IPY 2007–2008 and Social Sciences: A Challenge of Fifty Years

Igor Krupnik

Member, Joint Committee for IPY 2007–2008, Smithsonian Institution

This paper offers an insider's summary of one of the most exciting components of IASSA's recent history that goes back to the ICASS-5 in Fairbanks in spring 2004. At that meeting four years ago and in the following weeks, IASSA and the Arctic social science community made what in hindsight was a 'historic' decision to join the preparations for new International Polar Year (IPY) 2007–2008. Actually, we jumped into that process with a big splash. We openly argued for our place in IPY 2007–2008 program based upon the crucial role that the studies of Arctic communities, people, and cultures play in contemporary polar science.

The rest, as people say, is history. It is hard to underestimate the transition between ICASS-5 in 2004 and ICASS-6 in 2008 in the social/human themes' standing in IPY and in the way the broad polar science community views our research. This very Congress, ICASS-6, was an IPY venue in itself (IPY #69), with more than 15 sessions focused on the ongoing IPY projects in the social/human field. Many new partnerships have been forged recently, thanks to IASSA's participation in IPY, including the expanding collaboration with IASC; the new SAON (Sustainable Arctic Observing Network) initiative; *Arctic Social Indicators* study launched by the Arctic Council; and a new BOREAS program. IASSA's entry into IPY also opened the door to a new level of engagement of Arctic residents and indigenous people in research and science planning, through numerous projects and public activities under the IPY program.

The main goal of this paper is to review IPY 2007–2008 as a multi-faceted venture that produced a 'fifty-year' challenge, as well as opportunities to Arctic social and human sciences. It will address, in particular, the origination of IPY 2007–2008; the role that IASSA played in building its socio-cultural agenda; the new legacy created by social/human research in IPY; and the future of that legacy after IPY is officially completed. As this once-in-a lifetime initiative is gradually coming to a close, the time is ripe to assess our contribution to IPY 2007–2008 and to start looking beyond those dates.

How IPY Was Born: 1997-2004

Unlike its predecessors, the International Years of 1882–1883, 1932–1933, and 1957–1958, the fourth IPY of 2007–2008 lacks a charismatic origination story of its own. It had neither a single 'creation event,' similar to the famous dinner at James Van Allen's house in April 1950 that gave momentum to the International Geophysical Year (IGY) 1957–1958 (Chapman 1954; Fraser 1957; Jones 1959) nor a recognized individual champion, such as Karl Weyprecht, whose talks and writings inspired the first International Polar Year of 1882–1883 (Baker 1982; Barr 1985; Heathcote and Armitage 1959). Available narratives on the origins of IPY 2007–2008 (Andreev et al. 2007; Bell 2008; IOC 2004; Stirling 2007; Summerhayes 2008; Tsaturov et al. 2005) are usually brief and do not explore the full story². Therefore, producing an acceptable account on the beginning of this IPY is a pressing task, particularly while our memories are still fresh.

The reconstruction of the history of IPY 2007–2008 is also a scholarly field to which social scientists may contribute in earnest by applying their professional tool kit. Amanda Graham from the Yukon College has already assembled a preliminary online 'chronology' of IPY 2007–2008, supplied by the links to its many early documents and events (http://dl1.yukoncollege.yk.ca/ipy/documents). I have started a small IPY 'oral history' project by conducting interviews with several of its early champions and key players. Also, many documents related to the IPY planning process can be accessed on the IPY Interim website (http://classic.ipy.org/index.php), the U.S. National Committee for International Polar Year's site (http://www.us-ipy.org/downloads.shtml), or via common search engines. Building a broadly accepted story on the origin of IPY 2007–2008 requires sustained research; what is presented here is a preview by a social scientist familiar with some, though not all available sources.³

As expected, the emerging historical narrative is *complex*. Unlike its predecessors, the fourth IPY 2007–2008 had not one but at least four or, perhaps, more presumably independent origination momentums in the years 2000–2001. It also had several false starts. For almost three years, from late 2001 till summer 2004, many groups debated and advanced various concepts of a new IPY, before these independent and often competitive streams merged into one. From the beginning, this IPY evolved as primarily a 'bottom-up' grass-roots initiative, with little high-level governmental involvement, beyond funding. Also, its origination remarkably steered away from the many military and strategic issues of the day related to global politics and super-power competition that were central to IGY 1957–1958. As a societal phenomenon, IPY 2007–2008 was indeed a true product of the post-Cold War era and its science. It also made great use of the new communication technologies, such as e-mail, websites, electronic list-serves and newsletters, online forums, and the like (Berkman 2003; Stirling 2007).

The earliest appeal for a new IPY, reportedly, dated back to 1997. It was made by Chris Rapley, the future Chair of the IPY Planning Group in 2003–2004, on the eve of the 40th anniversary of IGY 1957–1958. Rapley sent a letter to ICSU (International Union for Sciences) in Paris arguing for a new IGY-like initiative to commemorate the 50th anniversary of IGY in 2007. The proposal went nowhere and it did not get any traction through ICSU until almost six years later; Rapley, reportedly, did not return to it until 2002.⁴

Despite that early setback, in 2000–2001, at least four groups of scientists quite independently started to push for a new 'international polar year' to be launched in 2007. All have drawn their arguments upon the forthcoming anniversary of IGY 1957–1958. Antarctic scientists, a heavily physical science community, began discussing the idea of a major 'celebration event' on the 50th anniversary of IGY at their several international meetings in 2000–2001 (Bell 2008; Summerhayes 2008); some of these discussions



Fig.1
The Neumayer Symposium at Bad-Dürkheim, Germany, June 2001: Leonard Johnson and Jörn Thiede. Photo by Oliver Röller.

were reflected in the minutes and resolutions adopted by the Scientific Committee for Antarctic Research (SCAR) in 2000 and 2001.5 In early 2001, a group of astrophysicists at the U.S. National Aeronautics and Space Administration (NASA) began preparation for what they called 'International Heliophysical Year' or IHY, to take place in 2007, also in commemoration of IGY (Davila et al. 2001.⁶ In June 2001, an inspiring discussion on the new 'IGY'-like initiative took place at the Neumaver Memorial Symposium at Bad-Dürkheim, Germany, The symposium adopted a 'Neumayer Declaration' arguing for a new 'IPY/IGY' science initiative to be launched in 2006/2007, with its focus on climate variability and the dynamics of the Earth crust (Kremb and Kremb 2002, 11 - Fig. 1).8 Lastly, in October 2001, at a high-level Arctic symposium in Brussels, Russian politician and polar oceanographer Arthur Chilingarov introduced an idea of what he named a 'third International Polar Year' to take place in 2007.9

Arctic social scientists were not a party to these early talks on IPY and, in fact, remained unaware of them. During 2002, four original proposals took form as distinct programs. The idea was gradually taking root thanks in a large part to new communication technologies that helped disseminate the IPY message and increased the speed of exchange (Berkman 2003). Several disciplinary groups of polar scientists (like SCAR, Arctic Oceans Science Board/AOSB, the European Polar Board) established special teams to draft plans for their participation in IPY. In November 2002, the U.S. Polar Research Board (PRB) under the U.S. National Academies held a full-day inter-disciplinary session in Washington, DC, titled "How Might the Polar Science Community Commemorate the Upcoming Anniversary of the International Polar Year". The workshop advocated joining forces with the European Polar Board (EPB) in planning for new IPY and in bringing the idea of new Polar Year to the public domain, to marshal support from funding agencies and science groups.

In early 2003, the preparation for IPY was re-shaped by several events. The International Heliophysical Year team branched away and eventually channeled its venture under the UN Office for Outer Space Affairs (Harrison et al. 2005). The Russian proposal for IPY was approved by the Russian Government and the Russian Academy of Sciences; it was soon submitted to the World Meteorological Organization (WMO) in Geneva (RAS 2003) and was endorsed by the 14th World Meteorological Congress in May 2003 under the label of the 'third' IPY. In February 2003, Chris Rapley and Robin Bell, on behalf of the European Polar Board and the U.S. Polar Research Board, submitted a joint proposal to the International Union for Sciences (ICSU) in Paris. It argued for the launch of the '4th International Polar Year' in 2007 and for the creation of a special Planning Group to prepare its science program. This time, ICSU supported the idea. Within a few months, in March-July 2003, the ICSU planning strategy for IPY was endorsed by several major polar science organizations 14; it also incorporated some other early planning efforts initiated in 2002–2003.

For almost a year, two initiatives—one calling for the 'fourth International Polar Year' advanced by ICSU and its Planning Group, and the other named 'third International Polar Year' promoted by WMO—ran neck-to-neck on parallel tracks. ¹⁵ Eventually, the overlap between the two competing processes became too obvious. In early 2004, the two teams agreed to join forces under the leadership of the ICSU Planning Group, with WMO participation. ¹⁶ To accommodate their different numbering for new IPY, it was decided to call it simply 'IPY 2007–2008.'

