From the Southern Association for Vascular Surgery

Leadership in difficult times

James M. Seeger, MD, *Gainesville, Fla*

When I began to consider what to speak about in this address, I decided that I would not spend time reviewing the difficulties we face in the current practice of vascular surgery. We don't need another recitation of how bad things are. Change is a constant, and challenges are what make life interesting, although I am sure that we all wish that things were not so interesting at times. However, it was important to choose a topic that had at least some relevance to our professional lives, as for each of us our profession activities make up such a substantial portion of our existence. And so I chose to address the topic of leadership, in particular, leadership in difficult times.

Ralph Waldo Emerson wrote, "There is properly no history, only biography." To me, this means that despite external forces that at times seem both uncontrollable and larger than the people affected by those forces, events and outcomes are profoundly shaped by the individuals involved. Furthermore, the most difficult times often result in emergence of the best leaders, and the quality of the leadership in such situations most clearly influences outcome. This has become more and more evident to me as I have observed the organizations with which I have been associated during my career. It has seemed to me that often we chose our leaders on the basis of criteria other than their leadership skills and that people who seek leadership positions at times do so for the wrong reasons. In the health care environment of the past, it may have been acceptable for our leaders to have poor leadership skills or to "learn on the job." But now the environment has changed. Now the people selected for leadership positions in our profession must be successful leaders in difficult times. However, the question is, How do we identify such individuals, and what are the characteristics of a leader that result in success of the organizations or ventures that he or she leads?

To try to answer this question, I would like to share with you some leadership lessons from the history of exploration of our globe, in particular, the exploration of the earth's polar regions, some of the last places on the surface of the earth to be visited by human beings. The story of the exploration of the polar regions represents some of the best and worst examples of leadership in difficult circumstances. In addition, these were the last great adventures in which small groups of individuals could accomplish something truly unique in the exploration of our surroundings. However, despite the allure of adventure associated with polar exploration, the polar regions of our planet are harsh, unforgiving places that severely test an individual's organization and leadership skills, and extract the ultimate price for failure. Because of this, many who have studied leadership, in particular, leadership in difficult times, have turned to the history of polar exploration and the stories of the individuals involved to understand and to teach us what makes a truly great leader.

The initial recorded visits to the earth's polar regions were to the arctic by the Greeks in the fourth century BC and by the Norwegian Vikings in the Middle Ages.[1] However, the full flowering of polar exploration did not occur until the 1700s and 1800s, when, driven by a desire for a short route to the riches of the glorious East, multiple English expeditions were undertaken in a futile search for the Northwest Passage and the mystical North Polar Sea. These were primarily Royal Navy expeditions, and success in such ventures became an alternate route to promotion in that peerage-clogged organization. Exploration of the southern polar region also was undertaken during this time, and James Cook, a Royal Naval Officer, attempted to reach the southern Arctic continent in 1773 and 1774. However, he was turned back by ice, and it was not until 1820 that Edward Barnsfield, another Royal Naval Officer, first set foot on the antarctic continent. Subsequently, in 1834 James Clark Ross, also a Royal Naval Officer, mapped a portion of the coast of the continent, sited the great volcano Mount Erebus, and discovered the Great Ice Barrier, the Ross Sea, and the Weddell Sea. Polar exploration then shifted again to the North, driven by the search for Sir John Franklin and his 128 men, who died of exposure and

From the Division of Vascular Surgery, Department of Surgery, University of Florida.

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Reprint requests: J. M. Seeger, MD, University of Florida, Vascular Surgery, Box 100286, JHMC, 1600 Archer Rd, Gainesville, FL 32610 (e-mail: seeger@surgery.ufl.edu).

