



WP 17

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Report of the SCAR Social Sciences AG

Executive Summary

Title: Report of the SCAR Social Sciences Action Group

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Introduction/Background:

Increasingly, Antarctic institutions and stakeholders acknowledge the costs and benefits of human activities in Antarctica not merely from an economic perspective but also from environmental, social and cultural points of view. The coverage (in the media and in policy discussions) of the many aspects of human endeavour in the Antarctic asks policy-makers, educators, scientists and the wider public to weigh multiple costs and benefits (that is to say, values) against one another. Understanding the extent and nature of the values that human beings place on Antarctica has large-scale and very serious implications for human engagement with and activity in the Antarctic in the future and significant public-relations implications in relation to the wider social acceptability of even traditional forms of Antarctic activity.

Important Issues or Factors:

Social scientists and humanities researchers have the expertise and tools to lead an academic assessment of Antarctic values. The Social Sciences AG (hereon “the group”) was established to carry out research targeted at understanding the range of values underpinning human engagement with Antarctica. As shown in this report (including its appendices), this research effort has progressed considerably. At the same time, it has become clear that a thorough exploration of human values associated with Antarctica is a complex task that requires continued efforts. This research project promises considerable benefits in the long run, especially with regard to understanding decision-making in an Antarctic context and developing alternative strategies for environmental management.

Recommendations/Actions and Justification:

We request that the group’s term be extended to 2015 to maintain the momentum established through the Antarctic values research project and to enable a thorough examination of the complexities associated with Antarctic values and their implications.

Expected Benefits/Outcomes:

The group will continue to raise the profile of SCAR in the public realm and in social science and humanities research communities by demonstrating that SCAR supports multi-disciplinary research efforts outside the realm of the natural sciences. An examination of Antarctic values through this group will also help SCAR to root its scientific advice in a thorough understanding of the drivers of human engagement with the Antarctic. Finally, a range of academic publications resulting from this research effort will bolster SCAR’s scholarly record.

Partners:

The group has established contact with representatives of the IASC Social and Human Sciences Working Group and is in regular communication with the International Arctic Social Sciences Association (IASSA). The group also collaborates with the SCAR History EG as highlighted by the latest joint SCAR History and Social Sciences workshop, held in Cambridge from 1-5 July 2013.

Budget Implications:

The group would like to continue operating with the current budget of \$3000 per year.

Report of the SCAR Social Sciences Action Group

1. Rationale for the Group

The recent fiftieth anniversaries of the adoption and entry into force of the Antarctic Treaty, the fourth International Polar Year, and the centenaries of Heroic Era Antarctic expeditions have increased general awareness of the polar regions. Over the past couple of years, declared interest in joining the Antarctic Treaty System by a number of states (most particularly Malaysia, Pakistan and Iran) has ensured regular media interest in the region. Furthermore, in the midst of these developments, the historic international activity in Antarctica, scientific cooperation between participants from now more than 60 countries, appears to be strengthening. Media coverage (now including popular books, films, television programs) and artistic representations and installations have 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, and to increasingly apply generic standards of public scrutiny to policies, processes and established norms of behaviour there. 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, social and cultural 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 (that is to say, values) against one another.

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.

2. Report on Progress

The group's aims include understanding the range of human values associated with Antarctica, discussing the ways in which these values may have an impact on human activity in the Antarctic, and developing an open network of social scientists and humanities researchers interested in the intersection of society and polar activities.

In pursuit of these aims, members of the group have organized, convened or contributed to a number of conference sessions, including the IPY Science Conferences and the SCAR OSC in 2012. Furthermore, individual group members have also given presentations about the group's goals and work in general and about specific research questions pursued by the group in particular (see Appendix B for a list of sessions and presentations).

The group had a strong presence at the last SCAR Open Science Conference and, in the spirit of strengthening the collaboration with the group's Arctic colleagues, ran a bi-polar panel discussion titled "Changing Poles: Challenges to the Antarctic and Arctic Communities and Institutions". This panel discussion brought a number of Arctic researchers to a SCAR Open Science Conference and stimulated further trans-polar collaboration.

