

25 Mar 2020

Memorandum Report for Record

From: Former State of Alaska Deputy Commissioner Duxbury, ADAC Executive Counselor.

Subject: Report on Arctic Worlds 2020 Symposium on the Environment and Humanities, Boston University, MA.

On 26 Feb 2020, Former State of Alaska Deputy Commissioner Michael Duxbury, ADAC Executive Counselor attended the Arctic Worlds, a Symposium on the Environment and Humanities that took place at Barrister Hall, School of Law Boston University, Boston, MA. The event was sponsored by the Fredrick S. Pardee Center for the Longer-Range Future.

Academic investigators responsible for the research presented to the audience and one another on the various Arctic focused studies and cross-pollinated the discussions with ancillary apropos subject matter brought forth in three different panels.

The symposium encouraged engagement that could develop a broader consciousness facilitating a synergistic understanding of the sciences and humanities in the Arctic. We were asked to reflect on both disciplines and equate them to experience over time as history.

It was suggested from the onset that the symposium was meant to incorporate humanities and scientific studies revolving around the Arctic and thereby allow the disciplines to provide context and understanding that can drive a positive influence for Arctic Issues across the spectrum.

The Symposium's Keynote Speaker was Minister Plenipotentiary, Head of Representation, Inuuteq Holm Olsen, Greenland's representative to the United States and Canada on Economic Development, and Security Issues. His expressed interest in part focused on Greenland's journey towards self-determination. He spoke about a hope that Arctic peoples could have a greater voice on Arctic issues. We spoke about possible collaborative lessons learned from an event with Alaskans on the subject of delivering public safety within indigenous communities of the Arctic.

The first panel included the following presenters and facilitators. They tied together the disciplines of environmental sciences, literature, and geography.

Adriana Craciun from Boston University Professor and Emma MacLachlan Metcalf Chair of Humanities provided opening remarks and later her own research.

Ross Virginia from Dartmouth College, Myers family Professor discussed being born in the Holocene and doing Science in the Anthropocene.

Michael Bravo who is a Senior Lecturer in Geography at the University of Cambridge, gave a talk entitled “Polar remembering and Forgetting.

Mary Fuller an MIT Professor of Literature spoke of Editing foot noted regarding early literature of early 19<sup>th</sup> century Anglo-Inuit Encounters.

A Quote from Professor Ross that summarized his presentations and panel discussion was: “Scientists need help in what we do not understand... How do we bring new knowledge that helps us survive sic: [changes] into the Anthropocene... How do decolonize research methods and favor co-production of the science?”

Senior Lecturer Michael Bravo provided information on the long history of Arctic exploration discussing explorers as far back as 1524. He explained the Age of Discovery incorporated a level of sophistication the modern world does not often attribute to early exploration. His studies included early cartographer’s work and remarkable comparisons with the known Inuit trail system utilized throughout the Arctic. He provided documentation for the complex intertwining of explorers with the Arctic Inuit inhabitants.

Professor Mary Fuller from MIT discussed the language of early western explorers, their descriptions, and assumptions about Arctic indigenous people’s intellect. The impact these expressions have had on generations of exploration in the Arctic can be glimpsed in the intersection between the explorer culture and the Inuit societal norms. A people that had lived and survived in the Arctic for thousands of years were thought of and attributed a degree of ignorance in the English language descriptions. This, although explorer often perished in the Arctic environment due to their ignorance about things the indigenous understood. When interludes between cultures produced similar behavior by both western cultural response was accepted above the Inuit’s. The lesson, a behavior we should try to avoid in the present era.

The second panel discussion included presenters and facilitators that brought together the disciplines of social anthropology, anthropology, geography.

Barbara Bodenhorn: Professor Emeritus Fellow, Social Anthropology, University of Cambridge. Presented via skype video call from Cambridge England.

Catherine West: Assistant Professor of Anthropology and Archeology and a BU Pardee Center Faculty Research Fellow.

Mia Bennett: Asst Professor, Geography, the University of Hong Kong

Professor Bodenhorn referred to author Mary Douglas, believed to be the originator of the theory of “cultural risk”, drawing parallels with her own findings among North Slope Borough high school-aged adolescents, regarding their understanding of the risk involved as the Arctic environment changes. She explored the concept of “constellations of risks”. While on the North Slope she observed adults were very concerned about a changing Arctic, yet few students felt they would be impacted. While introducing the Arctic students to the Mexican marine environment she found the attitudes of the Mexican populations she interacted with were juxtaposed. Mexican adults were more concerned than the young students.

The discussion drew subtle connections between the tension and uncertainty of a changing Arctic and a young generation of inhabitants questioning itself about their potential role in the Arctic.

Asst Prof. West’s talk was titled *Looking to the Past: The Unalaska Sea Ice Project*. It described looking back and forth between the natural sciences and the humanities sciences. She focused on a study in the Aleutian Island of Unalaska. Aleut or Unangan people were marine hunter-gatherers established in the area approximately 10,000 years ago. Examining climate change in the Sub Arctic through the Neo Glacial period evidence that suggested the area was characterized by periods of cooling and warming. The study investigated animal bones and clam shells from archeological remains in the area. Findings indicated the area was inundated by ice and pagophilic species in the late Holocene.

