

PERSPECTIVE

Polar Research turns 40

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Among his varied Resistance activities during the Nazi occupation of Norway, Tore Gjelsvik co-edited an underground newspaper called *Bulletinen (The Bulletin)*. Four of the paper's previous editors were arrested, and the fifth, who handed it off to Gjelsvik, fled to neutral Sweden to avoid capture. Gjelsvik went on to become a geologist and to serve as a director of the Norwegian Polar Institute (NPI) from 1960 to 1983 (Fig. 1). In July 1982, toward the end of his appointment, he wrote a brief foreword to the maiden issue of *Polar Research* (Fig. 2), a periodical whose production and distribution posed no risk to life or limb.

Gjelsvik explained phlegmatically that the institute's new serial would "include original, scientific papers ... in such disciplines as geology, biology, glaciology, meteorology, oceanography, solid earth geophysics". Submissions would be evaluated by the NPI's Editorial Board, in consultation with "at least one referee outside the Institute". Copies of the journal would be exchanged for the scientific literature produced by some 250 institutions around the world: it was evident that an important raison d'être for *Polar Research* was to reinforce connections with other polar research institutions.

That first issue comprised five articles, all geology papers reporting research in Svalbard or the adjacent Barents Sea. Of the nine authors, four had Norwegian affiliations (two worked for the NPI), three were affiliated with US institutions, one was in the UK and one was in Finland. Eight of the nine contributors were men.

The following year, with a spruced-up layout that included complete citation details on the article title pages, the institute restarted *Polar Research* with volume 1, number 1, of a "new series". An editorial note explained that this brought the journal in line with "new techniques of information transmission". Inside the front cover, the new series named the journal-runners (information lacking in the two 1982 issues). Gjelsvik occupied the dual

role of the journal's chief editor and chairman of its editorial board, and the remaining board members were NPI scientists and the institute's communications officer, who was also the journal's managing editor and the only woman on the board (Fig. 3).

The NPI has undergone major changes since the journal's launch in 1982 (and re-launch in 1983), not least the relocation of its headquarters from Oslo, Norway's capital, to Tromsø, 1738 km to the north and well above the Arctic Circle, in the late 1990s. Throughout this and other developments at the institute, Polar Research has been issued regularly, its volumes growing in size and becoming increasingly international and decreasingly gender imbalanced (Figs. 4, 5). In the period 1982–87, 10% of contributors were women (women were 12% of lead authors). In 2000-05, this had become 21% (23% of leads). The corresponding figure for the last five years is 38% (46% of leads). This trend has not been the outcome of any particular editorial measures (apart from efforts to rope in as many female reviewers as male ones; later, reviewers or their students are likely to submit papers to the journal themselves) and likely reflects general trends in science and scientific publishing (e.g., Sugimoto et al. 2013).

I took the position of *Polar Research*'s chief editor in 1998, as the NPI completed its move to Tromsø. In the beginning, I mailed paper versions of submissions to reviewers and sent print-outs of accepted manuscripts to our printer, Page Bros, in the UK (Goldman 2010). I sometimes modified figures using scissors, paper, glue and a fine-tipped felt pen. I have overseen the journal's temporary stays, starting in 2007, in the stables of the publishing houses Wiley-Blackwell, Co-Action Publishing and Taylor & Francis. In 2018, the NPI became the journal's publisher once again, engaging Open Academia Publishing Services for typesetting, website management, fee collection and other crucial services.



Fig. 1 Tore Gjelsvik, Director of the Norwegian Polar Institute, in Observatorieholmen, Svalbard, in the summer of 1974. (Photo by Lars-Harry Jenneborg/NPI.)



Fig. 3 The members of the *Polar Research* editorial board in 1983 (photographs taken in various years). Clockwise from top left: Fridtjof Mehlum, Olav Orheim, Ørnulf Lauritzen, Yngve Kristoffersen, Vidar Hisdal and Annemor Brekke. (Mehlum, Kristoffersen, Lauritzen and Brekke: Kåre Monrad Bratlien/NPI. Orheim: Olav Orheim/NPI. Hisdal: Asgeir Brekke/NPI.)

