

THE MAKING OF A NATURALIST IN MANCHURIA:
ARTHUR DE CARLE SOWERBY, 1885–1922

by

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This article examines the professional identity-building of Arthur de Carle Sowerby (1885–1954), a China-born explorer of Anglo descent who was a versatile hunter-sportsman aspiring to become a naturalist. Existing work on Sowerby acknowledges his role as the founder of the *China Journal of Science and Arts* and as president of the North China Branch of the Royal Asiatic Society in Shanghai; yet his pre-Shanghai life and career prior to 1922 has received scant scholarly attention. Between 1907 and 1922, Sowerby joined several expeditions exploring the terrain and collecting animal specimens in the Manchurian and Sino-Mongolian borderland before taking up residence in Shanghai in 1923 until his departure from China in 1946. Sowerby's zoological expedition in Manchuria is discussed as a backdrop against which his subsequent Shanghai career is portrayed. Sowerby's roles as an explorer and fieldworker have not been subject to independent examination. I argue that the making of Sowerby's naturalist identity reflects a career route for amateur practitioners to build a scientific identity via expeditionary fieldwork, writing natural history for popular audiences and curating biological specimens in early twentieth-century China.

Keywords: modern China; naturalist; sportsman; Arthur de Carle Sowerby; scientific expedition; Manchuria

INTRODUCTION

Known to the English-speaking audience as a naturalist in Manchuria, president of the North China Branch of the Royal Asiatic Society, director of the Shanghai Museum and father of taxidermy in modern China, Arthur de Carle Sowerby was born in 1885 in China to a British missionary, Reverend Arthur Sowerby. In China, the name 'Arthur de Carle Sowerby' was rendered into different transliterated names such as 'Suo-er-bi', 'Su-a-Pei' and 'Su Keren'. He was known to Chinese readers as a biologist, British naturalist, naturalist-and-translator and a founder and editor. In various capacities, he was also a specimen collector, an artist of natural history and a museum curator. This long list of descriptors illustrates not just Sowerby's interdisciplinary interests; it also gives some

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indication of the making of a naturalist from the bottom up, and from China's periphery of Manchuria to the metropole of Shanghai.

For much of his early career Sowerby was not considered an esteemed scientist. He did not receive a PhD from an elite degree-granting institution. Rather, he began his career as an amateur, learned in the field and re-invented himself several times to adapt to China's changing circumstances and his own personal situation. As a young man he became a rugged explorer and hunter who wrote about his various exploits in northern China. By the early 1920s, Sowerby had transformed himself from hunter-explorer to naturalist, publishing a series of books on the flora and fauna of China, culminating in his five-volume study *The naturalist in Manchuria* (1922–1930). The fall of the Qing dynasty in 1911 had created political chaos in China, and the ensuing civil wars eventually made it nearly impossible for Sowerby to carry on his research in the field. In 1946, after spending time in a Japanese prisoner of war camp during World War I, he retired to Washington, DC, where he remained, struggling with ill health, until his death in 1954.

Sowerby's life and career coincided with China's transition from a Manchu empire into a modern nation-state. In the late Qing, foreigners in China played the service role of missionaries, advisors and translators.¹ Book learning and a deference to Qing royal customs were valued as determinants of a foreigner's trustworthiness by the cadre of scholar-officials. After the Boxer Rebellion and the subsequent fall of the Qing empire, foreigners and missionaries became targets of distrust, if not physical attack. Adding to the chaos was the abolition of the civil service examination in 1905, after which scholars could no longer serve as officials. The literati culture was soon replaced by a culture of scientism.² Sowerby was operating at a time when a cohort of professional scientists was beginning to emerge in Republican-era China. Faced with a crisis of learned authority, Sowerby had to prove himself to Chinese scientists who had recently received advanced education in the West and who saw him as little more than a rugged amateur. But the situation was open and fluid enough that he was able to gain a position for himself via engaging in scientific expeditions and subsequently writing and editing science periodicals for both popular and specialized audiences.

In his critically acclaimed study of British naturalists in Qing China, Fa-ti Fan provided an in-depth examination of a handful of nineteenth-century British naturalists and their natural history-related exploration in Chinese port cities after the Opium War.³ Highlighting the context of the China trade and the role of the natives as cultural mediators, Fan reconstructed the activities of British naturalists in China as a cultural encounter between collectors, naturalists, merchants, illustrators, local guides and translators. In the epilogue of Fan's book, Arthur de Carle Sowerby was mentioned as a successor to Robert Swinhoe, a member of the British Consular Service and a highly accomplished field zoologist, also known as 'A Victorian naturalist in treaty port China'.⁴ But Fan did not go into detail on Sowerby because he is largely a twentieth-century figure, while Fan's book is devoted to nineteenth-century British figures, so Sowerby falls outside the research scope of Fan's study.

