chapter 16

# LIFE AND DEATH

By the early 1860s the path of Franklin’s doomed expedition had become pretty clear. It was now known that, after leaving Greenland, *Erebus* and *Terror* had crossed Baffin Bay, sailed through Lancaster Sound and that Franklin and Crozier made their winter camp at Beechey Island. In that same year of 1845, or more likely at the start of the summer of 1846, they sailed north-west, up the Wellington Channel, presumably seeking a way round the heavy ice blocking their way through Barrow Strait. Finding no route through, they circumnavigated the previously unexplored coast of Cornwallis Island. (This may have proved to be a cul-de-sac in the search for the Northwest Passage, but it was a remarkable piece of exploration on a part of the map that would not be revisited for another 100 years.)

直到19世纪60年代初，Franklin命中注定的失败探险的整个过程已经变得相当清晰了。现在已知的是，在离开格陵兰岛后，*厄瑞玻斯号*和*恐怖号*经过巴芬湾，穿过兰开斯特海峡，之后Franklin和Crozier在比奇岛扎营过冬。在1845年的同一年，当然更有可能是1846年夏初，他们沿着威灵顿海峡向西北航行，大概是在寻找一条道路，能够绕过巴罗海峡厚重冰层的层层阻碍。由于找不到通路，他们绕到了以前未被探索过的康沃利斯岛海岸。（事实证明，这可能是寻找西北航道的一条死胡同，但是对这一部分地图的探索是非常值得尊敬的，在之后的100年里，这部分区域都不会再被探索。)

With ice again piling up to the west, Franklin must have decided to take his ships south to try to find a way through. They seem to have found clear water and sailed successfully down Peel Sound, passing between Somerset Island and Prince of Wales Island and keeping on the move until, towards the end of the summer of 1846, they reached Victoria Strait. Here they would have hit a barrier of impenetrable oceanic, multi-year ice, 40 or 50 feet thick – in Ann Savours’s memorably evocative image, ‘scouring, churning, groaning and forcing its way down what was later called McClintock Channel’.

随着西部冰层再次堆积，Franklin一定已经决定带领他的船只南下，并试图找到一条可通行的路线。他们似乎找到了未结冰的清澈海面，并成功地沿着皮尔湾航行，穿行在萨默塞特岛和威尔士亲王岛之间，一直前进着，直到1846年夏末，他们来到了维多利亚海峡。在这里，他们将会遇到一片难以穿越的冰层，积年累月的冰层厚度达到了40甚至50英尺——Ann Savours对此的回忆令人印象深刻，“伴随着冲刷、翻滚和呻吟，我们蛮横地冲进了这个后来被称为麦克林托克海峡的地方”。

Why they didn’t take the more sheltered eastern route on the other side of King William Island remains unanswered, but it seems more than likely that it was down to ignorance of the terrain. It needs to be remembered that Franklin and Crozier, bent over their tables in the wide stern cabins, would have been poring over charts of only recently discovered lands, whose details were often sketchy. They might have had monogrammed dinner plates and personalised silver cutlery, but they didn’t have very good maps. The charts with which Franklin had been supplied by the Admiralty showed King William Land not as an island at all, but as a piece of land attached by an isthmus to the Boothia Peninsula. Three experienced Arctic explorers – Sir John Ross, Peter Dease and Thomas Simpson – similarly believed that James Ross Strait was joined to the mainland. Franklin and Crozier and their ships therefore continued to sail south into the ice-trap that was to squeeze the life out of them. The Victory Point note names the day when they first found themselves ‘beset’ as 12 September 1846. They were, we know, still beset in April 1848. Their position, ironically, was on the line where the Atlantic and Pacific tides meet. It was the closest they would get to either ocean again.

他们为什么没有选择威廉国王岛东边一侧隐蔽的路线，至今仍然没有答案，但似乎更有可能是因为对地形的不了解。需要牢记的是，Franklin和Crozier一定曾弯腰伏在船尾宽大的船舱里的桌子上，仔细研究海图上那些最新发现的陆地，而海图的细节往往不够详尽。他们可能有印有花押字的的餐盘和私人定制的银制餐具，但他们没有足够优质的地图。根据海军部提供给Franklin的海图，威廉国王那片地区根本不是一个岛屿，而是一片由地峡连接到布西亚半岛上的陆地。而三位经验丰富的北极探险家——John Ross爵士、Peter Dease和Thomas Simpson——也都认为詹姆斯罗斯海峡与大陆相连。因此，Franklin和Crozier以及他们的船只继续向南航行，驶进了一处将吞噬他们生命的极地陷阱。胜利角笔记记录着他们第一次发现被“冰层围困”的日子是1846年9月12日。我们知道，1848年4月，他们仍然被围困着。颇具讽刺意味的是，他们的位置是在大西洋和太平洋潮汐的交汇处。那是他们再次离这两个大洋最近的一次。

Arctic winters are brutal enough, especially as three months are spent in total darkness. By April 1848 Franklin and his men would have endured six months of such darkness. Moreover, their voyage coincided with one of the coldest spells to hit the Arctic in living memory. Even the summers passed with no let-up in the ice’s grip.

