

A Remembrance

John Arnfield Heap, CMG

Mike Richardson

Polar Regions Unit, Overseas Territories Department, Foreign and Commonwealth Office, London

John Heap's whole working career was one devoted to the polar regions, primarily the Antarctic — as scientist, then as a distinguished, internationally respected polar diplomat, and finally to holding the Directorship of the Scott Polar Research Institute in Cambridge (Fig. 1). Much of the stability and innovative development of the Antarctic Treaty System during the crucial period of the 1970s and 1980s can be attributed to Heap's long tenure as Head of the UK Delegation to successive Antarctic Treaty meetings.

John Arnfield Heap was born on 5 February 1932 in Manchester to David and Ann Heap and educated at the Quaker founded Leighton Park School in Reading. His interest in the polar world was instilled early on by his mother reading to him from Robert Falcon Scott's journals. This interest blossomed further at Edinburgh University where he read geography. University in Scotland also provided the opportunity for a developing passion for the hills and mountains. Heap was active in the University's Mountaineering Club and climbed regularly in the Scottish Highlands. Two years before graduating, Heap honed his interest in the polar regions and in expedition science by leading a university expedition to the little explored Lingen area of Arctic Norway.

Soon after graduating in 1955, Heap took up a research studentship, funded by the Falklands Islands Dependencies Survey (the forerunner of the British Antarctic Survey), at the Scott Polar Research Institute and Clare College, Cambridge. Alongside his already developed interest in polar science, so begun the second of his life-long affinities — for Cambridge and its surroundings; a location he was to remain closely attached to for the rest of his life.

By the end of 1955 Heap was in the Antarctic. His first visit was aboard the FIDS Royal Research Ship *John Biscoe* to the Antarctic Peninsula, where, during the relief of the UK's Antarctic research stations, he experienced his first Antarctic sea ice. Two years later he was back again, this time to the much more inaccessible, pack-infested waters of the Weddell Sea as a sea-ice observer aboard *Theron* as part of (Sir) Vivian Fuchs' Commonwealth Trans-Antarctic Expedition. Heap's work on sea ice earned him his PhD in 1962, and the following year he published his research on Antarctic sea ice. This huge folio edition, *Sea ice in Antarctica*, was the first comprehensive survey of the distribution and variability of

sea ice around the continent. But, as Heap once remarked wryly, it hardly proved to be a best-seller.

Two years after marrying Peg Spicer, Heap took up post-doctoral research at the University of Michigan, then a leading institute in the US for glaciology. Here, under the enthusiastic tutelage of Jim Zumberge, he spent the 1962 and 1963 austral seasons as a member of the University of Michigan Ross Ice-Shelf Studies Project. Commemorating this, a 17-km long glacier was named after him in 2000 by the US Committee on Antarctic Place Names.

It appeared, at the time, that Heap's career was likely to remain one devoted to scientific research. But even during his previous time in Cambridge, Heap had come under the influence of Brian Birley Roberts, who split his time between SPRI and the Research Department in the Foreign and Commonwealth Office, where he headed the Polar Regions Section.

In 1964, in a major career switch, Heap returned to the UK and joined Roberts in London. It was immediately evident that Heap's scientific background and knowledge of Antarctica would stand him in good stead. For the next decade he understudied Roberts, whose knowledge of the political and diplomatic facets of the Antarctic were second to none. Roberts was a veteran of the negotiations of the Antarctic Treaty and had been crucial to their conclusions in 1959. Negotiated against the background of the Cold War, the succinct text of the Antarctic Treaty at only 14 Articles long was masterful in designating Antarctica as an international continent devoted to peace and science. In setting to one side the vexed questions of territorial claims to sovereignty, the Treaty has stood the test of time for the past 45 years without a single word of its text being amended.

But the Treaty was basically geopolitical in nature. It provided a framework for political accommodation. But major areas were left to one side. The Antarctic Treaty was virtually silent on anything to do with the environment. Missing also was any attention to resource-related matters. These would have proved too problematic to solve at that time, immediately raising — as they would have done — the question of economic gain and thus territorial sovereignty. Taking over the helm of the Polar Regions Section in 1975, Heap faced a period of almost constant negotiations, which were to see him right through to his retirement from the FCO in 1992.



Fig. 1. John Heap while Director of the Scott Polar Research Institute.

The first of the add-on treaties to the Antarctic Treaty had been negotiated in 1972 — three years before Heap became the head of the Polar Regions Section — to manage and regulate the perceived threat of commercial sealing on Antarctica's pack-ice seals, a threat incidentally that has not subsequently materialised.

