

# InfoNorth

## Social Sciences and Humanities in the International Polar Year 2007–2008: An Integrating Mission

by Igor Krupnik, Michael Bravo, Yvon Csonka, Grete Hovelsrud-Broda, Ludger Müller-Wille, Birger Poppel, Peter Schweitzer and Sverker Sörlin

THE READERS OF *ARCTIC* ARE CERTAINLY FAMILIAR with the major new interdisciplinary initiative in polar research, the *International Polar Year 2007–2008* (IPY 2007–08). IPY 2007–08 is envisioned as an intense international campaign of coordinated observations and analysis across the polar regions of the globe. It will be bipolar in focus, multidisciplinary in scope, and truly international in participation. The emerging vision of IPY 2007–08 is that researchers from many nations will work together to gain holistic insights into planetary processes and to explore and increase our understanding of the Arctic and the Antarctic, as well as their roles in the global system. The IPY 2007–08 effort will also expand our ability to detect ongoing changes in the polar regions and to extend this knowledge to the public (ICSU, 2004).

The new IPY initiative is organized jointly by the International Council for Science (ICSU) and the World Meteorological Organization (WMO); it has been endorsed by dozens of other science agencies, governmental bodies, and international institutions. The framework document outlining the IPY 2007–08 vision (ICSU, 2004) uses the terms “social sciences,” “humanities,” and “human dimensions” throughout. Its interdisciplinary focus is underlined repeatedly, with “active inclusion of the social sciences” emphasized unequivocally as one of its main objectives (ICSU, 2004:10). To us, social scientists, these words speak volumes about the changing ways the broader polar science community sees itself today. They also illustrate a new face of IPY 2007–08 that has evolved rapidly, in particular since May 2004.