Also borne out of the group's presence at the last SCAR Open Science Conference was the idea to hold a joint workshop with the History EG. This workshop takes place in Cambridge in the beginning of July

2013 and has a stimulating programme involving 40 individual presenters. An application for SCAR contingency funds has been lodged to support students to travel to Cambridge and present at the workshop.

The proceedings of the group's first workshop "Exploring linkages between environmental management and value systems – the case of Antarctica", held in Christchurch in December 2011, has now also been finalised and is currently in press under the title *Exploring Antarctic Values*. An electronic copy will be made freely available from the group's new website (<http://antarctica-ssag.org/>), and a bound volume (published under the auspices of the Gateway Antarctica Centre of the University of Canterbury, NZ) will be available on request. Further publications by core members of the group or those affiliated with the work of the group that are direct outcomes of the group's discussions are listed in Appendix C.

In order to develop future capacity in the field of Antarctic social sciences and cultural studies, some group members directly supervise or are associated with postgraduate students. These students have published on the topic of Antarctic values, and their publications are included in Appendix C as well.

Some of the group's members have collaborated on a number of research grant applications in areas related to Antarctic values (e.g. an Australian Research Council grant; a New Zealand Antarctic Research Institute grant), which can clearly be attributed to the close collaboration among members of the group's steering committee.

As noted in last year's report, the group is well represented on the editorial board of *The Polar Journal* (a social sciences and humanities publication focussed on the polar regions), which enables the group to encourage a broader academic discussion of values in a polar context. Furthermore, one of the group members (Enrique del Acebo Ibáñez) is the editor-in-chief of a peer-reviewed, annual polar-focused social sciences and humanities journal (*Arctic & Antarctic - International Journal on Circumpolar Sociocultural Issues*), which likewise provides a platform for scholarly engagement with the issues of interest to SCAR's SSAG and the wider community whom we serve.

In May 2013, the group launched its new dedicated website (www.antarctica-ssag.org). Still in a 'beta' stage of development, the website will allow the group to have a virtual presence to promote the group's activities, including news and events as well as a *wiki* to develop an archive of resources and a space for debate.

3. Future Plans

Over the next year, the group intends to continue working on achieving its aims and will particularly focus on the following:

- (a) Further promotion of the growth of the nascent polar social sciences and humanities network established in the last three years through SCAR and the group's presence at the SCAR Open Science Conference 2014, through the group's own workshops and symposia, the group's website, and other channels (e.g. academic publications, media, education and outreach);
- (b) Dedicated multi-disciplinary sessions exploring the links between values and human activities in the Antarctic, and other emerging themes, at the upcoming SCAR Open Science Conference in 2014 in Auckland, New Zealand;
- (c) A third symposium/workshop on Antarctic futures to be hosted in Sydney, Australia, as a pre- or post-event to the SCAR Open Science Conference in Auckland, New Zealand, 2014.
- (d) Increasing collaboration with the SCAR History EG and planning of future joint events/workshops;
- (e) Increasing trans-polar collaboration with networks and organizations of Arctic social scientists and humanities researchers; and

- (f) Publication of further research on Antarctic values in the polar and non-polar academic journals.
- (g) Discussion regarding future research directions in the broader area of Antarctic social and human sciences.

4. Budgetary Implications

The group would like to continue operating with the current budget of \$3000 per year.

Appendices

A. Group membership

A core group of experts was formed in January 2010 and was then expanded over time to ensure a wide geographical and disciplinary representation. This core group assumes the role of a steering committee. The leadership of the group changed in June 2012, when Dr. Gary Steel resigned from his position as a co-chair for personal reasons. Dr. Juan Francisco Salazar was elected by the steering group as Dr. Steel's successor.

- Dr Kees Bastmeijer (NL): Law
- Dr Paul Berkman (UK/US): Political Sciences
- Dr Sanjay Chaturvedi (IN): Geopolitics
- Dr Enrique del Acebo Ibáñez (AR): Sociology
- Dr Alan Hemmings (AU/NZ/UK): Polar Governance and Policy
- Dr Bernard Herber (US): Economics
- Dr Machiel Lamers (NL): Environmental Policy/Tourism
- Dr Daniela Liggett (NZ/DE) (co-chair): Environmental Management/Tourism
- Dr Elizabeth Leane (AU): Literature (Arts and Humanities)
- Dr Juan Francisco Salazar (AU/CL) (co-chair): Anthropology/Media Studies
- Dr Gary Steel (NZ/CA): Psychology
- Dr Emma Stewart (NZ/UK): Human Geography
- Dr. Veronica del Valle (AR): Anthropology

Note:

Country codes in parentheses indicate the country of residence followed by, where different, the country of origin.

