

# **ANTARCTICA IN/AND THE ANTHROPOCENE**

## **International Symposium**

### **Organizers:**

Cristián Simonetti (Pontificia Universidad Católica de Chile) &  
Juan Francisco Salazar (Western Sydney University, Australia)

**Saturday May 28, 2016**

Venue: Sala Matte - Centro de Extension UC

Address: Avenida Alameda Libertador Bernardo O'Higgins 390  
Santiago - Chile

This one day international symposium takes advantage of the fact that the Antarctic Treaty Consultative Meetings are being held in Santiago in 2016 to bring together a range of perspectives from the humanities, social sciences and Antarctic sciences to think more broadly about Antarctica as a crucial object for reflecting on the Anthropocene. Drawing on an interdisciplinary impetus, the event is an invitation to speakers and participants to open up a dialogue to debate about what lessons can be learnt from Antarctica in thinking about life in the Anthropocene, in which human and Earth futures are increasingly entangled and interdependent in their mutual uncertainty.

The symposium is sponsored by the anthropology program of the Institute of Sociology, Universidad Católica and the Institute for Culture and Society (ICS), Western Sydney University with support from the Humanities and Social Sciences Expert Group of SCAR. The venue is Sala Matte (Matte Hall) at the **Centro de Extension UC** (Catholic University) on Alameda 390. See link on [Google Maps](#).

### **Coming to terms with Antarctica in/and the Anthropocene**

2016 may prove to be a significant year at many levels when thinking about Antarctica and the Anthropocene. We wish to bring attention to four such events as a preamble to this symposium and as one way of thinking and inviting debate into how we are coming to terms with Antarctica in/and the Anthropocene.

- February to April of 2016 have been the warmest months on record for these months, continuing a long-term trend where 15 of the 16 warmest years on record have now occurred since 2001, and following reports that show that not only 2015 was the warmest year since modern record-keeping began in 1880 but also that the past 12 months have been the hottest such months in 135 years of recordkeeping.
- On 22 April 2016 (Earth Day) the Paris Agreement under the United Nations Framework Convention on Climate Change was signed in New York following initial adoption by consensus at the 21st Conference of the Parties of the UNFCCC in Paris in December 2015.
- In 2016 a proposal to designate a new geological epoch as the 'Anthropocene' is being developed by the 'Anthropocene' Working Group for consideration by the International Commission on Stratigraphy. This working group will decide on whether the Anthropocene is recognized formally as a new geologic era.
- 2016 marks the 25<sup>th</sup> anniversary of the signing of the Protocol on Environmental Protection to the Antarctic Treaty (1991) which designates Antarctica as a “natural reserve, devoted to peace and science” (Art. 2); sets forth basic principles applicable to human activities in Antarctica (Art.3); prohibits all activities relating to Antarctic mineral resources, except for scientific research (Art. 7.) and establishes that until 2048 the Protocol can only be modified by unanimous agreement of all Consultative Parties to the Antarctic Treaty.

## *The anthropocene*

The Anthropocene is a term coined in 2000 by ecologist Eugene F. Stoermer and atmospheric chemist Paul Crutzen. It has come to express the current time interval as a new geologic epoch defined by human agency where human activity has so profoundly impacted geology and atmospheric cycles that a new geological unit that accounts for measuring the impact of human activities. This also may be extended to invasive species into new habitats, intensive agriculture and soil depletion, urbanization, pollution, plastic waste, and global warming, among other anthropogenic forces and processes that began accelerating after the 1950's.

Many scholars are arguing that the driving forces pushing this "Great Acceleration" constitute an interlinked system, characterized by population growth, increased consumption, the abundance of cheap energy and the implementation of liberalizing economic policies. While the term Anthropocene sometimes neglects the presence – and force – of terrestrial processes that exist independently from human relationships we must acknowledge that what is at stake here/now is the predicament that humanity is no longer able to control most of the feedback effects derived from its own actions.

Humanities and social researchers, scientists and artists have embraced the Anthropocene in a range of ways which allows us to proposed that the notion can be used as a hinge to develop a more affirmative and productive relationship across these domains of knowledge production.

## *Antarctica in the anthropocene*

In this mode of thinking, the interest is in discussing the impacts of global ecosystems change on Antarctica. The continent and surrounding ocean are undergoing a profound transformation impelled largely by accelerated change in its ecosystems dynamics. Scientists are painting a sober picture of an unfolding and relentlessly unraveling future where changes will only intensify considerably in the next 50 years. These changes are also linked to shifting geopolitical undercurrents, improved technological and logistical capabilities, intense human activities in the continent and surrounding ocean, and increased interest in its bio-resources. The scope and intensity of human activities in the southern polar region has changed dramatically over the past 100 years and Antarctica is becoming an 'anthropogenic landscape' where the challenges of intensifying human activities there entail that the current governance system may be insufficient to meet the environmental protection obligations set out under the Madrid Protocol 25 years ago.