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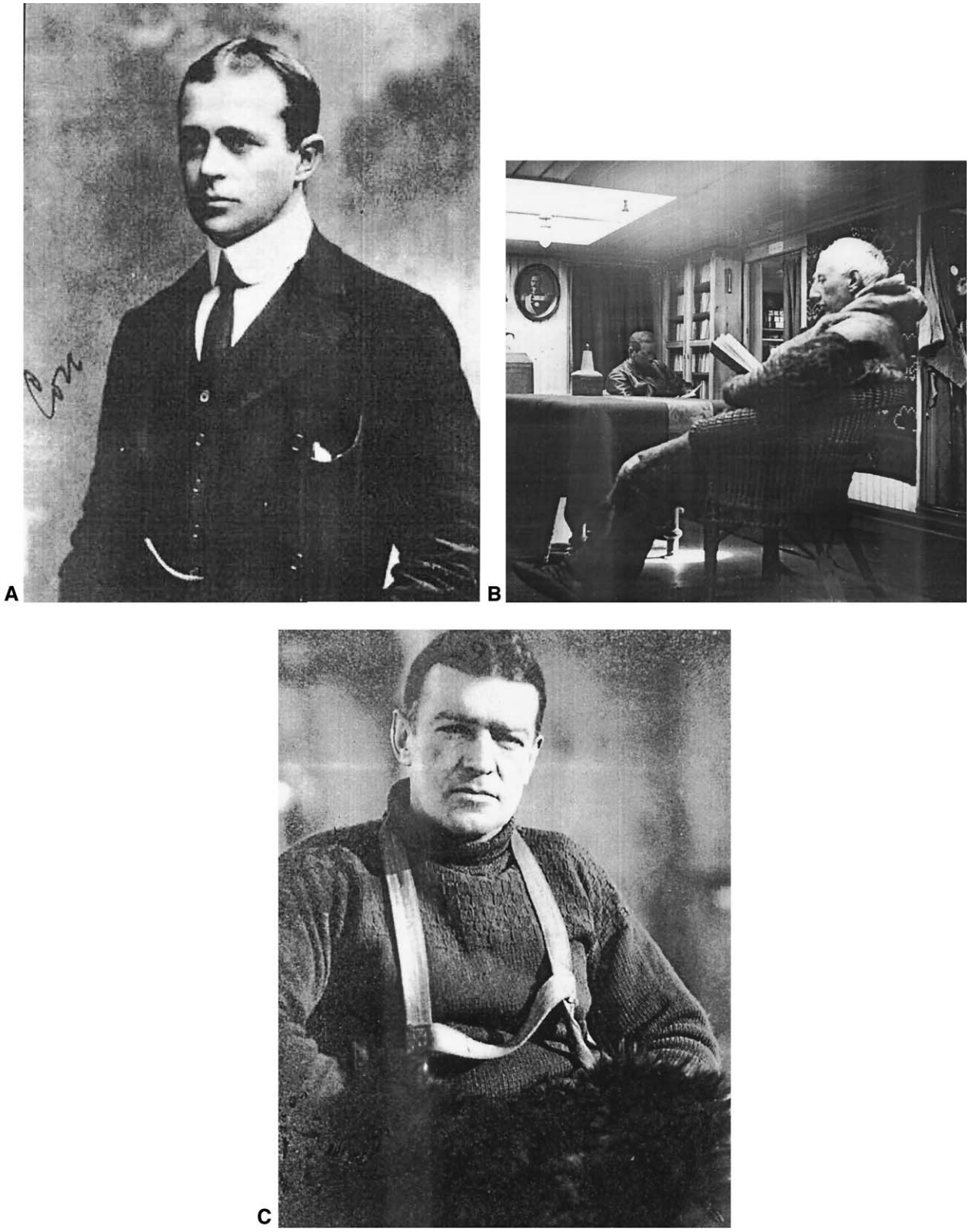

Fig 1. A, Robert Falcon Scott in 1909, before his last expedition. (From Huntford R. The last place on earth. New York: Atheneum Press; 1985. [Original title: Scott and Amundsen. Fairfield, Pa: Fairfield Graphics, 1979.]) **B,** Roald Amundsen. (From Huntford R, Jacobsen A-C. The Amundsen photographs. New York, NY: The Atlantic Monthly Press; 1987. p 169.) **C,** Sir Ernest Shackleton. (From Alexander C. 1998. The Endurance: Shackleton's legendary Antarctic expedition. New York, NY: Alfred A. Knopf; 1998.)

