby the superpowers were united in the peaceful utilization of international spaces, starting with Antarctica during the Cold War.

**Report on the 5<sup>th</sup> SCAR History Workshop  
"History of International Spaces"  
Antarctic Treaty Summit, Washington, D.C., 3rd December 2009**

The SCAR History AG was invited to organize its 5<sup>th</sup> workshop on "History of International Spaces" within the framework of the ATS 50 in Washington, D.C. on 3rd December 2009. 13 presentations were given by polar historians from Australia, Estonia, Great Britain, Norway, South Africa, and the United States of America among them were several young researchers and PhD students. About 40 participants attended.

The first session of the workshop started with Erki Tammiksaar (Estonian University of Life, Tartu, Estonia) and his evaluation of the reception of information about the Antarctic and the problem of its discovery in the scientific literature of the 19th - 20th century. Due to the very few 19th century expeditions to the south pole region it was still unknown around 1900 whether Antarctica was a continent, a group of islands, or an ocean. Tammiksaar showed how complicated it is to ascertain who discovered Antarctica, because arguments often follow the lead of political circumstances.

Bjørn Basberg (Norwegian School of Economics and Business Administration, Bergen, Norway) conceptualized the economic history of the Antarctic region from considerations ranging from the 19th century sealing industry and the 20th century whaling industry to the more recent fisheries and even bio-prospecting, as well as tourism – which has been present now for almost 50 years. Basberg reviewed the historic industries in terms of Antarctica being an economic region in a place with no permanent population and no sovereignty claims.

PhD Student Peder Roberts (Stanford University, Stanford, CA, USA) also focussed on Antarctic economic history. He discussed the issue of international waters of the Antarctic between the world wars, under the headline "Science and commerce on the high seas", addressing the period when whaling moved from shore stations to factory ships in the Southern Ocean. At that time science functioned as a powerful source of legitimacy for making judgements on what constituted appropriate commercial activities. Using as examples the British state-sponsored Discovery Investigations and the Norwegian private scientific expeditions in Antarctic waters, Roberts explained how science provided the material basis for demonstrating authority in an international space.

PhD Student Lize-Marié van der Watt (University of Stellenbosch, Matieland, South Africa) used another approach towards history, focussing on the case of South African involvement in Antarctica (1919 - 1965). She asked why and how South Africa became involved in Antarctic research and how this activity was received domestically. Although South Africa showed early interest in Antarctic research, the South African government did not start to allocate significant funds until 1948. The pursuit of science in Antarctica was a factor in legitimising involvement in the Antarctic in the mind of the public.

Irina Gan (University of Tasmania, Hobart, Australia) examined the evolution of Soviet Antarctic policy during the 1940s and 1950s prior to signing of the Antarctic Treaty. She identified the practical steps taken by the Soviets, and the thinking of political and scientific decision makers. Gan also reviewed the motives that drove the Soviet Antarctic activities, given the predominant political imperative of gaining a continuous voice in any international decision about a governance regime for the Antarctic.

Simone Turchetti (University of Manchester, Manchester, UK) talked about Antarctica, the Cold War and scientific internationalism. The establishment of an international regime privileged scientific collaboration over political rivalries. However newly released diplomatic archival material revealed 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, various diplomatic activities were considered on the basis of geopolitical

urgencies. Turchetti showed how scientific internationalism was advocated by the 'free world' diplomats in the Cold War context mainly because of a perceived Soviet threat and possible militarising Antarctica.

During the fourth session after lunch John C. Behrendt (University of Colorado, Boulder, also U.S. Geological Survey, Denver, USA) described the first determination of the configuration and volume of the Antarctic ice sheet in the International Geophysical Year (IGY) of 1957-58, which was constructed from a series of mostly US and USSR over-snow geophysical traverses making seismic reflection measurements of ice thickness. Behrendt drew on his experiences from participating in the Filchner Ice Shelf Traverse as a 25-year-old graduate student. In a few years the team produced a first approximation of the volume and elevation of the Antarctic Ice sheet using what today seem to be very primitive techniques.