AR – Argentina; AU – Australia; CA – Canada; CL – Chile; DE – Germany; IN – India; NL – The Netherlands; NZ – New Zealand; UK – United Kingdom; US – USA

B. List of conference sessions or workshops (since 2010)

Conference sessions

SCAR Open Science Conference

(Portland, OR, July 2012)

“Human Connections to the Antarctic and Antarctic Values”.

Co-convenors: D. Liggett, G. Steel & S. Engelbertz

SCAR Open Science Conference

(Portland, OR, July 2012)

“Changing Poles: Challenges to the Antarctic and Arctic Communities and Institutions”

Co-convenors: D. Liggett & P. Schweitzer

International Polar Year (IPY) Open Science Conference 2012

(Montréal, Canada, April 2012)

“Polar Values and Ethics: Perspectives From Across the Social Sciences”.

Co-convenors: D. Liggett, G. Steel & E. Neufeld

International Polar Year (IPY) Open Science Conference 2010

(Oslo, Norway: 8-12 June 2010)

(a) Roundtable: “The History of Polar Social Sciences: Arctic and Antarctic Connections”.

(b) Panel discussion by the SCAR Social Sciences Action Group: “The meaning of value”.

Workshops

SCAR History and Social Sciences Workshop

(Cambridge, UK, 1-5 July 2013)

“Past, present and future of human connections to the Antarctic”.

SCAR Social Sciences Action Group Workshop

(Christchurch, New Zealand, 5 Dec 2011)

“Exploring linkages between environmental management and value systems – the case of Antarctica”.

International Workshop

(University of Buenos Aires, Buenos Aires, Argentina, 15-17 November 2010)

“Northern and Southern Circumpolarities (Socioeconomic and Sociocultural approaches)”

Workshop: The Antarctic Problem in the 21st Century: Nationalism, Geopolitics, Cultural Futures

(University of Western Sydney, Australia, 25-26 October 2012)

Presentations

Seminar: Digital Interventions

(Royal Melbourne Institute of Technology, Australia, 15 May 2013)

Salazar J.F. (2013). “Geographies of place-making in Antarctica: ethnographic interventions”.

NZARI Antarctic Futures Workshop 2013

(Auckland, New Zealand, March 2013)

(a) Liggett, D. (2013). “The Significance of the Human Dimension: Challenges and Opportunities”.

SCAR Open Science Conference 2012

(Portland, Oregon, USA, July 2012)

(a) Engelbertz, S., Liggett, D., & Steel, G.D. (2012). “Climate change and uncertainty: what is the role of values in Antarctic policy?” (Paper)

(b) Salazar, J.F. (2012). “Perceptions and Attitudes of Antarctic cultural and environmental values in Chile”.

(c) Steel, G.D, Neufeld, E., & Stewart, E. (2012). “The value of clean ice: environmental worldviews and beliefs of New Zealand Antarctic field scientists”.

(d) Suedfeld, P., Steel, G.D., & Brcic, J. (July, 2012). “Personality and the positive psychological impact of polar sojourns”.

(e) Steel, G.D. & Neufeld, E. (July, 2012). "We leave it as we found it': value motivations and pro-environmental behaviour in the Ross Sea region". (Poster)

International Polar Year (IPY) Open Science Conference 2012

(Montréal, Canada, April 2012)

(a) Dawson, J. P., Stewart, E.J., Lemelin, R.H., Johnston, M.E. and Lemieux, C.J. (2012). "Cruise Tourism in Arctic Canada (C-TAC): Using the policy Delphi to identify and evaluate adaptation options".

(b) Neufeld, E. (2012). "Encountering the Ice: New Zealand perceptions of Antarctica".

