



**XXXII SCAR Delegates' Meeting**

**Portland, USA, 23-25 July 2012**

Agenda Item: 5.4.3

Person Responsible: Daniela Liggett

# **Report of the SCAR Social Sciences AG**



## Executive Summary

### **Title: Report of the SCAR Social Sciences Action Group**

**Authors:** D. Liggett, G. Steel, J. Salazar & K. Bastmeijer, P. Berkman, S. Chaturvedi, E. del Acebo Ibañez, A. Hemmings, M. Lamers, E. Leane, E. Stewart & other members of the steering group of the SCAR Social Sciences Action Group

### **Introduction/Background:**

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. In light of the coverage (in the media and in policy discussions) 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. 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.

### **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 referred to as “the group”) was established to carry out research targeted at understanding and cataloguing the range of values underpinning human engagement with the Antarctic. As this report and the list of research outputs (in the appendices) show, 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 more time and continued efforts. However, 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 2014 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 research outside the realm of the natural sciences and that it encourages multi-disciplinary research efforts. Facilitating an examination of Antarctic values through this group will also help SCAR to provide policy advice that is rooted 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 regular communication with the SCAR History EG and with the Association of Polar Early Career Scientists (APECS) and has established contact with representatives of the IASC Social and Human Sciences Working Group. Endeavours are underway to establish close collaborations with researchers working on Arctic social science and humanities topics in order to expand the reach of Antarctic social science and humanities research.

### **Budget Implications:**

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

## Report of the SCAR Social Sciences AG

### *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 year, 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 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, 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 cataloguing 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 a transparent 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 at the IPY Oslo Science Conference in 2010, ICASS (International Committee for Arctic Social Sciences) VII in Akureyri in 2011, the IPY Montréal Conference in 2012, 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).

In December 2011, the group held a workshop titled "Exploring linkages between environmental management and value systems – the case of Antarctica" and dedicated to the academic exploration of Antarctic values and a discussion of their relevance for Antarctic environmental management. The proceedings of this workshop are going to be available online and in hardcopy before the end of this year.

A number of publications by core members of the group or those affiliated with the work of the group are direct outcomes of the group's discussions or can be attributed to aforementioned conference sessions, presentations at conferences or workshop. The group members' publications 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.

The group has contributed to education and outreach activities, e.g. by participating in an APECS (Association of Polar Early Career Scientists) webinar in June 2011 and informing APECS members about the group's activities. The group has established contact with both the SCAR History AG and the IASC Social and Human Sciences Working and plans on holding a joint meeting with these groups at the 2012 SCAR OSC in Portland, OR.

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*). Furthermore, in June 2011, Routledge commenced publication of a new journal entitled *The Polar Journal*, specifically directed to the social sciences and humanities. Whilst this is an independent initiative, members of SSAG are well represented on its editorial board. This journal provides an important new platform for scholarly engagement with the issues of interest to SCAR's SSAG and the wider community whom we serve.

### ***3. Future Plans***

Over the next two years, 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 two years;
- (b) A second conference/workshop (this time examining the place of values in conflict resolution around Antarctic issues) in Australia;
- (c) Increasing trans-polar collaboration with networks and organizations of Arctic social scientists and humanities researchers; and
- (d) Publication of an edited volume of papers regarding Antarctic values.

### ***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 groups assumes the role of a steering group. 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): 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; 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

#### 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 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)”

### Presentations

#### 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”.

#### 3<sup>rd</sup> 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. &amp; Steel, G. (2011). "From Cape Evans to Kaiapoi: the stories, images, and experiences that make New Zealand's Antarctica". (Poster)

(b) Steel, G. (2011). "Values Associated with the Antarctic Environment".

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. &amp; 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".

2<sup>nd</sup> 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?".

18<sup>th</sup> 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) Neufeld, E. & Steel, G. (2010). "Imagining in Ice: Antarctica in the imaginations of New Zealanders".

(c) 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)

#### 2012:

- Bastmeijer, K. & Lamers, M. (forthcoming). Strategic Antarctic tourism policy-making: Calibrating the human-nature relationship? In Mueller, D., Lundmark, L. & Lemelin, H. (Eds.). *Issues in Polar Tourism*. Dordrecht, Berlin, Heidelberg, New York: Springer.
- Berkman, P.A. (in press). '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*. 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>.
- Lamers, M., Liggett, D. & Tin, T. (forthcoming). 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.
- Neufeld, E., O'Reilly, J., Summerson, R., & Tin, T. (Accepted). Valuing Antarctica: Emerging Views from International Studies. In Tin, T., Liggett, D., Lamers, M. & Maher, P. (Eds.) (Forthcoming). *Antarctic futures: Human engagement with the Antarctic environment*. Dordrecht, Berlin, Heidelberg, New York: Springer.
- Liggett, D. & Hemmings, A.D. (eds.) (forthcoming 2012). *Exploring Antarctic Values*. Christchurch: University of Canterbury, Gateway Antarctica Special Publication Series.
- 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.
- Salazar, J.F. (forthcoming 2012). "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.
- 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](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.
- Hemmings, A.D. (2011). Why did we get an International Space Station before an International Antarctic Station? *The Polar Journal* 1(1): 5-16.  
<http://dx.doi.org/10.1080/2154896X.2011.569377>.
- Lamers, M.; Eijgelaar, E.; Amelung, B. (2011). Last chance tourism in Antarctica – Cruising for change? In Dawson, J., Stewart, E.J. and Lemelin, H. (Eds.). *Last-Chance Tourism: Adapting Tourism Opportunities in a Changing World*: 25-41. London: Routledge.