1 Jonathan Spence, *To change China: Western advisors in China* (Penguin Books, New York, 2002).

2 D. W. Y. Kwok, *Scientism in Chinese thought, 1900–1950* (Yale University Press, New Haven, 1965); Grace Shen, 'Scientism in the twentieth century', in *Modern Chinese religion II: 1850–2015*, vol. 1 (ed. Vincent Goossaert, Jan Kiely and John Lagerwey), pp. 91–140 (Brill, Leiden, 2015).

3 Fa-ti Fan, *British naturalists in Qing China: science, empire, and cultural encounter* (Harvard University Press, Cambridge, MA, 2004).

4 Philip Hall, 'A Victorian naturalist in treaty port China', *Geogr. J.* **153**, 37–47 (1987).

Recent efforts have begun to take up the scholarly study of Arthur de Carle Sowerby and his contribution to the advancement of animal geography and faunistic distribution in early twentieth-century China. Most, if not all, of the recent scholarly works have been published in Chinese.⁵ Although Sowerby was of British descent and wrote prolifically in English, there are very few historical studies focusing on him in the Anglophone literature.⁶ Aside from a few biographical sketches of Sowerby, there is little historical analysis of him in and out of China, and there has yet to be a significant study on his work and life. This article is an attempt to fill a glaring gap in the Anglophone literature while also engaging with the emerging scholarly enthusiasm surrounding Sowerby studies in China.

In their recent article examining Sowerby's scientific expedition in northeast China, Fan and Han suggested a number of internal and external factors that contributed to Sowerby's career development as a naturalist in China.⁷ His great-grandfather, James de Carle Sowerby (1787–1871), was one of the founders and the first secretary of the Royal Botanic Society and a director of the Royal Botanic Gardens in Regent's Park, London, since its inception in 1838. His father, Rev. Arthur Sowerby, was a gifted missionary who endowed Arthur de Carle Sowerby with a good educational foundation. Fan and Han concluded that Sowerby's career trajectory in natural history was not a coincidence, but a combination of inheritance and personal choice. The Anderson and Clark expeditions were suggested as laying the foundation but not as the determining factor in shaping his subsequent career in natural history.

This article explores Sowerby's travel writings on hunting big game in Manchuria, attending especially to his strategic evolution from a hunter-sportsman between 1907 and 1918 to a naturalist-biologist between 1919 and 1922. This phase of Sowerby's early career represents the formative years of his scientific self, which has been little, if at all, discussed. I will stress the importance of patronage and mentorship from the American tycoon and former military officer Robert Sterling Clark in building Sowerby's scientific career. As Sowerby himself recollected in his later life, his entire career as a naturalist echoed the expeditionary work and masculine style of Clark, particularly after their joint expedition into the modern day Shaan-Gan-Ning border region in 1918–1919. I argue that Sowerby initially thought of himself as a 'sportsman-hunter', but he later cultivated the public persona of 'naturalist-scientist', beginning with his 1919 article titled 'The exploration of Manchuria' published in *The Geographical Journal* and culminating in his five-volume treatise titled *The naturalist in Manchuria*, in which he presented himself as an authoritative expert on the geographical and biological history of Manchuria.⁸ By adopting the persona of a 'naturalist-scientist', he downplayed the economic and sporting motives of his previous engagement in hunting big game from Manchuria and the Sino-Mongolian border. Showing how Sowerby modelled himself upon the genteel but martial character of R. S. Clark, and how he valued his 'bromance' relationship with Clark above his first wife, I suggest the single most important person who shaped his transition from a 'sportsman-hunter' to a 'naturalist-scientist' is Clark. After showing the making of

5 Liyuan Fan and Qi Han, 'British naturalist A. C. Sowerby's investigations in northeast China', *Stud. Hist. Nat. Sci.* **40** (2), 231–245 (2021); Liyuan Fan, 'A study of Sowerby's thought and transition in natural history practice: a case study of *The China Journal of Science and Arts* (1923–1937)', *Chinese J. Hist. Sci. Technol.* **42**(3), 442–453 (2021).