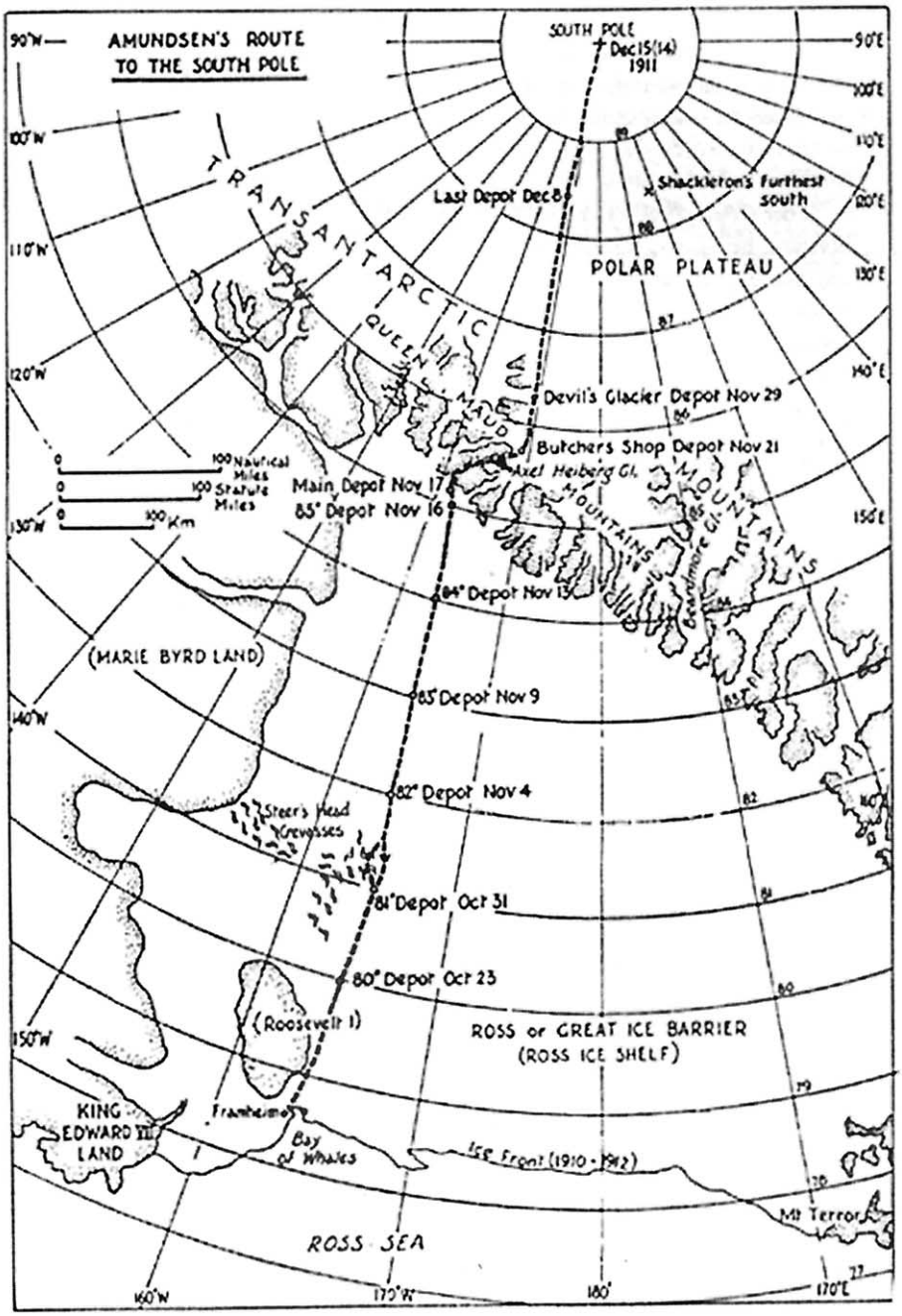

Fig 2. Amundsen's route to the South Pole. (From Huntford R. The last place on earth. New York: Atheneum Press; 1985. p 449. [Original title: Scott and Amundsen. Fairfield, Pa: Fairfield Graphics, 1979.])

starvation between 1848 and 1850 while again searching for the Northwest Passage. Franklin's expedition ended the era of polar expedition funded by the Royal Navy, because the cost had become too high and the embarrassment from incompetence too great to bear. In the south, not much more of significance happened until the geographic North Pole was finally reached by the American Robert Peary in 1909. After this, only the South Pole remained to be taken, and the exploration of the "last place on earth" began in earnest.

Explorations of Antarctica in the early 20th century would be the greatest challenge faced by polar explorers, because the antarctic continent is the coldest (−128.6°F), windiest, and driest place on earth.[1] Three interesting and very different men, Robert Falcon Scott of England (Fig 1, *A*), Roald Amundsen of Norway (Fig 1, *B*), and Earnest

Fig 3. Norwegians at the South Pole. *Left to right*, Oscar Wisting, Olav Bjaaland, Sverre Hassel, Roald Amundsen. (From Huntford R. The last place on earth. New York: Atheneum Press; 1985. [Original title: Scott and Amundsen. Fairfield, Pa: Fairfield Graphics, 1979.])