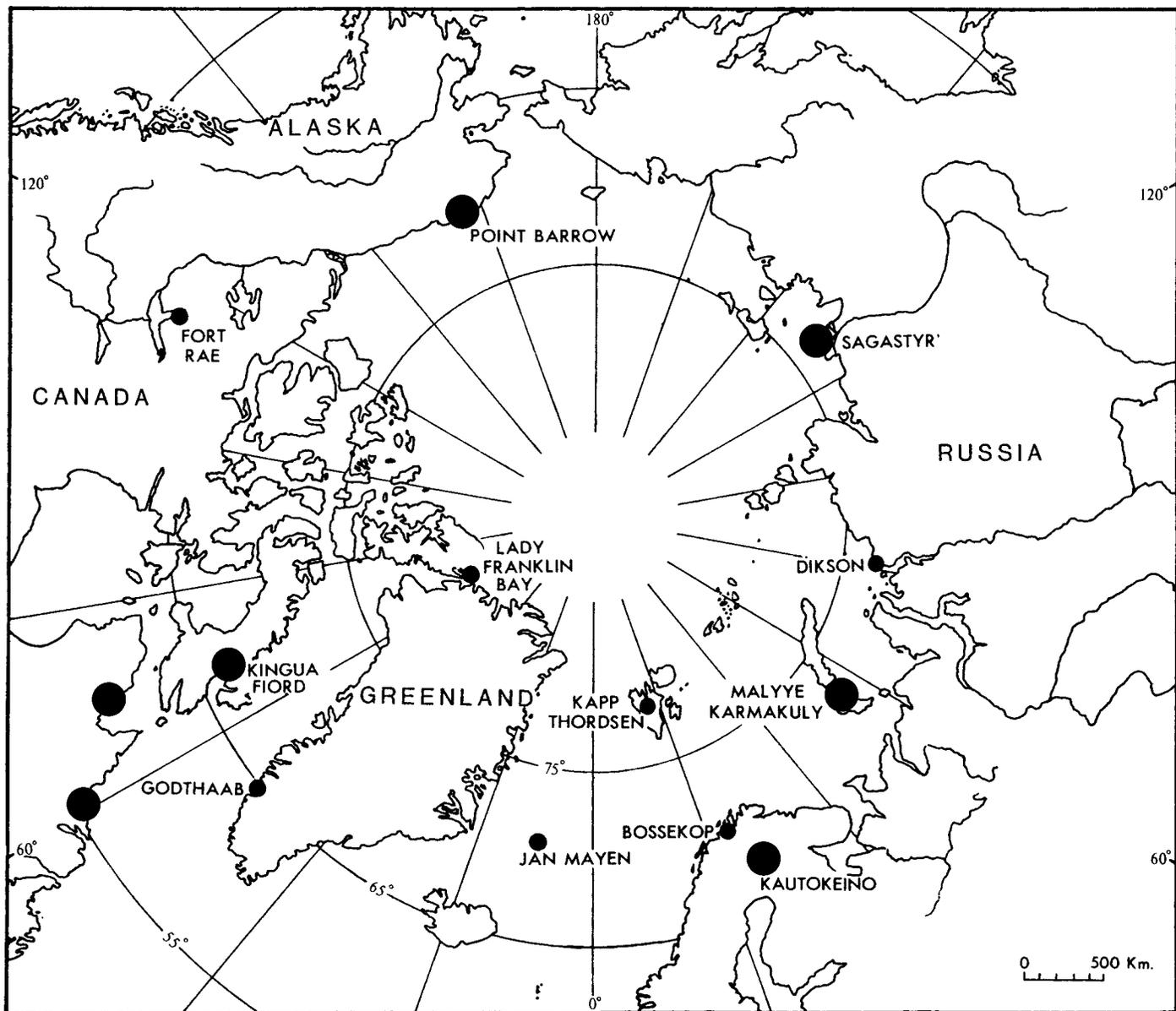
### THE IPY LEGACY AND THE SOCIAL SCIENCES

In general, the majority of polar researchers have not considered social sciences and humanities a genuine part of “hard-core” polar science. Until quite recently this view dominated the intent and scope of the International Polar Year—for both the earlier efforts and the current IPY 2007–08 initiative. Indeed, because all International Polar Years have historically been organized under the auspices

of the WMO or its predecessors, they have been assumed to be primarily, if not exclusively, geophysical initiatives, with their major focus on meteorological, atmospheric, and geomagnetic observations and additional emphasis on glaciology and sea ice circulation. Such a vision of “multidisciplinary” polar science was heavily biased towards planetary geophysics and polar ice studies and left little room, if any, for social and human research.

For example, in the final list of publications under the Second International Polar Year (1932–33), social and cultural research were not even mentioned among a dozen disciplinary fields of activity (Laursen, 1951). In the International Geophysical Year of 1957–58 (the third IPY), 25 years later, human studies were again virtually invisible, except for some medical observations on the personnel of the ice stations in Antarctica and on the drifting floes. Nor was there any acknowledged focus on the peoples who lived in the polar regions; in particular, the indigenous residents were overlooked.

Tempting though it may be to regard social scientists as irrelevant to the past IPY initiatives (not to mention northern peoples), a closer examination reveals otherwise. Social scientists and polar residents can justly claim a solid IPY legacy of their own. Our long-standing “institutional” memory of the International Polar Year traces its roots to the first IPY program of 1882–83. Some even argue that the very beginning of what today is called “Arctic anthropology” originated as a direct outcome of the first IPY initiative, thanks to Franz Boas, the German-born, physicist-cum-founding father of American cultural anthropology. As a young scholar, Boas volunteered to do a human geography study among the local Ukumiut people (South Baffin Inuit) as a follow-up to the German IPY 1 observation program on Baffin Island (Cole and Müller-Wille, 1984; Müller-Wille, 1998). Boas’ research among the Baffin Island Inuit in 1883–84 introduced to polar science much of what may now be considered the core of the “human agenda” under IPY 2007–08: the study of indigenous knowledge; Inuit observations of sea ice; their patterns of navigation and weather forecasting; human adaptations; culture change; local views on polar lands and



Large dots show locations of those IPY 1 Arctic stations and "auxiliary" missions of 1881–84 that produced ethnographic and cultural records. Adapted from Barr, 1985.

landscapes, and much more (Boas, 1885a, b, 1888). Because of this achievement, many Arctic social scientists revere their historical connection to the International Polar Year legacy. In fact, we were among the few to celebrate the 1983 centennial of the first IPY effort as also being the centennial of Arctic anthropology (Freeman, 1984).