6 A keyword search of his name from Isis Current Bibliography (IsisCB) resulted in no citations, while a Google Scholar search results in primary sources authored or co-authored by Sowerby himself.

7 Fan and Han, *op. cit.* (note 5).

8 Arthur de Carle Sowerby, 'The exploration of Manchuria', *Geogr. J.* **54**, 73–89 (1919); Sowerby, *The naturalist in Manchuria*, 5 vols (Unveränderter Faksimilereprint, Tientsin, 2007 [1922–1930]).

Sowerby's naturalist-scientist identity, I explore receptions of his work as 'the naturalist in Manchuria', an honorary title he wanted posterity to remember him for.

SOWERBY OF MANCHURIA

Nineteenth-century scientific expeditions in Manchuria were dominated by Russian and German naturalists and explorers, who wrote in their native tongues. Other than a few travel accounts, the emergence of English literature on Manchuria's natural history had to wait until the early twentieth century.⁹ One of the early historical surveys of the region in the English language is Sir Alexander Hosie's *Manchuria: its people, resources and recent history*, published in 1901.¹⁰ A complete survey of the flora of Manchuria was published in the Russian language.¹¹ In her pioneering study of the intellectual and environmental history of modern Manchuria, Ruth Rogaski examined how a Russian botanist of German descent collected, ordered and named flowers along the Amur River to fit the locally-grown wildflowers into the universally-ordered Linnean classification system. Published in 1859, *Primitiae Florae Amurensis* was a German book that contained over 900 plant species and over 100 supposedly new species that bear the name of the collector-discoverer 'Maximowicz'.¹²

Since the nineteenth century, Russia had the biggest affect and presence among Western colonial powers in the region. With the 1858 Treaty of Aigun and the 1860 Convention of Peking, Russia ceded over 200 000 square miles of territory from Qing China. The strong Russian influence in the region is reflected in the scholarly publications as well. A 1904 article in *The National Geographic Magazine* discussed the 'Russian development of Manchuria', whereas a 1900 journal article referred to Manchuria as under the 'Russian sphere of influence'.¹³ Under the shadow of Russia's formidable presence, Anglophone scholarship had just begun to scratch the surface of the Manchuria's vast territory at the turn of the twentieth century.

The weak Anglo-American presence in the region was one of the reasons that motivated Sowerby to undertake expeditions and write his five-volume *The naturalist in Manchuria* in English. In the preface of the first volume of the series (1922), he noted 'the most important and comprehensive works on the natural history of the Manchurian Region are not written in English'.¹⁴ The language in which his work is published appeared to be more important than the comprehensiveness of his collection. In volume five of *The naturalist in Manchuria*, which focused on invertebrates and other lower forms of life, he cautioned readers that though the 'lists of recorded species have been given, ... they must not be looked upon as finally complete, for in the extensive literature in other languages than English (chiefly Russian and German) upon Siberia, with which the Amur basin is usually included, and its fauna, it is more than likely that a certain amount of pertinent matter has been missed by the present writer'.¹⁵ While the cautionary note seemed to

9 Arthur Adams, *Travels of a naturalist in Japan and Manchuria* (Hurst and Blackett, London, 1870).

10 Sir Alexander Hosie, *Manchuria: its people, resources and recent history* (J. B. Millet, Boston, 1910).

11 D. Pozdnejeff, *Opisanie Manchurii*, 2 vols (Imperial Ministry of Finance, Russia, 1897 [in Russian]).

12 Ruth Rogaski, *Knowing Manchuria: environments, the senses, and natural knowledge on an Asian borderland* (University of Chicago Press, Chicago, 2022), ch. 4.

13 H. B. Miller, 'Russian development of Manchuria', *Nat. Geogr. Mag.* **15**, 113–127 (1904); E. H. Parker, 'The Russian sphere of influence; or a thousand years of Manchuria', *Imp. Asiat. Q. Rev.* **9**, 287–313 (1900).

