

Aurora Australis

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Antarctica does not have a long history of book production. Other than those employed on research stations, no humans actually live there. Between February and November there are about three hours of sunlight per day, and for some weeks none. The average temperature at the South Pole is -49°C , satellite measurements have recorded ground temperatures of lower than -90°C . There are libraries on some of the research stations – the one at McMurdo Station, run by the US Antarctic Program, contains more than 8,000 volumes – but all of their books come from as far away as the people who read them.

At the start of the last century, the chief reasons for heading south to the coldest, driest, windiest region on Earth were twofold – to research the structure of this unknown continent, and, more competitively, to achieve an exploration first by planting a flag at the South Pole. On the *Discovery* expedition led by Captain Scott in 1901–04, a three-man party that included Ernest Shackleton, reached $82^{\circ} 17' \text{S}$. All the dogs accompanying the explorers died on the journey and Shackleton himself became ill, but in 1907 he set off again as leader of his own expedition to the Antarctic. The omens were not promising – he lacked governmental or institutional support, relying on private loans and donations to finance his venture, the members of his team were relatively inexperienced, his ship, the *Nimrod*, was ‘small and old’, and ‘had received a good many knocks in the course of a varied career’, and Shackleton had personal business and family problems (in July 1907 his brother Frank was implicated in the theft of the Irish crown jewels from Dublin Castle).¹ But he took with him – much as you might take a pack of cards on a camping trip in Britain, to while away the hours when the rain is teeming down and

1. He had, too, dreams that far outstripped his capabilities. Before leaving he had ordered a lightweight boat named *Raymond*, after his son, which he intended to drag from one side of the continent to the other before sailing it back to liaise with the *Nimrod*. In the end, he shelved the plan, taking only the nameplate.

PUBLISHED AT THE
WINTER QUARTERS
OF THE BRITISH
ANTARCTIC EXPEDITION,
1907, DURING THE WINTER
MONTHS OF APRIL, MAY,
JUNE, JULY, 1908.
ILLUSTRATED WITH
LITHOGRAPHS AND
ETCHINGS; BY
GEORGE MARSTON

PRINTED AT THE SIGN OF
'THE PENGUINS'; BY JOYCE
AND WILD.
LATITUDE $77^{\circ} \cdot 32'$ SOUTH
LONGITUDE $166^{\circ} \cdot 12'$ EAST
ANTARCTICA



TRADE MARK

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Colophon page of *Aurora Australis* bearing the stamp of two penguins.

you are stuck inside the tent – a printing press and a small etching press. Shackleton loved books and according to a colleague could recite poetry ‘by the yard’ In 1902, on Scott’s *Discovery* expedition, he had edited the *South Polar Times*, a typewritten newspaper to which all members were encouraged to contribute. For his own expedition, however, he had grander ambitions. The result, as he later wrote in his official, two-volume account of the voyage, was ‘the first book ever written, printed, illustrated, and bound in Antarctica.’²

Produced in the base hut at Cape Royds, McMurdo Sound, during the winter months of April to July 1908 – months ‘lit only by vagrant moon and elusive aurora’, as Shackleton wrote in the preface – *Aurora Australis*³ was typeset and printed by crewmembers Ernest Joyce and Frank Wild, who had been given three weeks’ instruction by Messrs Joseph Causton and Sons. The same company also supplied the presses⁴, paper, type, ink and a colophon plate of two penguins. The work of setting up the press and sorting the type into its trays itself took several days and at first, as Shackleton recorded, ‘the two amateur typesetters found themselves making many mistakes, and when they had at last “set up” a page, made all the necessary corrections, and printed off the required number of copies, they had to undertake the laborious work of “dissing”, that is, of distributing the type again. They plodded ahead steadily, however, and soon became more skilful, until at the end of a fortnight or three weeks they could print two pages in a day’