By summer 2004, the merger of the two efforts became official. It was agreed that the new Polar Year would be co-sponsored by ICSU and WMO¹⁷ and would be run by a 'Joint Committee for IPY' nominated by both organizations, with a common Program Office. In October 2004, the ICSU Planning Group completed its task and produced a visionary summary document, *A Framework for the International Polar Year 2007–2008* (ICSU 2004). In November 2004, a new 'Joint Committee' was established; a central IPY Programme Office was created; call for 'Expressions of Intent' (EoI) for prospective projects had been issued; and several national IPY programs started to take shape. These components of the IPY structure—the Joint Committee, the central Programme Office, national IPY committees and secretariats, and the network of over 200 international projects—would remain its pillars roughly until mid-2008.

IASSA Joins IPY: 2003-2004

A common belief among social scientists is that prior to IASSA's entry, there was no vision for 'people' and for social sciences in IPY 2007–2008. This is hardly true. IASSA's involvement indeed secured a designated field for social/human studies and for polar residents' participation in IPY 2007–2008. Nonetheless, several



Fig.2a IPY 2007–2008 logo proposed by the ICSU PG and adopted as an official symbol of IPY by the Joint Committee in 2005.

early IPY documents back in 2003 referred to the need to include social issues in IPY. That explains why many early planners of IPY 2007–2008, unlike the organizers of IGY 1957–1958, were open to social issues and to social scientists as

prospective partners—a fact well reflected in very different logos created by the two initiatives (Figs. 2a, 2b). That openness, however, was quickly put to a test.

In July 2003, Gérard Duhaime, former President of IASSA, was nominated to the ICSU Planning Group (PG) and I was invited to serve on the U.S. National Committee for IPY under the U.S. National Academies. These were all promising signals. Several other social scientists were later placed on their respective national IPY committees, including Ludger Müller-Wille in Canada, Michael Bravo in the UK, Birger Poppel in Greenland, Sverker



Fig.2b IGY 1957–1958 logo featuring the *Sputnik* (or other satellite) orbiting around the Earth.

Sörlin in Sweden, and others. At least two national IPY programs, in Canada and Greenland, advocated strong focus on Arctic residents and societal issues since their very inception in early 2004.

In a letter to Peter Schweitzer, then-IASSA President (September 13, 2003), I suggested that IASSA develop a strategy for its participation in IPY. Shortly after, the IASSA's '*Northern Notes*' newsletter published first information about IPY planning (Krupnik 2003a; also Krupnik 2003b). It encouraged Arctic social scientists to join the IPY process in their respective countries. In December 2003, a special panel on IPY 2007–2008 was proposed for the next IASSA Congress (ICASS-5) in 2004 to address the opportunities for social sciences in IPY. ¹⁹

As both Gérard Duhaime and I started to attend our respective IPY planning meetings in 2003, we were greeted with a great amount of goodwill from many colleagues in the physical and natural sciences. It also became clear that they had limited knowledge about the nature of social/human research. Some IPY planners argued that a new IPY should be organized not by conventional science fields but, rather, along a few 'cross-cutting' themes to avoid the narrow vision and technical language of individual disciplines. In this vein, the first ICSU PG planning meeting in summer 2003 endorsed three major 'overarching themes' for IPY 2007–2008, Exploration of the Unknowns at the Science Frontiers; Understanding Changes at the Poles; and Decoding Polar Processes (ICSU PG 2003a,5). Two more themes were added shortly after, Polar-global Teleconnections and Polar regions as the unique vantage point for observations of the Earth's inner core, magnetic field, the Sun and beyond (ICSU PG 2004, 9–13; ICSU 2004; Rapley 2004). These five themes and the associated language were conveyed to ICSU (ICSU PG 2004b); they were also disseminated to the emerging national IPY committees in many participating countries (see U.S. National Committee 2004).

As much as Gérard and I tried to persuade our colleagues in the IPY planning that Arctic social sciences did not speak this language and that such themes would not generate enthusiasm among indigenous people and polar residents, our pleas went nowhere. The list of the proposed IPY 2007–2008 activities was being quickly filled with major initiatives in oceanography, meteorology, deep-sea and ice-sheet studies, climate-ocean modeling, and the like. Despite special warning from the Arctic Council in late 2003 about the importance of societal themes in a new IPY, there was little input to the IPY process from the social science community and hardly any effort was undertaken by the IPY planners to reach out to polar residents and Arctic indigenous people. As ICSU PG continued to solicit themes and encourage preliminary ideas for future IPY projects (informally since March 2003 and formally since September 2003 – IPY PG 2003c), a few individual proposals for social/human studies did appear on some early lists. But their share was minuscule (7 out of 185 in late 2003 – ICSU PG 2003b,10,19). By spring 2004, frustration was mounting. Our IPY partners from other disciplines were, seemingly, getting tired of our references to social issues and polar indigenous people, whereas both Gérard and I felt marginalized within our respective planning processes. I was even contemplating to use the forthcoming IASSA's 5th Congress (ICASS-5) as a forum to propose a parallel 'social and indigenous IPY' defined by social scientists and Arctic people's organizations.

That was the backdrop of ICASS-5 that opened in May 2004 in Fairbanks, Alaska. At that meeting, we held special panel titled *International Polar Year 2007-2008: Opportunities for Northern Communities and Social Sciences*, with several science presentations and national IPY planning updates (http://www.iassa.gl/icass5/program.htm; Krupnik 2004c, 2005c). Still, the main challenge was obvious: Is our social science 'glass' in IPY half-full or half-empty? What strategy could we offer to the Arctic social science community regarding its role in IPY 2007–2008? It was Gérard Duhaime, to his great credit, who

advocated strongly for staying within the IPY planning process and for the increased IASSA's role in IPY. Leaving the Congress, Gérard drafted two resolutions for IASSA's General Assembly on May 23, 2004. The resolutions argued for more input from social scientists, Arctic indigenous organizations, and polar communities regarding the objectives, themes, and issues in IPY; and for a more active engagement of those three constituencies in the planning process for IPY 2007–2008 (IASSA 2004a).

Many former ICASS-5 participants, perhaps, remember that day when the IASSA General Assembly enthusiastically approved both resolutions. Another critical outcome was the establishment of a special IASSA IPY 'task-group' charged to advance IASSA's participation in IPY. Twenty scientists from 10 nations joined the task-group, including all past IASSA Presidents (http://www.iassa.gl/ipy/alaska/ipy_taskgroup.htm). The resolutions and a liaison team to 'facilitate cooperation between IASSA and ICSU PG' were IASSA's first formal contributions to the IPY 2007–2008 process.

On June 15, 2004, an official IASSA letter with two resolutions regarding IPY was delivered to the chairs of the ICSU PG, Chris Rapley and Robin Bell (Schweitzer to Rapley, June 15, 2004). Little did we know that on May 4, two weeks prior to IASSA Congress, Rapley presented the 'Initial Science Plan' for IPY 2007–2008 at the Arctic Council/Senior Arctic Officials Meeting in Selfoss, Iceland (see ICSU PG 2004a; Rapley 2004). At that session, the proposed IPY outline was, reportedly, criticized for little input from the groups representing Arctic residents and low priority given to the social and human issues in the polar regions http://arctic-council.npolar.no/Meetings/SAO/2004%20Se/Default.htm; http://arctic-council.org/filearchive/SAO_ReporttoMinistersReykjavik_2004.pdf; Chris Rapley, personal interview, March 3, 2008). To the IPY planners, IASSA's entry to the IPY process could not come at a better moment.

Rapley's response acknowledged ICSU PG 'difficulties in preparing the social science content of the (IPY science) plan' and encouraged IASSA to join the planning process (Rapley to Schweitzer, July 2, 2004). Again, it was Gérard Duhaime who suggested that IASSA offer its expertise to ICSU PG in expanding the sections of the IPY science outline focused on social issues and polar residents (Duhaime to IASSA IPY team, June 21, 2004). Over the next two months, in July-August 2004, a dozen IASSA-IPY team members were engaged in frantic electronic communication; they developed what eventually became the 'social science theme' and a new 'observation initiative' in the ICSU science plan. We worked in close contact with Rapley, who offered many helpful remarks to our proposal. On August 13, 2008, Peter Schweitzer, the outgoing IASSA President, submitted IASSA's recommendations to ICSU PG (Schweitzer to Rapley, August 13, 2004) that included: a preamble explaining a special integrative mission of the social agenda in IPY 2007–2008; the proposed new research theme; and the corresponding 'observational strategy':

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 (Framework 2004:16).

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 (Framework 2004:5).

Several ICSU PG members promptly expressed their strong support for the IASSA proposal. ²⁶ On September 13, 2004, IASSA's appeal to add a new theme to the IPY science plan had been approved at the final meeting of the ICSU PG in Paris²⁷; it was soon included in the 'IPY Framework' document (ICSU 2004, 15,18) that was officially released on November 12, 2004. The final version of the PG document was approved at the 89th meeting of the Executive Board of ICSU in Trieste, Italy on November 20-22, 2004 and was soon endorsed at the Arctic Council/Senior Arctic Officials meeting in Reykjavik (November 22-23, 2004, p.10). With these official endorsements, the first IASSAS-led effort to ensure strong social/human footprint in IPY 2007–2008 came to a successful end.