14 Sowerby, *op. cit.* (note 8), vol. 1, travel and exploration, p. vi.

15 Sowerby, *op. cit.* (note 8), vol. 5, the invertebrates and flora of the Manchurian region, p. i.

indicate a lack of confidence or reliability, he was confident that his Manchurian fauna collection would 'be of assistance and value to future English-speaking investigators and collectors, as well as to students of the natural history of China'.¹⁶ The attention Sowerby assigned to language reflected his intended audience. Whether he was at his birthplace, Shanxi on the Sino-Mongolian steppe, alongside England's seashore, residing in Shanghai's International Settlement or retiring to Washington, DC, he always targeted Anglophone readers as his primary audience. By producing Anglophone accounts of Manchuria's natural history, he not only furthered the British imperial collection but also built his own reputation as the foremost naturalist in Manchuria, which was dubbed by Rogaski as a "'cradle of conflict," ground zero of the twentieth century's violent imperial competition in East Asia'.¹⁷

The term 'Manchuria' is a Latinized geographical term that emerged in the eighteenth century from Jesuit-drawn maps. The region we now commonly associate with Manchuria is limited to the three provinces in northeast China, but historically it was a much broader concept that encompassed parts of Mongolia and Siberia.¹⁸ Taking the historical cue, Sowerby did not limit himself to the narrow definition of Manchuria as the three northeast provinces delimited in the People's Republic of China (PRC) version of cartography. In *The naturalist in Manchuria*, he defined 'Manchuria' in the book title 'in its widest sense, referring rather to the great stretch of country conquered and ruled by the founder of the Manchu dynasty (Nurhaci) than to present day Manchuria'.¹⁹ This broadly conceived notion of Manchuria is in line with the historical research on Manchuria adopted by mainstream Qing historians.²⁰

Sowerby's effort to disseminate the natural history of Manchuria to an English-speaking audience is inseparable from the rising Anglo-American imperial presence in China in the late nineteenth and early twentieth centuries. Great Britain's imperial expansion—in the name of free trade and missionary work—was what brought Sowerby's father to northern China in the first place. In 1882, Rev. Arthur Sowerby was appointed to assist Timothy Richard to minister the Baptist Mission at Taiyuan in Shanxi province. As one of the well-known Protestant missionaries in nineteenth-century China, Timothy Richard was eponymous with W. A. P. Martin and Joseph Edkin for introducing Western learning to Qing China. Richard, in particular, published a series of forward-looking articles that informed the 1898 reform launched by Liang Qichao and Kang Youwei.²¹

Rev. Sowerby graduated from the Baptist Theological College at Regent's Park, London, and was prepared to go abroad as a missionary. He chose to go to China instead of west-Central Africa for his missionary service due to his perception that 'a greater need was in China'.²² Rev. Sowerby had six children, all of whom were born and lived most of their lives in China. His second child and first son was Arthur de Carle Sowerby. Family

16 Sowerby, *op. cit.* (note 8), vol. 1, p. i.

17 Rogaski, *op. cit.* (note 12), p. 195.

18 Mark Gamsa, *Manchuria: a concise history* (Bloomsbury Publishing, UK, 2020).

19 Sowerby, *op. cit.* (note 8), vol. 1, p. i.

20 Evelyn Rawski, *Early modern China and northeast Asia: cross-border perspectives* (Cambridge University Press, Cambridge, 2015).

21 Ben Elman, *A cultural history of modern science in China* (Harvard University Press, Cambridge, MA, 2006), p. 202.

22 Arthur de Carle Sowerby, *The Sowerby saga: a brief account of the origin and genealogy of the Sowerby family and of its history from earliest times down to the present based upon recent research into available extant literature* (printed privately by the author in conjunction with Alice Muriel Sowerby and Joan Evelyn Stone (Washington DC, 1952), pp. 62–63.

brought Sowerby to China, but, aside from the accidents of birth, the influence of family on the early Sowerby was an upbringing characterized by much travels and travails. Before reaching adulthood, Arthur de Carle Sowerby's presence in China seemed to follow the career needs of his father. In 1890, when Sowerby turned five, his father's first furlough came through, which compelled his parents to bring him and his three siblings back to England. The Sowerby family returned to Taiyuan in the spring of 1893. Between 1897 and 1898, Sowerby was placed in the Inland Mission School for Boys in Chefoo in the nearby Shandong province, but escaped the Boxer Rebellion of 1900 when his whole family spent the furlough in England. They returned to China in 1905, when Sowerby took up a teaching job at the Anglo-Chinese college in Tianjin. Sowerby would stay in China for the next five decades.