北极的冬天是非常残酷，尤其是其中有三个月的时间需要在完全黑暗中度过的。到1848年4月的时候，Franklin和他的士兵们已经忍受了6个月的黑暗。此外，他们的航行正好赶上了北极有史以来最寒冷的一段时期。即使是经过了一整个夏天，冰层的围困也没有减弱的迹象。

Sadly, we have no record of life on board *Erebus* during what turned out to be another exceptionally severe winter. What became of Jacko the monkey and Neptune the dog? How much of a blow was Franklin’s death, only a month after Gore and Des Voeux set out? With hindsight, we see tragedy staring them in the face, and it’s tempting to imagine a scenario of remorseless mental and physical suffering. But the ships were well equipped, and much thought had gone into how the crew might occupy themselves in precisely these circumstances. There were books, carpentry tools, hand-organs and other musical instruments, and we know that Sir John was very keen on religion and schooling and on helping his sailors better themselves. Did Crozier, his successor as leader of the expedition, keep up these activities? How much exercise were the men able to take? How did they pass the time?

遗憾的是，在又一次异常寒冷的冬天里，我们没有关于*厄瑞玻斯号*船上生活的记录。猴子Jacko和狗Neptune后来怎么样了？就在Gore和Des Voeux出发的一个月后，Franklin的死又给大家带来了多大的打击？从事后的角度来看，我们可以看到他们注定的悲剧，这很容易让人想象出一种带着坚持不懈的精神来面对残酷的肉体折磨的情景。但是这些船装备精良，充分考虑到了船员们在这种情况下应该如何自娱自乐。那里有书籍、木工工具、手摇风琴和其他乐器。我们知道，John爵士非常喜欢宗教和教育，并热衷于帮助他的水手们提高自身素质。接替他担任探险队领队的Crozier还在继续这些活动吗？大家平时又会保持多少运动量？他们是怎样打发时间的呢？

The nearest we can get to a picture of what life might have been like aboard *Erebus* and *Terror* during their long confinement is to look at what happened on other ships in similar situations. Perhaps the closest parallel is Parry’s expedition of 1819 in *Hecla* and *Fury*. Like Sir John Franklin, Sir Edward was charged with finding a way through the Northwest Passage. Whalers, who were used to the Arctic, would make sure their work was done by the end of the summer. But Parry, with work still to do, had little option but to stay and see out the long months of darkness.

要想了解*厄瑞玻斯号*和*恐怖号*上的人们在被长期受困期间的生活情况，我们最能想到的就是看看其他船只在类似情况下发生了什么。也许最类似的是1819年Parry探险队的*赫可拉号*和*狂怒号*。和John Franklin爵士一样，Edward爵士也是受命在寻找西北航道。习惯于在北极航行的捕鲸者需要确保他们的工作在夏末前完成。但Parry还有任务要完成，所以他别无选择，只能继续留在那里，经历长达数个月的漫长黑暗。

In his book, *Journal of a Voyage*, he captures the bleakness of their winter home: ‘the death-like stillness of the most dreary desolation’ and ‘the total absence of animated existence’. He also gives us an insight into how fearsome the cold could be – a cold so intense it could take your skin off. On a day when the temperature touched -24° Fahrenheit, ‘it now became rather a painful experiment to touch any metallic substance . . . we found it necessary . . . to use great caution in handling our sextants and other instruments, particularly the eyepieces of the telescopes’.

在他的著作《*航海日志*》中，他描绘了他们在冬天船上的凄凉一幕：“最荒芜沉闷的死寂”和“毫无生气的存在”。他还让我们了解到寒冷的可怕之处——这种寒冷会让你的皮肤脱落。在温度达到零下24华氏度的时候，“到了这种时候，接触到任何金属物质都会是一种痛苦的事情……我们发现这是很有必要的……在处理六分仪和其他仪器时要格外小心，尤其是望远镜的目镜”。

We know that, as winter came on, Parry prepared his ship *Hecla* by dismantling most of the masts and raising a waggon-cloth cover over the deck, to provide shelter and exercise space. Ann Savours’s valuable work on the subject notes that Parry’s men ‘were ordered to run round and round the deck, keeping step to a tune on the organ, or, not infrequently, to a song of their own making’.

我们知道，随着冬天的来临，Parry对他的*赫可拉号*进行了特意改造，他拆除了船上的大部分桅杆，在甲板上加盖了一块篷布，以提供遮蔽和活动空间。在这种情况下，Ann Savours写下了极其珍贵的记录，其中提到Parry的手下“被命令在甲板上一圈一圈地跑，还要踩着风琴的曲调，也常常会是他们自创的歌曲”。

Parry also set great store by amateur dramatics, encouraging the men to build sets and stage plays. He even wrote one himself: *The North West Passage, or Voyage Finished* – a risky title, I’d have thought. Such theatrical entertainments were popular: ‘the effect produced on the minds of men, who have no resource within themselves,’ enthused *Hecla*’s purser, William Hooper, in his diary, ‘is beneficial to the highest degree’. They also produced a weekly newspaper, the *North Georgia Gazette and Winter Chronicle*, ‘composed and edited . . . within fifteen degrees of the North Pole of the earth’. Parry’s purpose throughout was ‘to promote good humour among ourselves, as well as to furnish amusing occupation, during the hours of constant darkness’.