The book was illustrated with lithographs prepared and printed by George Marston, whose work was hampered by the presence of salt in the water, which acted upon the aluminium plates. Its covers, meanwhile, were made by the mechanic Bernard Day from Venesta board,⁵ an early version of plywood, that he salvaged from the 2,500

2. Shackleton, E. – *The Heart of the Antarctic*, Heinemann, 1909, Vol. I, p217.

3. Its original title, fortunately discarded, was *Antarctic Ice-Flowers*.

4. The printing press was most likely an ‘Amateur’ manufactured by Hewitt Bros. with a platen measuring 10 by 7 inches.

5. Comprising a layer of oak between two of chestnut (the latter prone to splitting, a feature common to many of the surviving copies) it supplied a variation in colour that Day would later exploit to advantage in 1912 when engraving covers for Volume III of the *South Polar Times*. So handy, indeed, was Venesta board that it was also used to make furniture for the base hut.

packing cases used to transport the expeditions supplies and then cleaned, chamfered and polished. (The insides of some boards show the stencilled marks indicating the contents of the original cases, in the absence of a numbered limitation individual copies are sometimes identified by the words BUTTER, BEANS, TURTLE SOUP, PETITS POIS.) The spine was made of leather, stamped with the 'two penguins' colophon, and leather hinges secured the boards to their book blocks which themselves were sewn with green silk cord.

The physical conditions in which the *Aurora Australis* was produced were taxing. 'The printing office,' as Shackleton wrote, measured just six feet by seven, and in addition to the letterpress equipment housed, 'a large sewing machine and bunks for two men.' In their unofficial account of the voyage, *Antarctic Days*, George Marston and his co-author James Murray, the expedition's biologist, described in detail the working conditions in a hut within which, according to Murray, fifteen men were, 'shut up together, say during a blizzard, which lasts a week.'

'Nobody goes out unless on business, everybody who goes out brings in snow on his feet and clothes. Seal-blubber is burned, mixed with coal, for economy. The blubber melts and runs out on the floor; the ordinary unsweepable soil of the place is a rich compost of all filth, cemented with blubber, more nearly resembling the soil of a whaling station than anything else I know

'Dust from the stove fills the air and settles on the paper as it is being printed. If anything falls on the floor it is done for, if someone jogs the compositor's elbow as he is setting up matter, and upsets the type into the mire, I can only leave the reader to imagine the result...'

Murray remarked on the particular difficulties encountered in printing the illustrations 'All the evils numerated above persecuted the lithographer, and he had others all to himself. The most delicate part of his work could not be done when the hut was full of activity, with vibration, noise and settling smuts, so Marston used to do most of his printing in the early hours of the morning, when the hut was as nearly quiet and free from vibration as it ever became, and there was a minimum of dust (at least in suspension in the air).

'I do not pretend to know the nature of the special difficulties that

the climate introduced into lithography, but I know this, that I've frequently seen Marston do everything right – clean, ink, and press – but for some obscure reasons the plates did not come right. And I've seen him during a whole night pull off half a dozen wrong ones for one good print, and he did not use so much language over it as might have been expected.⁶

To keep the printing ink fluid in sub-zero temperatures, a candle was lit under the platen, and to prevent the ink from becoming either too runny or too sticky it had to be moved at regular intervals. Once the printers left the candle burning when they were called away to another task. 'When they returned,' wrote Murray, 'they found that the plate had overheated and melted the inking roller of gelatinous substance. I believe it was the only one on the Continent and had to be re-cast somehow.' Given the paucity of materials available one can only marvel at their ingenuity.

