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IPY 2007-08 and Social/Human Sciences: An Update

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HIS REVIEW OF THE CURRENT STATUS OF ACTIVITIES IN the social sciences and the humanities under the forthcoming International Polar Year (IPY) 2007-08 covers critical steps in the IPY planning and implementation process during the last 18 months (from January 2005 to July 2006). Unlike the earlier statements and preliminary outlines for the IPY (e.g., ICSU, 2004; NRC, 2004; Krupnik et al., 2005), this evaluation is based on the analysis of several hundred proposals submitted for consideration to the Joint Committee (JC), the main steering body for the IPY, between June 2005 and January 2006. The proposals were evaluated and endorsed by the JC as IPY "initiatives" in three rounds between June 2005 and January 2006. We believe that those proposals offer an insightful view of the general research interests and concerns of the polar science community on the eve of the IPY, which begins in March 2007. Our paper is written in appreciation of the great effort put forth by many people in the ongoing IPY planning and implementation process and in the hope that this spirit will be carried through to the funding agencies and towards actual research.

TOWARDS A HISTORY OF IPY 2007-08

Historians will someday reconstruct a neatly organized timeframe ("chronicle") of IPY 2007–08, starting from the earliest actions that led to the launch of the IPY planning process in 2002–03. This has been amply done for the preceding IPY/IGY ventures of 1882–83, 1932–33, and 1957–58 (Fleming, 1931, 1932, 1933; Laursen, 1951; Gerson, 1958; Chapman, 1959; Taylor, 1981; Baker, 1982; Corby, 1982; Korsmo, 2003; Korsmo and Sfraga, 2003; Luedecke, 2004). In today's computer era, documentation for this future chronicle for IPY 2007–08 is easily available, electronically and otherwise.

To the contemporary actors, however, this massive venture is anything but a seamless chronological progression of well-marked phases and events. From its very inception four years ago, IPY 2007–08 has been a multitask operation. Its many individual interfaces developed as outcomes of sometimes independent but often overlapping activities in four core areas: science, funding, organization, and public efforts. Each area continues to be

multifaceted and complicated in both structure and function. For example, "science" under the IPY is a combination of themes, ideas, proposals, field researchers, papers, interdisciplinary linkages, science plans, and much more. Because of that, the rapidly developing "implementation plan" for IPY 2007–08 may best be visualized as a textbook model of a multi-level ecosystem, with its nodes of cross-cutting and overlapping linkages and various levels of interaction. Future IPY historians may find this parallel with the ecosystem model illuminating, but today's players find it takes much effort to navigate through the many layers of this huge international enterprise.

Over the last four years, each of the IPY core areasscience, funding, organization, and public efforts-has taken precedence during a certain stage in the buildup of the IPY venture. For example, the opening years (2003-04) were the prime phase for development of the overall organizational structure and science foundation for IPY 2007–08. Major planning documents produced in 2004 included A Framework for the International Polar Year 2007-2008 (ICSU, 2004) by the IPY Planning Group and A Vision for the International Polar Year 2007-2008 (NRC, 2004) by the U.S. National IPY Committee. In both documents, social and human issues were featured extensively as key to IPY efforts, along with education and community outreach. Funding for the IPY was hardly a critical limiting factor at that early stage, and the discussions about future public activities were all but insignificant.

The year 2005 marked a transitional period, when the search for funds to support the proposed IPY science and field operations became quite urgent. It also marked the first practical efforts to build the working IPY structure in terms of the International Programme Office for the IPY in Cambridge, United Kingdom, and many national IPY secretariats. Subcommittees on IPY data management, observations, and education and outreach were created. and first efforts were made to advance the whole venture beyond its initial scientific audience. The year 2006 opened yet another stage, when the issues of funding for IPY activities became predominant. National funding agencies in various countries-Canada, the United States, the Netherlands, Norway, Germany, the United Kingdom, Russia, and others-allocated their first substantial funds for the IPY-related research planned for 2007-08. Within the IPY community, it is widely believed that the success of the IPY will largely be determined by the amount of resources the funding agencies provide in the 2006 funding cycle and beyond. The second half of 2006 will also be crucial in marshalling a broad public support for the IPY and in preparing for its opening public events in March 2007.