Among other activities during that summer 2004 was the nomination of two IASSA representatives to serve on the future steering body for IPY 2007–2008, the 'Joint Committee' (JC). In November 2004, Grete Hovelsrud and I became members of that new team to lead IPY for the next five years. The appointment of two IASSA-backed candidates, with the support from the Norwegian and U.S. national IPY committees, respectively, was a clear sign of IASSA's growing status and of the final acceptance of social/human field in IPY 2007–2008.

Early Planning and Dissemination: 2005-2007

As IASSA rightly predicted, the creation of a special socio-cultural theme and the opening of proper channels triggered new enthusiasm among social/human scientists and Arctic residents about IPY 2007—2008. By winter 2005, the Joint Committee reviewed more than 800 'Expressions of Intent' (Eol's) for future IPY projects submitted to the IPY office in Cambridge. Social and human science submissions accounted for roughly 1/6 of all Eol's (Krupnik and Hovelsrud 2005,7; http://classic.ipy.org/news/story.php?id=124). The number of Eol's eventually expanded to more than 1,100, as new proposals were continuously added during 2005–2007. In March 2005, the aspiring IPY participants were asked to consolidate their applications as 'full

proposals,' with more collaboration across science disciplines and a higher level of coordination. Overall, about 450 'full coordination proposals' had been submitted in three rounds in 2005, of which about 230 were eventually endorsed for implementation (see www.ipy.org). All endorsed 'full proposals' were grouped in seven fields in the 'IPY Planning Chart': Earth, Land, People, Ocean, Ice, Atmosphere, and Earth, with additional eighth field in 'Education and Outreach.' Altogether, there were 166 endorsed IPY proposals in science and 52 in Education and Outreach, as of early 2007 (Allison et al. 2007).

In this next round of IPY science planning, social/human topics again scored very well. They accounted for roughly 20% of all endorsed 'full proposals' in research and more than a third in Education and Outreach (Hovelsrud and Krupnik 2006, 346–347; Hovelsrud and Helgeson 2006,7; Krupnik 2006a,4).²⁸ Several proposals had been submitted by indigenous researchers and institutions, who also became partners in other endorsed initiatives. By their sheer engagement, social scientists and Arctic residents let it known that the new IPY would have a strong societal focus and a human face.

In hindsight, IASSA, again, may take credit for many of these developments. In fall 2004, IASSA launched an 'IPY Facilitation Initiative' to encourage its members and other researchers in social sciences

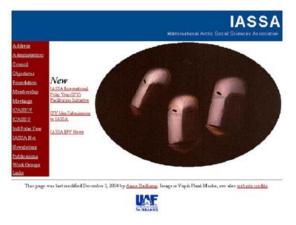
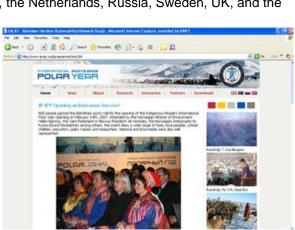


Fig.3
IASSA IPY webpage established in October 2004 - www.uaf.edu/anthro/iassa

In 2006, the IASSA-IPY task group was reorganized to include social scientists who served on their respective national IPY committees in Bulgaria, Canada, Germany, Denmark, Greenland, Iceland, Norway, the Netherlands, Russia, Sweden, UK, and the

US (see http://www.iassa.gl/newsletter/news06 1.pdf). Also, in 2005 IASSA endorsed its forthcoming 6th Congress in Nuuk in 2008 as an IPY event (IPY project #69) and issued a call for sessions on IPY activities and individual projects. Perhaps, one of the most symbolically notable events was the launch ceremony for the 'Indigenous People's International Polar Year' in the northern Norwegian town of Kautokeino/ Guovdageaidnu on February 14, 2007 organized jointly by the Nordic Sámi Institute, International Centre for Reindeer Husbandry, and other local institutions (Fig.4). The town of Kautokeino in the heart of the Sámi territory had a special role in IPY history as the site of one of the first IPY observation stations in 1882-1883. A beautiful tri-lingual two IPY-year calendar for 2007-2008 in Sámi, English, and Russian was printed for the event illustrated by historical photographs of the local Sámi people and landscapes taken by the IPY-1 observer in Kautokeino, Sophus Tromholt, during his stay in 1882-1883.29



and the humanities to be involved with the IPY science

http://www.uaf.edu/anthro/iassa/ipysubmitform.htm). A new IASSA-IPY webpage attached to the main IASSA website (http://www.uaf.edu/anthro/iassa/ipynews.htm) was created (Fig.3). Also, IASSA offered a pool of social science experts who attended numerous IPY-related events, advocated on behalf of the social/human themes at the planning meetings, and were eventually placed on

various IPY teams, including sub-committees on observation, data management, and education. IASSA-IPY task group members also produced updates on IPY

2007–2008 preparation in their respective countries for the IASSA website, its newsletter, and for major science journals (Krupnik et al. 2005; Hovelsrud and Krupnik 2006). Few other fields witnessed such a concerted effort

program (Krupnik 2004a; see

to raise its presence in IPY.

Fig.4
Website for the 'Indigenous People's IPY Opening event in the Norwegian Sámi town of Kautokeino (Guovdageaidnu), February 14, 2007 at www.ip-ipy.org. The site is now owned by the EALÁT project (IPY #399) administered by the Sámi University College-Nordic Sámi Institute at https://arcticportal.org/en/icr/ealat.

Half-Full or Half-Empty: IPY in 2008

This brings us full circle to the question raised at the first IASSA's IPY session in Fairbanks in 2004. Is our social science glass in IPY half-full or half-empty? Of course, not everyone in the Arctic social/human science community is enthusiastic about IPY. Also, it is hard to use any statistics to measure the social/human science input in IPY 2007–2008. Of 30-some endorsed projects in the "people's" field (http://www.ipy.org/index.php?/ipy/detail/ipy_country_charts/) a few never materialized and several received only partial funding. Nonetheless, as of the most recent count (fall 2008), at least 30 original proposals in social/human research endorsed by the IPY Joint Committee in 2005–2006 received full or partial funding and were operational by summer 2008; some have been already completed (see **Table 1**). The final list

may be even larger, particularly if several endorsed Canadian proposals in education and outreach are eventually funded through Canada's program for IPY. Those 30-some endorsed and funded projects cover all fields of social and human research; they include participants from at least 16 countries (Australia, Bulgaria, Canada, Denmark, Estonia, Finland, France, Germany, Greenland, Iceland, the Netherlands, Norway, Russia, Sweden, UK, and the U.S.) and major organizations of polar residents in all circumpolar nations.

To that list, we should add at least two dozen social/human initiatives that have been funded in some countries—notably, in Canada, Russia, Sweden, and the U.S.—through their national IPY programs, beyond the JC review and endorsement process.³² When these *national* IPY projects are taken into account, the overall number of the IPY activities in the 'People' field is, perhaps, close to 55-60, with some other still unaccounted efforts in education, outreach, and public communication fields.



Fig. 5
Public meeting at the community of Uelen, Chukotka, Russia, April 2007.
Victoria Golbtseva presents the outline of the IPY *SIKU* project (IPY#166) to local hunters and elders. Photo courtesy Victoria Golbtseva.

Lastly, the social/human science footprint in IPY 2007-2008 is also boosted by the innumerable public events, such as scholarly talks, public lectures, museum and art exhibitions, community workshops, roundtables, speaking tours. media coverage, websites, and the like (Fig.5). In July 2008, Yvon Csonka, IASSA's outgoing President, delivered a keynote address, "Polar societies and cultures in a changing world", at the IPY 'open-science' conference in St. Petersburg, Russia, which featured six sessions on social/human projects in IPY 2007-2008 (see http://www.scar-iascipy2008.org/). Another opportunity to elevate our profile in IPY was the socalled 'People's Day'

(http://www.ipy.org/index.php?/ipy/detail/p

eople/) launched on September 24, 2008. That weeklong event, the *sixth* in the series of special 'International Polar Days' scheduled for the duration of IPY, ³³ featured 41 individual projects in social/human research, education, and science outreach. It offered information on project activities, links to individual project websites and related resources, as well as new channels to introduce educators, students, and general public to the ongoing IPY activities in the social/human field. As such, the final tally of our impact may not be known until the end of IPY in 2009, if not a few years later. Nonetheless, based upon our current standing in the IPY science community, we may rightly claim that our glass in IPY is at least 'half-full.'