Parry还非常重视业余戏剧表演，他鼓励人们搭建场景和舞台剧。他甚至自己也写过一部剧：《*西北航道*》，又称《*航行结束*》——真是一个危险的书名。这样的戏剧娱乐是很受欢迎的：“对那些知识匮乏的人们的思想产生了的深远影响，” *赫可拉号*的事务长William Hooper,在他的日记中兴奋地写道，“这非常有利于大家提高自身的学术素养。”他们还出版了一份周报《*北乔治亚州冬季纪事*》。“在地球北极十五度的地方……进行创作和编辑。” Parry自始至终的目的都是“在我们之间培养良好的幽默感，并在持续的黑暗中提供有趣的消遣”。

His example was followed on HMS *Resolute*, one of the squadron of ships sent to search for Franklin in 1852. They had been supplied with a printing press and produced two newspapers, the *Illustrated Arctic News* and the *Aurora Borealis*. Their Royal Arctic Theatre staged a specially written pantomime, entitled *Zero*, and if that wasn’t enough diversion, there was also a Royal Arctic Casino. *Resolute*’s captain, Horatio Austin, attended a fancy-dress ball disguised, so one of the officers writes, as an ‘odd figure uttering the cry of “old chairs to mend!”’ until his ‘well-known laugh’ revealed ‘our ever-cheerful Commodore’.

他作为榜样被*果断号*所效仿，该船是1852年被派去搜寻Franklin的舰队之一。他们备有一台印刷机，并出版了两份报纸，即《*北极新闻画报*》和《*北极曙光*》。他们的皇家北极剧院上演了一出特制的哑剧《*零*》，如果这还不够吸引人，还有一个皇家北极赌场。*果断号*上尉Horatio Austin乔装打扮参加了一个化装舞会，其中一名军官写道，他是个“怪模怪样的人，大喊着‘把旧椅子修一修!’”直到他发出“众所周知的笑声”，我们才知道原来是“我们永远开朗的领队”。

Of course the Franklin expedition was to spend not one, but three successive winters in the Arctic, and in the later stages their experience could have been more like that described by Henry Piers, the assistant surgeon on *Investigator*, stuck fast in thick ice off Banks Island in 1852:

当然，Franklin探险队要在北极度过的不是一个，而是连续的三个冬天。所以他们后期的经历可能更像是*调查者号*中的助理外科医生Henry Piers在1852年被困在班克斯岛外的厚冰中所描述的那样：

. . . let anyone imagine a ship frozen up, with the deck covered with snow a foot or eighteen inches deep . . . a temperature of minus 30 or 40 with strong wind . . . the fine snow drift . . . finding its way through and covering everything, the wind howling through the rigging at the same time: let him picture to himself then this covered deck lit by a single candle in a lantern; five or six officers walking the starboard side and maintaining some conversation, and twenty or thirty men, perfectly mute, slowly pacing the port side, muffled up to the eyes and covered with snow drift or frozen vapour . . . he will then have some idea of many of this winter’s day’s exercise.

……想象一下，一艘冻住的船，甲板上覆盖着一英尺甚至十八英寸深的积雪……温度零下30到40度，并伴有强风……大雪连绵……无孔不入地覆盖了一切，与此同时，狂风在帆索之间穿行咆哮。如果让一个人想象自己置身在这个带篷的甲板上，只有一盏灯笼里点燃的蜡烛照亮周围。五六个军官在右舷边走动着，并一直说个不停，而其他二三十个人则一声不吭，慢慢地在左舷踱来踱去，捂住眼睛，身上覆盖着飘来的雪花和冻结的水汽……这样他就会对这个冬天的锻炼有所了解。

That was *Investigator*’s second winter. A third winter in such conditions, as endured by those on Franklin’s flagship, seems almost unimaginable. If *Erebus* was indeed named after the darkest depths of hell, it must have felt as if she had come home.

那是*调查者号*的第二个冬天。而Franklin船上的人在这样的条件下度过了第三个冬天，这几乎是不可想象的。如果*厄瑞玻斯号*真的是以地狱中最黑暗的地方来命名的话，她一定会有回到家的感觉。

Another subject that has been hotly debated is the state of health of the crew at the time they were driven to abandon the ships.

另一个引起激烈争论的话题是船员被迫弃船时的健康状况。

Writing some fifty years after the departure of the expedition, Sir Clements Markham, an Arctic traveller himself and President of the Royal Geographical Society, laid the blame for their demise fairly and squarely on the quality of the tinned food they had taken with them. He made much of the fact that the company that had supplied tinned food to the Antarctic expedition had been passed over by the Admiralty, in favour of a cheaper bid from a company set up by a Hungarian, Stephen Goldner, whose food was produced to a formula of his own, in a factory at Galatz in Moldavia. Since a new supplier was now involved, Fitzjames had apparently cautioned that before they left London every tenth case should be examined, but Franklin had demurred, probably because time was short and he felt that the authorities had already taken precautions. ‘So,’ concluded Markham, ‘the Admiralty, in perfect ignorance and without a care, went gaily on filling the ships with offal unfit for human food, nicely concealed in cylindrical tin cases painted red. Thus were the brave men condemned to death by slow poison even before they sailed.’