(c) Stewart, E. J., Dawson, J. P., Lemelin, H. & Johnston, M. (2012). "Involving local people in defining adaptation strategies related to the cruise sector in Arctic Canada".

(d) Liggett, D. (2012). "An Erosion of Confidence? The Institutional Robustness of the Antarctic Treaty System".

3rd International Polar Tourism Research Network Conference

(Nain, Canada, 16-20 Apr 2012)

(a) Lamers, M. (2012). "Governing transnational cruise tourism mobility. Examples from the Antarctic Peninsula and the European Arctic". (Invited keynote presentation)

(b) Liggett, D. & Engelbertz, S. (2012). "Values and political decision-making: The case of Antarctic Tourism". (Invited keynote presentation)

SaGAA International Conference on Science & Geopolitics of the Arctic & Antarctica

(New Delhi, India, 9 March 2012)

Chaturvedi, S. (2012). "Geopolitics of Knowledge: Antarctica as Global Knowledge Commons".

Legal Forum

(Akureyri University, Akureyri, Iceland, 14 February 2012)

Bastmeijer, K. (2012). "Nature Conservation Law and Human-Nature Relationships".

SCAR Social Sciences Action Group Workshop – Exploring Linkages between Environmental Management and Value Systems: The Case of Antarctica

(University of Canterbury, Christchurch, New Zealand, 5 December 2011)

(a) Hemmings, A.D. (2011). "Environmental Management as Diplomatic Method: Advancing Strategic National Values in Antarctica".

(b) Salazar, J.F (2011). "Perceptions and Attitudes of Antarctic cultural and environmental values in Chile".

International Conference on The Arctic Council: Its Place in the Future of Arctic Governance

(Toronto, Canada, 17 January 2012)

Chaturvedi, S. (2012). 'Geopolitical Transformations, "Rising" Asia and the Future of the Arctic Council'

Antarctica New Zealand Science Conference

(Hamilton, New Zealand, 4-6 July 2011)

(a) Neufeld, E. & Steel, G. (2011). "From Cape Evans to Kaiapoi: the stories, images, and experiences that make New Zealand's Antarctica". (Poster)

(b) Steel, G.D., & Neufeld, E. (2011). "Valuable ice: environmental orientations of Antarctic scientists".

Advancing the Social Science of Tourism

(Guildford, University of Surrey, UK, 28th June – 1st July 2011)

Lamers, M. (2011). "Governing transnational cruise tourism flows towards sustainability: the case of Antarctica".

International Congress of Arctic Social Sciences (ICASS VII)

(Akureyri, Iceland, 22-26 Jun 2011)

(a) del Acebo Ibáñez, E. (2011). Invited presentation on the Scientific Committee on Antarctic Research (SCAR)'s Social Sciences Action Group (SSAG) to the International Arctic Science Committee (IASC) Social and Human Sciences Working Group.

(b) del Acebo Ibáñez, E. (2011). "The Ship". Documentary based on the 2010-11 Tierra del

- Fuego/Antarctic campaign of the Puerto Deseado Oceanographic vessel (Argentine Council for Scientific research), directed by Enrique del Acebo Ibáñez and screened at the conference.
- (c) Liggett, D. (2011). Invited contribution to a plenary discussion “Arctic Social Sciences beyond IPY”.
- (d) Liggett, D. & Steel, G. (2011). “Adding “value” to Antarctic research, management and policy: A project-driven approach towards creating a community of Antarctic social and human scientists”.
- (e) Liggett, D. (2011). Invited presentation on the Scientific Committee on Antarctic Research (SCAR)’s Social Sciences Action Group (SSAG) to the International Arctic Science Committee (IASC) Social and Human Sciences Working Group.
- (f) Liggett, D. (2011). Invited contribution to a roundtable “Building a community of polar social scientists”.

Perspectives on Transboundary Environmental Governance in Australia and Beyond

(Wollongong, Australia:, 12 May 2011)

Hemmings, A.D. and Roura, R. (2011). “Application of Strategic Environmental Assessment to the Marine Environment of Antarctica”.

Cooperation Regimes and Third Parties

(Canberra, Australia, 22 November 2010)

Hemmings, A.D. (2010). “Cooperation, Competition and Moving Ocean Fronts: Institutional Challenges in the Far South”.