Dian Olson Belanger (Washington DC, USA) examined the Antarctic Treaty under the headings of idealism, parochialism and the art of the possible. The Antarctic Treaty created the first internationalized space on Earth, dedicating an entire continent to peace and the cooperative pursuit of science by avoiding territorial claims, military rivalries, and political antagonisms active elsewhere, which was an achievement unique in world affairs. Belanger asked how twelve leery, fearful nations could come to such a high-minded, far-sighted agreement in the depths of the Cold War. She also looked at the role of the International Geophysical Year, and explored how entrenched self-interests and mutual suspicions were overcome and how science did what politics could not. In the end the imperfect success story provided a useful foundation for the day's focus on the meaning and uses of international spaces.

William B. McAllister (U.S. Department of State, Washington DC, USA) reconceptualized Antarctica and other new international spaces as the opening of the "Interdependency Age". 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. Scientific communities and emerging ecological constituencies contested the definition, ownership, and use of these spheres. McAllister explored how diverse communities reconsidered notions of "interest" to accommodate human activity in these previously "uninhabitable" spaces. This led to new conceptions of interdependence across an expanded geospatial continuum. He stated that the heightened awareness of the interconnectedness of humans with each other and the planet made it possible to "see" the globalized world that we now regard as commonplace.

Margaret S. Race (SETI Institute, Mountain View, CA, USA) updated policies for scientific exploration and protection in outer space while borrowing from the Antarctic Treaty experiences. The Outer Space Treaty of 1967 required that exploration of other worlds be conducted without "their harmful contamination" and the ICSU's Committee on Space Research (COSPAR) provided policy guidance for exploring the solar system to protect future scientific study by preventing biological contamination. When a study on forward contamination of Mars recommended re-examination of COSPAR's policy in 2006, a task became to integrate considerations of "ethical implications" into the policy along with science protection. Race pointed to an international forum planned for mid-2010, which will gather scientists, legal/policy experts, and ethicists to examine questions pertaining to the potential revision of the existing science-based policy. She was convinced that comparative studies and lessons learned from the Antarctic Treaty could provide useful information and approaches for the deliberations ahead.

Adrian Howkins (Colorado State University, USA) examined science, conservation, and the question of Antarctica in the United Nations by investigating the use of scientific and environmental rhetoric in the political discussions of Antarctica in the early 1980s. When views of all UN member states on the "Question of Antarctica" were requested, 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 peace and science, which sustained the Antarctic Treaty System (ATS). A similar rhetoric was used by almost every member of the ATS to defend the Treaty. Howkins argued that the use of science and conservation to defend political rights to the continent had a long history associated with imperial claims.

The last paper given by Peggy Dillon (Salem State College, Salem, MA, USA) dealt with the workshop at the Beardmore South Field Camp in Antarctica (1985) and its role in the history and evolution of the Antarctic Treaty. Participants from 25 countries met on the Beardmore glacier to help determine Antarctica's future by freely sharing 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. Open discussion and camaraderie rather than production of conclusions or recommendations were the main purpose of the workshop at Beardmore South Field Camp. Dillon discussed the major talking points and the conclusions of the workshop in the context of Antarctic history and scientific research.

In addition to the oral papers, PhD student Jason Davis (The Ohio State University, Columbus, Ohio) presented a poster on emerging geopolitical contexts for Antarctic operations. Recent political frameworks, like the neoconservative theory, tended to promote the extension of state power beyond its borders and saw non-state enactments of power as threats, while critical theories were more wary of state power extensions and celebrated non-state practices of power. Davies reviewed these geopolitical theories and their relevance to Antarctic practices to help us to gain a better understanding of how approaches to international spaces were currently framed.

In addition to the workshop, the chair of the SCAR History AG, Cornelia Lüdecke, was invited to give the historical paper on "Parallel agendas for the International Geophysical Year" during the first plenary session of the AT Summit and to take part in the subsequent panel discussion. Two other members of the History AG played active roles during the Antarctic Treaty Summit. All of the speakers have prepared papers to be published in the Proceedings of the Antarctic Treaty Summit. A movie including our interviews was produced alongside, which will be published 2010.

The workshop was a great success for the SCAR History AG. Several young researchers and PhD students were among the speakers. They gave enthusiastic feed back, having benefited from becoming engaged with a forum of scholars with the same interests in the history of Antarctic research. The input of IGY veterans and senior polar historians with various backgrounds in the discussions was very much appreciated.