在探险队出发约50年后，北极旅行家、皇家地理学会主席Clements Markham爵士直截了当地将他们的死亡归咎于他们随身携带罐头的质量问题。他强调海军部抛弃了原本为南极探险队提供罐头的供应商，而是选择了一家的报价更廉价的公司，该公司是由来自匈牙利的Stephen Goldner建立的，他的食品都是按照自己的配方，工厂位于摩尔达维亚的加拉茨。由于现在牵涉到一家新的供应商，Fitzjames似乎警告称，在他们离开伦敦之前，应该对其中十分之一的罐头进行抽样检查，但被Franklin拒绝了，可能是因为时间紧迫，他觉得当局已经采取了预防措施。“所以，”Markham总结说，“海军部在毫不知情，也毫不担心的情况下，兴高采烈地将装着不宜食用的垃圾的红色圆柱形锡制罐头堆满船舱。就这样，那些勇敢的人在起航前就被慢性毒药判处了死刑。”

That he should argue this case with such vehemence, a generation later, suggests that Goldner’s culpability had been debated for some time, and the allegations resurfaced in a book published in 1939. In *Historic Tinned Foods*, J.C. Drummond, a historian of such matters, speculated that ‘It is possible that Goldner’s foods prepared for *Erebus* and *Terror* went bad because their preparation was rushed, he being behind with his contracts.’ This is also a notion taken up more recently in Scott Cookman’s book *Ice Blink*, which suggests that the tinned food contained botulism.

在经过了一代人的时间后，他竟然还需要如此激烈地辩论这件事，这表明关于Goldner的罪责问题的争论已经持续了一段时间，而这些指控在1939年出版的一本书中再次出现。在《*历史上的罐头食品*》一书中，研究此类问题的历史学家J.C. Drummond推测，“Goldner为*厄瑞玻斯号*和*恐怖号*准备的食品之所以变质，可能是因为准备工作过于匆忙，导致他难以按时完成合同。”这也是最近 Scott Cookman在其著作《*冰原反光*》中提出的观点，书中认为罐头食品中含有肉毒杆菌。

It is certainly significant that it was about the time of the Franklin expedition that ‘packs’ larger than 2–6 lb were being prepared. And since larger tins would, of course, have required longer processing time to heat the contents and destroy bacteria, Goldner’s haste was risky. It therefore comes as no surprise that from 1849 onwards serious reports of faulty tins and bad meat were coming in from many of the victualling yards, and that in 1850 the Royal William Yard condemned no less than 11,108 lb of Goldner’s meat. Even so, his tinned foodstuffs won a prize at the Great Exhibition in 1851 and, despite Markham’s certainty, there is no firm evidence that Goldner’s food was responsible for any loss of life. Had it really been tainted, one would have to ask why so many of the expedition managed to survive for so long.

值得注意的是，大约在Franklin远征的时候，准备好的“罐头”要超重2-6磅。当然，由于更大的罐头需要更长的处理时间来加热罐头内的食物并消灭细菌，Goldner的这种仓促行事是有风险的。因此，从1849年起，许多存储食品的庭院都不断传出劣质罐头和坏肉的恶性报告也就不足为奇了。1850年，皇家威廉庭院对多达11108磅的Goldner肉类品进行了谴责。即便如此，他的罐头食品还是在1851年的世界博览会上赢得了一个奖项。尽管Markham很肯定，但并没有确凿的证据表明Goldner的食物对任何生命损失负有责任。而且如果它真的被污染了，人们就会问，为什么还会有这么多探险队成员能活这么久。

More recently, a rather different explanation has been floated. In 1984 a party led by Owen Beattie exhumed the first three fatalities of the expedition, who had been buried on the shore of Beechey Island: John Hartnell and William Braine of *Erebus* and John Torrington of *Terror*. Analysis of hair samples showed markedly raised levels of lead. In a groundbreaking and shocking book called *Frozen in Time*, Beattie and John Geiger advanced the theory that the copious quantities of lead used to seal the tinned-food cans had leached into the very things that were supposed to have kept the men alive, and so hastened their deaths.