We are also proud to refer to the legacy of several IPY 1 field stations that operated between 1881 and 1884, producing extensive ethnographic and natural history collections; historical photographs, diaries, and travel reports; and early publications (see map). This legacy includes seminal ethnological reports by John Murdoch (1892), Lucien Turner (1894), H. Abbes (1890), P. Hyades and John Deniker (1891), and by Boas himself (see Barr, 1985). Today, these records offer troves of treasures to

museum curators, anthropologists, and historians of science. They may be even more valuable to local communities across the polar regions, which are now very keen to tap this prime cultural resource for their education and community heritage programs. Many publications that resulted from the first IPY illuminate the way polar research had been construed as a multidisciplinary endeavour over 100 years ago, much to the surprise of our colleagues from other polar disciplines.

Therefore, social scientists have never doubted that human and social studies were a part of the wider polar science "venture." We know firsthand the key role that has been played by such factors as demography, economy, health, and politics in the overall science advance to the Arctic and Antarctica. To this list we are eager to add

another crucial component: the interactions between polar researchers, local residents and indigenous peoples in the Arctic, and the use of their expertise in the earlier phases of explorations in both polar regions.

### A SOCIAL SCIENCE AGENDA FOR IPY 2007–08

Our main challenge today is to articulate to a broader science audience that we regard ourselves as vigorous and active players in the polar science community, with the human and social conditions in the polar regions as our prime study object. We believe that as partners we are well qualified to address the issues of participation, involvement and representation, human rights, social and economic development, education and public outreach. Those issues—on top of any so-called “hard-core” (i.e., geophysical or other) science missions—will likely be the key to ensure the success of the next IPY in a wider societal context. With such a premise at the heart of the IPY 2007–08 vision, the social sciences and the humanities will be able to serve their role as fully engaged and committed members of the interdisciplinary team.

Like other polar scientists, we are wondering what the lasting legacy of IPY 2007–08 will be. Each of the earlier IPY/IGY ventures resulted in a new level of collaboration and understanding among many players with diverse interests and motives that went far beyond individual disciplinary achievements. The first IPY of 1882–83 witnessed the first truly coordinated international research effort organized by several countries that had been otherwise fractured by political and economic alliances, with competing interests in other parts of the world. By the second IPY of 1932–33, the political antagonism among its participating nations was even more dramatic and explicit; but the IPY 2 program, nevertheless, made a huge step forward in both the scope of efforts and the number of countries involved. The IGY of 1957–58 took place against the backdrop of the Cold War nuclear rivalry; still, it gave birth to a new model of Antarctic governance based on international scientific agreements and a new ethics of intergovernmental cooperation.

A crucial achievement for IPY 2007–08, we believe, would be to articulate *common interests* among scientists, polar residents and their institutions, other actors, including sovereign nations, and the needs of the world at large. Scientific explorations during IGY 1957–58 established a new paradigm of a shared vision and a common responsibility for the world’s southern polar regions. Much in the same way, IPY 2007–08 may offer a comparable opportunity to acknowledge the need for new paradigms in Arctic governance and partnerships, and, specifically, to recognize the social and ethical complexity inherent in building consensus amongst many diverse players.

The unprecedented speed of change, both environmental and social, across the world’s polar regions brings additional urgency to this mission. There is also a strong

argument that, in the face of rapid change, investing in local governance, collaborative management, and shared institutions and regimes is our best strategy to increase the resilience of coupled human-environmental systems, both globally and across polar regions (Berkes, 2004). Hence, a special mission for the social sciences under this IPY is to study and to articulate the principles with which collective action can be achieved across a wide range of activities, including coordinated social and environmental research, policies for sustainable development, co-management of natural resources, indigenous governance, and national policy making.