As a teenage boy, he took drawing lessons and showed great promise in producing accurate illustrations of fauna and flora. Later, as he took up a teaching appointment at the Tientsin (Tianjin) Anglo-Chinese College, he taught biology, drawing and writing, alongside English, geography and arithmetic.²³ This early exposure to scientific illustration became one of his core professional identities. In Keith Steven's biographical essay of Arthur de Carle Sowerby, the role of 'artist' was listed as one of Sowerby's many professional attributes.²⁴ R. R. Sowerby, a distant relative of Arthur de Carle Sowerby, traced the Sowerby family heritage of scientists and artists to the great-great-grandmother named Anne de Carle, who came from a French Huguenot family of artists.²⁵ Anne's eldest son was James de Carle Sowerby, one of the founders and a director of the Royal Botanic Gardens in Regent's Park, London, and whose 1880 discovery of the freshwater jellyfish in a tank in the Royal Botanic Gardens inspired Arthur de Carle Sowerby to follow the storyline and speculate about the historical significance of Chinese freshwater jellyfish.²⁶ Sowerby reflected later in life that 'all my life my training in Art has stood me in great good stead'.²⁷

Sowerby's life-changing opportunity arrived in the spring of 1908, when he was invited to join the zoological expedition of Malcom Playfair Anderson to collect mammals for the British Museum, under the auspices of what was called the Duke of Bedford's zoological exploration in Eastern Asia. The Anderson expedition toured north Shaanxi, the Ordos desert and through the upper basin of the Fen River in western Shanxi. Anderson introduced him to the Smithsonian Institution and suggested Sowerby should learn the methods of taxidermy and illustration in order to prepare for a career preferred by museums of natural history.

Sowerby later expressed his gratitude to Anderson in an honorific essay portraying Anderson as a pioneering naturalist in China and stated that it was through Anderson's work that Sowerby became a professional naturalist.²⁸ The Duke of Bedford's exploration marks the beginning of Sowerby's initiation into the realms of field naturalism and zoological taxidermy, which would prove tremendously useful to him in his later

²³ *Ibid.*, p. 105.

²⁴ Keith Stevens, 'Naturalist, author, artist, explorer and editor and an almost forgotten president, Arthur de Carle Sowerby 1885–1954, president of the North China Branch of The Royal Asiatic Society 1935–1940', *J. R. Asiat. Soc. Hong Kong Br.* **38**, 121–136 (1998).

²⁵ R. R. Sowerby, *Sowerby of China: Arthur de Carle Sowerby F.R.G.S., F.Z.S.* (Titus Wilson & Son, Highgate, Kendal, 1956).

²⁶ Arthur de Carle Sowerby, 'The romance of the Chinese freshwater jellyfish', *Hong Kong Naturalist* **xi** (1), 186–189 (1941).

²⁷ Sowerby, *op. cit.* (note 22), p. 90.

²⁸ Arthur de Carle Sowerby, 'A pioneer naturalist in China', *China J.* **xxxi** (5), 240–246 (1939); Thomas J. Loughman (with contributions by Shi Hongshuai, Li Ju and Mark Dion), *Sterling Clark in China* (Yale University Press, New Haven, 2012).

appointment as the curator-cum-director of the Shanghai Museum beneath the North China Branch of the Royal Asiatic Society (NCB-RAS) between 1927 and 1940.

THE CLARK EXPEDITION

Ever since the naval voyages of Captain James Cook in the eighteenth century, most scientific expeditions in the nineteenth and twentieth centuries were dominated by the British and the Americans, respectively.²⁹ In the age of overseas imperial ambition, scientific expeditions were determined primarily by broader geopolitical interests and mostly undertaken by naval or military institutions. Private, non-state funded voyages were rare. The Clark expedition was one of these non-national, privately-run scientific expeditions initiated by the ex-military officer Robert Sterling Clark (1877–1956), who came from a well-off family in New York. He had served in the US Army in the Philippines. Driven by his wealth and early experiences stationed in the Asia Pacific, Clark was keen on mounting a scientific trip in Asia to re-visit ‘the jungle and the monotony of camp life’ that cast an indelible mark on his personality in the summer of 1900 when he was 23 years old.³⁰