In 2004–06, the IPY JC also initiated and completed two "censuses" of the prospective IPY community. The first such census was conducted in December 2004–January 2005, when IPY participants were invited to submit their initial Expressions of Intent (EoI). Overall, over 850 EoIs have been submitted to the IPY Programme Office. The response from the polar science community was truly overwhelming, and it came from across all polar disciplines and from indigenous communities and organizations. From the assessment of all of the EoIs in early 2005, the JC has identified more than 50 prospective IPY research topics (or "missions") that are linked to the main IPY themes (see ICSU, 2004:11–15).

A few months later, the JC launched another census of the prospective IPY community. This time, future IPY participants were invited to submit more developed proposals, also called "coordination initiatives," as teams of scientists were encouraged to build alliances and to consider merging their initial EoIs into larger ventures. The new census was conducted in three rounds of submission in June 2005, September 2005, and January 2006. Again, the international polar science community demonstrated its unyielding enthusiasm. By 30 January 2006, the International Programme Office had received the final batch of over 200 proposals, which brought the overall number of "coordination initiatives" submitted in science, data management, education, and outreach to almost 450.

At its latest meeting in April 2006 in Cambridge, United Kingdom, the JC endorsed the final list of coordination initiatives recommended for implementation as IPY projects: about 216 of the 450 proposed. The 216 endorsed proposals involve some 50000 scientists, data and project managers, educators, students, engineers, technicians, and media specialists from more than 60 nations. All of the full proposals have been reviewed by the JC members and are posted on the IPY website. The now famous "IPY planning chart," widely known as the "honeycomb chart" (Fig. 1; also www.ipy.org), provides an overview of the thematic categories and prospective linkages among the endorsed projects.

SOCIAL AND HUMAN SCIENCES IN THE IPY: A PRELIMINARY ANALYSIS

In viewing the process from inside of the JC, we take great pleasure in watching the IPY growing. As polar social scientists, we see it as a matter of pride that the most current IPY planning chart lists over 30 endorsed initiatives in social/human science. This makes "people" one of the most solid blocks among the prospective IPY activities, fully comparable in size to the other main thematic areas: earth, land, ocean, ice, atmosphere, and space (Fig. 1). The human dimension is also included in many initiatives that fall beyond the "people" area, as well as in some 30 endorsed proposals in education and outreach. Northern indigenous institutions have submitted several IPY proposals and are actively collaborating in many education, environment, and wildlife projects as well (see below).

As noted elsewhere (Krupnik et al., 2005), the success of the polar social/human science community in the original planning for IPY 2007–08 was evident already in the initial IPY Framework Document (ICSU, 2004). Many national IPY programs developed in 2004–05 also feature human and social topics very prominently. In Canada, Norway, and Denmark/Greenland, social and human issues are listed as key foci of national IPY efforts.

Another indicator is the level of participation of social/ human science specialists in IPY planning, both nationally and internationally. Social scientists and northern residents are currently serving on national IPY committees in more than a dozen countries: Bulgaria, Canada, Denmark, Estonia, Germany, Greenland, Iceland, the Netherlands, Norway, Russia, Sweden, the United Kingdom and the United States. A few national committees (in Canada, Greenland, Sweden, and the United States) have several social scientists and northern residents on board; a social scientist chairs the IPY committee in Sweden, and another co-chairs that in Norway. The present authors represent social and human sciences in the IPY Joint Committee, and each IPY subcommittee (on data management, observations, and education and outreach) has social science specialists or representatives of indigenous organizations (or both) among its members.

Of course, the actual scope and focus of the social science field under IPY 2007-08 will be determined only when we know which IPY projects the national funding agencies will fund, and to what extent. Funding proposals are currently being evaluated in many countries, and the process may extend well into 2007, the first IPY year. Not every project endorsed by the JC will be funded, and new initiatives are likely to develop and blossom. Still, the current list of endorsed proposals offers valuable insights into the potential role of social sciences and humanities in the upcoming IPY efforts. It also reveals the main areas of interest and the strong links that are currently developing among researchers in various fields and different countries. Those critical synergies will define the overall success (as well as the shortcomings) of the new IPY venture and will also be useful beyond the scope and timing of IPY 2007 - 08.