### DESIGNING THE SOCIAL SCIENCE AGENDA

To their great credit, the ICSU planners for IPY 2007–08 realized from the outset that, unlike all previous IPY ventures, this one should have *some* institutionalized social science footprint. To achieve this, individual social scientists have been appointed to several IPY planning bodies, at both international and national levels. However, it took the actions of the whole polar social science community to ensure that the approaches, ideas, and language of social sciences have been included in the emerging vision of IPY 2007–08.

The main professional body for Arctic social studies, the International Arctic Social Sciences Association (IASSA), founded in 1990, took the leading role in this process. In May 2004, at the Fifth International Congress of Arctic Social Sciences, the IASSA General Assembly adopted two resolutions strongly endorsing the IPY. It further argued for a more significant presence of social scientists, polar residents, and indigenous organizations in the planning for IPY 2007–08. To that end, IASSA established the special IASSA-IPY International Task Group of 20 members from 10 countries (Canada, Denmark, Finland, Greenland, Iceland, Norway, Russia, Sweden, UK, and USA) to facilitate interactions between the IPY planning bodies and the social science community.

This International Task Group spearheaded IASSA’s active role in reviewing a preliminary ICSU document, the *Initial Outline Science Plan for the IPY 2007–2008*, and in drafting the agenda for social and cultural studies for the new IPY mission. Upon IASSA’s recommendation, which was strongly supported by the Arctic Council, the ICSU IPY Planning Group, and other participating agencies, such as the International Arctic Science Committee (IASC), a new, sixth major research theme and a supporting interdisciplinary observational strategy were added to the overall IPY 2007–08 science program (ICSU, 2004:15–16):

[Research Theme] 6. To investigate the cultural, historical, and social processes that shape the sustainability of circumpolar human societies, and to identify their unique contributions to global cultural diversity and citizenship.

[Observational Strategy] 6. To investigate crucial facets of the human dimension of the polar regions which will lead to the creation of datasets on the changing conditions of circumpolar human societies.

In addition, social and human issues have been articulated in one way or another in other prospective IPY themes.

Because of these and other actions, for the first time in the history of the IPY ventures, IPY 2007–08 has a designated research field that specifically addresses social and human issues relevant to polar residents and indigenous communities. Two social scientists, Grete Hovelsrud-Broda, a member of the IPY national committee of Norway, and Igor Krupnik, a member of the IPY national committee of the United States, have been nominated and appointed as members of the new ICSU-WMO IPY Joint Committee to oversee the socio-cultural agenda for IPY 2007–08. Social scientists and representatives of indigenous organizations are now serving on almost a dozen national IPY committees and on many international bodies engaged in preparing the new IPY. The social science community is quickly mobilizing itself through proposal writing, team building, and extensive communication. Those activities may be followed on a dedicated website set up by IASSA at [www.uaf.edu/anthro/iassa](http://www.uaf.edu/anthro/iassa), which has several sections devoted to IPY 2007–08 issues, and also on the websites of individual national committees, such as [www.ipy-api.ca](http://www.ipy-api.ca) for Canada, [www.us-ipy.org](http://www.us-ipy.org) for the United States, and [www.dpc.dk/ipy](http://www.dpc.dk/ipy) for Denmark.

#### PROSPECTIVE SOCIAL SCIENCE AND HUMANITIES TOPICS UNDER IPY 2007–08

The current science outline for IPY 2007–08 identifies the following crucial “societal questions” that will be central to the new IPY objective of enhancing the understanding of human-environmental interactions in the polar systems (ICSU, 2004:15–16):

1. How can the “wellness” of polar environments be studied in terms of changing socio-political conditions and the health of ecosystems?
2. What has been the effectiveness of governance regimes in polar regions, and how can these respond to the divergent and rapidly evolving cultural and socio-economic systems?
3. What research methodologies are best suited to an interdisciplinary understanding of the fundamental links between ecosystems, economies, and cultural diversity? How can polar residents become more instrumental in shaping these activities? And how can social sciences, humanities, and fine arts communicate this understanding to diverse audiences?
4. What are the key human health and medical issues in polar regions? How, for example, are diseases carried into polar communities, and how is community health affected by environmental change?