The Humboldt clam considered a paleo thermometer due to unique shell chemistry and compositional response to the environment was studied. The study of nitrogen and carbon levels in the bones of marine mammal species provided insight on where the animals in the Unangan diet originated, either locally or from distant locations. The observations revealed aspects of the Unangan people’s interdependent diet adaptation to these changes. Findings also suggested salmon species persisted even during glacial periods in the area.

Asst Professor Bennett presented the audience with imagery of the Arctic as her discussion led one on a journey through the sublime aspects of the natural Arctic region topography and landscapes. She adroitly connected the natural images of the Arctic to the aesthetics of classical ancient ruins. Through picture comparisons, she explained her study of Arctic images could be considered demonstrative of the despair and helplessness often accompanying much of today’s thinking about the Arctic. She suggested depicting the Arctic steeped in a catastrophic and apocalyptic status tends to drive a sense of inevitable hopelessness and inaction.

Asst Prof Bennett described an environmental melancholy that can develop in Arctic communities. People of the Arctic believe change has been occurring for some time, they approach it with a pragmatic acceptance that they will adapt. People outside the Arctic regions often seem to interpret the change in negative terms leading to a laissez faire, insurmountable or, nothing can be done attitude.

The third panel discussion included presenters and facilitators that incorporating disciplines of social ecology, anthropology, humanities.

Harriet Ritvo: is an Arthur J Conner Professor, Environmental Studies, at Dartmouth College.  
Teaching the environment as history:

Laurence E. Culler: research assistant professor Environment Studies Dartmouth.  
Biting insects in a rapidly changing Arctic:

Adrianna Craciun: Professor Emma MaClachlan Metcalf Chair of Humanities.  
Plant time and Arctic Time Scalbard Global Seed Vault.

Professor Ritvo teaches a course on climate as history that begins its study circa 14K years ago culminating in the 20<sup>th</sup> century. Over history, she asserts humans seem to have influenced their environment. Developing one's understanding of the current anthropogenic warming in this, the Holoceneperiod could arguably explain change and how it occurs.

She mentioned that contact across the Atlantic in the north took place before Columbus' exploration pointing out Iceland was settled in the 9<sup>th</sup> Century and Greenland in the 10<sup>th</sup> Century. The discussion elucidated the inevitable contact between European and non-Europeans and the human drivers of climate change that developed. Impacts on the Arctic by humans not generally considered stakeholders in the Arctic can be histrionic and modern negative examples manifest in some failed agreements like the Paris Climate Accords.

Asst. Research Professor Culler is an ecologist with 10 years of working history in the Arctic. Temperature variants in the Arctic motivate her scientific investigations on biting insects. The presentation declared the Arctic is warming over twice the rate of the world's other biomes. A warming tundra has resulted in boreal forest species beginning to populate the Arctic.

Ectothermic organisms, such as insects, respond to changes in Arctic temperatures as a relationship that influences growth and/or population numbers. Her study of arthropods in the Arctic tends to reveal lifecycle changes in response to increasing average temperatures. An example of which is the documentation of the early emergence of mosquitos. Early emergence impacts caribou populations because the numbers of blood-sucking insects peak concurrent with calving season becoming a factor in calve mortality, ecosystem unbalance, and food security for Arctic populations.

Professor Craciun, discussed the importance of preserving historic seeds from around the world. With a changing Arctic the need for added security by duplicating the existence of the Svalbard Global Seed Vault. This location is a repository, a seed gene bank, for the world's more than 1700 existing agricultural seeds. The preservation of the seed history in a secure storage bank that can withstand disaster and or the total melting of the arctic is an important legacy with survival implications. A humanities perspective on history when considering an Arctic seed vault designed to protect seeds important to human survival is a unique convergence of three types of time the historic, the present, and the future. This example of time convergence preserved and coalescing in one unique Arctic location can yet be threatened if the security it was meant to provide is diminished by a melting Arctic unable to provide protection for this future.

Key Note Speaker: Minister Inuuteq Olsen: Greenland's Plenipotentiary Minister of Representation.

Minister Olsen discussed a vision for Greenland's journey towards eventual self-determination. Minister Olsen also spoke on Greenland's important relationships with Canada, the United States, and the countries of Europe. Minister Olsen's comments expressed a desire for Greenland's role in the Arctic to be a prominent one within the international community of Arctic decision-makers.

Many issues Minister Olsen spoke of have parallels in Alaska. Greenland's need to improve the lives of its people through building infrastructure that positively influences economic development rings familiar for Alaskans. Minister Olsen and I spoke of the social necessity for delivering improved public safety to indigenous populations. We brainstormed a possibility of conducting a collaborative, lessons learned forum between Greenland, perhaps other Arctic Nations, and Alaska on public safety deliverables to indigenous populations.

ADAC may consider approaching UAA's School of Justice to sponsor such a collaborative exchange of information event with the State of Alaska, Tribal Leaders, small Western Alaska communities, and federal government entities as well. I would volunteer to be one of the moderators at such an event.

End of Report.

//Signed/Mike Duxbury//25 Mar 2020

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State of Alaska  
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