The hard-won result was a book of around 120 unnumbered pages, printed in black and red with the title page of an aurora overprinted in blue, and was published in an edition of perhaps 60–100 copies. Such vagueness is explained in John Millard's introduction to a facsimile edition published in 1986 by Bluntisham Books and Paradigm Press. According to his research, individual sections were printed in different quantities, with title sheets placed either before or after the illustrations – sometimes also upside down or sideways – and some have missing leaves. Some, too, were collated after their return. Of the 56 copies Millard managed to locate two have variations in 'An Ancient Manuscript' by Frank Wild, writing under the pseudonym 'Shellback', where an illustration is replaced by additional text. Moreover, the final leaf usually lacks its intended illustration, bearing only (and even then only occasionally) the caption: 'A GIANT TICK WAS INVESTIGATING THE CARCASE.'⁷

The opening section of *Aurora Australis* is an account of the ascent of Mt. Erebus, an active volcano almost 12,500 feet high, by six members of the expedition in March 1908. Its author, Australian geologist T W. Edgeworth David FR S, wrote that upward prog-

6. Marston, G. and Murray, J. – *Antarctic Days*. Andrew Melrose, 1913, pp. 106–7.

7. The only extant copy known to have included the illustration was sold by a descendant of *Nimrod's* chief engineer at Bonham's, London in 2017 for £55,000.



The print room aboard *Nimrod* as depicted in *The Heart of the Antarctic* (Heinemann, 1909). Shackleton called it the 'Rogue's Retreat.'

ress was slow, 'as the altitude and cold combined to make respiration difficult', later, the descent was rapid, as the climbers slid down a series of snow-covered slopes after binding their loads 'into the shape of sausages' and sending them bouncing downwards, 'we let ourselves go again and again, in a series of wild rushes towards the foot of the main cone.' At the summit they investigated distinctive fumaroles. In less extreme climates these are simply openings in the Earth's crust through which steam and gases escape, but on Erebus the vapours were frozen into bizarre shapes 'Some resembled bee-hives, others were like huge ventilating cowls, others like isolated turrets, or bits of battlemented walls, others again in shape resembled various animals.' After a night with 'nothing but hard rubble under our sleeping bags,' the climbers woke at 4.00 am to an extraordinary scene. On a layer of dense cumulus cloud gathered under the base of the main crater and extending forty miles to the west, the shadow of Erebus was projected 'as on a vast magic lantern screen. ...All within the shadow of Erebus was a soft, bluish grey; all without was warm, bright and golden. Words fail to de-

scribe a scene of such transcendent majesty and beauty ' Alpinists of the time may have considered this a mere day trip – the slope was relatively gentle, with no rocky crags – but then they didn't have to measure craters, record temperatures, or describe the length and weight of the sledges they hauled, the number of toes that became frostbitten and how long it took to boil pemmican at high altitude in snow water.

The book as a whole resembles a kind of school magazine, mixing official reports with more whimsical contributions, and after the dutiful account of scaling Mt. Erebus its contents are various. The verse includes an ode to Mt. Erebus, written by Shackleton under his pseudonym 'Nemo', 'Southward Bound' by 'Lapsus Linguae' (Dr. Eric Marshall), and a ballad about Midwinter Night, listed in the Contents as by 'Nemo' but attributed in the text to 'Veritas' (and signed as such in some copies), which records the tedium suffered by whichever poor soul served as night watchman, whose responsibilities were to care for the ponies and dogs from 10.00 pm until 9.00 am, keep the stove burning, and make two-hourly metereological observations

'And this is the tale the watchman,
Awake in the dead of night,
Tells of the fourteen sleepers
Whose snoring gives him the blight.

From the corner cabin a mutter,
The listener kens not what,
It sounds like "yon pale moon,"
Or some other poetic rot

And some see tailors they knew of yore,
Stalk in with their mile-long bills,
And everyone when morning broke
Made a rush for calomel pills.'

Among the prose contributions is an account by 'Putty' (George Marston) of looking after Manchurian ponies in the *Nimrod's* hold during a stormy night, a record by 'A Messman' (Raymond Priestley) of the challenges faced in preparing meals ('At nine o'clock

I serve the porridge, distributing it about equally between the inside and outside of the bowls.’), a conversation with an Emperor penguin in the guise of a Scottish gamekeeper by ‘A.F.M.’ (Dr. Alistair Mackay) and a description of an imaginary land, ‘Bathybia,’ by Douglas Mawson.