Social scientists argue that the contributions of their disciplines to previous IPY efforts have left a solid legacy, and that cultural and human issues have always been an implicit component of IPY ventures, particularly in the first IPY of 1882–83 (Krupnik et al., 2005:92–93). IPY 2007–08, however, is the first such venture to integrate

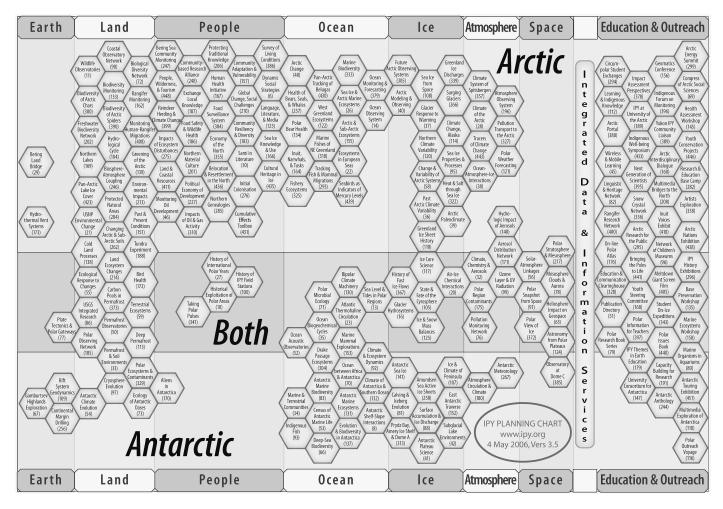


FIG. 1. Preliminary planning chart for IPY 2007-08, May 2006 (see www.ipy.org).

social science fully into the planning and implementation. To accomplish such integration, a specific research theme has been added to the preliminary science program for IPY 2007-08: "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" (ICSU, 2004:15-16). The adding of that theme to the IPY science outline strongly encouraged the more active involvement of social/human specialists and polar residents, with their distinctive research issues, methods, and concerns. Clearly, it has changed the dynamics of the entire planning process for IPY 2007-08 and it will certainly affect its implementation during the next few years. It has also presented opportunities for a new level of partnerships between physical, natural, and social sciences, which, as everyone hopes, will lead to a better understanding of climatic, environmental, and societal challenges in the Arctic and Antarctica, as well as on the global scale.

As of July 2006, the total number of endorsed full proposals ("coordination initiatives") listed in the IPY project database stands at 216. It is more difficult to discern the exact number of the social science initiatives among them. Many proposals are truly interdisciplinary and hence may be equally claimed by various disciplines. Other projects, such as studies of pollutants and contaminants, are very significant for people, but may not include social sciences (and should rather be reviewed under "health"). In a similar way, many education and outreach proposals (such as those for media and publication efforts, public engagement, or school curriculum development), albeit of critical value to the societal processes, are not classified as "social science" and are not included in our analysis. With this in mind, there are 60 endorsed proposals that may be considered "true" social/human science initiatives (Table 1). These projects advance collaborative efforts by researchers and agencies from 25 countries, including non-polar nations such as Australia, Indonesia, Italy, and South Africa, in addition to the Arctic countries and nations with traditionally strong polar programs, such as the United Kingdom, Germany, France, Poland, and the Netherlands. Scientists from 14 nations are listed as project leaders, which makes the social/human field as diverse as the IPY itself. In addition, several initiatives have been submitted by polar indigenous organizations (see below).

Overall, those 60 proposals now under consideration by the national funding agencies make an amazingly high score of about 28% of the total IPY effort. Through active participation in the submission process in 2005 and 2006, Arctic social scientists and northern residents have made it abundantly clear that this IPY, unlike its three predecessors, will have a prominent human dimension with a strong societal focus. The upcoming IPY will therefore be a milestone in the history of polar science. The number of proposals (20 to 30, based upon various criteria) that aim to explore social, cultural, economic, or health linkages in larger interdisciplinary studies is further evidence for the emerging role of social sciences and humanities, as well as of northern residents, in what traditionally has been called "polar research."