5. How can historical studies and records of the polar regions enhance understanding of contemporary social and cultural problems?
6. What do the polar societies contribute to global cultural diversity and the political status of indigenous people worldwide?

As mentioned, social and human issues have now been articulated under other prospective IPY themes. Theme 1, for example (“To determine the present environmental status of the polar regions”) aims at the boldest science questions of human-environmental interactions, such as the “present status of demography, health and educational conditions, language, economy, access to infrastructure of polar peoples, and how these vary regionally and in time and what the contemporary factors are of social cohesion and values for polar societies” (ICSU, 2004:11). It also targets “variation of the structure and function of polar ecosystems through space and time and how much of this variation...can be attributed to anthropogenic causes.” The issues of environmental change and its socio-economic consequences (including world economy and global politics), as well as of polar communities’ responses to change, are listed under Theme 2 (“Past and present natural environmental and social change in the polar regions; and projections of future change”) and Theme 3 (“Links and interactions between polar regions and the rest of the globe”). The nature and extent of social transformations induced by large-scale resource exploitation, industrialization, and infrastructure development in polar regions would be addressed under Theme 4 (“The Frontiers of Science in the Polar Regions”). Clearly, the way today’s polar science community views the goals and the prospective scope of IPY 2007–08 is totally different from the approach to previous IPY/IGY ventures.

Still, this list of research questions is so far very general, and it is neither exhaustive nor complete. Social and human research are certain to be expanded and diversified as the national IPY committees outline their research priorities and as many individual and collaborative projects take shape as IPY 2007–08 initiatives in the coming years. What is critical here is that the new IPY social science agenda is defined around the principles of *inclusion*, *social complexity*, and *ethics* that are inherent in the diversity of human cultures and populations. It focuses on the wide sphere of human activities ranging from local governance, social and environmental sustainability (“wellness”), cultural and linguistic diversity, health and living conditions, and national policy making. It recognizes that our understanding of the polar regions has grown increasingly complex, and that social issues operate at a range of scales, from the local to the global.

One issue with highest priority on the social science agenda—and for the IPY 2007–08 program in general—is the study of *change* in the polar regions and its impact on the local and planetary systems. Social scientists have long acknowledged that polar societies have been active agents of

change in their own cultural, socio-economic, and physical environments for millennia and are instrumental in shaping these changes at local, regional, and global levels. This view has yet to become a shared vision under IPY 2007–08. Many global modellers and policy makers are primarily preoccupied with processes and impacts originating in more southerly latitudes. For these and other reasons, many still perceive the agency of polar communities—highly dispersed and relatively small in population numbers—to be insignificant in the global context. We anticipate that the social and human research under IPY 2007–08 will broaden the general understanding of social issues within the polar science community and will help put many of those stereotypes to rest.

Last but not least, research in the social sciences and the humanities has changed significantly during the last few decades as social and political conditions have undergone remarkable changes. Unlike the previous IPY efforts, the predominant paradigm is now one of close collaboration with local communities and of including indigenous peoples and polar residents as partners in research—from designing the projects to collecting and interpreting data, to disseminating the results. It follows that studies of the vulnerability, resilience, adaptability and sustainable development of polar communities under IPY 2007–08 are best undertaken by networks of collaborating researchers and experts, both local and international. The same logic applies to processes of data management, education and outreach, and dissemination of results. Each becomes a two-way route linking researchers and scientific institutions to local stakeholders and their representative agencies.