The penultimate chapter, written by James Murray, is devoted to Bdelloid Rotifers, minute aquatic animals, visible only under a microscope, which can survive drought and extremes of cold and heat: ‘All the species found at Cape Royds have been brought quickly from -30° Fahr. to +60° Fahr., and have then been found actively feeding.’ For much of the year they are frozen into the ice. Quite apart from his aesthetic appreciation of their appearance – ‘beautiful little cone-shaped animals of crystal transparency, with a ruby red eye in the middle of a large head’ – it is not hard to see why Murray was fascinated by, and even had some fellow feeling for, the Rotifers ‘one of the hardest creatures in the world.’ Other members of the expedition were fascinated both by the Rotifers and by Murray himself, as he struggled to find conditions in which they could not survive. ‘It became a contest between Rotifers and scientist,’ Shackleton wrote, ‘and generally the Rotifers seemed to triumph.’

Shackleton’s primary purpose in initiating the *Aurora Australis* was, like other polar leaders before him, ‘to guard us from the danger of lack of occupation during the polar night.’ He may also have intended to offset the expedition’s costs by selling copies of the book when the *Nimrod* returned to Britain. In the event, all of the known copies were given to the crew or were presented to friends and benefactors, the latter bearing not only Shackleton’s inscription on the fly leaf but signatures at the rear from Day, Joyce, Marston and Wild.⁸ The blessing was mixed – many of the presentation copies were constructed on their return, using excess sheets that had often been poorly printed.

At the end of October 1908 Shackleton and three companions

8. One such copy is held by the National Maritime Museum, inscribed on the fly leaf by Shackleton to the Misses Dawson-Lambton (to whom the book was dedicated). The Dawson-Lambtons were elderly maiden sisters of eccentric bent who supported, among other causes, a fund for survivors of the Charge of the Light Brigade. Their donation of £1,000 had been misappropriated by Shackleton’s brother Frank.

set off for the South Pole, a journey (there and back) of around 1,700 miles. They were hindered by bad weather, and the loss of their four ponies meant that the men themselves had to haul the sledges. Rations were progressively reduced. On 9 January 1909 lack of supplies forced them to turn back. Shackleton wrote in his diary, 'We have shot our bolt, and the tale is latitude 88°23' South, longitude 162° East' – a new record for the most southerly point yet reached.⁹ In early March the expedition sailed from Antarctica to New Zealand, and from there back to Britain. They left behind several cases of whisky and brandy – recovered a century later in 2010 – but they took with them copies of the first book ever printed in Antarctica.

An epitaph was supplied by Griffith Taylor, of Scott's *Terra Nova* expedition. In 1912 he sledged to Cape Royds where, as well as several discarded sheets of *Aurora Australis*, he 'came upon some blue-lined foolscap in Shackleton's cubicle, so heavy in quality and smooth of surface that it positively invited me to write.'¹⁰ On it, while stuck in a blizzard, he jotted some notes as to how the travails of Scott, Shackleton and others might be commemorated. After many crossings out he came up with the word 'Institute'. These notes led, in 1920, to the creation of the Scott Polar Research Institute, of which he was a founding father and which has ever since been one of the world's foremost centres of polar studies.

9. Separately, a team under Edgeworth David discovered and 'claimed' for Britain the South Magnetic Pole. It was an arduous trek, during which David's mental health deteriorated to such an extent that he had to be replaced as leader by fellow Australian Douglas Mawson. Nevertheless, they covered some 1,260 miles there and back, a record for an unsupported sledge journey that was not bettered until the mid-1980s.

10. Taylor, G. – '*With Scott: the Silver Lining.*' Bluntisham Books, 1997, p. 178