Table 1 presents the IPY proposals for social/human science organized by topics, or disciplinary subfields, which are ranked by the overall number of endorsed projects. It also indicates the initiatives with strong participation by northern indigenous residents and their organizations. Altogether, four top subfields (topics) with the highest number of endorsed projects-studies of indigenous knowledge, human health, northern economies, and polar exploration history-account for more than half of the total social/human efforts. The three latter topics may be considered "traditional" for polar social/human research, as they have all been in place at least since the post-WWII era. The study of indigenous knowledge and of environmental observations by northern residents, on the contrary, is a very recent phenomenon. This subfield did not develop until the late 1990s; none of the previous IPY ventures would have considered indigenous knowledge of the polar environment to be a "science" topic. Several other topics-community sustainability, subsistence, and local resources; multi-scale change and adaptation; indigenous education; rapid social and cultural change, globalization, and social data management; and reindeer and caribou studies-also represent the changing face of polar social research. Altogether there are 18 proposals in those emerging new fields (30% of all social/human science initiatives), to which indigenous experts and northern collaborators can make a strong contribution. The remaining fields (13 endorsed initiatives)-general social studies; languages, arts, and media; prehistory and archaeology; policies and government; and, particularly, material culture-belong to the "core" of polar socio-cultural research. They all have been in place for many decades, but (except for material culture) were never featured in the activities of the earlier IPYs.

GENERAL AIMS OF SOCIAL SCIENCE IN THE IPY

It is now broadly recognized that the polar regions significantly affect the climate, environment, ecosystems, and human society all over the earth. The IPY offers many possibilities for linking researchers internationally, across science disciplines, and in a stronger capacity than before. IPY 2007–08 will also act as a great venue for synthesis of the ever-increasing body of scientific knowledge and data

in many fields. Crucial to the advancement of polar social sciences are studies of linkages between humans and the natural environment, as well as efforts that require intensive interdisciplinary collaboration.

Six IPY themes have been developed around the principles of inclusion, complexity, and ethics in an attempt to allow for a variety of foci in the wide sphere of activities. Underlying the research themes is a concentration on change in the polar regions and related systems—global, physical, and social—through time. The majority of project proposals address more than one of the six themes outlined in the Framework document for IPY 2007–08 (see ICSU, 2004).

Past IPY research has resulted in a wealth of information concerning many natural phenomena linked to the earth sciences: temperature, radiation, and other atmospheric fluctuations, as well as ocean, ice, and atmospheric circulation. It is an important aim of many proposed IPY studies to determine some established patterns in these earth science indicators and subsequently to link them to human health readings.

The majority of proposals that consider personal interviews as a research method have a strong focus on linking individuals to their social, cultural, and natural environments as a way of understanding the development of group dynamics over time. This type of analysis is especially useful in the projects that actively seek to link historical scientific data concerning changes in environment and resources to induced changes in the lifestyle of Arctic peoples. The proposals also employ a variety of methods in order to determine measurements for social science indicators that may not have been accounted for in the past studies and were not on the list of earlier IPY efforts. One suggestion is to look at human interactions that took place within and between field stations as symbols of nations' political, diplomatic, and economic ambitions. A method that examined such interactions would make better use of funding than a standard request to establish new field stations that would serve only a limited geographical area.

Comparison of many indicators (such as water quality and food safety) to be recorded through local interviews and review of past firsthand accounts (i.e., journals and earlier testimonies) during the IPY years, will allow a more thorough understanding of indigenous beliefs, attitudes, and local interpretations of environmental phenomena. Projects that stress understanding of intergenerational issues or perspectives set a strong context for short- and long-term changes in the social and socioeconomic spheres of Arctic communities. In the realms of gender and generational issues, six major topics have been identified in several IPY sociocultural proposals: change in resource use; change in values; change in community dynamics; shift in income patterns; new risks and stresses related to the development process; and youth versus seniors' perspectives towards socio-economic and cultural development. Taken together, those topics address human security in the form of economic benefits, but also security of indigenous cultures as such. This is true particularly in the area of energy concerns and technological