Clark fit the profile of wealthy gentleman-explorers who had the means and passion to carry out scientific expeditions independently. Echoing Alexander von Humboldt of the late eighteenth century, Clark trekked the mountainous terrain, endured physical discomfort and carried heavy instruments while surveying. Clark was probably not as heroic as the Prussian aristocrat, who risked his life in advancing the science of biogeography and cartography, but the Clark–Humboldt parallels were captured in objects and in print. In 2009 the Sterling and Francine Clark Art Institute, named after Robert Sterling Clark and his wife, put together an exhibition and a publication honouring the centennial anniversary of the Clark expedition of 1908 to 1909. In a hagiographical essay, the then director of the Clark Institute lauded the institute’s founder for embarking on a significant scientific campaign in China, which was ‘outsized in its scope and accomplishment even for its days’.³¹ Coming from the present-day director of an institute named after Clark, it is tempting to take the praise with a grain of salt. To evaluate the inception and reception of the Clark expedition, we have to take a step back to a few years before the expedition took place. Indicators of Clark’s interests to launch a scientific expedition in China can be traced to 1905, if not earlier. Between 1903 and 1905, Clark visited the Smithsonian Institution in search of records about previous accounts of American explorations into the heartland of Asia. A particular source of inspiration came from W. W. Rockhill’s *Diary of a journey through Mongolia and Thibet in 1891 and 1892*, not least because Clark had come into contact with Rockhill, who was an honorary corresponding member of the Royal Geographical Society and appointed minister of the American Legation in Beijing in 1904.³² Clark had likely met Rockhill during his previous trips to Beijing as a serviceman for the China Relief expedition to suppress the 1900 Boxer Rebellion.

29 Richard J. Sorrenson, ‘Expeditionary science’, in *The Cambridge history of science volume 8: modern science in national, transnational, and global context* (ed. Hugh Stotten, Ronald L. Numbers and David N. Livingstone), pp. 127–148 (Cambridge University Press, Cambridge, 2020), at p. 138.

30 Loughman, *op. cit.* (note 28), p. 14.

31 *Ibid.*, p. 11.

32 W. Rockhill, *Diary of a journey through Mongolia and Thibet [sic] in 1891 and 1892* (Smithsonian Institution, Washington DC, 1894); cited in Loughman, *op. cit.* (note 28), p. 29.

Clark recruited a mix of Britons, Americans and Indians as his expedition team members: Captain Henry Douglas of the Royal Army Medical College, George Grant of the Royal Geographical Society, Nathaniel Cobb of Vermont, who was acquainted with Clark's younger brother at Yale, and Hazrat Ali, an Indian Muslim who had 15 years of experience working as a master surveyor for the Royal Survey of India. The expedition team comprised a physician (Douglas), an interpreter (Grant), an artist (Cobb) and a surveyor (Ali), all coming from different parts of the British empire. After Clark embarked on his journey in Taiyuan in May 1908, he decided he needed to hire a collector-naturalist to oversee the collecting of biological specimens. He found Sowerby, who joined the Clark expedition in the summer of 1908 as the collector and naturalist. As soon as the team began trekking the mountainous range of the frontierland, Sowerby began collecting animals, first a common Korean wood mouse (*Apodemus peninsulae*) and later bigger rodents such as mole rats, and mammals such as goral and roe deer. Clark had arranged for these specimens to be shipped to the Smithsonian Institution in Washington, accompanied by Sowerby's cataloguing and painting of 150 mammals, more than 80 birds and numerous other reptilian and fish specimens. Sowerby's Chinese mammal collections were not just 'life on display' at the Smithsonian. Along with Japanese zoologist Tokuda Mitoshi and Russian zoologist Loukashkin, Sowerby became an expert naturalist on Manchuria's indigenous rodents, which were identified as an important carrier of pathogen that caused the 1910–1911 Great Manchurian Plague.³³

According to the itineraries outlined in *Through Shen-Kan* (1912), the team left Taiyuan for Yulin in northern Shaanxi (aka Shaanbei), which was a former military centre with a large garrison. Crossing over the Shaanbei province mostly on mule track, the team waded through the Yellow River and set upon to trek through a 220-mile distance that brought them in contact with streams, valleys, ridges, plateaus, villages and post offices. From Yulin, the team trekked nearly 200 miles south to reach Yan'an, which would later become the 'cradle of revolution' for the Chinese Communist Party from 1935 onwards as the ideological birthplace for the regime.³⁴ After Yan'an, the team continued the overland journey for another 500 miles, but the expedition came to an abrupt end at Lanzhou in Gansu province, where the surveyor Ali was unprovokedly attacked and killed by allegedly xenophobic local villagers. The death of Ali literally dealt a death blow to the expedition, since surveying was highlighted as the major purpose of the expedition. To accomplish this goal, Clark had procured surveying instruments such as scales, weights, tripods, stopwatches, measuring tapes, trunks and level rods from London, and he authored 'Chapter XIV: survey work of the expedition' in *Through Shen-Kan*. As surveying work could not be continued without the surveyor, the rest of the expedition members left Lanzhou under military escort in July of 1909. This would be the only time Clark ever set foot on China's soil.³⁵

The Ali incident was suggested to have 'tainted the success and achievement of the Clark expedition in China', as Shi Hongshuai, a Chinese environmental historian, noted; but, in his capacity as an invited contributor to the centennial celebration of the Clark expedition, Hongshuai probably felt the need to justify the expedition and concluded 'an objective

33 William C. Summers, *The great Manchurian plague of 1910–1911: the geopolitics of an epidemic disease* (Yale University Press, New Haven, 2012).