But the late 1970s saw increasing concerns about the potential over-exploitation of Antarctica's rich krill and fish stocks. Indeed, already in some instances, that path had been recklessly followed, with the stocks of highly lucrative Antarctic marbled rock cod commercially fished out around South Georgia — 400,000 tonnes being taken by the USSR deep-water fleet in two seasons alone. Heap was influential in the ensuing negotiations of the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR), which began in 1980 and concluded in Canberra in 1982. As leader of the UK Delegation to those negotiations, Heap deployed the principles of the Antarctic Treaty, rather than the approach that would have been more normal for a fisheries-related treaty. CCAMLR was startling in its innovation, injecting not only a highly precautionary approach to commercial fishing, but also adopting an eco-system based management. Instead of just taking account of target fish and krill species, CCAMLR also factored in potential impacts on fish predators — the seabirds, penguins, seals, and whales, as well as the lower end of the food web. Even so, it took five years before the first of CCAMLR's Conservation Measures,

regulating a commercial fishery based on these principles, was adopted. Heap's precautionary instincts came to the fore in the early 1990s with the increasing opening up of Antarctic fisheries. His oft quoted mantra in CCAMLR meetings of 'no data — no fish' was a heeding to those who wanted instead to press ahead irrespective of the scientific basis for doing so. Heap insisted that commercial fisheries must only be allowed to proceed if there was adequate scientific evidence to justify their initiation and subsequent management. Despite the commercial pressures dictating otherwise, Heap's approach won the day. By the mid 1990s all commercial fisheries in the Southern Ocean under CCAMLR's control were fully regulated by Conservation Measures based on appropriate science. Although Heap did not endear himself to some other national delegations, he was invariably respected. To the US he was a staunch ally but as one American diplomat remarked 'when he knows he is right he can be as stubborn as hell.' It was that stubbornness, infused with an innate knowledge of the political and legal systems governing Antarctica and heavily tinged with his scientific background, that influenced Heap's negotiations. He was a natural diplomat and negotiator — a master at securing deals, but compromising when it was the only way forward. And throughout, Heap's ability to influence, coupled with his humour and wry smile, would invariably win him the day.

Heap regarded the negotiations of CCAMLR as perhaps his greatest feat. The tribute is that even today the precautionary and eco-system based approach of the Convention remains in advance of most other fisheries regulatory organisations in the world.

However, the next stage in the development of the Antarctic Treaty System was more problematic: how to address the issue of mineral resources in Antarctica — its potential oil, gas, and mineral deposits. Speculation was rife. The origin of modern Antarctica, Gondwana, had spawned the mineral rich regions of South America, South Africa, and Australia. Despite overlain by kilometres of ice sheet, and its surrounding pack ice, Antarctica, it was argued, must by definition be mineral rich. Competing interests were at play. On the one hand, a spate of countries keen to join the Antarctic Treaty for fear of being left out of any division of mineral rights; on the other, an increasingly vociferous lobby through the environmental NGOs with their persuasive one liner 'Hands off Antarctica.' So followed six long years of patient negotiations of CRAMRA — the Antarctic Minerals Convention. Heap was convinced of one thing, that it was infinitely preferable to negotiate a legal regime to deal with Antarctica's minerals before such resources were found. If such negotiations were delayed until resources were discovered in commercial quantities, then vested economic interests would make agreement a virtual impossibility. The Treaty Parties had been beaten to this objective on fishing, but they must succeed on the vital issue of minerals if Antarctica's future was to be safeguarded adequately.

June 1989 saw the successful adoption of the Minerals Convention in Wellington, New Zealand. But within six months it was shaken to the core with the outright refusal by Australia and France, driven by their domestic politics and the environmentalists, to sign the Convention. Heap remained convinced of the strong environmental credentials of CRAMRA, which would have needed consensus from all the Treaty Parties before any minerals operations could even be contemplated in Antarctica. But his hopes to save six years of careful negotiations were finally dashed in the first quarter of 1990 with the very public refusal by New Zealand, which would have provided the international home for a Minerals Secretariat, to ratify the Convention. Since ratification of CRAMRA by all seven Antarctic Claimant States was a pre-requisite for the Convention coming into force, this action by New Zealand was CRAMRA's death knell.

Realising that this collapse in international consensus now left Antarctica with no regulation on minerals whatsoever — it in effect could become a minerals' free-for-all — Heap turned his agile thinking to a remedy. He remained convinced that the Antarctic Treaty itself must remain the cornerstone of Antarctic politics. For this reason he was completely against the notion being promoted by Australia and France of a Conservation Convention for Antarctica. Such an international instrument had, in his view, the capacity to undermine, or sideline the Treaty, which was a dangerous proposition. An alternative had to be found, and in a typical Heap gesture this was first unveiled in May 1990. The venue was a restaurant in Oslo, to which a selected group of influential Antarctic diplomats had been invited.