Shackleton of Ireland (Fig 1, *C*), dominated these explorations. Scott, accompanied by Shackleton, first went south in 1902-1903, leading the Discovery Expedition, which included a heroic but ill-conceived and ill-managed sledge journey that, while reaching a new farthest south point of 82°17′, almost ended in tragedy.[1] Subsequently Shackleton returned in 1907-1908 to lead the Nimrod Expedition, in which the magnetic South Pole was discovered, climbed Mount Erebus, and first explored King Edward Land. During this expedition Shackleton also led a sledge journey to within 97 miles of the geographic south pole, but turned back, almost within sight of his goal, to save the lives of the expedition members. These initial expeditions to explore the antarctic continent set the stage for the race between Amundsen and Scott to be the first to reach the South Pole and the subsequent attempt by Shackleton to be the first to cross the antarctic continent.

Roald Amundsen devoted his life to making himself a "professional" polar explorer.[1] Amundsen was an expert skier and arctic outdoorsman who "apprenticed" aboard whaling ships in the arctic, and was the second mate on *Belgica* when, in 1898-1899, she became the first ship to winter over in the antarctic pack ice. He then lead the Gjoa Expedition, between 1903 and 1906, during which he spent 3 years drifting through the arctic pack ice and demonstrated for the first time the presence of the fabled, but impassable, Northwest Sea passage. During the Gjoa Expedition Amundsen studied the methods by which the Eskimo lived and prospered at high latitude, acquiring many aspects of their clothing, dog driving skills, and diet. He then spent 2 years meticulously planning an attempt to reach the South Pole, carefully selecting the men for his expedition and refining every aspect of equipment, from clothing to dogs to sledges to food. Furthermore, he was by then a seasoned leader who led by force of personality; respected the man, not the rank; selected men for his expedition on the basis of their expertise and previous arctic experience; and was personally involved in every detail of the expedition.

Amundsen began his journey to the South Pole from the Bay of Whales in the Ross Ice Barrier on October 15, 1911, after spending the previous winter preparing at Framheim, his base on the Ross Ice Barrier (Fig 2).[1] During the previous antarctic summer and fall he had established depots with almost two tons of supplies on the Ross Ice Shelf at latitudes 80°, 81°, and 82° along his planned route. He also had carefully marked both the locations of these depots and his proposed route south across the ice shelf the next summer. His attempt to reach the South Pole was thus carefully planned and included a large margin of safety in supplies, tried and tested arctic equipment, and a polar crew experienced in travel in the arctic regions. His men were expert skiers (one was a cross-country champion) and sledge dog drivers, and they used the method of polar travel perfected by the Norwegians, that is, men skiing beside sledges pulled by Eskimo dogs.

They crossed the Ross Ice Barrier and reached the trans-Antarctic Mountains on November 17, there discovering and climbing the Axel Heiberg glacier, and reached the antarctic plateau on November 30. Two weeks later, on December 15, 1911, they reached the geographic South Pole (Fig 3). After spending 3 days at the pole they returned by the route that they had pioneered, arriving back at Framheim on January 26, 1912. They and their remaining dogs arrived at their base fit and healthy after traveling 1400 miles over the ice barrier and polar plateau. Despite later being criticized for making their journey appear "too easy," they had climbed an unmapped glacier that even today is not used as an approach to the antarctic plateau; endured fog, blizzards, and temperatures to 20 degrees below zero; and had not only survived, but prospered, while exposed to the harshest climate on earth for more than 3 months.