**Report on session T4-3  
"History of polar exploration, cooperation, research and logistics"  
Oslo IPY Science Conference, 10 -11 June, 2010**

The session focussed on the discussion of contextual factors such as the scientific and socio-cultural background that triggered co-operation or non co-operation at different historical stages of polar research as well as aspects of the everyday life of polar explorers and the impact of politics and economy on polar expeditions. Furthermore, it was discussed how, over time, polar field stations have served serve as units of knowledge production in the field and what role they, along with scientific cooperation, have to play to do.

On Thursday Bernard Stonehouse (University of Cambridge, UK) opened the first session with his talk on cold co-operation: whaling, the Royal Navy, and 18th -19th century exploration in the North Atlantic Arctic. Then Lisbeth Lewander (University of Gothenburg, Sweden) analysed the state support for the Swedish Antarctic Expedition 1901-03. Ursula Rack (Canterbury University, New Zealand) followed with her presentation of a biographical sketch of the Jewish member of Alfred Wegener's last expedition to Greenland (1930-1931 Fritz Loewe and how he flew from Germany to Australia. Jan Anders Diesen (Lillehammer University College, Norway) showed silent films from expeditions to the North and the South Pole. Terry Vance (San Francisco State University, USA) asked why was the work done there? She explained geographic approaches to understanding the spatial and temporal patterns of Arctic research and research stations. At the

end of the session Jörn Thiede (University of Copenhagen, Denmark) introduced the planned European research ice-breaker AURORA BOREALIS in context with the past and future strategies for European marine polar research.

On Friday the second session dealt with historical aspects of Scandinavian polar research. David Anderson (University of Tromsø, Norway) focussed on the 1926/27 Polar Census Expeditions and the beginning of Soviet power in the North. Julia Lajus (European University at St. Petersburg, Russian Federation) presented Hans Ahlmann and Scandinavian-Soviet Connections in Understanding the Arctic Environment under the headline "Melting the Glacia, when he analysed the cultural-politics of the northern light as national icon and research specialty. And Anders Houlitz (Royal institute of technology, Sweden) mediated the modern arctic nation as the International Polar Year's and national ambitions on museum display in Norway and Sweden.

The last session was devoted to the local inhabitants and the history of the exploration of the Arctic environment. Karin Granqvist's (Independent scholar, Sweden) paper on "The Stranger Within" was about the representations of Sámi in Norden in 19th-century Swedish Natural Scientific Works. Urban Wråkberg (Barents Institute, Norway) explained the Sami experience of developing scholarship. Suzanne Zeller (Wilfrid Laurier University, Canada) worked on wild men in and out of science, when the professional-popular borderland in Arctic Canada and Greenland was negotiated during the early 20th century. Then Robert Bird (Florida State University, USA) reframed Arctic history during the Cold War referring to science, empire, and colonialism in comparative Atlantic contexts from the 18th century to the present. Ronald Doel (Florida State University, USA) constituted the Arctic environment and showed how U.S. military patronage after World War II influenced the environmental sciences in the Far North. Finally Sverker Sörlin (Royal Institute of Technology, Sweden) investigated Hans Ahlmann's 'polar warming' theory in the field and in the media, 1920 to 1960 and how it produced Arctic climate change.

Two additional poster sessions described various aspects of Arctic and Antarctic research. In the first poster session on Thursday, N. Pyrtsov (St. Petersburg State University, Russia) pointed his fingers on problems of development of polar tourism in the Yamalo-Nenets Autonomous District. Ron Doel (Florida State University, USA) told comparative international histories of the modern Arctic and gave insights from the European Science Foundation project BOREAS initiative "Colony, Empire, Environment" project. Karen Granqvist (Independent scholar, Sweden) asked Who produced scientific knowledge in looking at Axel Hamberg's Sarek research and his Sámi assistant Lars Nilsson Tuorda. Chris Southcott (Lakehead University, Canada) made a social impact assessment of Arctic science. Doel (Florida State University, USA) looked at field stations in the temperate and Arctic Seas and referring to pedagogy and practice in the physical environmental sciences.

In the second poster session, Terry Wade (Texas A&M University, USA) focussed on the human dimension of scientific research by analyzing the bioavailability of Contaminants in Winter Quarters Bay, McMurdo Station, Antarctica. Nina Wormbs (Royal Institute of Technology, Sweden) gave a history of emerging Arctic climate modelling. Svend Funder (University of Copenhagen, Denmark) asked whether migrations in the high Arctic is a question of sea ice? David Anderson (University of Tromsø, Norway) introduced histories from the North investigated by a major interdisciplinary research programme of humanities within the European Science Foundation.