Adding to the clandestine flavour of the evening, they had each individually had to discreetly leave a reception in Oslo Castle hosted by the then Norwegian Foreign Minister. Half way through dinner, Heap produced and distributed round the table a set of papers. 'This, gentlemen, is the draft of an Environmental Protocol to the Antarctic Treaty. Hopefully it will provide the way forward.' It was to be more than six months before negotiations on a successor to CRAMRA began. But the UK proposal on a Protocol rapidly gained general support. The details were ably fleshed out by Norway and within a further year the Protocol was adopted in Madrid — the UK being the first to sign. Included amongst its various tough environmental provisions was an indefinite prohibition on mineral activities. So was averted the vacuum in consensus with which Heap had been preoccupied. But the switch from CRAMRA to the Protocol on Environmental Protection to the Antarctic Treaty demonstrated the characteristic agility of Heap to find a pragmatic way forward if other alternatives were blocked.

Heap worked tirelessly to support the Antarctic Treaty System. Strengthening the Treaty was crucial to this. He was always on hand to provide advice and support to other countries, particularly those keen to sign up to the Treaty. Whilst wary of seeing the management of Antarctica

taken over by the United Nations, Heap recognised that the initial grouping of Antarctic States that had signed the Treaty in 1959 was insufficient. The constituency had to grow. Years after his retirement from the FCO, the diplomats of other countries, Uruguay being just one example, would repeatedly refer to the assistance they had received from Heap when they were applying to join the Treaty.

Heap's principles on how to deal with international negotiations were simple, and threefold: it must be your paper and not someone else's that is being debated; you must be well prepared to fend off all queries and counter arguments; and after that — well it is all just theatre. Using those maxims Heap was able to ensure that the UK's agenda on Antarctic matters was invariably in the lead. And his encyclopaedic knowledge of the Treaty System provided him with ample opportunity to fall back on historical theatre as and when the need arose.

Heap's 17-year service to polar diplomacy was recognised with the award of a CMG just before his retirement in early 1992. But again, typical of his orderly approach, Heap had put in train over three years before that procedures for ensuring a smooth succession when he left post, providing his successor with a two-year period of understudy — a far cry from the normal one-week handover between most posts in the FCO. Heap's considerable effectiveness in the complex world of polar diplomacy was down to his background in science and practical knowledge of the Antarctic, coupled with his political far-sightedness. That the FCO provided long-term tenure for the head of its Polar Regions Section gave him an institutional memory of the Antarctic Treaty System that few, if any, other polar diplomats enjoyed. He put this to good use compiling single-handedly eight editions of the *Antarctic Treaty handbook*, which, by the early 1990s, was regarded by many as the definitive 'bible' of the Treaty System and vital both to those countries planning to join the system as well as existing members.

Not one for retirement, Heap was soon again in harness, this time taking up the Directorship of his former scientific home, the Scott Polar Research Institute. Heap's appointment was timely, for the Institute's future was looking insecure. Despite his adroit ability to negotiate at international level and manage the inter-departmental complexities of central government, Heap found the politics of the University even more daunting. But approaching the task with tact and firm leadership, he regained a more secure footing for SPRI. The Institute, and particularly its world-renowned library, was fast running out of space. Resourceful as ever, Heap embarked on a major fund-raising campaign. Indeed, his tenure at the SPRI was characterised either by a period of attracting financial sponsors, or having the construction workers in. But the results were amply justified when in late 1998, close to schedule, the new Shackleton Memorial Library commemorating both Sir Ernest and his son Lord (Eddie) Shackleton was opened by the Hon. Alexandra

Shackleton. Heap's tenure had put the Institute's long-standing sustainability back on track.

Retiring for the second time, this time from the Directorship of SPRI, Heap turned his attention to politics, standing successfully for election as a Liberal Democrat on the South Cambridgeshire District Council. Here, his particular interest lay in environmental conservation and employment portfolios. But, as had been typical throughout his life, Heap was keen to plough back his skills into the local community. He possessed a social responsibility that saw him devote time and energy in support of his local village, Harston, where he and Peg had lived since 1968.

Heap continued to remain active in polar matters. He was a member of the UK Antarctic Place Names Committee, the body that formally adopts approved names for use in the British Antarctic Territory, and Heap Island off the Antarctic Peninsula commemorates his sea-ice studies. As chairman of the UK Antarctic Heritage Trust, he actively encouraged interest in, and conservation of, Britain's heritage in the Antarctic. The preservation of historic buildings and artefacts spanned the continent from the remnants of former British bases on the Antarctic Peninsula to the huts of Scott and Shackleton from the 'Heroic Age' of polar exploration in the Ross Dependency of New Zealand. This meant a close working relationship with the New Zealand Antarctic Heritage Trust. Heap also spent 30 years as treasurer of the International Glaciological Society, the scholarly body concerned with the study of snow and ice, and served as chairman of the Trans-Antarctic Association, which is responsible for providing bursaries for continuing research in the Antarctic.