'Life After IPY'

The summer of 2008, the second in the IPY 2007–2008 observation cycle marked the climax for many initiatives. The next peak of field research activities will come in winter 2008/2009, both in the Arctic and

Antarctica. Whereas the work in the IPY field 'trenches' will continue for a few more months, the year 2009 is to bring a rapidly growing number of IPY-focused sessions, panels, and presentations; these will naturally lead to more follow-up publications. The new IPY 2007-2008 'Publications Database,' which is run jointly by the Arctic Institute of North America in Calgary, Canada; American Geological Institute in Alexandria, USA; and Scott Polar Research Institute in Cambridge, UK, already lists 945 IPY-related entries as of October 2008 (see http://biblioline.nisc.com/scripts/login.dll accessed November 11, 2008 - Fig.6). That number is to grow manifold over the next years. Also, the IPY scientists will soon start working on the summary publications of their project research as special journal issues or collections of papers. If we want to secure the impact of our social/human science contribution to IPY, we are to plan for those special journal issues and books, while the public interest in IPY is at its prime.



Fig.6
The opening page of the IPY 2007–2008 Publication Database at http://biblioline.nisc.com/scripts/login.dll. As of January 2009 this database contained 1,346 records.

The official closing of IPY 'observation phase' will take place in March 2009. The closing ceremony or, rather, several ceremonies like at the opening of IPY in March 2007, will be tailored primarily to the media and the general public. Nonetheless, several funded IPY studies will continue to run its course during 2009 and even in 2010.

By that time, the attention will be focused on the next major IPY-related event, the international Conference 'Polar Science – Global Impact' in Oslo in June 2010³⁴ (**Fig.7**). The Oslo conference in 2010 may attract a few thousand scientists, as well as scores of science managers, writers, journalists, publishers, and educators. The conference program will be built 'bottom-up' and it will, perhaps, offer the

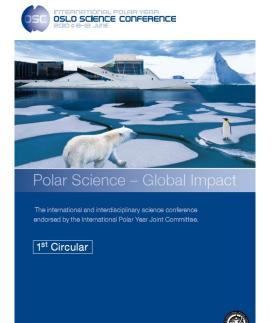


Fig.7
The next major IPY-related event, the international Conference 'Polar Science – Global Impact' to take place in Oslo in June 2010. The first conference circular has been produced by the Norwegian Steering Committee and is already posted online at http://www.ipy.no/filearchive/1stCircular2008.pdf.

best and final chance to secure the social science's footprint in IPY 2007–2008 at the highest international level. It is critical that Arctic social and human scientists do not to miss this opportunity and fill our designated conference field named *Health and Well-being of Northern People and Communities* with sessions, round-tables, and other activities associated with their projects.

Preserving one's footprint in the science record requires a consistent and multi-pronged effort. The organizers of IGY in 1957-1958 were very keen in using several strategies, including an IGY publication series of 48 volumes (Annals of the International Geophysical Year 1957–1958); special volumes and review papers on the history of origination and implementation of IGY; full bibliography of IGY publications; network of IGY data centers; a powerful cohort of trained students; IGY documentation archives, and the like. Some efforts took many decades to accomplish and the last volume of the IGY Annals was not published until 1970, which will be equivalent to 2020 for IPY 2007-2008. These and other options are open to us today. A lot will depend upon our ability to preserve the voluminous electronic records of this IPY, including hundreds of created websites, PDF and video files, poster papers and PowerPoint presentations.

As no agency is capable of doing it single-handedly, we have to take a collective responsibility for the life of our records 'after IPY.' Fortunately, this is already happening. In addition to the already-mentioned IPY 'Publications Database,' the nascent IPY 2007–2008 Archives, both for physical and electronic records, have been established at the Scott Polar

Research Institute in Cambridge, UK. It will eventually inherit the materials of the IPY Programme Office at the British Antarctic Survey (also in Cambridge), as well as numerous other IPY-related files. At the recent meeting in St. Petersburg, Russia (July 2008), the IPY Joint Committee endorsed a proposal for the 'IPY Legacy' series to release the documentation related to the origination and planning for IPY 2007–2008. In the same vein, IASSA should explore options to secure its own records related to the social scientists' involvement in the IPY process that would be of value to young researchers, historians, as well as similar efforts in the future.

On top of IASSA's growing partnership with IASC, Arctic Council, and other northern organizations, it should develop a policy toward other international agencies that are/were critical to the success of IPY 2007–2008, like ICSU, WMO, the Scientific Committee for Antarctic Research (SCAR), with whom it has not interacted before. There are many indicators that the partnership between IASC and SCAR, the two leading international players in Arctic and Antarctic research, respectively, will become a pillar of the post-IPY legacy. As the main body representing Arctic social scientists, IASSA has to develop a vision on its future relations with these and other institutions that will be guardians of the IPY legacy, when IPY shifts to its final analytical/publication/data preservation phase in 2009.

Conclusions: IASSA and the Legacy of IPY 2007-2008

In four-plus years following ICASS-5 in 2004, we have witnessed a remarkable turn-around in our vision on, and in the status of, social/human sciences in IPY. Being initially seen as odd and marginal players, we are now regarded as active and valued partners. In the eyes of so many, the very presence of the social/human sciences and polar residents in IPY 2007–2008 defines its innovative and modern face. We achieved it via hard work, perseverance and strong grass-roots network, despite many obstacles and against all odds. During this four-year transition, we helped successfully reshape IPY 2007–2008 and make it truly multidisciplinary enterprise. Compared to an almost 'zero' input in IPY-2 in 1932–1933 and in IGY in1957–1958, the social/human studies now account for more than 20% of all scholarly activities in this IPY and, perhaps, a third of its public and educational impact.

IASSA, through its unyielding support and the actions of its many members may justly take credit for that development. Of course, we were not the only ones who promoted the 'people's field in IPY and, thus, should be grateful to our allies, such as IASC, the Arctic Council, many organizations of the Arctic residents, and members of the IPY planning team. If we indeed regard IPY 2007–2008 as something that happens once in a scientist's lifetime, a 'challenge of fifty years,' we may justly claim that Arctic social/human scientists were up to that challenge and that IASSA emerged much stronger from its participation in IPY. We may refer to our growing acceptance by the mainstream polar organizations; our expanding partnership with IASC; the opening of BOREAS and other new funding sources for social research; and the inception of many science initiatives operated jointly or primarily by Arctic residents. To that list one may add the emerging recognition of the importance of social sciences and societal issues by many agencies and governmental programs in polar research, and of the value of collaboration with polar residents. We should be pleased we did not 'miss the IPY boat' back in 2004.

Over the past four years, IASSA witnessed growing interest among many physical and natural scientists in themes and issues related to polar communities and to the methods of social and human research, as became evident in several large-scale science initiatives of the past years, like ICARP, Arctic Climate Impact Assessment (ACIA), International Study of Arctic Change (ISAC), Sustainable Arctic Observing Network (SAON), and the like. We now have many more sympathetic partners and fewer skeptics than we faced four years ago. The time when we always held a designated last session on the program and the last speaker's slot at any interdisciplinary meeting is, hopefully, over. This is a symbolic thing; but it is also a good indicator of our changing status in the 'mainstream' polar science.

In 2004, in his plenary talk at the ICASS-5 in Fairbanks, Tim Ingold warned against becoming a perennial junior partner to natural scientists in multi-disciplinary science projects. He argued, instead, for running studies with a clear socio-cultural agenda and under our leadership, to which natural and physical scientists may be invited as partners. IPY collaboration over the past years yielded a wide range of interaction with our colleagues in natural and physical sciences, from junior partnership in certain 'megaprojects,' like DAMOCLES or SAON, to clear leadership in many cross-disciplinary efforts, particularly in the documentation of ecological knowledge, monitoring and responding to Arctic climate change, and the like. This is yet another important outcome of our participation in IPY.

So, the main conclusion about our legacy in IPY 2007–2008 is that we have established a legacy of being a valued and welcomed partners in this 'once-in-a-lifetime' initiative, much like we did it in ICARP-2, ACIA, and other major science programs of the past decade. It is not yet fully secured, particularly with regard to the Arctic residents' participation in long-term research planning and the dissemination of IPY scholarly results. But it is something we may now pass to the next IASSA leadership and onto the new cohort of the 'early career' Arctic social scientists to safeguard and to explore. Our successors may justly claim their seat at the next IPY in 2057 by invoking the example of this IPY, besides referring to the memory of Franz Boas and the Point Barrow expedition of 1881, like we did in 2003–2004. Also, our record in IPY 2007–2008, as well as many other developments of the past decade proved that IASSA has come of age. That is, perhaps, the most cherished outcome of IASSA's participation in IPY that we started four years ago, almost from a clean slate.