最近，有人提出了另一种完全不同的解释。1984年，由Owen Beattie率领的一支小队挖出了远征队的前三名遇难者，他们分别是*厄瑞玻斯号*上的John Hartnell和William Braine以及*恐怖号*的John Torrington，他们当初被埋葬在了比奇岛的海岸上。通过对头发样本的分析显示，其中的铅含量明显过高。在一本名为《*冻结的时间*》的书中，Beattie和John Geiger提出了一种理论，认为用于密封罐头的大量铅，逐渐渗入了人们生存所需依赖的东西里，因此加速了他们的死亡。

Other circumstantial evidence would appear to support the poisoned-tin thesis. As Russell Potter emphasises, the diet would have differed quite markedly between decks. Whereas the bulk of the crew would have eaten a fairly basic diet of salt pork and hardtack, cooked by one of the company designated as mess-cook for the week, senior officers, who would have dined with the captain, would have had their own supplies, cooked by their own stewards. We know that Captain Crozier and Lieutenant Fairholme had procured goods from Fortnum & Mason, and they were almost certainly not the only ones. The officers would have had the best-quality tea, tobacco, wines and spirits – and also tinned food, then regarded as something of a luxury item. The Victory Point note records that of the deaths up till April 1848, nine were officers and fifteen were men. Bearing in mind that the proportion of officers to crew was about one to six, this is a startlingly high number of officers, and has been raised as further evidence that the tinned food could have been at fault.

其他的间接证据似乎也支持锡中毒的论点。正如Russell Potter所强调的那样，甲板上的人们之间的饮食会有很大的区别。大部分船员吃的都是一些勉强果腹的食物，比如咸猪肉和硬面包，由队伍每周指定一名厨师负责烹饪；而高级军官则和船长一起用餐，他们会有自己的供应，由自己的管家负责烹饪。我们知道Crozier上尉和Fairholme中尉曾经从福南梅森公司采购货物，而且几乎可以肯定的是他们不是唯一的买家。军官们会享受最好的茶叶、烟草、葡萄酒和烈酒——还有当时被视为奢侈品的罐头。根据胜利角笔记的记录显示，截止到1848年4月的死亡人数中，有9名军官和15名水手。考虑到军官与船员的比例大约是一比六，所以军官的死亡人数如此之高令人咋舌，这也是罐头食品可能有问题的进一步佐证。

Lead has been advanced as the culprit more recently, too, as more remains have come to light and forensic techniques have advanced. But the argument has also shifted a little. In 2008 William Battersby, James Fitzjames’s biographer, while noting the high levels of the toxic metal found in the soft tissue of the dead men, pointed out that food from lead-sealed tins had been safely used on several previous expeditions, including the Clark Ross Antarctic voyage, and suggested that the likeliest source for those aboard *Erebus* and *Terror* was actually the hot-water system, with its lead pipes and tanks, which we know to have been modified for the Franklin expedition. In the interest of balance, it’s only fair to mention that this suggestion, too, has been disputed. Peter Carney has argued that the ship was heated by exactly the same Sylvester System that had been used on the Antarctic expedition (in his opinion, the problem lay with the process by which ice was melted for drinking and washing), while research by Keith Millar, Adrian Bowman and others from the University of Glasgow has pointed out that, given the prevalence of lead piping in Victorian England, one would expect to find traces of the metal in human remains from that period.

随着越来越多的遗骸被发现以及法医技术的进步，最近也有人认为铅才是罪魁祸首。而论据也发生了一点变化。2008年，James Fitzjames的传记作者William Battersby注意到死者软组织中含有大量有毒金属，他指出，在之前的几次探险中，包括Clark Ross的南极航行中，铅密封罐头中的食物都是可以安全使用的。他还提出，对于*厄瑞玻斯号*和*恐怖号*上的人来说，最有可能的中毒来源实际上是包含铅管和水箱的热水系统，我们知道，这些都是专门为Franklin远征而改装的。为了公平起见，我们需要指出这个提议也是存在争议的。Peter Carney认为，这艘船所采用的加热方式与南极探险时所用的西尔维斯特加热系统是几乎相同（在他看来，问题的根源在于融化冰块用于饮用、清洁的过程），而根据来自格拉斯哥大学的Keith Millar、Adrian Bowman和其他人的研究表明，考虑到铅管道的维多利亚时期英格兰的普及性，在那个时期的人类遗骸中找到这种金属的痕迹是很有可能的。

An alternative theory has its roots in Sir James Ross and Francis McClintock’s abortive search for the missing expedition in 1848. John Robertson, the surgeon who accompanied them, not only noted the impossibility of living off the land (they were ‘not visited by either deer, hare, grouse,’ he noted, ‘nor were we able to provide a single fish’), but was highly critical of the provisions they had with them. These he described as being ‘bad in quality and deficient in quantity, and the preserved meats were a disgrace to the contractor’. As for the lemon juice provided, this was found to have been poorly prepared and useless in preventing the spread of scurvy – the chronic lack of Vitamin C – the scourge of so many expeditions. Many of those on the expedition, including Robertson himself, were suffering badly by the time they got back to their ship.