Arctic and Antarctic Continental Shelves: New Resource Frontiers?

(British Library, London, UK, 21 September 2010)

Hemmings, A.D. (2010). “Claimant stances on Outer Continental Shelf in the Antarctic Treaty Area and the consequences for Antarctic Collective Governance”. (invited presentation)

Polar Law Symposium

(Akureyri, Iceland, 9 – 11 September 2010)

Bastmeijer, K. (2010). “Antarctic management in the benefit of future generations?”.

Symposium on the Politics of Antarctica

(University of Canterbury, Christchurch, New Zealand, 8-9 July 2010)

(a) Chaturvedi, S. (2010). “India and Antarctica: Towards a Post-Colonial Engagement”.

(b) Hemmings, A.D. (2010). “The Hollowing of the Antarctic Treaty System and the Governance of Antarctica”.

2nd IPTRN conference: Tourism, People and Protected Areas in Polar Wilderness

(Abisko, Sweden, 12-15 June 2010)

Bastmeijer, K., Lamers, M. (2010). “Strategic Antarctic tourism policy-making: Calibrating the human-nature relationship?”.

18th Annual Australia and New Zealand Society of International Law (ANZSIL) Conference

(Australian National University, Canberra, Australia, 24 June 2010)

Chaturvedi, S. (2010). “The Antarctic Treaty: Back to the Future or Business as Usual” (As a Distinguished Guest Speaker).

Antarctic Visions: Cultural Perspectives on the Southern Continent

(University of Tasmania, Hobart, Australia, 21-23 June 2010)

(a) Hemmings, A.D. (2010). “Considerable Norms in the Antarctic”.

(b) Leane, E. & Narraway, G. (2010). “Things from Another World: Nature and the Nonhuman in Eight Below”

(c) Neufeld, E. & Steel, G. (2010). “Imagining in Ice: Antarctica in the imaginations of New Zealanders”.

(d) Salazar, J.F (2010). “Rendering Antarctica in the Chilean Imaginary”.

International Polar Year (IPY) Open Science Conference 2010

(Oslo, Norway: 8-12 June 2010)

- (a) Lamers, M. (2010). "Strategic challenges of tourism development and governance in Antarctica".
- (b) Neufeld, E. & Steel, G. (2010). "Does Anyone Dream in White? Antarctica in the imaginations of New Zealanders".

Pirates of the Southern Ocean?

(Australian National University, Canberra, Australia, 15 April 2010)

Hemmings, A.D. (2010). "Cold Comfort: The Role of the Antarctic Treaty System".

C. List of publications (since 2010)

2013:

- Bastmeijer, K. & Lamers, M. (2013). Strategic Antarctic tourism policy-making: Calibrating the human-nature relationship? In Mueller, D., Lundmark, L. & Lemelin, H. (Eds.). *New Issues in Polar Tourism: Communities, Environments, Politics*: 67-86. Dordrecht, Berlin, Heidelberg, New York: Springer.
- Dodds, K. & Hemmings, A.D. (2013). Recent Developments between the UK and Argentina in the South Atlantic/Antarctic Region. *Polar Record* <http://dx.doi.org/10.1017/S0032247412000794>.
- Hemmings, A.D. (2013). The Antarctic Treaty System (The Year in Review - 2011). *New Zealand Yearbook of International Law (2011)* 9: 335-340.
- Hemmings, A.D. (2013). 'Environmental Management' as Diplomatic Method: The advancement of strategic national interest in Antarctica. In Liggett, D. & Hemmings, A.D. (Eds.) *Exploring Antarctic Values*. Christchurch: University of Canterbury, Gateway Antarctica Special Publication Series.
- Hemmings, A.D. (2013). Rights, Expectations and Global Equity: Re-justifying the Antarctic Treaty System for the 21st Century. In Powell, R. & Dodds, K. (Eds.) *Polar Geopolitics? Knowledges, Resources and Legal Regimes*. Cheltenham & Northampton MA: Edward Elgar.
- Lamers, M., Liggett, D. & Tin, T. (2013). Strategic Thinking in Antarctic Environmental Governance: Learning from global experience? In Tin, T., Liggett, D., Maher, P., Lamers, M. (Eds.). *Antarctic Futures: Human Engagement with the Antarctic*. Dordrecht, Berlin, Heidelberg, New York: Springer.
- Liggett, D., Tin, T., Lamers, M. & Maher, P. (2013). Multiple dimensions of human engagement with the Antarctic environment. In Tin, T., Liggett, D., Maher, P., Lamers, M. (Eds.). *Antarctic Futures: Human Engagement with the Antarctic*. Dordrecht, Berlin, Heidelberg, New York: Springer.
- Liggett, D. & Engelbertz, S. (2013). Values and political decision-making: The case of Antarctic Tourism. In Lemelin, H., Maher, P. & Liggett, D. (Eds.). *From talk to action: How tourism is changing the Polar Regions*. Proceedings of the 3rd International Polar Tourism Researcher Network conference.
- Liggett, D. & Hemmings, A.D. (eds.) (2013). *Exploring Antarctic Values*. Christchurch: University of Canterbury, Gateway Antarctica Special Publication Series.
- Neufeld, E., O'Reilly, J., Summerson, R., & Tin, T. (2013). Valuing Antarctica: Emerging Views from International Studies. In Tin, T., Liggett, D., Lamers, M. & Maher, P. (Eds.). *Antarctic futures: Human engagement with the Antarctic environment*. Dordrecht, Berlin, Heidelberg, New York: Springer.
- Salazar, J.F. (2013). Perceptions and Opinion of Antarctic values in Chile. In Liggett, D. & Hemmings, A.D. (Eds.) *Exploring Antarctic Values*. Christchurch: University of Canterbury, Gateway Antarctica Special Publication Series.
- Salazar, J.F. (2013). Geographies of place-making in Antarctica: an ethnographic approach. *The Polar Journal* 3(1).
- Tin, T., Liggett, D., Lamers, M. & Maher, P. (Eds.) (2013). *Antarctic futures: Human engagement with the Antarctic environment*. Dordrecht, Berlin, Heidelberg, New York: Springer.

2012:

- Acebo Ibáñez, E. del & Schlüter, R. (2012). *Diccionario de Turismo*. Buenos Aires: Claridad [Dictionary on Tourism. In Spanish].
- Berkman, P.A. (2012). 'Common Interests' as an Evolving Body of International Law: Applications for Arctic Ocean Stewardship. In Wolfrum, R. (Ed). *Arctic Marine Science, International Law and Climate Protection. Legal Aspects of Future Marine Science in the Arctic Ocean*: 155-174. Heidelberg: Max Planck Institute.
- Chaturvedi, S. (2012). The Antarctic 'Climate Security' Dilemma and the Future of Antarctic Governance. In

A.D. Hemmings, D.R. Rothwell and K.N. Scott (Ed.). *Antarctic Security in the Twenty-First Century: Legal and Policy Perspectives*: 257-283. Abingdon: Routledge.

Chaturvedi, S. (2012). De(securitizing) the Ice: Circumpolar Arctic in 'Global' Climate Change. In P. Aalto, V. Harle and S. Moisiso, (Eds.). *Global and Regional Problems: Towards an Interdisciplinary Study*: 171-198. Aldershot: Ashgate.

Chaturvedi, S. (2012). Geopolitical Transformations: 'Rising Asia' and the Future of Arctic Council. In T. S. Axworthy, T. Koivurova and W. Hasant (Eds.). *The Arctic Council: It's Place in the Future of Arctic Governance*: 225-260. Walter & Duncan Gordon Foundation, Munk School of Global Affairs and Arctic Council. Available at: <http://gordonfoundation.ca/node/530>.

Hemmings, A.D. (2012). Considerable values in Antarctica. *The Polar Journal* 2(1): 137-154.
<http://dx.doi.org/10.1080/2154896X.2012.679565>.

Hemmings, A.D., Rothwell, D.R. and Scott, K.N. (Ed.) (2012). *Antarctic Security in the Twenty-First Century: Legal and Policy Perspectives*. Abingdon: Routledge.
<http://www.routledge.com/books/details/9780415620253>.