Robert Falcon Scott was a Royal Navy Officer who came to polar exploration as a means for attaining promotion when it seemed unlikely that he would achieve rank through traditional means.[1] Although he had spent 2 years in the Antarctic leading the first major British expedition to that region, he remained largely an amateur polar explorer. He could not ski, did not believe that dogs could be successfully used to pull sledges in the Arctic, and believed that improvisation was better than careful planning, as was the philosophy of the British Navy of the time. Furthermore, he led on the basis of the authority of his rank, and selected men for the expedition who understood Navy discipline and who would not compete with him for leadership, although most had little if any polar experience. He also chose to use Siberian ponies to pull his sledges in his attempt to reach the South Pole, because that was what Shackleton had done on the expedition that came within 97

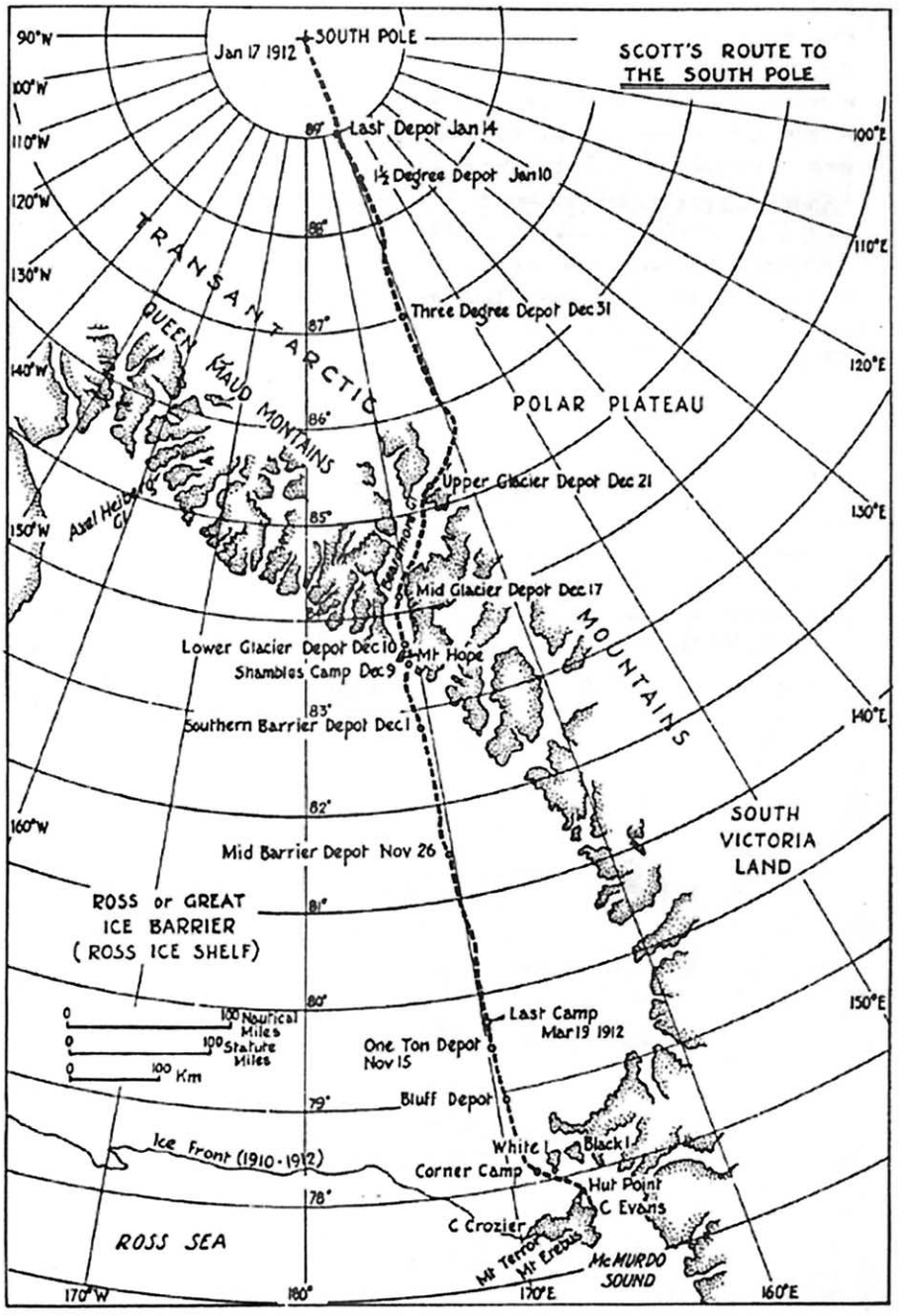

Fig 4. Scott's route to the South Pole. (From Huntford R. The last place on earth. New York: Atheneum Press; 1985. p 447. [Original title: Scott and Amundsen. Fairfield, Pa: Fairfield Graphics, 1979.])

miles of the pole. In addition, he brought with him three untested motor sledges, the first attempted use of motorized transport in polar exploration, but ultimately thought that hauling by men was the romantic ideal of the true arctic explorer.