另一种理论源于1848年James Ross爵士和Francis McClintock寻找失踪的探险队失败的一次搜寻。陪同他们的外科医生John Robertson不仅注意到在陆地上生活是不可能的(这里“既没有鹿、野兔、松鸡，” 他指出，“甚至连一条鱼都没有”)，而且还对他们随身携带的食物提出了严厉的批评。他形容这些肉“质量低劣，数量不足，这种腌肉对于承包商来说简直是一种耻辱”。 至于柠檬汁，人们发现它准备得不够充分，而且在预防坏血病的方面毫无用处——坏血病是由于长期缺乏维生素C导致的，而这种病是许多探险队悲剧的源头。包括Robertson在内的许多探险队成员，在回到船上之前都饱受这种疾病的困扰。

It’s therefore not surprising that McClintock’s belief at the time – taken up later by one of the most respected of all Franklin scholars, Richard Cyriax, whose book, *Sir John Franklin’s Last Arctic Expedition*, was first published in 1939 – was that the main cause of death was not food poisoning, but scurvy. Cyriax backed up his argument with testimony from the Inuit that they had seen white men with bad teeth and swollen gums (two obvious signs of the condition). One Inuit woman told the American explorer Frederick Schwatka, who went searching for Franklin remains in 1878, that the men she had met were thin and their mouths were ‘dry and hard and black’. The discrepancy between the optimistic tone of the first Victory Point note, dated 28 May 1847, with no mention of any deaths, and that of the postscript, less than a year later, which lists twenty-four, suggests that that last winter in the ice was the killer. This would accord with the known deterioration of anti-scorbutic provisions like lemon juice over a period, and the inevitable diminishing supplies of fresh fruit and vegetables that would have yielded the much-needed Vitamin C. Cyriax also pointed out that scurvy tends to incubate over a long period, not showing itself for eighteen months or so, but that when it takes hold, it accelerates fast. This could account for the rapid increase in deaths in the third and fatal winter, and suggests that Crozier and the others felt they had no option but to evacuate the ships and try for survival on land.

因此McClintock当时的观点不足为奇——之后，受人敬仰的富兰克林学者Richard Cyriax在他1939年首次出版的书《John Franklin爵士最后的北极探险》中，认为死亡的主要原因不是食物中毒，而是坏血病。Cyriax用因纽特人的证词支持他的论点，他们看到白人的牙齿不好并且牙龈存在肿胀（这是两种很明显的症状）。美国探险家Frederick Schwatka曾在1878年前去寻找Franklin遗体，当时有一位因纽特妇女告诉他，她所见过的男人都很瘦，他们的嘴“又干又硬又黑”。1847年5月28日的第一份胜利角笔记中，没有提到任何死亡，而在不到一年后的附言中，则列出了24名死者，两者之间的明显差异表明，真凶是在极地的最后一个冬天。抗坏血病所需的柠檬汁在一段时间后会出现变质，而提供必需维生素C的新鲜蔬菜和水果也在不可避免的减少供应，这与已知情况是相符的。Cyriax还指出,坏血病的潜伏期往往很长，症状往往需要十八个月左右的时间才会逐渐显现，但当坏血病扎根后，病情就会迅速恶化。这可以解释在第三个致命的冬天死亡人数迅速增加的原因，也说明了Crozier和其他人为什么觉得他们别无选择，只能撤离船只，尝试在陆地上求生。

The land journey would have tested the hardiest and fittest, let alone those fatally weakened by scurvy. Admiralty expeditions were not taught how to live off the land. The ships, in Russell Potter’s words, ‘were seen as powerful, fortified, mobile homes of discovery’. Everything they needed had been provided for them, so long as they stayed aboard. And once scurvy had taken hold, there would have been no chance of reversing it. As they walked, the effects would have worsened. Gums would have swollen and teeth loosened. Bleeding beneath the skin, breathlessness and overwhelming fatigue would have followed. Men would eventually have been unable to stand any longer. They would have fallen as they walked, and would have been left where they fell, by those who had not the strength to bury them.

即使是最为顽强并且健康的人在陆地旅行时也将面临严峻的考验，更不用说那些因患有坏血病而身体虚弱的人了。海军部的探险队并没有学会如何在陆地上生活。借用Russell Potter的话来说，这些船“被视为强大、坚固、可移动的探索的家园”。只要他们还在船上，各种补给都能满足他们的需求。但是一旦坏血病开始发作，就没有了翻盘的机会。随着他们的行走，病情的影响会逐渐恶化。牙龈变得肿胀，牙齿变得松动。随之而来的是皮下出血、呼吸困难和极度疲劳。船员们最终会无法再忍受下去。他们会在走路的时候跌倒，然后被那些无力埋葬他们的人们抛弃在原地。

Doubtless no single theory can be made to fit every fatality. A likely explanation therefore is necessarily also a broader one: that Franklin’s men were weakened by the lack of a balanced diet and that this laid them open to infection and disease. In 2016 a team led by Jennie Christensen examined a toenail and thumbnail belonging to John Hartnell, one of the Beechey Island bodies. Nails retain the nutrients in a person’s body, giving a record of an individual’s health over the last months of their life. They found that Hartnell had died from tuberculosis (one sufferer had, of course, already been removed, soon after leaving Stromness). There was also significant evidence of zinc deficiency, which suggests that the nutritional content of the fresh or canned meat supplies was, from the outset, not at healthy levels. Research by Keith Millar, Adrian Bowman and others, based on the records of contemporary search expeditions, came to the conclusion that Franklin’s men would have suffered from common respiratory and gastrointestinal disorders, exacerbated by the harsh conditions.