- Lamers, M.; Gelter, H. (2011). Diversification of Antarctic tourism: the case of a scuba diving expedition. *Polar Record*. <http://dx.doi.org/10.1017/S0032247411000246>
- Lamers, M.; Amelung, B. (2011). Sustainable Tourism Development in Antarctica: Conceptualization, Perspectives, and Ways Forward. In Grenier, A.A. and Müller, D.K. (Eds.). *Polar Tourism: A Tool for Regional Development*: 207-226. Québec, Canada : Presses de l'Université du Québec.
- Leane, E. (2011). Introduction. In Crane, R., Leane, E. and Williams, M. (Eds.). *Imagining Antarctica: Cultural Perspectives on the Southern Continent*: 10-17. Hobart: Quintus.
- Leane, E. (2011). Introduction: The Cultural Turn in Antarctic Studies. *The Polar Journal* 1(2): 149-54.
- Roura, R. and Hemmings, A.D. (2011). Realising Strategic Environmental Assessment in Antarctica. *Journal of Environmental Assessment Policy and Management* 13(3): 483-514. <http://dx.doi.org/10.1142/S1464333211003973>.
- Tin, T., Bastmeijer, K. O'Reilly, J. and Maher, P. (2011). Public Perception of the Antarctic Wilderness: Surveys from an Educated, Environmentally Knowledgeable European Community. In Watson, A., Murrieta-Saldivar, J. and McBride, B. (Eds.). *Science and Stewardship to Protect and Sustain Wilderness Values – Proceedings of the Ninth World Wilderness Congress Symposium 6-13 November, 2009, Meridá, Yucatán, Mexico*: 109-117. Fort Collins, CO: United States Department of Agriculture Forest Service. Available at [http://www.fs.fed.us/rm/pubs/rmrs\\_p064.pdf](http://www.fs.fed.us/rm/pubs/rmrs_p064.pdf).
- Tin, T. and Hemmings, A.D. (2011). Challenges in protecting the wilderness of Antarctica. In A. Watson, J. Murrieta-Saldivar and B. McBride (Ed.), *Science and Stewardship to Protect and Sustain Wilderness Values: Ninth World Wilderness Congress Symposium: November 6-13, 2009, Merida, Yucatan, Mexico*: 147-152. Fort Collins: Rocky Mountain Research Station. [http://www.fs.fed.us/rm/pubs/rmrs\\_p064/rmrs\\_p064\\_147\\_152.pdf](http://www.fs.fed.us/rm/pubs/rmrs_p064/rmrs_p064_147_152.pdf).

## **2010:**

- Berkman, P.A. (2010). *Environmental Security in the Arctic Ocean: Promoting Cooperation and Preventing Conflict* (With Foreword by Adm. James G. Stavridis, NATO Supreme Allied Commander for Europe). London: Routledge.
- Berkman, P.A. (2010). Biodiversity Stewardship in International Spaces. *Systematics and Biodiversity*, 8(3): 311–320.
- Berkman, P.A. (2010). Integrated Arctic Ocean Governance for the Lasting Benefit of All Humanity. In Wolfrum, R.) (Ed). *New Challenges and New Responsibilities in the Arctic Region*: 187-194. Heidelberg: Max Planck Institute.
- Berkman, P.A. (2010). Common interests in the international space of Antarctica. *Polar Record*, 46(1):7-9.
- del Acebo Ibáñez, E. (2010). Bordering Immigrants in Argentina. The case of Chilean immigration to Patagonia and Tierra del Fuego. *Arctic & Antarctic - International Journal on Circumpolar Sociocultural Issues*, 4: 47-65.
- del Acebo Ibáñez, E. and Costa, M. (2010). Antarctic environmental problems: attitudes and behaviours of young inhabitants of two Argentine cities (Buenos Aires and San Carlos de Bariloche). *Polar Record*, 46(238): 257-263.
- del Acebo Ibáñez, E. and Gunnlaugsson, H. (Eds.) (2010). *La Circumpolaridad como Fenómeno Sociocultural (Pasado, Presente, Futuro)* [*The Circumpolarity as a Sociocultural Phenomenon (Past, Present, Future)*] (In Spanish). CICLOP: University of Buenos Aires. (ISBN 978-950-29-1239-4)

- Dodds, K. and Hemmings, A.D. (2010). Stenographers of Power: Reply to Haward and Bergin. *Australian Journal of Politics and History* 56(4): 617-619. <http://dx.doi.org/10.1111/j.1467-8497.2010.01575.x>.
- Hemmings, A.D. (2010). Does Bioprospecting Risk Moral Hazard for Science in the Antarctic Treaty System? *Ethics in Science and Environmental Politics* 10(1): 5-12. <http://dx.doi.org/10.3354/esep00103>.
- Hemmings, A.D. and Kriwoken, L.K. (2010). High Level Antarctic EIA under the Madrid Protocol: State Practice and the Effectiveness of the Comprehensive Environmental Evaluation Process. *International Environmental Agreements: Politics, Law and Economics* 10(3): 187-208. <http://dx.doi.org/10.1007/s10784-010-9119-5>.
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