	Table 1
List of Active	International' IPY Projects in Social/Human Sciences
	(September 2008)

Research							
IPY ##	Full Title	Project Acronym	Participating Nations	Project Website link			
6	Dynamic Social Strategies		Denmark, Norway, Canada				
10	Historical Exploitation of Polar Areas	LASHIPA	The Netherlands, Sweden, Russia, Norway, UK, US	http://www.lashipa.nl/			
21	Understanding environmental change in national parks and protected areas of the Beringian Arctic		US, Russia, Canada	http://science.nature.nps.gov/im/ units/arcn/			
27	History of International Polar Years		Germany, Russia				
30	Representations of Sami in Nineteenth Century Polar Literature: The Arctic 'Other'		Sweden				

46	Traditional Indigenous Land Use Areas in the Nenets Autonomous Okrug, Northwest Russia	MODIL- NAO	Norway, Russia	http://npolar.no/ipy%2Dnenets/
82	Linguistic and Cultural Heritage Electronic Network	LICHEN	Finland, Norway, UK	http://mustard.tapor.uvic.ca/coco on/ach_abstracts/xq/xhtml.xq?id =134
100	Polar Field Stations and IPY History: Culture, Heritage, Governance (1882-Present)		UK, Sweden, Norway Russia, U.S., Denmark	http://museum.archanth.cam.ac. uk/fieldstation/ http://researchprojects.kth.se/ind ex.php/kb_1/io_10181/io.html
120	Northern High Latitude Climate variability during the past 2000 years: implications for human settlement.	NORCLIM	The Netherlands, Canada, Greenland, Iceland, Norway, U.S.	http://www.geo.vu.nl/~palmorph/ staff/Norclim.htm
123	Glocalization: Language, Literature, and Media		Greenland, Denmark, U.S., Canada	http://www.ilisimatusarfik.gl/Instit utter/InstitutforSprogLitteraturMe dier/IPYGlocalizationLanguageLi teratureMedia/tabid/148/languag e/en-US/Default.aspx
157	Community Adaptation and Vulnerability in Arctic Regions	CAVIAR	Norway, Canada, U.S., Iceland, Finland, Russia, Greenland	http://www.cicero.uio.no/projects/detail.aspx?id=30170⟨=EN
162	Circum-Arctic Rangifer Monitoring and Assessment	CARMA	Canada, U.S., Russia, Norway, Finland	http://www.rangifer.net/carma/
164	Inuit, Narwhal, and Tusks: Studies of Narwhal Teeth		U.S., Canada	http://www.narwhal.org/
166	Sea Ice Knowledge and Use: Assessing Arctic Environmental and Social Change	SIKU	U.S., Canada, Russia, Greenland, France	http://gcrc.carleton.ca/siku
167	Arctic Human Health Initiative	AHHI	U.S., Canada, Denmark, Greenland, Finland, Norway, Russia, Sweden	http://www.arctichealth.org/ahhi/
183	Community Resiliency and Diversity		Canada, Greenland	
186	Engaging communities in the monitoring of zoonoses, country food safety and wildlife health		Canada, Denmark, Greenland, Norway, Poland	
187	Exchange for Local Observations and Knowledge of the Arctic	ELOKA	U.S., Canada, Finland	http://eloka-arctic.org/
227	Political Economy of Northern Development		Denmark, Greenland, Finland, Russia	
247	Bering Sea Sub-Network: International Community-Based Observation Alliance for Arctic Observing Network	BSSN	U.S., Russia	
276	Initial Human Colonization of Arctic in Changing Palaeoenvironments		Russia	
310	Gas, Arctic Peoples, and Security	GAPS	Norway, Canada, Russia	http://www.ipygaps.org/
335	Land Rights and Resources		Sweden, Russia	
386	Survey of Living Conditions in the Arctic, Remote Access Analysis System: Inuit, Saami, and the Indigenous Peoples of Chukotka	SliCA- RAAS	Greenland, U.S., Canada, Norway, Finland, Russia	http://www.arcticlivingconditions. org/
399	Reindeer Herders Vulnerability Network Study	EALAT	Norway, Finland, Denmark	http://www.arcticportal.org/en/icr/ealat
408	Social-science migrating field station: monitoring the Human-Rangifer link by following herd migration	NOMAD	Germany, Bulgaria, Finland, Norway, Russia	http://www.polarjahr.de/NOMAD. 194+M52087573ab0.0.html
435	Cultural Heritage in Ice		Canada, U.S.	
436	Moved by the State: Perspectives on Relocation and Resettlement in the Circumpolar North	MOVE	U.S., Canada, Denmark, Finland Greenland, Russia	http://www.alaska.edu/boreas/move/
462	Arctic Social Indicators	ASI	Iceland, Canada, Finland, Denmark, Greenland, Norway, Russia, U.S.	

	Knowledge Exchange (Conferences, Publications, etc.)							
69	6 th International Congress of Arctic Social Sciences	ICASS-6	Greenland, U.S., Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, UK	www.icass.gl				
135	Polar Heritage: Protection and preservation of scientific bases in polar regions – Polar Base Preservation workshop		Norway, U.S., Australia, U.K.					
160	Arctic Change: An Interdisciplinary Dialog Between the Academy, Northern Peoples, and Policy Makers		U.S., Canada, Greenland, Iceland					
299	Arctic Energy Summit		U.S., Canada, Russia	https://www.confmanager.co m/main.cfm?cid=680				
410	Inuit Voices Exhibit: Observations of Environmental Change		U.S., Canada	http://cumuseum.colorado.ed u/Exhibits/InuitVoices/				

Acknowledgments

Special thanks:

- to my colleagues on the IASSA Council and IASSA-IPY team (Peter Schweitzer, Yvon Csonka, Gérard Duhaime, Ludger Müller-Wille, Grete Hovelsrud, Michael Bravo, Sverker Sörlin, Anne Sudkamp, Monica Tennberg, and many more) whose efforts were instrumental in advancing the social science and Arctic residents' agenda in IPY 2007–2008;
- to the members of the IPY Planning Group and IPY Joint Committee (Chris Rapley, Robin Bell, Eduard Sarukhanian, Robert Bindschadler, Cynan Ellis-Evans, David Carlson, and other) who helped secure the participation of Arctic social scientists and polar residents in IPY 2007–2008;
- to many people, who kindly shared their memories, records, and knowledge in the ongoing effort to document the origination and planning for IPY 2007–2008 (Amanda Graham, Colin Summerhayes, Leonard Johnson, Chris Elfring, Chris Rapley, Peter Clarkson, Jörn Thiede, Fae Korsmo, Rip Bulkeley, Olliver Röller, and many more) and offered critical comments to the first draft of this paper (Yvon Csonka, William Fitzhugh, Leonard Johnson, Eduard Sarukhanian, Cara Seitchek, and Colin Summerhayes).

References

- Andreev, A.O., M.V. Dukalskaya, and S.V. Frolov. 2007. *Mezhdunarodnyi poliarnyi god. Istoriia i perspectivy* (International Polar Year: History and Perspectives). St. Petersburg, AANII
- Anonymous. 2003. (Russian) Concept on Conducting the 3rd International Polar Year. Approved by the Scientific Council on Arctic and Antarctic Explorations, Russian Academy of Sciences on April 22, 2003, 7 pp.
- AOSB. 2003. Arctic Ocean Sciences Board. Report of the Twenty-Second Meeting of the Arctic Ocean Sciences Board, March 28–31. Kiruna, Sweden http://www.aosb.org/pdf/XXII.pdf
- Arctic Council. 2004a. Arctic Council/Senior Arctic Officials Meeting. Selfoss, Iceland. May 4 –5, 2004 http://arctic-coucil/npolar.no/Meetings/SAO/2004%20Se/Default.htm
- Arctic Council. 2004b. Report of Senior Arctic Officials to Ministers at the Fourth Arctic Council Ministerial Meeting. Reykjavik, November 24, 2004 http://arctic-council.org/filearchive/SAO_ReporttoMinistersReykjavik_2004.pdf
- ATCM. 2003. Antarctic Treaty Consultative Meeting, XXVI. Final Report. Madrid, Spain. Resolution 2: Support of the ATCM for the International Polar Year 2007/8. http://www.asoc.org/portals/0/pdfs/XXVI%20ATCM%20Final%20Report_E.pdf