Despite his affinities for Cambridge, Heap's passion for the hills and mountains never waned. It was constantly renewed by having visits to the family house that was bought as a retreat in 1965 at Ulva Ferry on the Isle of Mull. Even in his last month, and despite being weak, John and Peg made the long journey north to Mull by car. He grudgingly admitting that on the very day that he finally decided that his motoring times were over, he managed to acquire a penalty ticket for speeding!

Returning home to Harston for what were to prove to be his final days, he continued to receive a train of colleagues and friends through the door, entertaining them with his cerebral wit and that wry smile that had characterised his international negotiations. He died on 8 March 2006. Heap is survived by his wife Peg, their two daughters Alice and Sarah, and son Thomas.

Klaus Dodds of Royal Holloway, University of London, who also wished to provide an appreciation, wrote:

John Heap, as the obituaries published in *The Times*, *The Daily Telegraph*, and *The Independent* recognised, was an internationally respected polar scientist, Foreign Office diplomat, and Director of the Scott Polar Research Institute, University of Cambridge.

What the obituaries did not record, however, was quite how supportive John was to a whole generation of scholars and students (including outside the University of Cambridge) who were seeking to understand better the relationship between Antarctic science, politics, and policy-making. For me, that help began in the early 1990s, when I was completing a doctoral thesis on Anglo-Argentine relations and the 'Antarctic Problem.' After making initial contact with Heap, I received an invitation to lunch at his south Cambridgeshire house. What followed was a master class in Antarctic diplomacy coupled with some wonderful stories about individual diplomats and scientists attached to the Antarctic Treaty System and/or the Scientific Committee on Antarctic Research (SCAR). Interspersed with his infectious humour, his musings were a literal godsend to an eager if inexperienced doctoral student.

One of the other qualities Heap possessed in proverbial amounts was intellectual generosity. Even if he did not agree with one's particular opinion, he was, nonetheless, always interested in argument and engagement. In 2004, when researching Operation Tabarin for a Radio 4 production, I contacted Heap again to ask for help. After hearing the rationale for the programme, Heap immediately offered his help and explained why he and Brian Roberts (both attached to the Polar Regions Section of the Foreign and Commonwealth Office) thought the Operation had been instrumental in ensuring Britain's Antarctic presence in the post-1945 period. He gave a typically brilliant performance when he was interviewed for the programme at the Scott Polar Research Institute. The producer and I were inundated with a wealth of material, which was subsequently incorporated (including his distinctive chuckles) into the broadcast.

Over the years, through his written work and interviews, Heap provided a wealth of material to polar scholars. His support and dedication to promoting Antarctic scholarship in Cambridge and beyond are gratefully acknowledged.

Peter Beck of Kingston University also provided an appreciation:

As Klaus Dodds pointed out, John Heap always proved a helpful mentor for academics researching the history of Antarctic politics and law. My initial contact prompted a rapid response. As academics know, officials (this excludes past and current members of the FCO's Polar Regions Section) do not always respond promptly, let alone positively, to requests and enquiries, but when I approached Heap, I received an offer of a talk over lunch at a restaurant somewhere along Whitehall. It was an interesting period, and an increasingly busy one for Heap. During the early 1980s, Antarctica was emerging as an international issue due to a range of political, legal, scientific, environmental, and economic reasons as evidenced by, for example, the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR), the start of the minerals regime negotiations, and the involvement of the UN in the issue of Antarctica. There

was also the 1982 Falklands conflict, which was seen by some politicians and commentators as having an Antarctic dimension, particularly given the involvement of two Consultative Parties, their territorial rivalry over Antarctica, and the manner in which the area of intervention extended to cover South Georgia and the South Sandwich Islands. Indeed, during the conflict, Heap revealed one of the most vivid images illuminating the practical impact of the Antarctic Treaty System. He travelled to Hobart (May 1982) and Wellington (June 1982) for scheduled meetings on marine resources and a proposed minerals regime, respectively. Journalists who

were expecting Anglo-Argentine fireworks greeted him, but in the event Heap and his Argentine counterpart sat down together at the same table to discuss Antarctica's present and future. In this manner, the 1982 Falklands conflict highlighted the achievements of John and his fellow diplomats and scientists in protecting Antarctica's status as a continent for peace insulated from problems occurring elsewhere in the world, even in a geographically proximate area. In so doing, he played no small part in enhancing Antarctica's image as a continent for science and preparing the way for the recognition of its status as 'a natural reserve,' devoted to peace and science.