Topic/Field	Proposal Number in the main IPY database ¹	Total
Indigenous Knowledge & Observation	112, 164, 166, 187, 206, 247, 248, 396, 410	9 (7)
Human Health; Food; Contaminants	145, 167, 186, 341, 349, 384, 433	7 (3)
Economies; Industrial Development	10, 46, 227, 299, 310, 355, 411	7 (1)
History; Polar Exploration	27, 100, 135, 296, 338, 436	6 (0)
Indigenous Education	282, 389, 395, 446	4 (4)
Community Sustainability; Subsistence; Local Resources	183, 259, 378, 448	4 (3)
Multi-Scale Change; Adaptation	157, 431	2 (0)
Social and Cultural Change; Globalization; Social Data Management	208, 210, 386, 388	4 (2)
General Social Studies; Anthropology; Kinship	69, 160, 285	3 (1)
Reindeer/Caribou	162, 399, 400, 408	4 (3)
Prehistory, Archaeology, Palaeoenvironment	6, 120, 276, 435	4 (1)
Language; Media; Arts	30, 82, 123, 438	4 (3)
Policies, Government	337	1(1)
Material Culture	201	1 (1)
Total:		60 (30)
Other Proposals with Human/Societal Issues:		
Interdisciplinary: Human Component; Complex Ecosystems; Large-Scale Changes; System Studies; Biodiversity	21, 48, 58, 86, 90, 99, 105, 114, 133, 134, 138, 151, 153, 155, <i>213</i> , 214, 235, <i>257</i> , 275	19 (2)
Pollutants, Contaminants	76, 99, 175, 327	4 (0)
Data Management and Observations	11, 49, 90, 133, 185	5 (0)
Public/Outreach/Education	45, 51, 79, 96, 110, 168, 189, 294, 295, 328, 336, 343, 372, 388, 397, 402, 440, 441	18(1)

TABLE 1. IPY 2007-08: Thematic distribution of the endorsed full proposals in the social sciences and humanities.

¹ See www.ipy.org. Proposals with strong indigenous participation are shown in italics, and their number is given in parenthesis after the total number of proposals in each field.

approaches of northern groups in response to oil exploration and gas development.

A number of proposals look closely at some aspects of health and related concerns as a means to gain insight into other issues or as issues to be explored in depth and subsequently linked to other fields. Proposals stressing human health commonly take animal health or food safety into consideration, usually as a method to determine possible new threats to human health. Many proposed studies demonstrate significant depth in their approach to human health in the North; for instance, a single project concerning human health also encompasses broad research applicable to humanity in general, for example, regarding concerns about cancer and obesity. It then expands to explore direct linkages of those health stresses to environmental changes. Societal issues are often linked to behavioral health issues as a means to track changes through history and to illustrate the importance of changes in the pan-Arctic social and scholarly systems.

The majority of the social and human science proposals endorsed for implementation during the IPY years illustrate that creating a favorable context for individual research depends very much upon cooperation between social scientists and their counterparts in physical sciences. It is important that our colleagues in other disciplines also understand the need for exchange and interplay between their fields and the more humanistic concerns, such as the economy, health, and community well-being. It is known that speaking across the disciplinary lines, communicating with our peers in physical sciences, and even promptly informing them of our results have a very positive effect on the ways they conduct their own research efforts, and even on the nature of topics they choose to investigate.

The linkages developed between many subfields in social/human studies tend to expand considerably because many social systems are inclusive. Strategies suggested to tackle this complexity of social and human systems vary widely among the endorsed IPY proposals. A seemingly narrow topic (e.g., the depiction of the Sámi people and culture in literature) has been linked to the significance of culture and inter-group communication for achieving sustainable development. Other proposals are strongly focused on direct connections with the so-called "hard" science indicators and historical data. "Well-being" is also a popular term that many IPY proposals strive to explore. For instance, focused research on media in the Arctic could lead to alterations in the methodology of many development and preservation projects. Perceptions of local people can be just as important, if not more so, in work that strives to create social change that has positive impact in other fields.

Many sociocultural and environmental proposals endorsed for the IPY demonstrate an implicit concern for human wellbeing as linked to the earth and climate changes. Those studies also have significant potential for improving our understanding of animal and earth systems. Modeling those links using various computer-based techniques should provide information about possible outcomes to the general ecosystem and community sustainability.

Sustainability, legacy building, and applicability for the future are inherent to many of the proposed IPY studies in social sciences and the humanities. Creating extensive and multidisciplinary databases to store the data collected through IPY projects will be a significant step in the overall research development, and particularly for Arctic social studies. Many proposals recognize the value of cataloguing past phenomena related to climate conditions, as well as to changes in health, education, and lifestyle, as a precursor to studying the present-day situation. Photography and videography are widely accepted as crucial means to collect data on current conditions, especially during personal interviews of polar residents. Cross-cataloguing research findings on computer-based platforms will allow the wide circumpolar dissemination that IPY 2007-08 strives to achieve by making results accessible to researchers, the public, and in some cases, even school groups. Such web-linking of information will be truly international, because it is suggested that the information concerning local environments be made available in local languages, as well as in English, Russian, and other national languages. The combined documentation of past events and current conditions can be used as a basis for advanced computer models that project future outcomes. Such methods truly link the Arctic and Antarctic regions as "resource frontiers" and duly strive to explain the impact on sustainability of extractive energy projects, rural and renewable power, and other development.