#### SOCIAL DATA COLLECTION AND MANAGEMENT UNDER IPY 2007–08

The world's science agencies and other stakeholders rightly expect from IPY 2007–08 an exponential rise in data sets and various data records, including the collection and management of interdisciplinary databases. To social scientists, the multiple origins and functions of the various types of knowledge and data, such as scientific, local, indigenous, historical, and educational, have become increasingly apparent. This diversity continues to challenge the capacity of both residents and researchers to assemble and synthesize their knowledge and experience. There is an urgent need to explore and to understand better how such data coming from different sources may be interpreted in multiple and diverse ways. There is also a practical and ethical aspect to this, as the rule of the day (absent from earlier IPY efforts) is to make the data produced by modern research projects simultaneously useful to different constituencies, ranging from disciplinary experts to policy makers and local communities.

As noted above, observational strategy #6 of the current science plan for IPY 2007–08 focuses on creating data sets that document the changing conditions of human societies in the circumpolar world. The true target here is

the integration of social and human data with the information generated by other fields of polar research. Aspiring to be full partners in the large interdisciplinary program of IPY 2007–08, social scientists have to think about how their data can be understood and integrated by other specialists, various agencies, polar residents, and the public, without losing their diversity and context.

Such a task will surely pose a great challenge. Despite decades of active collaboration, interaction between social/human studies and other fields of polar science has been mostly pragmatic. Information has been borrowed, shared, and used across disciplinary lines as needed, or as individual researchers saw fit. Social scientists in concert with medical practitioners have pushed hard to ensure certain data collection protocols and regulations—such as privacy rules, intellectual property, and informed consent—that rarely appeal to physical scientists. In addition, much social research in the polar areas operates primarily with qualitative or non-numerical data, such as interviews, participant observation, tapes and video footage of local experts, historical photographs, museum collections, archaeological specimens, and objects of art. Such data have traditionally remained beyond the focus of mainstream physical sciences and of their high-speed computer databases.

Despite these differences, the approach to data sets in the social sciences and humanities aspires to fulfill many of the same requirements that apply to the physical and natural sciences, such as calibration, standardization, geographic transects, cross- and inter-comparisons, and time series. Cooperation and data transparency are as much an essential part of research design in social sciences today as they are in all other polar disciplines. There is likewise a strong drive for data compatibility, as social observations are now conducted at different scales, from the household and community levels to the entire circumpolar region.

To enhance the public awareness and understanding of scientific work, IPY 2007–08 projects will use technologies and engage in practices that enable the data to be widely used in outreach programs, education, and efforts towards “knowledge” and “visual” repatriation. These activities will expand scientific literacy among students, the general public, and polar residents. Collaborative multinational and multidisciplinary data sets can be collected to document the current health, occupational, and community conditions in polar regions. These data will provide standardized “snapshots” that can be compared to data from prior and future research, allowing researchers to create timelines of ongoing change.

#### ICASS VI: A FORUM FOR SOCIAL SCIENCES IN IPY 2007–08

The Sixth International Congress of Arctic Social Sciences (ICASS VI) will be held in Nuuk, Greenland, during the International Polar Year 2007–08, probably at the end



The historic New Herrnhut building (right) in Nuuk, Greenland, built in 1733, was still a Moravian mission when an IPY 1 observation station operated nearby in 1882–83. It currently houses the University of Greenland (Ilisimatusarfik), which is host to IASSA. A new “University Park” may be completed in time to host the Sixth International Congress of Arctic Social Sciences (ICASS VI), to be held in Nuuk during IPY 2007–08. Photo by Yvon Csonka.

of 2007. ICASS VI will act as the major forum for the international community of Arctic social scientists to review its contribution to the overall IPY effort, discuss the status of the emerging social science programs under IPY 2007–08, and make plans for further action.

Judging by attendance at previous ICASS ventures, ICASS VI will bring together several hundred scientists, students, and practitioners from many countries and from every field of social and human research. We also expect an increased participation of our project partners from the physical and natural sciences. This will make ICASS VI a fully multidisciplinary venture, much like IPY 2007–08 itself.