Scott began his journey to the South Pole on November 1, 1911, from Hut Point, where he had wintered over next to McMurdo Sound (Fig 4).[1] However, rather than preparing for their journey to the pole during the previous winter, as Amundsen had done, Scott and his men spent the time in pleasant diversions such as publishing a newspaper and listening to lectures on nonpolar topics. In addition, they had been eating a civilized diet of canned food brought from England that was low in vitamin C and B.

Fig 5. Cairn marking the site of Robert Falcon Scott's tent. (From Collection of Sir Joseph James Kinsey: Antarctic and mountaineering photographs. 1912. [PAColl-5011]. Reference number PA1-f-066-086-3. Alexander Turnbull Library, National Library of New Zealand, Wellington, New Zealand, Te Puna Matauranga o Aotearoa. With permission.)

Scott did not ascribe to the theory of the American physician-explorer Cook that fresh meat prevented scurvy, despite Dr Cook's successful treatment of scurvy with fresh seal meat during the *Belgica* expedition. Furthermore, also in contrast to Amundsen, Scott had layed down only one depot of one ton of supplies on the Ross Ice Barrier the previous summer, and even up to the start of his journey south had not planned his route in more than the general terms of following the route Shackleton had taken. He also had not entirely decided how supplies used on the outward journey would be replenished for use during the return trip to safety.

Five days after starting, just past corner camp, the motor sledges on which Scott's "dream of great help from the machines" rested, broke down, and Siberian ponies, with their nearest natural food source 2000 miles away, became the only transport other than man hauling for the expedition. Scott had dogs with him, but did not really believe in using them to pull sledges in the arctic. He therefore used his dog sledges primarily for carrying fodder for the ponies until they were no longer needed, then sent the dog sledges back to be used to supply the barrier depots for the return journey from the pole, a plan he devised only after his party was on the Ross Ice Barrier. At the base of Beardmore Glacier, the pony fodder was gone, and they were shot and stored for meat on the return journey. Man hauling then became the only transport for the remainder of the expedition, including the climb up the glacier to the Antarctic Plateau. Hauling an average of 200 pounds per man, this took 11 agonizing days. At that point the final support party turned back, and Scott, Oates, Bowers, Wilson, and Evans, rather than a planned polar party of only four, began the last 150 miles of the journey to the pole. They were already beginning to suffer from vitamin deficiency and were losing weight from inadequate food to support the grueling work of man hauling sledges up to 14 hours per day. Furthermore, they had begun to eat the food planned for the plateau journey while they were still on the barrier, and now there was also one more mouth to feed on the remainder of the journey to the pole. In addition, there was significant dissention in the group, exacerbated by Scott's isolation and leadership style.

On January 17, 1912, they reached the pole, to find that the Norwegians had beaten them there by more than a month. Scott wrote in his diary, "Great God! This is an awful place, and terrible enough to have labored to it without the reward of priority." They spent only 1 day at the pole, then began the desperate return journey and the effort to find the return supply depots that had been placed too far apart, contained too little food, and were poorly marked. They were too malnourished, too sick with scurvy, and too worn out from man hauling to accomplish this. On February 5 Evans died, potentially as the result of a cerebral hemorrhage secondary to a fall made more likely from scurvy. On March 17 Oates broke down completely, and crawled out of the tent into the snow, never to be seen again. Finally, on March 21, Scott, Bowers, and Wilson died in their tent, only 11 miles from the one ton depot. Their bodies were found the next spring; Oates' body was never discovered. They were buried where they lay, under a large cairn built over the tent that was their last resting place (Fig 5). The publication of Scott's edited journal made him an overnight hero. He was hailed as a romantic polar explorer who gave his life and the lives of his companions in a noble quest. He was made a hero by the English opinion leaders of the time as a "glorious failure," and the evidence of his weakness as a leader was suppressed to fit this romantic ideal.