34 Robert Sterling Clark and Arthur de C. Sowerby, *Through Shen-Kan: the account of the Clark expedition in north China, 1908–9* (T. Fisher Unwin, London, 1912).

35 Loughman, *op. cit.* (note 28).

evaluation of the Clark expedition in terms of its academic contribution during a historical period of transition validates its significance'.³⁶ My purpose here is not to adjudicate on the questions surrounding Ali's death or justify the scientific worth of the Clark expedition, but to connect these contextual events with Sowerby's participatory experience within the broader geopolitical contexts of early twentieth-century China. The unexpected death of the surveyor revealed the perils of conducting a private scientific excursion in a foreign country undergoing political turmoil. Unlike global oceanic voyages, which were usually backed by naval forces, overland expeditions such as the Clark expedition of 1908–1909 were within the reach of individual travellers. In the science-and-empire context of the nineteenth century, non-state driven scientific expeditions were easily mistaken as unlicensed foreign invasion, but private expeditions also opened up opportunities for youthful dilettantes to participate.

The Clark expedition was entirely dependent on Clark's wealth and whims. Because there was no externally imposed restriction on the quantity and qualification of team members, Clark's idiosyncrasy enabled the participation of an amateur like Arthur de Carle Sowerby. In contrast to Hazrat Ali, who was a veteran surveyor with over a decade of work experience, Sowerby was a 23-year-old novice with practically no experience other than the Anderson expedition. Sowerby unabashedly admitted his youthfulness as he described his own role in the Clark expedition as 'naturalist to the expedition' but added 'it was not until I met Mr. Malcom Anderson 18 months ago that I really became acquainted with the methods preferred by museums'.³⁷ Since the Anderson expedition took place in the same year as the Clark expedition, it is safe to conclude that Sowerby was an inexperienced young man when Clark hired him. It was true that Sowerby had some prior experience from the Duke of Bedford's exploration, yet he was still primarily a hunter and used whatever skills he learned about natural history to help in the hunting. In any case, the flexible nature of a non-governmental excursion created the condition for Sowerby to join the expedition in the first place.

Although Sowerby may have stumbled into the field, its ruggedness left an indelible mark on his body. He gradually developed debilitating arthritis and rheumatism from 'the cold and excessive dampness of the forest'.³⁸ Rogaski's pioneering study has demonstrated how the complex landscape of Manchuria profoundly shaped the lives and experiences of its travellers, frontiersmen, labourers, exiles, naturalists and fieldworkers by exposing their bodies to life-threatening harm. The variegated terrain of the Asian borderland is hardly a pastoral scene of picturesque tranquillity, but was constantly struck by environmental pitfalls and plague.³⁹ Manchuria's ecology made a physical imprint on Sowerby's body, as the toughness of the expedition crippled his ability to travel from 1922, after which he moved to Shanghai and took up a more sedentary lifestyle by working as museum curator and journal founder and editor.

It is difficult not to overstate the impact of these expeditions on Sowerby's subsequent career. As with the impact of the *Beagle* voyage on Charles Darwin, Sorrenson asserts that 'an expedition could be more than an adventure; it could make a scientific career'.⁴⁰ In

36 Hongshuai Shi, 'The Clark expedition 1908–9: context and achievements', in Loughman, *op. cit.* (note 28), p. 48.

37 Loughman, *op. cit.* (note 28), p. 21.

38 Sowerby, *op. cit.* (note 8), vol. 1, p. 196.

39 Rogaski, *op. cit.* (note 12).

40 Sorrenson, *op. cit.* (note 29), p. 142.

Sowerby's case, the importance of the series of expeditions went beyond specimen collection and knowledge enhancement of Manchuria's natural history. The Anderson expedition, the Clark expedition and the Shensi Relief expedition took place when Sowerby was at an impressionable age.⁴¹ The danger and drama of these expeditions were impactful on shaping Sowerby's character and lifelong commitment. He matured as a young man and gained field experience through these expeditions.