The main goal of the congress is to offer various venues where IPY scholars, northern researchers, and local participants can analyze the progress of IPY 2007–08 in social sciences and humanities. Sessions and panels at ICASS VI will be framed by major IPY research fields and initiatives, with broad international and interdisciplinary participation. For many international network projects, these sessions will offer practically the sole chance for face-to-face discussions because participants from many countries and regions may have limited contacts in the field and across boundaries. Special efforts will be made to ensure the presence of as many project collaborators from Arctic communities as possible. Holding ICASS VI in Nuuk, the capital of the only indigenous self-governing Arctic country, will give an unprecedented voice to polar residents and indigenous peoples.

By offering its major event as a forum to enhance all IPY research with human components, IASSA follows logically on its initial leadership in making the wish to develop the agenda for social and human studies for IPY 2007–08 come true. In doing so, IASSA aims at fulfilling the main objective for which it was created 15 years ago, “to promote and stimulate international cooperation and to increase the participation of the social scientists in



Part of the historic section of Nuuk, which housed the Danish IPY 1 observation station in 1882–83. Photo by Igor Krupnik.

national and international Arctic research.” This and other objectives of IASSA, which insist on coordination with other organizations and stakeholders, data collection and management, outreach to the general public, partnership with polar peoples, and adherence to ethical principles for the conduct of research, are remarkably congruent with the general IPY scientific agenda. IASSA’s objectives and “Guiding Principles for the Conduct of Research” are available online at [www.iassa.gl](http://www.iassa.gl).

ICASS VI will also be a critical milestone for IPY 2007–08 outreach and educational agendas. The presence of social scientists from many countries and discussions on many themes common across the polar regions will inspire the young generation of students, indigenous educators, and leaders—and provide an extraordinary opportunity to advance the role of polar science, both locally and globally.

## CONCLUSIONS

From the perspective of social studies and humanities, IPY 2007–08 may indeed be a defining new experience to polar sciences. Following previous IPY efforts, major groundbreaking findings may be expected across many disciplines. Innovative in this IPY, however, is that its framework for research advocates giving great importance to inclusiveness, from the very beginning. Interpreting and translating terms like “inclusiveness” and “participation” into action, of course, poses a big challenge. Some would argue that “participatory development” in the global context has become more of a mantra than a reality. How far IPY 2007–08 is able to live up to its promise to be inclusive remains to be seen and to be tested. Only then will the final outcome go beyond individual research results and become more than the sum of its parts.

The challenges and opportunities span a wide range of levels and issues, from collaboration across social and disciplinary boundaries to the organizational structure of gathering and managing data and sharing information through outreach and education. First, IPY 2007–08 provides a unique opportunity for a convergence of social

science issues and the concerns of local communities in the polar regions. If we are to live up to our pledges, polar communities will have to be involved in developing the projects and thereby ensure that the IPY research projects also are of interest and use to them. Second, this IPY gives physical scientists an opportune sense of obligation to collaborate with social scientists and to contribute to a genuinely multidisciplinary (and not simply “systems-based”) understanding of the environment. How far the physical and natural scientists unpack the five initial IPY themes and recognize the social assumptions may be very much a litmus test for their reception of the newly added sixth theme, which examines questions that belong explicitly to the social sciences and polar residents.

Third, studies of rapid social and environmental change stimulate coupled human-environment systems; in addition to coordination, such systems require equal partnerships and an active interdisciplinary conversation that bridges and communicates across different disciplinary vernaculars. Ensuring that the social sciences do not “speak past” the physical and natural sciences (and that their issues are not positioned at the bottom of the multidisciplinary menus) requires some new arenas for cooperation that have yet to be adequately identified or defined. In that sense, IPY 2007–08 invites polar researchers to lift their gaze beyond the taken-for-granted boundaries of their respective scientific fields.

Fourth, local communities across polar regions have made it abundantly clear that scientific work undertaken in their backyards and on their environments should include local (or “traditional”) knowledge. Here again we may be forced to test the conditions and aims of scientific “inclusiveness.” IPY 2007–08 represents an opportunity for local communities to become research partners, to be fully involved in setting the scientific agenda for their regions, and to be instrumental in the design and undertaking of IPY-related projects that will bring scientists to these communities.