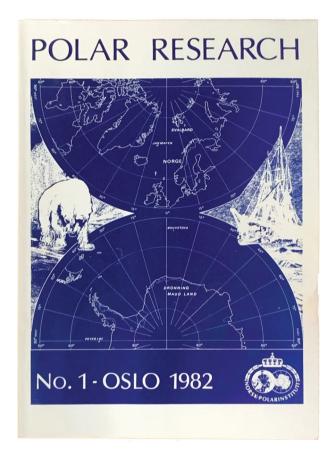


Fig. 2 The cover of the first issue of *Polar Research*, highlighting Norway's interests in Svalbard and Jan Mayen in the Arctic and, in the Far South, Dronning Maud Land and the islands of Bouvetøya and Peter I Øy.

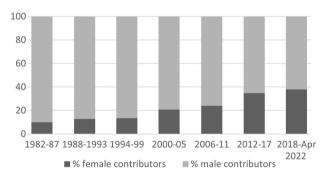


Fig. 4 Percentages of women and men contributors to *Polar Research* from 1982 to the present.

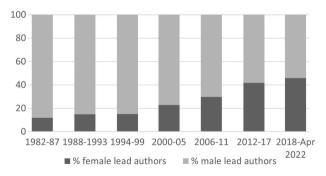


Fig. 5 Percentages of women and men lead authors in *Polar Research* from 1982 to the present.

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In 2010, the journal discontinued its print edition and became, to my knowledge, the first all open-access multidisciplinary polar journal. The original internal editorial board has been replaced by an international group whose current members are at institutions in the US, Germany, Sweden, Argentina and Norway. Three (including myself) out of eight are women. (Invitations aimed at recruiting more women to the *Polar Research* board are usually met with polite rejection. This is perhaps at least partly because women scientists, even more than their male counterparts, are overloaded with professional and domestic duties [e.g., Barlow 2021; Krukowski et al. 2022].)

Most of the journal's 10 most cited articles concern environmental conditions—air temperature, permafrost, glaciers, fjord ecosystems and snow—in Svalbard or conditions in the Arctic Ocean and contribute to the literature on climate change. Nowadays, an article's impact is not measured solely by how many times it is referred to in other articles. An example is the article "Arctic fox dispersal from Svalbard to Canada: one female's long run across sea ice" (Fuglei & Tarroux 2019), which was published in June. By the end of 2019, the article had been viewed on the journal's website more than 7000 times. The story was initially covered by Medium and was picked up by the web platforms of CNN, The New York Times, The Washington Post, Reuters, the BBC, The Guardian, USA Today, NBC News, The New York Post, Smithsonian Magazine, Spiegel, El País and other online purveyors of news, as well as by public radio stations across the US.

The NPI, scientific publishing and the polar regions—especially the Arctic—have undergone profound transformations, some of which would have been hard to predict in 1982. Polar science journals have multiplied during the last 20 years, mushrooming around the

time of the International Polar Year, in 2007–08. The role of the Arctic and Antarctic in global environmental, economic and geopolitical challenges will only escalate in the years to come. There is no danger of *Polar Research* losing its relevancy, and it will continue do its part to build up the world's environmental knowledge base.

Acknowledgements

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References

Barlow R. 2021. The ivory tower is like the real world in one way: mothers still do most of the childcare, BU researcher finds. *BU Today*. Accessed on the internet at https://www.bu.edu/articles/2021/mothers-in-academia-covid-19-childcare/on 4 July 2022.

Fuglei E. & Tarroux A. 2019. Arctic fox dispersal from Svalbard to Canada: one female's long run across sea ice. *Polar Research 38*, article no. 3512, doi: 10.33265/polar. v38.3512.

Goldman H.V. 2010. The bipolar editor. *Editorial Office News*, August issue, 11–15.

Krukowski R.A., Williams D.C.M. & Cardel M.I. 2022. A year into the pandemic: an update on women in science, technology, engineering, math, and medicine. *Annals of the American Thoracic Society 19*, 517–524, doi: 10.1513/AnnalsATS.202107-875CME.

Sugimoto C.R., Lariviere V., Ni C.Q., Gingras Y. & Cronin B. 2013. Global gender disparities in science. *Nature 504*, 211–213, doi: 10.1038/504211a.