毫无疑问，没有哪种理论能适用于所有的死亡事件。因此，一个可能的解释必然是一个包含多种因素的解释：Franklin的手下由于缺乏均衡的营养饮食而变得虚弱，这使得他们易于感染和疾病。2016年，Jennie Christensen领导的研究团队检查了在比奇岛遇难的John Hartnell的脚趾甲和拇指甲。指甲会保留人体内的营养成分，记录了一个人在生命的最后几个月的健康状况。他们发现Hartnell死于肺结核（当然，团队中有一个人被传染了，不过在离开斯特姆尼斯后不久就被治好了）。还有证据表明他们存在显著的锌缺乏症，这表明新鲜肉类或罐装肉类的营养含量从一开始就没有达到健康水平。Keith Millar和Adrian Bowman等人根据当时的探险记录进行了研究，得出了结论：Franklin的部下可能患有常见的呼吸和胃肠道疾病，而恶劣的环境又加剧了这些疾病。

Scurvy would have been a significant contributory factor in the deathrate and the general lowering of fitness levels. The higher rate of death amongst officers was not due to their greater consumption of tinned food, they concluded, but could probably be explained by the fact that the officers did most of the hunting, and therefore spent more time exposed to the harsh conditions outside the ship.

坏血病是导致死亡和健康水平普遍下降的重要因素。他们得出结论，军官存在更高的死亡率并不是因为他们食用了更多的罐头，而可能是因为军官大部分时间都在打猎，因此会有更多的时间暴露在船外的恶劣环境中。

Ultimately any attempt to find some answer, or some combination of circumstances, that might explain the fate of the expedition is a bit like navigating through the ice. As one lead closes, another opens up. A recent DNA study of skeletal remains, for example, came up with the shock finding that in four cases the bones showed no signs of the Y chromosome, indicating that these were the bones of European females. In fact the most likely explanation for the discrepancy is that studies of old DNA samples commonly fail to amplify the Y chromosome (the male sex chromosome), due to problems of the quantity or quality of material available. But the researchers involved have pointed out intriguingly that ‘we cannot discard the . . . analysis . . . without noting that women are known to have served in disguise in the Royal Navy in the 17th and 18th centuries’; and, as examples, they cite Hannah Snell, Mary Lacy and Mary Ann Talbot – the last-named is said to have served on at least two ships during the Napoleonic Wars, revealing that she was a woman only after she had been wounded and had left the Navy. Whether or not there were women aboard *Erebus* and *Terror,* it’s another intriguing twist in the ongoing search for explanations.

最终，任何试图找到答案的尝试，或者对各种情形的考虑，都可能解释探险队的命运，这有点像在极地里航行。一条路线堵住了，就会出现另一条新的路线。例如，最近一项针对遗骸的DNA研究，得出了一个令人震惊的发现，有四具遗骸没有Y染色体的迹象，这表明这些是欧洲女性的遗骸。其实对这种矛盾最可能的解释是，由于现有材料的数量或质量问题，对旧DNA样本的研究通常无法扩增Y染色体（即男性性染色体）。但参与其中的研究人员有趣地指出，“我们不能排除……这种可能……没有人注意到17至18世纪的皇家海军中有乔装打扮的女性存在；他们列举了Hannah Snell、Mary Lacy和Mary Ann Talbot这几个例子。据说，在拿破仑战争期间，Mary Ann Talbot至少在两艘船上服役过，在她负伤离开海军后才被发现是女性。无论*厄瑞玻斯号*和*恐怖号*上是否存在女性，这都是在寻找原因的过程中出现的一个有趣的反转。

In the end, though, all that can be said for certain is that those who served on the Franklin expedition were simply in the wrong place at the wrong time. They ended up in the least hospitable corner of a remote archipelago at a time that even the local Inuit referred to as ‘the years without summers’.

但最终可以肯定的是，那些在Franklin远征队服役的人只是在错误的时间出现在了错误的地方。他们最后来到了一个偏远群岛最不好客的角落，并处于一个就连当地因纽特人都称之为“没有夏天的年代”。

Whatever the possible reasons for their fate, the brutality of their predicament once they had abandoned the ships is appalling to imagine. As the masts of the ships that had been their home for three years disappeared from sight behind them, what possible hope could have kept them going? There was, at best, a weak sun above them and hard-packed snow and ice beneath, over which heavily laden sledges had to be hauled. At least on the ships they would have had some protection from the freezing winds. On the low, exposed, treeless island the cold must have been intolerable. Where did the will to live come from? Was there a single inspirational figure whose vision kept them going? Did Francis Crozier rise to the occasion and become that man? What hopes were raised when they encountered a party of Inuit, only to see them disappear after a brief exchange? Was that the moment they lost all hope, or had it gone long before? One hopes that the determination to survive, in-built in us all, was enough to stave off despair. But there is no way around it – theirs was a dreadful way to die.