- Baker, F.W.G. 1982. The First International Polar Year 1882-83. Polar Record 21:275-285.
- Barr, William. 1985. The Expeditions of the First International Polar Year, 1882–83. *The Arctic Institute of North America, Technical Paper* 29.
- Bell, Robin E. 2008. Antarctic Earth System Science in the International Polar Year 2007–2008. In: Cooper, Alan et al., eds. *Antarctica: A Keystone in a Changing World*. Washington, DC, The National Academies Press, pp. 7–18.
- Berkman, Paul A., 2003. International Polar Year 2007-08. Science 301(5640): 1669 (Sept. 19)
- Chapman, Sydney. 1954. The International Geophysical Year and some American aspects of it. *Proceedings of the National Academy of Sciences* 40(10): 924–926.
- Heathcote, N.H. and A. Armitage. 1959. The First International Polar Year. *Annals of the International Geophysical Year* 1:6–99. London, Pergamon Press.
- Davila, Joseph, and R. Harrison. 2001. International Heliophysical Year (unpublished website printout in author's possession).
- Dickson, Robert, Leif Anderson, Sergey Priamikov, and Tom Pyle. 2003. Contribution of the Arctic Ocean Sciences Board (AOSB) to the planning for an International Polar Year in 2007–08. *AOSB Newsletter* (July 2007):3–11. http://www.aosb.org/publications/pdf/News7 03.pdf
- Elfring, Chris and Chris Rapley. 2003. Planning for the International Polar Year 2007–08. *AOSB Newsletter* (July 2007):1 –2. http://www.aosb.org/publications/pdf/News7_03.pdf
- Fraser, Ronald G. 1957. *Once Round the Sound. The History of the International Geophysical Year.* New York, The MacMillan Company.
- Harrison, Richard, Andy Breen, Barbara Bromage, and Joe Davila. 2005. 2007: International Heliophysical Year. *Astronomy and Geophysics* 46(3): 3.27–3.30
- Hovelsrud, Grete K. and Jennifer Helgeson. IPY 2007–2008 and the Social Sciences: A Preliminary Analysis. *Northern Notes*, Summer 2006:7–10 http://www.iassa.gl/newsletter/news06_1.pdf
- Hovelsrud, Grete K., and Igor Krupnik. 2006. IPY 2007–08 and Social/Human Sciences: An Update. *Arctic* 59(3):341–348.
- IAGA 1999. The International Association of Geomagnetism and Aeronomy. The proceedings of the IAGA Aseembly, July 18–30, Birmingham, UK. *IAGA News* 39, 3. http://www.iugg.org/IAGA/iaga_pages/pubs_prods/iaga_news_39/resolutions39.htm
- IASSA. 2004a. IPY Resolutions adopted by the IASSA General Assembly on May 23, 2004 in Fairbanks, Alaska. http://classic.ipy.org/news/story-print.php?id=110
- ICSU 2003. Proposed Approach and Workplan. ICSU Planning Group for a International Polar Year 2007/8. September 3, 2003. http://www.asof.npolar.no/library/pdf/icsuworkplan.pdf
- ICSU 2004. A Framework for the International Polar Year 2007–2008. Produced by the ICSU IPY 2007–2008 Planning Group. Paris, ICSU.
- ICSU PG 2003a. International Polar Year 2007–2008. Planning Group Meeting 1 (PG 1). Paris, France, July 31–August 2. Meeting Summary. http://classic.ipy.org/international/documents/PG1.pdf
- ICSU PG 2003b. International Polar Year 2007–2008. Planning Group Meeting 2 (PG 2). Paris, France, December 17–19. Meeting Summary. http://classic.ipy.org/international/documents/PG2.pdf
- ICSU PG 2003c. September 2003 Letter to Community Requesting IPY Actions and Input. Appendix VI in ICSU PG 2004b.
- ICSU PG. 2004a. International Polar Year 2007–2008. Initial Outline Science Plan. Prepared by the ICSU IPY 2007–2008 Planning Group. April 20, 2004. http://classic.ipy.org/development/framework/OSP_v5.1.pdf

- ICSU PG 2004b. Report to ICSU Executive Board from the International Polar Year Planning Group (ICSU IPY PG). By Chris Rapley (Chair) and Robin Bell (Vice-Chair). February 9, 2004. http://www.us-ipy.org/downloads/ICSU%20Planning%20Group%20Report%20to%20ICSU%20Executive%20Board.pdf
- ICSU PG 2004c. International Polar Year 2007–2008. Planning Group Meeting 3 (PG3). April 1- 3, 2004. Paris, Francehttp://classic.ipy.org/international/documents/IPY_PG3_Minutes.pdf
- ICSU PG. 2004d. IPY Discussion Forum-2, Agenda. September 13–14, 2004. Paris. http://classic.ipy.org/international/planning-group/discussion_forum2_agenda.pdf
- IOC 2004. Intergovernmental Oceanographic Commission (of UNESCO). Preparation for the International Polar Year 2007–2008. 37th Session of the Executive Council, Paris June 23–24, 2004, IOC/EC-XXXVII/2. http://unesdoc.unesco.org/images/001344/134489e.pdf
- IZMIRAN 2004. MPG 2007–2008. Press-reliz (IPY 2007–2008. Press release). *Elektronnyi bulleten'* novostei po solnechno-zemnoi fizike 3(32): 1–3 (February 16, 2004) http://www.izmiran.ru/stp/ELNEWS/bullet32.htm
- Johnson, Leonard G. 2001. Symposium Melds Pat and Future Polar Research. Eos 82(51):640.
- Johnson, Leonard G. 2002a. International Polar Year 2007. A Discussion Paper. *AOSB Newsletter*, April, pp.8-12 http://www.aosb.org/publications/pdf/News4_02.pdf
- Johnson, Leonard G. 2002b. International Polar Year. Origins and Content of Proposal to Conduct International Polar Year. Paper presented at the 84th Polar Research Board meeting, April 9, 2002. Washington, DC.
- Johnson, Leonard G. and Joe Davila. 2002. International Polar Year 2007: An Integrated Heliospheric and Oceanographic Program. COSPAR02-A-01194.
- Jones, Harold S. 1959. The Inception and Development of the International Geophysical Year. *Annals of the International Geophysical Year* 1, pp. 383–413. London: Pergamon Press.
- Korsmo, Fae L. 2001. The International Polar Years: A History. The Nansen Icebreaker 12:6.
- Korsmo, Fae L. 2004. Shaping Up Planet Earth. The International Geophysical Year (1957–1958) and Communicating Science through Print and Film Media. *Science Communication* 26(2): 162–187.
- Korsmo, Fae L., and Michael P. Sfraga. 2003. From Interwar to Cold War: Selling Field Science in the United States, 1920s through 1950s. *Earth Sciences History* 22 (1):55–78.
- Kremb, Klaus and Carsten Kremb, eds. 2002. Proceedings of the 4th International POLLICHIA-Symposium, 24–26 June 2001: "Perspectives of Modern Polar Research and 175th Anniversary of Georg von Neumayer." *Mitteilungen der POLLICHIA*, Bd. 88 (Supplement). Bad Dürkheim.
- Krupnik, Igor. 2003a. Fourth International Polar Year. Northern Notes (Fall 2003): 6-7.
- Krupnik, Igor. 2003b. International Polar Year 2007–2008: The Next Major Science Effort in the Polar Regions? *ASC Newsletter* 11:11–12.
- Krupnik, Igor. 2004a. IASSA Launches IPY Facilitation Initiative. *Northern Notes*, Fall 2004:7–10 http://www.iassa.gl/newsletter/news04 2.htm
- Krupnik, Igor. 2004b. Social Sciences and Humanities Advance on the IPY Agenda for 2007–2008. ASC Newsletter 12:38-40.
- Krupnik, Igor. 2004c. Fourth International Polar Year 2007–2008 (IPY–4): Social Science Agenda and Public Impacts. Unpublished paper presented at the ICASS-5 IPY session, May 22, 2004.
- Krupnik, Igor. 2005a. International Polar Year 2007–2008: One year to 'P-Day.' ASC Newsletter 13:32-35.
- Krupnik 2005c. International Polar Year 2007–08. In *Connections: Local and Global Aspects of Arctic Social Systems*. Anne Sudkamp, ed. *Topics in Arctic Social Sciences* 5. Fairbanks, IASSA, p.87.

- Krupnik, Igor. 2006a. IPY 2007–2008: Nine Months and Counting. *Northern Notes*, Summer 2006:3 –7 http://www.iassa.gl/newsletter/news06_1.pdf
- Krupnik, Igor. 2006b IPY 2007–08: It's Right Around the Corner! ASC Newsletter 14:11–12.
- Krupnik, Igor. 2007. International Polar Year 2007–2008 Steams Ahead! ASC Newsletter 15:14–16.
- Krupnik, Igor and Grete Hovesrud-Broda. 2005a. Arctic Social Sciences Advance in the International Polar Year 2007–2008. *Northern Notes* Spring/Summer 2005:5–8 http://www.iassa.gl/newsletter/news05_1.pdf
- Krupnik, Igor and Grete Hoveslrud. 2005b. IPY 2007–2008: The Clock Is Ticking. *Northern Notes* Fall/Winter 2005/2006: 7–10 http://www.iassa.gl/newsletter/news05_2.pdf
- Laursen, V. 1951. Bibliography for the Second International Polar Year 1932-33. Copenhagen: Hørsholm Bogtrykkeri.
- Laursen, V. 1959. The Second International Polar Year. *Annals of the International Geophysical Year* 1:211–234. London, Pergamon Press.
- Polar Research Board. 2002. How Might the Polar Science Community Commemorate the Upcoming Anniversary of the International Polar Year? Summary of the Special Planning Session. Polar Research Board. November 25, 2002. Washington, DC.
- Rapley, Chris. 2004. International Polar Year. PowerPoint presentation delivered at the 'IPY Open Session,' Arctic Science Summit Week. Reykjavik, April 25, 2004 www.ipy.org/international/presentations/assw-reykjavik/2004-04-25_assw_ipy_intro.ppt
- Rapley, Chris and Robin Bell. 2003. Proposal to Establish an ICSU Planning Group for an International Polar Year 2007/8.
- Roots, Fred, s.a. History of the International Polar Years: A Long Unfinished Story Chapter Four and Counting? http://www.ipycanada.ca/web/guest/history/unfinished history (Accessed July 10, 2008)
- Russian Academy of Sciences. 2003. Concepts of Conducting the 3rd International Polar Year. Approved by the RAS Scientific Council on Arctic and Antarctic Explorations, http://www.ipy-api.ca/english/documents/e_int_russian_ipy_concept.pdf (April 22, 2003; accessed 07/10/2008)
- SCAR. 2003. Scientific Committee on Antarctic Research, Executive Committee Meeting, July 11 –15. Report. SCAR Bulletin 152:5–6, 9. http://www.scar.org/publications/bulletins/152/bulletin152.pdf
- Stirling, George C. 2007. International Scientific Collaboration: International Years of Science and the launch of the International Polar Year 2007–2008. Paper prepared for the OECD Global Science Program, 18 pp. http://www.oecd.org/dataoecd/49/40/39516014.pdf
- Summerhayes, Colin P. 2008. International Collaboration in Antarctica: the International Polar Years, the International Geophysical Year, and the Scientific Committee on Antarctic Research. *Polar Record* 44
- Tsaturov, Iu.S., I.E. Frolov, A.I. Danilov, V.G. Dmitriev, S.M. Priamikov, and A.V. Klepikov. 2005. Mezhdynarodnyi poliarnyi god (International Polar Year). *Meteorologiia i gidrologiia* 10:94–106.
- U.S. National Committee 2004. U.S. National Committee for the International Polar Year 2007–2008. *A Vision for International Polar Year 2007–2008*. National Research Council. Washington, DC, National Academies Press.
- WMO 2003a. World Meteorological Organization (WMO). Fourteenth General Congress. Resolution 9.1/3 (Cg-XIV), "Holding of a Third International Polar Year in 2007–2008." Geneva.
- WMO 2003b. Third International Polar Year (2007–2008). WMO Background document (copy supplied by Ed Sarukhanian).