It is widely hoped that many social and human science proposals presented for IPY 2007-08, by coupling indigenous knowledge and perspectives with the earth science data, will become instrumental in determining the best adaptation and mitigation strategies. This is an important goal in many realms that directly affect the environment and indigenous ways of life, such as green stewardship and oil exploration activities. It is hoped that key information concerning sustainable economic development and accelerated sociocultural changes collected during the IPY years will help re-evaluate some of the past databases, so that the earlier information is re-examined according to the new principles of international and interdisciplinary cooperation, with a special focus on collaboration with indigenous peoples and northern residents. This IPY is designed to highlight the ways in which humans and the environment in the Arctic are both part of a larger global system, whereas in the past the crucial role of polar regions and their residents in the global development was often overlooked.

Last but not least, IPY 2007–08 continues to provide the Arctic social science community with unique opportunities to form partnerships that address complex conditions involving both humans and the natural environment. Under the IPY agenda, social and human scientists are supposed to work in interdisciplinary settings; interdisciplinary involvement was one of the critical criteria for the JC endorsement of the proposals. Projects can be also cross-disciplinary within the field of social science itself, involving cultural anthropolo-

gists, economists, linguists, and political scientists to address certain research topics. Following the "IPY spirit," social scientists are encouraged to conduct comparative studies of current social, cultural, economic, and political conditions and explore how those are linked to broader environmental challenges. With the new themes of broad cross-disciplinary interests-climate change, analysis of coupled humanenvironmental systems, resilience and vulnerability, biodiversity, and the like-an interdisciplinary approach involving both physical and social sciences is becoming more common, if not the established mode of science collaboration. Even though the IPY funding process is still ongoing and the final scope of the IPY social/human science effort is yet to be determined, many new partnerships across traditional science disciplines are being formed, and clusters of related projects are actively being developed.

IPY 2007-08 AND NORTHERN RESIDENTS

If this IPY is special because of the participation of social/human scientists, it is certain to become unique because of the level of engagement of polar residents, particularly of northern indigenous people. We have hardly any record of the polar residents' involvement in the previous IPYs, other than their serving as guides, dog drivers, manual laborers, food providers, and unskilled, low-level assistants. This IPY is going to take place in a totally different era. Scientists doing research across the polar regions will be interacting with the new cohorts of educated, inquisitive, and politically astute local residents, particularly in the Arctic. The social "landscape" has also changed dramatically since the time of the previous IPY/IGY ventures. Many Arctic regions now feature modern schools, computer and Internet communication, and highly literate youth interested in science, modern technologies, and higher education.

Polar science ("polar studies") has also changed dramatically over the past decades. Many interdisciplinary programs developed after IGY 1957-58, primarily in ecosystem and biodiversity research. From "Man and Biosphere" in the 1960s to the Arctic Monitoring and Assessment Programme in the 1990s, these programs gradually paved the way to including northern residents in polar research. Studies of Arctic climate change in the last decade, particularly the recent Arctic Climate Impact Assessment (2004), were instrumental in opening physical scientists to the value of indigenous knowledge and local observations of polar processes. Thus IPY 2007-08 will be a culmination of many changes and factors that have transformed the face of polar science, long considered an exclusively male, chiefly white, and primarily geophysical domain. The new IPY could not be more different from that old pattern.

Indeed, the response to the IPY call from groups representing Arctic residents and indigenous people was beyond anyone's expectation. The IPY is important to them because, as Karla Jessen Williamson from the Inuit Tapiriit Kanatami explained to the American and Canadian IPY committees in June, "it is going to be about us and about our lands." We may add to this that IPY 2007–08 is also important to polar residents because it will be the first major interdisciplinary venture in the history of polar science for which their views and their knowledge of the polar environment are actively sought and promoted.

