

# History of antarctic exploration



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The heroic age of Antarctic Exploration was one filled with triumphs and discoveries, but for some, those years between 1895-1922 brought disappointment and death (Guly, 2012). One of its most notable proceedings was the coined 'race to the pole,' where British Robert Falcon Scott and Norwegian Roald Amundsen aimed to reach the uncharted geographical South Pole, both starting their expeditions around the October-November period of 1911 (Barrett, 2000). On December 14<sup>th</sup>, 1911 after an arduous 56 days of dog-sledding, Amundsen and his team of four were the first to fly their country's flag at the South Pole, beating Scott by a mere 34 days. Scott's traverse from the Pole was calamitous for him and his party of four, who all perished before returning to base, whereas Amundsen's team returned safely to Norway and proliferated news of their success (Barrett, 2000). Whilst both expeditions occurred concurrently and shared the goal of reaching 90°S, there were also a myriad of differences between Scott's *Terra Nova* and Amundsen's *South Pole* journeys that lead to the contrasting outcomes.

Despite both parties attempting to reach the South Pole, the intentions of the *Terra Nova* and *South Pole* expeditions were different. It is commonly assumed that attaining the Pole first was the main motivation behind both campaigns, exacerbated via the coinage of 'the race to the pole,' however Scott's earlier *Discovery* expedition wielded an abundance of findings that inspired him and his crew of 65 to pursue further scientific ambitions- even during his last stretch to the pole (Larson, 2011). Whilst Amundsen and his team of 19 carried out meteorological observations during the Antarctic winter, reaching the Pole first was his "main object" and had no intention to

make diversions (Amundsen & Chater, 2003, p. 49). Conversely, Scott did not siphon all of the focus on the polar trip, instead choosing to dispatch groups to explore and collect Antarctic specimens, even after the sighting of Amundsen on the continent (Larson, 2011). One hazardous diversion was Scott's fulfilment of the promise made to his Chief of Scientific staff, Edward Wilson, for the retrieval of Emperor Penguin eggs during the deep-winter period at Cape Crozier. Wilson and his team of two made the 140-mile trek in dark, extremely cold conditions and faced horrific difficulty man-hauling the many frozen and damaged eggs back to base, disproving Wilson's theory that penguins evolved from reptiles (Berry, 1915). Despite being faced with freezing temperatures, exhaustion and illness, Scott's march from the Pole still included geologic observation and sample collection, with the remaining team hauling the barest necessities, fieldnotes, diaries and 35-pounds worth of specimens to their death- with one fossil being the *Glossopteris* leaf in support of Darwin's continental drift theory (Scott, 2004; Larsson, 2011). Amundsen's lack of scientific ambition for this expedition ensured his team travelled light, enabling the swift pull of dog-sledges without the distraction "of any adventures," allowing for the brisk yet successful return from the Pole (Amundsen & Chater, 2003, p. 274). Although the *Terra Nova* expedition fulfilled many scientific goals, the comparison to Amundsen's 'dine-and-dash' polar approach insinuates that Scott's refusal to give-up his scientific aspirations may have been a detrimental factor in the death of his final party, who perished a mere 11-miles from their One Ton depot (Larson, 2011).

Amundsen and Scott used different methods of transport throughout their expeditions, ultimately having an effect on the pace and time each took to reach the Pole. Scott drew inspiration from Shackleton's *Discovery* expedition when planning, choosing to abandon the reliance of dogs as they did not have the expertise to use them, instead adopting ponies and 'innovative' motor-sledges to haul supplies to the Beardmore Glacier (Larson, 2011). Unfortunately, one motor-sledge fell through the ice during the ship's unloading, and despite being the forerunner of the modern-day tank and snowmobile, the remaining two sledges broke-down early on (Pugh, 1972). Conversely, Amundsen had worked with Inuits during his *Gjøa* expedition, therefore being proficient in dog-sledding; he also recruited experienced dog-drivers and killed the weaker canines as the journey persisted, using the meat for food (Pugh, 1972). Whilst Amundsen believed it "was hard" to kill the creatures, he affirmed it was needed "to reach our goal," whereas Scott expressed reluctance in exterminating the dogs as he regarded them as "friends and companions" (Amundsen & Crater, 2003, p. 469; Murray, 2008, p. 307). Amundsen utilised skis throughout his depot and Pole journeys, as all his men were competent on them, employing accomplished skier Olav Bjaaland to set the pace (Amundsen & Crater, 2003). Conversely, Scott's team were too inexperienced for skis and instead used ponies until overcoming the Beardmore Glacier to man-haul their provisions to the Pole; however, the food sources for the ponies had to be brought along and as soon as they depleted, the ponies became weak and were shot, whereas Amundsen's dogs were free to gorge on seals and penguins as they traversed towards the Pole (Pugh, 1972). Even though Amundsen could have travelled faster with his dog-sleds than Scott with his ponies, Pugh (1972)