Over merely two centuries, human activities have transferred to the atmosphere, in the form of gases or heat, a substantial part of the hydrocarbons, which took millions of years to accumulate on Earth. More substantially and worrying, is that the Anthropocene comes to signal a time interval in which nowhere, not the furthest reaches of the stratosphere nor the lowest point in the marine abyss, are untouched by the activities and detritus of humankind. In this regard, Antarctica presents an inherently futures-oriented problem and one of the most serious tests of our collective and coordinated capacity to exercise foresight. Not only to protect these fragile environments, but also to rethink our species as part of and in relation with nature, and to mobilize novel experiments with living differently in the Anthropocene.

## *Antarctica and the anthropocene*

In this mode of thinking Antarctica thus becomes a key object to think the Anthropocene with. Thinking about the Anthropocene suggests a complex blend of socio-political and physico-material negotiations. The current problematization of planetary 'boundary conditions' is indicative of the need for new ethical engagements, but is also suggestive of a new kind of 'geologic politics' that is as concerned with the temporal dynamics and changes of state in Earth systems as it is with political issues revolving around territories and nation state boundaries. In this sense, in thinking Antarctica *and* the anthropocene we invite speakers to reflect on lessons learnt from Antarctica that are useful and significant to take into account when grasping planetary changes. On the one hand this entails looking at how Antarctica shapes the future of the planet, but also to speculate how Antarctica can be thought of not only as a laboratory for science, but as a laboratory for thinking alternative ways of living in the Anthropocene.

## Preliminary Program

**09.45 Welcome**

**09.50 Opening remarks** – Instituto de Sociología Universidad Católica

**10.00 *Coming to terms with Antarctica in/and the Anthropocene***

Juan F. Salazar (Western Sydney University) & Cristián Simonetti (Universidad Católica de Chile)

**10.15 – 11.30 Session 1 – Chair: Jessica O'Reilly**

***The frozen continent: Isolated in the Anthropocene?***

Mike Sparrow (World Climate Research Programme, World Meteorological Organisation)

***Antarctica in the Anthropocene: reflections from natural history***

Marcelo Leppe (Instituto Antártico Chileno)

***Antarctica and the Anthropocene: The future is not what it used to be***

Denzil Miller (Antarctic Tasmania)

**11.30 – 12.00 Coffee break**

**12.00 – 13.15 Session 2 – Chair: Juan F. Salazar**

***Preparing for Catastrophe on the Polar Frontier***

Jessica O'Reilly (Indiana University)

***Antarctica and 'Climate Terror': Towards a Critical Geopolitics of Anthropocene***

Sanjay Chaturvedi (Panjab University, India)

***Territorial and Resource Rights in the Anthropocene: the Case of Antarctica***

Alejandra Mancilla (University of Oslo)

**13.15 – 14.30 Lunch with speakers**

**14.45 – 16.15 Session 3 – Chair: Juan F. Salazar**

***Antarctica as a source of opportunities for the construction of a citizen imaginary for the Anthropocene***

Edgardo Vega (Instituto Antártico Chileno)

***Humanistic research and Antarctica in the anthropocene***

Lize-Marié van der Watt (Umeå University, Sweden)

***Tourism in Antarctica: challenges for the International Association of Antarctic Tour Operators (IAATO)***

Monika Schillat (Universidad Nacional de Tierra del Fuego, Argentina)

***Punta Arenas and the challenge to become an Antarctic city in the context of the Anthropocene***

Elias Barticevic (Instituto Antártico Chileno)

**16.15 – 16.30 Discussion, Summary & Closing remarks**

**16.30 End of Symposium**

## Invited Speakers

**Elias Barticevic** is a science journalist. For over a decade he was Head of the Department of Communications and Education at the Chilean Antarctic Institute, leading what has been called the "citizen Antarctica" program in Chile. He is a grant recipient of the National Commission for Scientific and Technological Research (Conicyt) and is currently conducting research on Punta Arenas, local development and Antarctica as part of a Master in Social Sciences degree at the University of Chile.

**Sanjay Chaturvedi** is Professor of Political Science at Panjab University, India. He specializes in the theory and practices of geopolitics in the Polar Regions and the Indian Ocean Region. His current area of research is geopolitics of climate change. And his most recent co-authored books are: *Climate Terror: A Critical Geopolitics of Climate Change* (Palgrave Macmillan 2015) and *Climate Change and the Bay of Bengal: Emerging Geographies of Hope and Fear* (Institute of South East Asian Studies, Singapore). He has been a member of the Steering Committee of International Geographical Union (IGU) Commission on Political Geography (2004-2012) and currently is a member of the Core Group of Experts on Antarctic and Southern Ocean set up by the Ministry of Earth Sciences, Government of India, and has served on the Indian delegation to the Antarctic Treaty Consultative Meetings since 2007.