**Report on the 6th SCAR History Workshop  
"Polar History and Institutionalization of Polar Research  
The International Polar Years"**

**SCAR/IASC Open Science Conference, Buenos Aires, Argentina, 5 August, 2010**

The SCAR history session on "Polar History and Institutionalization of Polar Research The International Polar Years" took place on 5 August 2010. It focussed on the time before the Antarctic Treaty came into force, when expeditions sailed south in hopes of earning much money

from whaling, sealing or exploiting other resources in Antarctic regions. Science too was the driver behind many expeditions to explore the white continent, sometimes also with the intent of laying claim to a good part of it for one's own nation in the event of a division of the territory. The interrelationship of various types of motives behind and aspects relating to exploration and research were discussed in historical context.

María Ximena Senatore (Universidad de Buenos Aires, Argentine) opened the session with her keynote speech on pre-industrial whaling in the South Shetland Islands, Antarctica. Systematic analyses are based on documents of the New England Historic Archives related to the activity of whaling and sealing ships in the early and mid nineteenth century as well as on archaeological information. The results contribute in setting much earlier dates for whaling incursions in the South Shetland Islands.

The second keynote was given by Adrian Howkins (Colorado State University, USA) on regulating the frozen El Dorado in respect to environment, science and politics in the Antarctic minerals negotiations, 1973-1991. He argued that the unique confluence of environmental, scientific, and political factors that came together by the late 1980s made a complete ban on mineral exploitation an expedient solution to the minerals question that supported the political goals of the Antarctic Treaty System.

Thierry Rousset (University of Cape Town, South Africa) analyzed the Cape involvement in the sea elephant oil trade at the Crozet and prince Edward Islands (1822-1872). The main protagonist in this trade was John Jearey who had a monopoly in the sea elephant oil trade for a large portion of the thirty years (1838-1869). The paper discussed how he was able to pursue this venture almost uninterrupted over such a long period of time.

Brandon Luedtke (Colorado State University, USA) talked about Antarctic research and imperial ambition when assessing the 7<sup>th</sup> International Geographical Congress in Berlin 1899, when participants formulated an Antarctic research program structured around a strict demarcation of national zones of activity Great Britain and Germany

Erki Tammissaar (Estonian University of Life Sciences, Estonia) explained the history and future of Estonian Antarctic research, going back to Baltic German expedition leader Fabian Gottlieb von Bellingshausen. The Estonian members of Soviet Antarctic expeditions laid the foundation of Estonian polar research, which now aims to establish a legal and financial basis for the participation of Estonians in Arctic and Antarctic research.

Then Consuelo León (Center for Hemispheric and Polar Studies, Chile) introduced scientific activities carried out at Base O'Higgins from its creation in 1948 through the tragic fire Base Luis Risopatrón in March 1958 in using the daily logs kept by the base commanders as well as their annual reports.

Lisbeth Lewander (Gothenburg University, Sweden) worked on Swedish deliberations facing the pre-negotiation period of the Antarctic Treaty (1954-1958). Archival material showed that Sweden had a high degree of sensitivity both towards internal political-economic interest groups as well as towards external partners of foreign- and security political cooperation. Foreign political concerns complemented the former understandings of why Sweden chose to abstain from the International Geophysical Year and therefore possibly the later involvement in the negotiations of the Antarctic Treaty.

In the end Xiaolinang Ling (Polar Research Institute of China, China) discussed a perspective analysis on Antarctic affairs based on paper and recommendation of 32 Antarctic Treaty



Consultative Meeting. The paper showed that the original signatory parties such as New Zealand, United Kingdom, Australia, USA and Chile are the most active and influential nations in ATCM, thus strengthen their leadership in Antarctic affairs. Russia, Argentina, Norway and Japan follow them, while the influences of the other consultative parties are not relatively obvious. Besides, the interests of some organizations on Antarctic issue and participation in ATCM are rising rapidly in the recent years.

In an additional poster Alan Cooper and Julianne Stafford (U.S. Geological Survey USA) described music of Antarctic expeditions from Capt. Cook to the Antarctic Treaty and its roles in exploration, science and geopolitics. This poster stimulated a Music and cultural arts programme for the next SCAR OSC in Portland Oregon in 2012.