Once Amundsen had taken the South Pole, only one great adventure of Antarctic exploration remained, a transcontinental crossing. In December 1914 Earnest Shackleton, who had come so close to being the first man to reach the South Pole, set out to do this aboard the ship *Endurance*.[2]

Shackleton, like Scott, was also an amateur polar explorer, although he became and remained a polar explorer because, as he told his wife, "it was the thing I am best at." Furthermore, he had learned much about survival in the harsh antarctic environment from his previous polar expeditions. The son of a Quaker physician and a nurturing Irish mother, he had grown up in a decidedly feminine household with eight sisters, numerous aunts, and his grandmother. He left school early to join the Merchant Marine, and gained his masters certificate by age 24 years. He also had spent much of his life before this expedition consciously teaching himself to be a good leader of men, particularly in difficult circumstances.

The *Endurance* left St. George's Island in the South Atlantic Ocean on December 5, 1914, and entered the antarctic pack ice on December 7 (Fig 6).[2] The pack ice

Fig 6. The journey of the *Endurance* crew. (From Alexander C. The Endurance: Shackleton's legendary Antarctic expedition. New York, NY: Alfred A. Knopf; 1998. Map from National Geographic Maps, National Geographic Image Collection, 1998.)

that season was the worst in years, and by January 27, 1915, despite all of the efforts of the crew, the ship was frozen in the ice, only 80 miles from their intended landing site at Vahset Bay. They wintered over in the relative comfort of the ship while they drifted, trapped in the pack ice in the Weddell Sea, expecting to continue their expedition when the ship was released from the ice the next spring. However, the coming of spring and the return of the sun did not result in the ship being freed from the ice. Rather, the spring and summer storms and partial breakup of the ice significantly increased the pressure of the ice on the ship, and her hull began to crack. On October 27, 1915, the ship was finally crushed by the pack ice, and sank on November 21, leaving Shackleton and his 28 men stranded on the Antarctic sea ice, 180 miles from nearest land and 1000 miles from the nearest human being. To try to survive and get themselves home, they had only the limited supplies that they could salvage from the ship before it sank, and the ship's three lifeboats. Shackleton's reaction to this tragedy was to call his men together, explain the reality of situation, and say, "So now we will go home."

After first attempting to man haul their boats and supplies to land, they drifted on the ice floes for almost 7 months. Despite their dire situation, their time on the ice at Ocean Camp was relatively pleasant, and they always had confidence that "the boss" would get them home. When the pack ice finally broke up on April 9, 1916, they took to the lifeboats, and sailed and rowed the dangerously overloaded boats continuously for 6 days to reach Elephant Island, setting foot on solid land on April 15 for the first time in more than 16 months. Elephant Island was deserted and so isolated that it was unlikely that they would be discovered there. It was also evident that, as the pack ice began to expand around the island in the coming antarctic winter, seals and penguins, on which they depended for food, would become increasingly scarce.

Shackleton therefore decided they must attempt to reach the whaling station on St. George's Island, from

Fig 7. Rescue from Elephant Island. Picture from "30 August, Wednesday, Day of Wonders," Hurley diary. (From Alexander C. The Endurance: Shackleton's legendary Antarctic expedition. New York, NY: Alfred A. Knopf; 1998. p 203.)

which a rescue operation could be mounted. To do this, they refitted the largest of the lifeboats, the *James Caird*, adding decking from packing crates to make it dryer and more seaworthy, and loading it with rocks for ballast. Shackleton and four companions, including Wolsley, the former captain of the *Endurance*, set out on May 2, 1916, to attempt an 800 mile journey in an open 22½ foot boat over the most dangerous ocean in the world. Because of clouds and storms, Wolsley was only able to take two sextant readings during the journey, but using those fixes and superb dead reckoning, they arrived at St. George's Island on May 10, and safely landed the next day. Had they missed the island, they and likely all of the men on Elephant Island would have died, because past St. George's Island was only open sea. That boat journey is now recognized as one of the greatest small boat voyages ever undertaken.

Unfortunately, they had landed on the opposite side of St. George's Island from the whaling station, and it was too dangerous to attempt to sail to the other side. Therefore Shackleton and the two of his men who were still able to travel set out at 2:00 AM on May 19, 1916, to cross the heart of the island on foot. They crossed mountains and glaciers that were not subsequently crossed until the 1950s by professional mountain climbers, and reached Stromness Whaling Station on May 20. The foreman took them to the station manager, whom Shackleton knew, and when Shackleton asked the station manager if he knew him, the manager replied, "Who the hell are you?" Shackleton replied, "My name is Shackleton." The foreman turned aside and wept. A boat was dispatched to collect the remainder of the *James Caird* crew from the opposite side of the island.