**Marcelo Leppe** is a paleobotanist and paleoecologist. He is currently Head of the Scientific Department at the Chilean Antarctic Institute and Chilean representative to the Scientific Committee on Antarctic Research (SCAR). His research focuses on Triassic flora of southwestern Gondwana, and recently on the study of the connections between South America and Antarctica during the Mesozoic (mainly Cretaceous) and the origin of the southern South American biotas.

**Alejandra Mancilla** is a postdoctoral researcher in political philosophy at the Centre for the Study of Mind in Nature (CSMN), University of Oslo. Her research at the Chilean Antarctic Institute (INACH), focuses on Antarctica as a site for rethinking theories of territorial and resource rights. She is author of *The Right of Necessity* (forthcoming), co-editor of *Theories of Justice* (2012), and has published in a number of journals in political philosophy and applied ethics.

**Professor Denzil Miller** is currently Director of Antarctic Tasmania. He has been involved in Antarctic matters for nearly 40 years. He has a PhD in marine biology and is a former CCAMLR Executive Secretary and a Professorial Fellow at the University of Wollongong. Denzil is also a recipient of the South African Antarctic Medal (1995) and a WWF Duke of Edinburgh Conservation Medal (2007) awardee. He was inaugurated as a Member of the Order of Australia in 2011 for his Antarctic work and has published widely in the fields of marine science, policy, law and conservation.

**Jessica O'Reilly** is an Assistant Professor of Climate Change and International Studies at Indiana University Bloomington. Her research is centered on the relationships between science, environmental management, and policy; she has conducted ethnographic fieldwork in Antarctica and New Zealand. Her newest project is an ethnographic study of the writing processes of the Intergovernmental Panel on Climate Change. She has published widely in anthropology, science studies, and climate change journals and has a forthcoming book *Technocratic Antarctic: scientific expertise and environmental management* (Cornell University Press). O'Reilly serves as an advisor to the Antarctic Treaty consultative meetings.

**Mike Sparrow** is currently Senior Scientific Officer, World Climate Research Programme at the World Meteorological Organization in Geneva and Head of Delegation to the Antarctic Treaty for the World Meteorological Organisation. Until May 2015 he was Executive Director of the Scientific Committee on Antarctic Research (SCAR). He has a PhD in Southern Ocean physical oceanography and a Masters in climate/atmospheric sciences and has worked and lived in China, the UK, Spain and Switzerland.

**Juan Francisco Salazar** is a cultural and media anthropologist. He is Associate Professor in media and environmental studies and Fellow of the Institute for Culture and Society at Western Sydney University, Australia. He has published widely in the fields of environmental humanities; Indigenous media in Latin America, climate change in science museums and centers, and has conducted ethnographic research in the Antarctic Peninsula and Antarctic gateway cities. He is a member of the executive committee of the Humanities and Social Sciences Expert Group (HASSEG) of the Scientific Committee for Antarctic Research (SCAR) and since 2014 is co-director of the Future Anthropologies Network of the European Association of Social Anthropologists (EASA).

**Monika Schillat** is a historian and writer who currently lectures at the National University of Tierra del Fuego in Ushuaia. She is a researcher at the Polar Science Institute (ICPA) and has lead tourism expeditions to Antarctica for over 22 years. She holds masters degrees in Latin American History and Literature from the University in Hamburg/Germany and in Educational Research from the University of Valencia/Spain. Her works include several books and articles on the history of Tierra del Fuego and the South Atlantic Islands as well as a couple of travel guides, an essay book on Antarctica, another one on the Arctic and an Antarctic Bestiary with her personal watercolour sketches.

**Cristián Simonetti** is Assistant Professor at the Programa de Antropología, Instituto de Sociología, Pontificia Universidad Católica de Chile and an Honorary Research Fellow at the Department of Anthropology, University of Aberdeen. He has conducted fieldwork with land and underwater archaeologists in Chile and Scotland, and with glaciologists in Greenland. His research concentrates on how scientists studying the past understand time, the topic of a monograph he is currently writing for Routledge, entitled *Sentient Conceptualizations*. He is currently involved in collaborative explorations, across the sciences, arts and humanities, on the properties of inorganic materials iconic of the Anthropocene, such as ice and concrete.

**Edgardo Vega** is a biochemist with a PhD in Biological Sciences and vast expertise in communication of science. He is currently Deputy Director of the Chilean National Antarctic Program (INACH) and was formerly scientific advisor to the Interactive Center for Art and Technology in Concepción, Chile.

**Lize-Marié van der Watt** is a post-doctoral researcher at the Arctic Research Centre at Umeå University, Sweden, with a background on socio-environmental history. She is interested in cultural and political understandings of the environment and environmental change. Her past research included work on locust plagues in southern Africa and her current work focuses on the Polar Regions, specifically on the global geopolitical and institutional contexts of Arctic environmental change as well as social and environmental histories of Antarctica. Previously, Lize-Marié worked as a project officer at the Swedish Polar Research Secretariat. She is co-editor of *Antarctica and the Humanities* with P. Roberts and A. Howkins (Palgrave Macmillan Forthcoming, 2016).