Altogether, over 30 full proposals ("IPY initiatives") endorsed by the JC will feature very strong participation by polar indigenous researchers or groups representing polar residents. Of course, the majority of these proposals belong to the social/human/health fields of the proposed activities, primarily involving studies of indigenous knowledge, environmental observations, health and nutrition, language, literacy, and education. Table 1 summarizes their distribution by fields and subfields. Scores of projects have indigenous scholars as their principal investigators or have local groups and agencies as their driving force. All major international and regional organizations created by Arctic indigenous residents, such as the Inuit Circumpolar Conference, the Aleut International Association, the Arctic Athabaskan Council, the Gwich'in Council International, the Russian Association of Indigenous Peoples of the North, and the Sámi Council, as well as many of their national and local chapters, are actively involved not only as participants, but also as initiators or supporters of various IPY projects. We hope that this unprecedented level of enthusiasm and engagement will be rewarded with great scholarly results, as well as benefiting the participating communities in other ways, with new skills, training of young students, documentation of knowledge, influx of resources, and the development of local infrastructure.

Unfortunately, no similar effort has been undertaken to engage local communities and indigenous people from the Southern Hemisphere in IPY-related projects. Many strategies developed in the Arctic-such as studies of smallscale fishing communities, documentation of indigenous knowledge of climate change and marine and terrestrial ecosystems, and research on health and environmental risks-may be successfully applied along the continental fringes and on the islands across the SubAntarctic region. Expanding these and other fields of Arctic social studies to the Southern Hemisphere will beneft the development of social/human research in both polar regions. Still, no projects focused on people are listed so far on the IPY Planning Chart for Antarctica, and the French studies of the indigenous residents of Tierra del Fuego and the Cape Horn area, a legacy of IPY 1882-83, remain unsurpassed (see Barr, 1985).

IPY IMPLEMENTATION: WHAT'S NEXT?

As of this writing, the JC believes that the general science "design" for IPY 2007–08 is more or less in place.

Still, the JC and International Programme Office will continue to process additional submissions individually. Prospective new applicants will be asked first to look for affiliation with or within the existing IPY initiatives; they will also have to prove strong linkage to other IPY efforts. Several new initiatives may emerge in the next several months, or during the years of IPY research, education, and public activities, and even during the processing and publishing of IPY records after the main field operations are completed in 2009.

Different levels of funding and ranges of opportunities in each participating nation are sure to make a big impact upon the scope of IPY operations, both nationally and internationally. The earliest indicator will be the rate of success in funding proposals from the first round of IPY grant submissions in spring-summer 2006. Current estimates vary from as high as 35% to 40% success for some national IPY programs (like those in Canada or Norway) to as low as 5% to 10% in the countries where the new IPY funding is still limited.

As essential as funding is to advance science in IPY 2007–08, it is now becoming even more critical to support the IPY organizational structure, and to launch educational and community outreach efforts. So far, the two key elements of the IPY organizational system, the international Joint Committee and the IPY Programme Office, have secured sustainable funding for the years of IPY operations. The IPY organizational system, however, now includes several additional elements, such as international subcommittees on data management, observations, and education and outreach, which were established in 2005. Of these, only the data management subcommittee has some funding; the other two have been operating primarily via online communication and partial meetings at major international conferences. This is no small matter for the Arctic social science community, as each subcommittee has to develop policies and recommendations relevant to our efforts and to our interactions with local communities across the North.

This drive will become even more urgent in the next few months, as scientists, public groups, and international agencies start their preparations for the IPY "launching events" in March 2007. Some nations already have plans for certain, and many more people are sure to be fascinated by the IPY ventures when and if they become open to the public. Again, availability (or lack) of funds will be a crucial factor. So far, the recommendation from the JC and from its education and outreach subcommittee (which is coordinating public planning) is to encourage national IPY committees to develop their launch events as national or collaborative venues. The two IPY "parent" organizations, the World Meteorological Organization and International Council for Sciences, are planning a special joint celebration for the IPY, with a joint statement and a press release on 1 March 2007. Stay tuned for the next round of IPY 2007-08 announcements.

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Additional information regarding many developments described in this paper can be accessed via the "News Archives" postings at the major IPY website at www.ipy.org and at several national IPY websites. The status of the social sciences field has been followed in a number of short articles published in *Northern Notes*, the newsletter of the International Arctic Social Sciences Association, also available at www.iassa.gl.

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