Notes

¹ History of Polar Field Stations (#100); Glocalization: Language, Literature, and Media (#123); Community, Adaptation, and Vulnerability (CAVIAR, #157); Sea Ice Knowledge and Use (SIKU, #166); Arctic Human Health Initiative (AHHI, #167); University of the Arctic (#189); Gas, Arctic Peoples, and Security (GAPS, #310); Survey of Living Conditions (SLICA, #386); Relocation and Resettlement in the North (MOVE, #436); Arctic Social Indicators (ASI, #462), as well as individual papers on several other IPY projects.

² Bell (2008) and Summerhayes (2008) view the origins of IPY 2007–2008 primarily as a drive from the Antarctic science community via its major professional bodies, the Scientific Committee on Antarctic Research (SCAR) and Council of Managers of National Antarctic Programs (COMNAP). Russian accounts (Andreev et al. 2007; Tsaturov et al. 2005) cover mainly the Russian planning for IPY and activities by the World Meteorological Organization (WMO). A short 'IPY Chronology' created by ICSU PG reflects primarily ICSU involvement (ICSU PG 2004b, 13)

³ This preview is based upon discussions with Eduard Sarukhanian, Amanda Graham, Robin Bell, Colin Summerhayes, Rip Bulkeley, Ludger Müller-Wille, Yvon Csonka, and extensive interviews with Chris Rapley (March 3, 2008), Peter Clarkson (March 6, 2007), Chris Elfring (April 11, 2008), Robert Bindschadler (May 19, 2008), Leonard Johnson (June 7, 2008), and Joern Thiede (September 23, 2008). I also consulted Rapley's personal papers related to the IPY planning process in 2003–2004 that are currently stored at the IPY Office in Cambridge, UK.

⁴ Chris Rapley, personal interview (London, March 3, 2008). Also, in 1999, the Assembly of the International Association of Geomagnetism and Aeronomy (IAGA) adopted a resolution that recommended the preparation of 'collaborative programs [...] during the period 2003 to 2008 to mark the 50th anniversary of the IGY and to act as a springboard for future research' (IAGA 1999,3). This resolution was most certainly an outcome of Rapley's initiative passed via ICSU channels. I am grateful to Amanda Graham, who brought my attention to this earliest reference to the fourth IPY.

⁵ SCAR Bulletin 141, April 2001 (Report of the 26th Meeting of SCAR, July 17–21, 2000, p.5); SCAR Bulletin 145, April 2002 (Report of the SCAR Executive Committee Meeting, August 22–24, 2001, p.6); SCAR Bulletin 149, April 2003 (Report of the 27th Meeting of SCAR, July 22–26, 2002, p.8).

⁶ The plan for 'International Heliophysical Year' (IHY) was first unveiled in winter 2001. It introduced the first outline of a major science initiative in the footsteps of the first IPYs and IGY, with a plan of actions and appeal for international partnership. IHY original website, under the title of 'International Polar Year' (sic!) was launched in 2002 at http://ipy.gsfc.nasa.gov. IHY team had its first planning session at the World Space Congress in Houston, TX on October 17, 2002. During 2001 and 2002, there were several efforts to 'bridge' plans for IHY and IPY 2007 (Johnson and Davila 2002).

⁷ According to Jörn Thiede, the former Chair of the Neumayer Symposium, that discussion actually stemmed from many earlier talks among polar scientists that "something major should happen, because there was no way to continue major efforts in polar research without larger degree of collaboration, integration, and collaboration. We were actually looking for some major event coming up to mobilize all key polar players" (personal interview, September 23, 2008).

⁸ Georg von Neumayer (1826–1909) was a German meteorologist and a key figure in the First International Polar Year of 1882–1883. Leonard G. Johnson, American polar marine geologist, was awarded a Neumayer medal at the Bad-Dürkheim session. At the meeting, he volunteered to promote the idea of 'new IPY' among the U.S. polar community. During 2001–2002, Johnson was one of the most active early champions of IPY (see Johnson 2001, 2002a, 2002b), particularly via the Arctic Ocean Sciences Board (AOSB). Following Johnson's presentation, AOSB formally reviewed the concept of the new IPY at its 21st meeting in Gröningen on April 21–23, 2002 http://www.aosb.org/pdf/XXI_Report.pdf (p.21). AOSB planning for IPY merged with the ICSU-led process in summer 2003, following another review of IPY at the AOSB 22nd meeting in Kiruna, Sweden on March 28–31, 2003 http://www.aosb.org/pdf/XXII.pdf (p.23–24); Dickson et al. 2003; Elfring and Rapley 2003).

⁹ Chilingarov advanced his idea for a new IPY in passim at the Joint EU-Russia-Canada-US Workshop on collaborative technological research for Arctic development in Brussels on October 25–27, 2001. The workshop was attended by over 120 participants from several countries. Chilingarov's push for 'the third IPY' was wrapped among several other Russian proposals for collaborative projects in the Arctic. Chilingarov reiterated a similar package, including a reference to a 'new IPY,' in his letter to several high officials at the Director General Research office of the European Commission in Brussels on December 20, 2001. Chilingarov's proposal to launch new IPY was quickly brought to the attention of the Russian Government, but was tabled for over a year and remained mostly hidden from the Russian science community. It was re-instituted at the joint meeting of Russian scientists and representatives of the Director General's EU office and the European Polar Board in St. Petersburg on January 22, 2003 (see *Elektronnyi bullten' novostei po solnechnozemnoi fizike* (Electronic Newsletter on the Sun-Earth Physics) 2(9) https://www.izmiran.ru/stp/ELNEWS/index2003.htm.

¹⁰ The first IPY-related website was launched by the IHY planning group in 2002 (http://ipy.gsfc.nasa.gov and http://ipy.gsfc.nasa.gov). By 2003, several IPY websites were running, such as www.nationalacademies.org/prb/ipy (U.S. Polar Research Board, April 2003), www.polarcom.gc.ca/polaryear.htm, and a Russian IPY site at http://www.polarf.ru.

¹¹ PRB first discussed the issue of new 'International Polar Year' at its earlier meeting on April 8, 2002, following a short presentation by Leonard Johnson (2002). The full-day IPY 'planning session' by the PRB in November 2002 featured

several invited talks by Fae Korsmo, Robert Bindschadler, Phil Smith, Stephanie Pfirman that outlined the need for collaborative planning for new IPY. Two NSF-based social scientists, Fae Korsmo and Carole Seyfrit, and archaeologist Glenn Sheehan from Barrow participated in that workshop (Polar Research Board 2002).

¹² See 'Scientists to Plan International Heliophysical Year' (NASA Press Release, April 14, 2004; http://www.spaceref.com/news/viewpr.html?pid=14024). The most recent updates on IHY are available at http://www.ihy2007.org/

¹³ The WMO Congress in May 2003 also charged the WMO Executive Council to establish a special working body to prepare a plan of action for new IPY and to coordinate its implementation (WMO 2003) – see: WMO Resolution 9.1/3 (Cg-XIV), "Holding of a Third International Polar Year in 2007–2008" (WMO 2003a).

