

FINAL ARTisticc MEETING, CANADA, JUNE 2017

Artisticc's consortium groups the following institutions



























In the last ARTisticc Meeting, India



Uummannaq Team: Juan Baztan, Mateo Cordier, **Jean-Michel Huctin** Peter Jensen, Lis Stender, Jean-Paul Vanderlinden, Zhiwei Zhu.

Bibliographic analysis of the available scientific data; two fieldworks completed in Uummannaq in October 2014 and April 2015; 25 interviews and 5 focus groups recorded, transcribed, translated and coded.



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ANY NEW RESEARCH COMPLETED?

A film 28 art posters



More details next Wednesday.

A Task 2 paper, but not only ...

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ANY NEW ANALYSIS OF RESEARCH RESULTS?



Contents lists available at ScienceDirect

Polar Science

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Life on thin ice: Insights from Uummannaq, Greenland for connecting climate science with Arctic communities

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ABSTRACT

What are the links between mainstream climate science and local community knowledge? This study takes the example of Greenland, considered one of the regions most impacted by climate change, and Inuit people, characterized as being highly adaptive to environmental change, to explore this question. The study is based on 10 years of anthropological participatory research in Uummannaq, Northwest Greenland, along with two fieldwork periods in October 2014 and April 2015, and a quantitative bibliometric analysis of the international literature on sea ice - a central subject of concern identified by Uummannaq community members during the fieldwork periods. Community members' perceptions of currently available scientific climate knowledge were also collected during the fieldwork. This was done to determine if community members consider available scientific knowledge salient and if it covers issues they consider relevant. The bibliometric analysis of the sea ice literature provided additional insight into the degree to which scientific knowledge about climate change provides information relevant for the community. Our results contribute to the ongoing debate on the missing connections between community worldviews, cultural values, livelihood needs, interests and climate science. Our results show that more scientific research efforts should consider local-level needs in order to produce local-scale knowledge that is more salient, credible and legitimate for communities experiencing climate change. In Uummannaq, as in many Inuit communities with similar conditions, more research should be done on sea ice thickness in winter and in areas through which local populations travel. This paper supports the growing evidence that whenever possible, climate change research should focus on environmental features that matter to communities, at temporal and spatial scales relevant to them, in order to foster community adaptations to change. We recommend such research be connected to and co-constructed with local communities to ensure their needs and values are integrated into the research process and

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This paper shows that for the example of Uummannaq Bay, scientific and traditional/local knowledge systems do not often connect because their perspectives are different. Raising the issue of adequacy between scientific content and what matters to communities could help improve connections between science and society, especially when such content concerns the environment of a particularly vulnerable community. Our results contribute to the ongoing debate on the missing connections between community needs and climate science. A key finding our results show is that scientific research should consider local-level needs in order to produce results that are salient, credible and legitimate for communities experiencing climate change.

This paper supports the assumption that to be more useful to Inuit communities, research on coastal sea ice should be further developed, specifically research focused on sea ice thickness in the winter in areas through which local populations travel for professional or recreational purposes. Groundbreaking studies such as those by Johnson et al. (2014), Mahoney et al. (2009), Gearheard et al. (2013), and Kofinas (2010), among several others, are pointing the way for using knowledge co-production approaches to study research topics relevant for Inuit communities, leading to better research work, enhanced collective awareness both for researchers and community members, and efficient application of findings for planning and policy making. We recommend that such research continues to expand to ensure local communities' knowledge and values are integrated into the research process and outputs.

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ANY NEW INSIGHTS
INTO ADAPTATION
TO ENVIRONMENTAL CHANGE?

WHAT ARE
THE MOST SIGNIFICANT
RESEARCH CONCLUSIONS
FOR UUMMANNAQ
REGARDING ADAPTATION?

In Uummannaq Bay there is a disconnect between scientific and traditional/local knowledge systems due to different perspectives. Most mainstream scientific research is not undertaken with communities such as Uummannaq in mind, and scientific information is generally not published with the aim of connecting with those living in such communities. We find this to be a critical gap. Our work suggests that considering the adequacy of scientific content for informing matters relevant to communities could improve connections between science and society, especially when the scientific content concerns the community's environment. If those living in the studied environment do not connect with what the science could tell them about it and help them understand, then there is a problem. From our experiences, involving community members in research and taking traditional/local knowledge into consideration are not only a matter of improving "our" scientific studies; we find such efforts are crucial for increasing researchers' awareness of the environments and communities they study, and simultaneously promoting better knowledge transfer within a community and throughout society, helping people to act in ways that are beneficial for them, their environment, and hopefully lead to more efficient planning and policies.