Lamers, M.; Liggett, D.; Amelung, B. (2012). Perspective: Strategic challenges of tourism development and governance in Antarctica: taking stock and moving forward. *Polar Research*, 31.
doi:10.3402/polar.v31i0.17219.

Leane, E. (2012). *Antarctica in Fiction: Imaginative Narratives of the Far South*. Cambridge: Cambridge UP.

Rothwell, D.R., Scott, K.N. and Hemmings, A.D. (2012). The Search for 'Antarctic Security'. In A.D. Hemmings, D.R. Rothwell and K.N. Scott (Ed.), *Antarctic Security in the Twenty-First Century: Legal and Policy Perspectives*: 1-17. Abingdon: Routledge.

Hemmings, A.D. (2012). Security Beyond Claims. In A.D. Hemmings, D.R. Rothwell and K.N. Scott (Ed.), *Antarctic Security in the Twenty-First Century: Legal and Policy Perspectives*: 70-94. Abingdon: Routledge.

Hemmings, A.D., Rothwell, D.R. and Scott, K.N. (2012). Antarctic Security in a Global Context. In A.D. Hemmings, D.R. Rothwell and K.N. Scott (Ed.), *Antarctic Security in the Twenty-First Century: Legal and Policy Perspectives*: 328-336. Abingdon: Routledge.

2011:

Bastmeijer, B. (2011). Intergenerational Equity and the Antarctic Treaty System: Continued Efforts to Prevent 'Mastery', In Alfredsson, G. & Koivurova, T. (Eds. in chief) and Hossain, K. *The Yearbook of Polar Law (Vol. 3)*: 635 – 682. Boston/Leiden: Brill/Martinus Nijhoff Publishers. Also available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1762039.

Bastmeijer, K. (2011). A Long Term Strategy for Antarctic Tourism: The Key to Decision Making within the Antarctic Treaty System? In Maher, P., Stewart, E. and Lück, M. (Eds). *Polar Tourism: Human, Environmental and Governance Dimensions*: 167-184. Elmsford, NY: Cognizant Communication Corporation. Also available at SSRN: <http://ssrn.com/abstract=1335091>.

Berkman, P.A., Lang, M.A., Walton, D.W.H. and Young, O.R. (Eds.) (2011). *Science Diplomacy: Antarctica, Science and the Governance of International Spaces*. Washington, DC: Smithsonian Institution Scholarly Press.

Berkman, P.A. (2011). President Eisenhower, the Antarctic Treaty and Origin of International Spaces. 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*: 17-28. Washington, DC: Smithsonian Institution Scholarly Press.

Berkman, P.A., Walton, D.W.H. and Young, O.R. (2011). Conclusions. 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*: 299-310. Washington, DC: Smithsonian Institution Scholarly Press.

- Crane, R., Leane, E. and Williams, M. (Eds.) (2011). *Imagining Antarctica: Cultural Perspectives on the Southern Continent*. Hobart: Quintus.
- Farreny, R.; Oliver-Solà, J.; Lamers, M.; Amelung, B.; Gabarrell, X.; Rieradevall, J.; Boada, M.; Benayas, J. (2011). Carbon dioxide emissions of Antarctic tourism. *Antarctic Science* 23: 556 - 566.
- Gunnlaugsson, H. and del Acebo Ibáñez, E. (2011). Iceland's (2008) and Argentina's (2001) crises: Are there any similarities? *Arctic & Antarctic - International Journal on Circumpolar Sociocultural Issues*, 5: 51-62.
- Hemmings, A.D. and Jabour, J. (2011). Already a Special Case? Australian Antarctic Policy in the First Decade of the Antarctic Treaty. In M. Haward and T. Griffiths (Ed.), *Australia and the Antarctic Treaty System: 50 Years of Influence*: 118-137. Sydney: UNSW Press.
- Hemmings, A.D. (2011). Environmental Law - Antarctica. In K. Bosselmann, D. Fogel and J.B. Ruhl (Ed.), *The Encyclopedia of Sustainability, Vol 3: The Law and Politics of Sustainability*: 188-194. Great Barrington: Berkshire Publishing.
- Hemmings, A.D. (2011). The Antarctic Treaty System (The Year in Review - 2010). *New Zealand Yearbook of International Law (2010)* 8: 238-242.
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