¹⁴ Arctic Science Summit Week in Kiruna, Sweden (March 29–April 4, 2003); Joint Assembly of the European Geophysical Society–American Geophysical Union–European Geosciences Union in Nice, France (April 11, 2003); Antarctic Treaty Consultative Meeting in Madrid, Spain (June 9–20, 2003), Scientific Committee on Antarctic Research (SCAR) Executive Committee Meeting in Brest, France (July 11–15, 2003) – see full list in IPY PG 2004b,3). Arctic Ocean Science Board (AOSB) at its annual meeting in March 2003 has agreed to endorse the ICSU-led planning for IPY (AOSB 2003, 23–24; Dickson et al. 2003; Elfring and Rapley 2003), as also did the joint SCAR-COMNAP (SCAR 2003, 9) and ATCM meetings (ATCM 2003, 288).

¹⁵ The ICSU 'Planning Group' (PG) for IPY was established in May 2003; it held its first meeting (PG-1) on July 31– August 2, 2003 (ICSU PG 2003a) and its second meeting on December 17–19, 2003 (ICSU PG 2003b). The IPY 'working body' under WMO was officially announced in summer 2003; but I have no information on its composition and/or activities. Nonetheless, WMO prepared its outline ('background document) for IPY 2007–2008 by late September 2003 (WMO 2003b).

¹⁶ The idea to merge the ICSU and WMO planning for IPY was debated on many occasions during late 2003 and early 2004, including the ICSU PG-2 meeting in December 2003 (ICSU PG 2003b). It was endorsed at the international meeting "Cooperation for the International Polar Year 2007–2008" organized by the Russian Academy of Sciences and Russian Hydrometeorological Service (*Roshydromet*) in St. Petersburg, Russia (January 22–23, 2004 – ICSU PG 2004b, 23–25; IZMIRAN 2004, 1–3) and was formally approved at the PG-3 meeting in April 2004 (ICSU PG 2004c).

¹⁷ For a short time in late 2003–early 2004, there was a drive to bring UNESCO as the third co-sponsor of IPY 2007–2008 via its Intergovernmental Oceanographic Commission (ICO) – see IOC 2004. This proposal has been rejected, though Keith Alverson, Director of the Global Ocean Observing System (GOOS) program under the ICO, was later nominated to the IPY Joint Committee to represent IOC and other Earth observing networks under UNESCO.

¹⁸ For example, the Russian IPY proposal of April 2003 endorsed by WMO cited the need to 'develop recommendations for socio-economic development of the Arctic region" (Russian Academy of Sciences 2003,5) and the ICSU 'planning approach' to IPY posted on September 2003 advocated the Arctic as "home to people and cultures [...] uniquely adapted to survival in the challenging environment" that are now facing significant challenges from social and environmental change" (ICSU 2003c).

¹⁹ The idea of a special IPY-focused panel emerged in communication with Ludger Müller-Wille, Fae Korsmo, and Anna Kerttula. The original vision was to focus on historical resources, primarily from the first IPY 1882–1883, also to brief IASSA members on the IPY 2007–2008 planning. Gérard Duhaime, Yvon Csonka, Monica Tenneberg agreed to present the updates from their respective national committees, whereas David Norton, Kevin Wood, Anne Jensen and Dessislav Sabev submitted paper abstracts on their prospective IPY projects (see http://www.iassa.gl/icass5/program.htm)

²⁰ E.g., Duhaime to Peter Schweitzer, IASSA President, January 22, 2004.

²¹ The first draft list of proposed IPY 'science clusters' (December 2003) included: Changes in polar ice masses; Geophysical slices of polar regions; Thermohaline circulation; Genomic fingerprinting of Polar ocean; Genomic study of polar adaptation; Exploration of sub-ice ecosystems; Solar activity and polar atmosphere; The collapsing magnetic dipole; Polar biodiversity and ecosystem response to global change; Studies of deep basins; Polar climate connections; Robotics and new technology; Revitalization of polar observing networks (ICSU PG 2003b,11).

²² The meeting of Senior Arctic Officials (SAO) of the Arctic Council in Svartsengi, Iceland (October 23–24, 2003) expressed its overall support for IPY 2007–2008, but noted in particular the AC call for the inclusion of a 'human dimension' in the concept of the IPY – http://arctic-council.npolar.no/Meetings/SAO/2004%20Se/Default.htm. The weakness of the IPY 'social' field was also obvious to the ICSU organizers since late 2003 (ICSU PG 2003b,10; 2004b,5).

²³ The only social scientist with a substantial intellectual input during early planning stage for IPY 2007–2008 was Fae Korsmo. In 2001–2004, she produced a string of influential presentations and published papers on the history of planning for IGY and IPY-2 (Korsmo 2001; 2004; Korsmo and Fraga 2003).

²⁴ See http://www.us-ipy.org/download/IPY community submissions 02 13 2004.pdf (February 13, 2004); http://classic.ipy.org/development/framework/OSP_v5.1.pdf (April 20, 2004).

- ²⁷ Duhaime to Krupnik, September 13, 2004; Duhaime to Schweitzer and Krupnik, September 15, 2004. On the same day, the new 'social' theme was endorsed at the second IPY 'Discussion Forum' (http://classic.ipy.org/international/planning-group/discussion_forum2_agenda.pdf), also in Paris; it was featured as the first item on the Forum's agenda. Gérard Duhaime and Michael Bravo presented the proposal on behalf of IASSA. As Michael Bravo reported after the meeting, "[...] It went extremely well for us. IASSA achieved a landmark in having social science representation in ICSU. [...] IASSA taskforce's backing up Gerard's patient and persistent advocacy of the social sciences has placed the social sciences in a much stronger position—even in a new position. The sense of progress has been graciously acknowledged by our natural sciences colleagues (Bravo to Krupnik and Schweitzer, September 15, 2004).
- ²⁸ The most recent IPY 'Planning Chart' lists 37 endorsed science proposals in its 'People' field (version 6.4, May 2008; see http://216.70.123.96/images/uploads/ipychart6.4.pdf), plus about 20 proposals in the field of 'Education and Outreach.' The search of the endorsed 'full proposal' database on the original IPY website (http://classic.ipy.org) produces a total of 83 proposals under the listing of 'People,' of which 54 can be reasonably attributed to social and human field.
- ²⁹ See http://arcticportal.org/ipy/opening-of-the-indigenous-peoples-international-polar-year-guovdageaidnu-norway-feb-14-2007; http://www.polararet.no/artikler/2007/IP_IPY.
- ³⁰ For example, 'Base Preservation Workshop' (IPY#135), 'Arctic Interdisciplinary Dialogue' (IPY #160); Arctic Energy Summit (IPY#299).

The new partnership has been already endorsed at the IASC annual meeting in Syktyvkar, Russia (March 2008 – see http://arcticportal.org/uploads/GA/gO/GAgOKLZd0NTqgMzd AQVSw/IASC-Council-ASSW2008---Draft-Minutes-Open-Session.pdf) and most recently, at the Joint Committee's meeting in St. Petersburg, Russia (July 2008).

²⁵ Ludger Müller-Wille, Michael Bravo, Sverker Sörlin, Peter Schweitzer, Birger Poppel, Monica Tennberg, Grete Hovelsrud, and Yvon Csonka were particularly instrumental in this writing and editing process. It was Michael Bravo, who introduced some of the key wording into the definition of the new 'social science theme.'

²⁶ We are grateful in particular to Chris Rapley, Robin Bell, Robert Bindschadler, Ed Sarukhanian, Hanne Petersen, Odd Rogne, Cynan Ellis-Evans, and other members of the PG who supported our effort. Gérard Duhaime lobbied vigorously on behalf of the new social theme. The story of the PG's approval of the IASSA proposal in August-September 2004 is yet to be recovered in full.

³¹ http://www.ipycanada.ca/web/guest/education/project_highlights - accessed September 10, 2008.

³² The list also includes two international IPY conferences organized by my 'home' institution, *Smithsonian at the Poles: Contribution to the International Polar Year Science* (http://www.si.edu/ipy/) and *Making Science Global: Reconsidering the Social and Intellectual Implications of the International Polar and Geophysical Years* in 2007 (http://www.nasm.si.edu/qetinvolved/makingscienceglobal/).

http://www.ipy.org/index.php?/ipy/detail/people_summary. The International 'Polar days' are week-long spikes of science dissemination and public outreach activities that explore a particular research field of IPY 2007–2008, as its major focal point. The previous International Polar Days were focused on Sea Ice (September 21, 2007), Ice Sheets (December 13, 2007); Changing Earth: Past and Present (March 12, 2008); and Land and Life (June 18, 2008), with two more, Above the Poles, and Oceans and Marine Life scheduled for December 2008 and March 2009, respectively – see http://www.ipy.org/index.php?/ipy/detail/international_polar_days/.

³⁴ See conference website at http://www.ipy-osc.no/

³⁵ Among these new players is the Joint 'Bipolar Action Group' established by IASC and SCAR in late 2007, http://www.scar.org/about/partnerships/iasc/SCAR_IASC_BipAG_IPY_JC6.pdf; http://www.scar.org/about/partnerships/iasc/767_BipAG.pdf; http://classic.ipy.org/national/HAIS%205/IPY.SCAR_IASC_ASSW2008%5B1%5D.pdf.