found that both teams covered the first 300-miles of the journey across the ice-shelf in similar time. However, the dash to the Pole revealed the superiority of Amundsen's dogs, covering 200-miles more in the same time it took Scott to ascend to the polar plateau and to reach 90 ° S (Pugh, 1972). Amundsen's expertise in his transportation choices, as opposed to Scott's reliance on Shackleton's past methods and newfound technology, assisted with his team's swift dash to the Pole that will be forever revered in history.

Scott and Amundsen took different Polar routes and relied on opposing depot-laying strategies. Scott's basecamp was situated at Cape Evans, aptly named after his second-in-command, 15-miles north of Hut Point where his first hut was erected in 1902 (Preston, 1999). Amundsen's base was made at the Bay of Whales, situated 60-miles closer to the Pole than Scott's, naming it Framheim as it was the ' home of the Fram' vessel that had sailed Amundsen to Antarctica (Amundsen & Crater, 2003). Despite Amundsen's locational advantage, Scott's base was better suited for geographic exploration of the Dry Valleys, allowing for the study of glaciers, rock-outcroppings and bays alongside that northern coast (Larson, 2011). Scott's polar route was the same as chartered by Shackleton up until 88° 23' S over the Beardmore Glacier, whereas Amundsen's route was through unknown land and lead to the discovery and ascent over the Axel Heiberg Glacier (Pugh, 1972). During the spring before leaving Framheim, Amundsen laid out three-tonnes of provisions in depots, using dogs in teams of six to pull the 650-pound sleds, having 110 dogs at his disposal (Pugh, 1972). The last depot was placed at the 83<sup>rd</sup> parallel and to ensure that no depots were to be overlooked, Amundsen laid each in the midst of a cross of bamboo flags

that had notes on the depot's location (Amundsen & Crater, 2003). Scott however laid only one depot in advance, named One Ton depot situated at latitude 79° 40', which was 30-miles short of its intended location due to the weakened state of his ponies (Preston, 1999). Scott's strategy instead consisted of taking a large support-party to lay depots down as they traversed to the Pole and marked them with a single flag, with groups turning back the further inland they went- akin to Shackleton's 1908 journey (Pugh, 1972). Furthermore, Amundsen was a budding nutritionist and understood certain vitamins prevented scurvy, thus ensuring his men constantly ate seal-meat to cease the onset; Scott's rations contained no traces of Vitamin B or C, except when dogs or ponies were eaten, leaving Scott and his last four men malnourished and manifesting signs of scurvy from their basic provisions- their weakened states bringing death closer (Kippenes, 2012; Preston, 1999). Perhaps if Scott laid more depots instead of conducting scientific explorations then his polar party may have survived, especially with the advantage of following a chartered route, however Amundsen's ample reserves of food meant that only his followers were able to maintain their strength throughout the perilous journey and be the ones to survive.

The disparity between Scott's exclamation " Great God! This is an awful place," and Amundsen's " the land looks like a fairy-tale" highlights their differing perceptions of Antarctica once their fates were sealed, where one would die without seeing the results of his ambition and the other would be known as the first to reach the South Pole (Maxwell, 2012, p. 47; Huntford, 1980, p. 438). Whilst it seems that Amundsen succeeded and Scott failed,

the scientific ambitions of *Terra Nova* were largely fulfilled and allowed for the development of Antarctic science and exploration. However, comparing the different intentions, transportation, routes and depot-laying strategies used between the expeditions one can see that Amundsen's experience in the Arctic proved invaluable for his survival- as his use of dogs, skis and depot-preparations were superior to that of Scott's. Despite Amundsen's prestigious attainment of the Pole, Scott will always be known for his heroic endurance, leadership and especially his dedication to science- never a failure.

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