Fifth, IPY 2007–08 represents a great opportunity for northern institutions in their ongoing attempts to develop new paradigms of Arctic and indigenous governance and partnerships. Several efforts—some already listed in the revised IPY 2007–08 documents and others still to be named—will be critical to achieve these key goals, such as the coordination of social and environmental research; policies for sustainable development; resource use and management; policy tools for adaptation, vulnerability and resilience; and local and national policy making.

Last but not least, IPY 2007–08 will almost certainly have a heterogeneous character reflecting the diversity of knowledge traditions. It will be conducted through myriad interconnected projects and initiatives and in many old and new arenas for cross-disciplinary interaction. Social scientists and northern residents must seize these new opportunities with enthusiasm and commitment, but also with an open mind, to make their utmost input to the IPY 2007–08 program.

## REFERENCES

- ABBES, H. 1890. Die Eskimos des Cumberland Sundes (Eskimos of Cumberland Sound). In: Neumayer, G., ed. *Die internationale Polarforschung 1882–1883. Die Deutschen Expeditionen und ihre Ergebnisse*. Vol. 2:61–74. Hamburg.
- BARR, W. 1985. *The expeditions of the First International Polar Year, 1882–83*. Technical Paper 29. Calgary: The Arctic Institute of North America, University of Calgary.
- BERKES, F. 2004. Why keep a community-based focus in times of global interactions? Plenary paper delivered at the 5th International Congress of Arctic Social Sciences (ICASS V), 19–23 May 2004, Fairbanks, Alaska.
- BOAS, F. 1885a. The Eskimo of Baffin Land. *Transactions of the Anthropological Society of Washington* 3:95–102. Washington.
- . 1885b. Baffin-Land. *Geographische Ergebnisse einer 1883 und 1884 ausgeführten Forschungsreise*. *Ergänzungsheft zu Petermanns Mitteilungen* 80:1–100.
- . 1888. The Central Eskimo. *Sixth Annual Report of the Bureau of Ethnology for the Years 1884–1885*. Washington, D.C.: Government Printing Office. 399–669.
- COLE, D., and MÜLLER-WILLE, L. 1984. Franz Boas' Expedition to Baffin Island, 1883–1884. *Études/Inuit/Studies* 8(1):37–63.
- FREEMAN, M.M.R. 1984. Franz Boas on Baffin Island: A centennial observed. *Études/Inuit/Studies* 8(1):11–12.
- HYADES, P., and DENIKER, J. 1891. *Anthropologie, ethnographie. Mission scientifique du Cap Horn*. Vol. 7. Paris: Gauthier-Villars et Fils.
- ICSU (INTERNATIONAL COUNCIL FOR SCIENCE). 2004. *A Framework for the International Polar Year 2007–2008* produced by the ICSU IPY 2007–2008 Planning Group. (Available online at [www.ipy.org/concept/framework/index.html](http://www.ipy.org/concept/framework/index.html))
- LAURSEN, V., comp. 1951. *Bibliography for the Second International Polar Year 1932–33*. Copenhagen: Hørsholm Bogtrykkeri.
- MÜLLER-WILLE, L., ed. 1998. *Franz Boas among the Inuit of Baffin Island, 1883–1884: Journals & Letters*. Toronto: University of Toronto Press.
- MURDOCH, J. 1892. *Ethnological results of the Point Barrow Expedition*. *Ninth Annual Report of the Bureau of Ethnology 1887–88*. Washington, D.C.: Government Printing Office. 441 p.
- TURNER, L. 1894. *Ethnology of the Ungava District, Hudson Bay Territory*. *Eleventh Annual Report of the Bureau of American Ethnology for the Years 1889–1890*. Washington, D.C.: Government Printing Office. 159–350.

*All authors are members of the IASSA-IPY International Task Group, established in Fairbanks in May 2004. For further information, see [www.iassa.gl](http://www.iassa.gl).*