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- . Baztan, J., & Vanderlinden, J.-P. (2015). Artisticc: An Art and Science Integration Project to Enquire into Community Level Adaptation to Climate Change. Poster presented at the Our Common Future Under Climate Change International Scientific Conference, Paris.
- . Baztan, J., Vanderlinden, J.-P., Cordier, M., Da Cunha, C., Gaye, N., Huctin, J.-M., . . . Seck, A. (2016). Communities needs, values, and representations of the world: lessons learned from Greenland's and Senegal's ARTisticc's study sites. Poster presented at the AGU Fall meeting, San Francisco.
- . Baztan, J., Mateo Cordier, Jean-Michel Huctin, Zhiwei Zhu, Jean-Paul Vanderlinden, 2017. Life on thin ice: Insights from Uummannaq, Greenland for connecting climate science with Arctic communities, Polar Science (in press). https://doi.org/10.1016/j.polar.2017.05.002
- . M. Cordier, J. Baztan, J-M. Huctin, Z. Zhu and J-P. Vanderlinden, 2017. Discrepancies Between The Perspective Of Scientists And Small Coastal Arctic Communities: The Case Of Climate Change In Uummannaq, Greenland. Oral presentation at the Ninth International Congress on Arctic Social Sciences (ICASS IX) organized by the International Arctic Social Sciences Association (IASSA), June 8-12 2017, Umeå, Sweden.
- Jean-Michel Huctin, Mateo Cordier, Matthew Berman, Charlotte Da Cunha, Nikulkina Inga Vladimirovna, Vyacheslav Shadrin, Jean-Paul Vanderlinden, Juan Baztan, 2017. Isolation and Disempowerment as a New Challenge of Adaptation in Three Arctic Communities: Uummannaq (Greenland), Wainwright (Alaska), Tiksi (Yakutia). Oral presentation at the Ninth International Congress on Arctic Social Sciences (ICASS IX) organized by the International Arctic Social Sciences Association (IASSA), June 8-12 2017, Umeå, Sweden.
- . J-M. Huctin, 2016. From Knowledge Repatriation to Knowledge Co-Production: Insights into Interdisciplinary Research Projects in Greenland and the Arctic. Oral presentation at the Franco-German seminar Gateway to the Arctic IV, DFH-UFA, AWI, IPEV, UVSQ, AWI, Potsdam, Germany, 16-18 November 2016.

 J-M. Huctin, 2016. Un anthropologue chez les Inuit du Groenland. Oral presentation at the University Paris Diderot, octobre 2016.
- . M. Cordier, J-M. Huctin, J. Baztan, Z. Zhu and J-P. Vanderlinden, 2017. Does scientific knowledge matches with what matters to small arctic communities? Studies On Sea Ice And The Perspectives Of The Uummannaq Community In Greenland. Oral presentation at the conference of the Arctic Network of the OVSQ, "Environment and Societies facing Global Issues. Multidisciplinary meeting: snows and ices", Guyancourt, France, 21th of April 2017.
- . M. Cordier, J. Baztan, J-M. Huctin, Z. Zhu and J-P. Vanderlinden, 2016. Discrepancies Between The Perspective Of Scientists And Small Coastal Arctic Communities: The Case Of Climate Change In Uummannaq, Greenland. Oral presentation at the international conference "The Changing Arctic Environment and Governance", organised by the French Institute of Norway, the French Embassy, the FRAM High North Research Centre on Climate, and the Environment, Arctic University of Norway, Tromsø, Norway, 14th of Octobre 2016.
- . Da Cunha, C., (2015) Adaptations to global change: Contribution of interdisciplinary and transdisciplinary research, Public Talk on Climate Change. GVSU Allendale, Hosted by Environmental Studies Program and Padnos International Center, Brooks College of Interdisciplinary Studies.
- . Vanderlinden, J.-P. (2015). Transdisciplinarité et performativité. Paper presented at the Séminaire du CEMOTEV, March 25 2015, Guyancourt.
- . Vanderlinden, J.-P. (2015). L'adaptation au changement climatique en tant que concept et en tant que pratique en zones côtières. Paper presented at the Débat AGORA 21, October 1, 2015, Compiègne.
- . Vanderlinden, J.-P., & Baztan, J. (2016). Art and science integration lessons learned from three transdisciplinary projects. Paper presented at the 4th Nordic Conference on Climate Change Adaptation: From research to action and transformation, August 29-31, 2016, Bergen.
- . Vanderlinden, J.-P., Berman, M., Chouinard, O., Kane, A., Nikulkina, I., Ragueneau, O., . Thomson, K.T., Baztan, J., Cordier, M., Curry, T., Da Cunha, C., Gaye, N., Huctin, J.-M., Kennedy, G., Kofinas, G., Maze, C., Quensiere, J., Raimonet, M., Remvikos, Y., Seck, A., Surette, C. and, Zhu, Z. (2016). Coasts under multiple stresses: lessons learned from ARSTISTICC's eight coastal study sites. Paper presented at the AGU Fall meeting, December, 12-16, San Francisco.

CHIEVEMENTS

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WHAT IS LEFT TO DO?







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WHAT IS LEFT TO DO?



Share results with the Uummannaq community.