无论导致他们命运的可能原因是什么，当他们弃船而逃后，他们身处的困境之残酷是常人难以想象。那些船是他们三年来的家，而当她的桅杆从他们身后消失的时候，哪还有什么希望能让他们继续前进呢？他们仅有头顶那微弱的太阳，脚底下却是硬实的冰雪，还不得不拖着沉重的雪橇。至少在船上，他们还能得到一些保护，来抵御凛冽的寒风。但是在这个低矮、裸露、没有树木的岛上，严寒是常人无法忍受的。生存的意志从何而来？是否有一个鼓舞人心的人物用他的真知灼见带领他们坚持下去？Francis Crozier是在这种情况下挺身而出并成为那样的人呢？当他们遇到一群和他们短暂交流后便消失的因纽特人时，他们是否燃起了什么希望？是否有一刻他们失去了所有的希望，还是希望在很久以前就消失了？我们每个人都有一种与生俱来的对生存的渴望，那种渴望足以与绝望抗衡。但是最终还是躲不掉——那令人生惧的死法。

It could be argued that lives might have been saved if rescue expeditions had been sent out earlier; that better mapping would have helped both them and their searchers; and that Franklin and the Admiralty should have attached more importance to the leaving of cairns indicating their route. There are those who blame Crozier for leading the survivors in the wrong direction after leaving the ship, despite his knowing that there were supplies left at Fury Beach by the Parry expedition in 1825 (supplies that were found to be perfectly good by a party forty-five years later). Instead he headed south and west, for one of the most difficult and dangerous rivers on the mainland, and a Hudson’s Bay post that was 1,250 miles away. But then Crozier’s options were few. Men, struggling with sledges carrying food and supplies, would have found it hard work in any direction, and Fury Beach was some way off. It is thought they took three boats with them (Hobson found one of them on King William Island and the Inuit said they had found two others), so the plan could well have been to find open water as soon as possible, where boats would have been a more comfortable and much faster means of transport.

有人可能会说，如果能早点派出救援队伍，也许就能救下他们的生命；如果有更好的地图，也许就能帮助他们更好的探索；Franklin和海军部应该更加重视留下标示他们的航线的石堆。有人指责Crozier在弃船后带领幸存者走错了方向，尽管他知道1825年Parry远征队在狂怒海滩留下了一些补给（45年后，有一支队伍发现这些补给品依然保存完好)，但他却朝着西南方向，前往1250英里以外的哈德逊湾哨所，而那里有着当地最困难和危险的河流。但是Crozier所能做出的选择很少。当人们用雪橇载着食物和补给艰难前进时，他们会发现无论往哪个方向前进都苦难重重，而狂怒海滩离他们还有一段距离。据称，他们带着三艘船（Hobson在国王威廉岛上发现了其中一艘，而因纽特人声称他们还见过另外两艘）,所以他们的计划很可能是尽快找到开阔的水域，而到那时，船将会是一个更为舒适便捷的交通工具。

The only way we will ever know what precisely was going through the minds of those leading the expedition would be if some new documentary evidence comes to light. The Royal Navy was punctilious in keeping records. Log books kept by the captain and mate, and Sick Books kept by the ship’s surgeon, would have been among those routinely maintained on *Erebus* and *Terror* and, unless discipline had completely broken down, would have been maintained to the end. The marine archaeologist Ryan Harris has pointed out that ships’ logs were written on linen-based paper that could have survived in the icy water. There are some who hold out hopes that these documents will be found on the ships; there are others who fear that the Inuit, who never had paper themselves, would simply have discarded any records they came across. Most likely they were blown away long ago. But history abhors a vacuum, and as long as we don’t know, there will always be those who want to know. A disaster of this scale looks for an explanation of equal magnitude. They must not have died in vain.

只有新的文献证据出现，我们才能更确切地知道当时的探险队领导者的所思所想。皇家海军在保存记录方面一向是非常严谨的。船长和大副的航海日志，以及船上外科医生的病历本，都会在*厄瑞玻斯号*和*恐怖号*上定期保存，除非纪律完全崩坏了，否则记录就会一直保存到最后。海洋考古学家Ryan Harris指出，航海日志是用亚麻纸写的，而这种纸在冰冷的海水中也能保存下来。所以有些人希望能在船上找到这些文件；还有一些人担心，考虑到因纽特人自己没有用纸的习惯，他们很可能会随意丢弃遇到的各种记录。这些文件很可能在很久以前就被风吹走了。但历史讨厌出现空白，凡是我们不知道，总会有人想知道。而且这种规模的灾难需要一个合理的解释。他们不能就这么白白牺牲。

Charles Francis Hall’s 1864 memoir *Life with the Eskimaux* – for which this illustration forms the frontispiece – recounts the friendships he made with the Inuit as he sought to unravel the mystery of the Franklin expedition.

Penguin

Random

House

Charles Francis Hall’s 1864 memoir *Life with the Eskimaux* – for which this illustration forms the frontispiece – recounts the friendships he made with the Inuit as he sought to unravel the mystery of the Franklin expedition.

Charles Francis Hall 在其1864年出版的回忆录《与爱斯基摩人的生活》，讲述了他在试图解开Franklin远征之谜的过程中与因纽特人建立的友谊，而这幅图是此书的卷首插图。