The situation for the remaining men on Elephant Island was still bleak. Thus, despite the long and arduous boat journey that he had just completed, Shackleton immediately set out to organize their rescue. Finally, after several failed attempts and numerous delays, he returned to Elephant Island on August 30, 1916, to retrieve the remainder of his crew (Fig 7). Despite almost 2 years on the ice, with innumerable hardships and dangers, everyone returned alive. Because of the "failure" of the planned trans-Antarctic crossing, Shackleton's exploits were largely ignored until recently, when the remarkable nature of his leadership in keeping his men together as a team and managing against almost impossible odds to lead them all safely home has begun to be studied. Shackleton's accomplishment is now recognized as one of the greatest feats of leadership in the history of polar exploration, if not for all times. As was well said by British explorer Apsley Cherry-Garrord, a member of Scott's tragic polar expedition, "and if I am in the devil of a hole and want to get out of it, give me Shackleton every time."

What lessons from these stories of exploration of the Antarctic continent at the turn of the 20th century and the men who led them can be applied to the challenges we face today? The first and most obvious lesson is that good leadership makes the difference.[3,4]

Amundsen won the race to the pole because he was better prepared, better equipped, and led a "happier" group than Scott. His work as the leader of that expedition made what was a long and dangerous journey to the heart of an entirely unknown continent in one of the harshest climates on earth look "easy." In contrast, Scott's failure as a leader, because of poorly planning his expedition, leaving too narrow a margin of safety, and limiting the effectiveness of his sledge journey team by using poor equipment, methods, and leadership techniques, cost the entire group their lives. More strikingly, Shackleton, almost entirely through his leadership skills, saved his entire crew after their ship was crushed, and brought them home despite almost insurmountable obstacles. Perhaps Shackleton's greatest attribute in this accomplishment was the ability to keep his men focused, optimistic about survival, and working as a team toward the goal of getting home safely, for almost 2 years, when they were constantly wet, cold, hungry, and in imminent danger of death. Numerous other expeditions to the polar regions, beset by problems less severe than those faced by Shackleton's group, met with tragedy.

If leadership is of paramount importance in the success or failure of organizations and ventures, what are the characteristics of successful leaders, particularly in difficult times? To be successful, leaders must be visible and set a personal example; must be optimistic but grounded; must be scrupulously fair and minimize status differences; must master conflict; must be willing to take risks, while being ever concerned about the well-being of those they lead; must never lose sight of the ultimate goal, while adapting to changing circumstances; and must never give up (Table).[3,4] Furthermore, they must always remember that leadership is a responsibility, not a privilege. As Shackleton said, "leaders

Qualities necessary for leadership in difficult times

- Be visible/personally involved
- Be optimistic but grounded
- Be scrupulously fair
- Minimize status differences/respect the individual
- Master conflict
- Balance safety and risk
- Be focused but adaptable
- Never give up

face a thankless and lonely job, especially in hard times."[3] Leadership is something that, at least in part, must be learned and must constantly be developed. Some individuals may be born with the talent for leadership, but without educating themselves they will likely be ineffective. Identifying and selecting good leaders is a remarkable challenge, but we must successfully accomplish this task if our organizations and ventures are to succeed.

Although we as a profession and specialty are facing difficult times, we must remind ourselves that time and demographics are on our side. Patients need what we can do, and in the future even more patients will seek our care. Though we may well be doing different things in the future, those likely will be more interesting and exciting things, as our new generation of vascular surgeons understands. Good leadership will take us through these difficult times, just as Amundsen safely led his men on the first successful visit to the geographic South Pole and Shackleton led his men to safety after being stranded on the Antarctic pack ice 1000 miles from civilization. Although the stories of these men who first explored the "last place on earth" are almost 100 years old, they still have much to teach us.

REFERENCES

1. Huntford R. The last place on earth. New York: Atheneum Press; 1985. [Original title: Scott and Amundsen. Fairfield, Pa: Fairfield Graphics, 1979.].
2. Alexander C. The Endurance: Shackleton's legendary Antarctic expedition. New York, NY: Alfred A. Knopf, 1998.
3. Morrell M, Capperell S. 2001. Shakleton's way. New York, NY: Penguin Books; 2001.
4. Perkins D. 2000. Leading at the edge: leadership lessons from the extraordinary saga of Shakleton's Antarctic expedition. New York, NY: American Management Association.

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