In her recent study of the history of the Shanghai Museum in modern China, Li-Chuan Tai credited Sowerby with introducing habitat dioramas to modern China and attributed his skilful knowledge in taxidermy to his participation in the Duke of Bedford's exploration (aka the Anderson expedition) and the Clark expedition. Tai suggested that, as a result of this fieldwork experience, Sowerby 'changed from an amateur explorer into a professional specimen collector' and this enabled him to become 'increasingly influential in the field of Chinese natural history'.⁴² I concur with Tai on the career-shaping influence of these expeditions, but I would modify the characterization of Sowerby to reflect that he was not merely a passive explorer in the wilderness; he was also an active hunter and sportsman. Sowerby's publication prior to living in Shanghai manifests his passionate engagement with hunting and sportsmanship. It is to the identity transformation from a hunter-sportsman to a naturalist-scientist that I now turn.

FROM A HUNTER-SPORTSMAN TO A NATURALIST-SCIENTIST

After the Clark expedition aborted in 1909, Clark continued to pay Sowerby to collect specimens for the Smithsonian Institution. An annual salary would be deposited to Sowerby's bank account for almost the rest of his life, even after both had left China for good (Clark left in 1909, Sowerby in 1946). The Clark–Sowerby bond was beginning to solidify when they co-authored their account of the Clark expedition and titled it *Through Shen-Kan*.⁴³ Interrupted by the 1911 Xinhai Revolution that brought down the Qing dynasty, *Through Shen-Kan* was written in 1910 but published in 1912. It was intended to be a collaborative project, but in the end was mostly written by Sowerby. Of the 15 chapters and five appendices listed in the table of contents, at least seven were explicitly marked as contributed 'by A. De C. Sowerby' and only one 'by R. S. Clark', and that is the chapter on 'survey work of the expedition'. Sowerby was responsible for the content that dealt with mammals, birds, and geological and meteorological observations. Most of the chapters in *Through Shen-Kan* summarized the routes and findings of the expedition. One chapter in particular hinted at the increasing bond between Clark and Sowerby during the journey. Titled 'Description of Hsi-An Fu—Clark and Sowerby's journey to Lan-Chou Fu', this chapter (VI) narrated the route and footsteps of the team led by Clark and Sowerby who travelled from Hsi-An Fu (present-day Xi'an city, literally 'Western City of Peace') to Lan-Chou Fu (present-day Lanzhou city). This chapter contains a photograph of

41 The Shensi Relief expedition of 1912 was not a scientific expedition but a missionary effort to rescue refugees after the Boxer Rebellion. Sowerby volunteered and provided a journalistic account in which he described the irksome scenes with mutilated corpses and smell of blood in the air. See Arthur de Carle Sowerby, 'The Shensi relief expedition being a narrative of the experiences of Mr. A.C. de Sowerby and party, to Shensi during the revolution', *Peking & Tientsin Times* (23 January 1912).

42 Li-Chuan Tai, 'The Shanghai Museum and the introduction of taxidermy and habitat dioramas into China, 1874–1952', *Arch. Nat. Hist.* **48**, 111–130 (2021), p. 119.

43 Clark and Sowerby, *op. cit.* (note 34).



Figure 1. Portrait of Robert Sterling Clark and Arthur de Carle Sowerby during the 1908–1909 Clark expedition. While the picture was likely intended to be a trophy shot with wild games, the body language suggested Sowerby on the right was looking at Clark on the left. This photograph was first published as a supplemental plate (Plate 21) in ‘Chapter VI. Description of Hsi-An Fu—Clark and Sowerby’s journey to Lan-Chou Fu’, in *Through Shen-Kan* (see note 34).

Clark and Sowerby, which was featured as a frontispiece in the centennial celebration of the Clark expedition. Against a wall where a dozen dead pheasants hung, two rifle-armed and booted young men clothed in gentlemanly suits stood on each side of the trophy wall. Clark stood on the left and Sowerby on the right. While Clark was looking directly at the camera, Sowerby’s eyesight and body posture were facing the left side of the wall, suggesting that Sowerby was gazing at Clark (figure 1). It might have been a trophy snapshot, but it soon became one of the most definitive representations of the unequal relationship between them, with Sowerby looking up to Clark for guidance, inspiration and, most importantly, regular stipends. The monetary and emotional support coming from Clark lasted until the end of Sowerby’s life. Sowerby’s friendship with Clark proved vital to his career-building. Their lifelong friendship can be discerned from their epistolary exchange after both had left China for good.⁴⁴

Li-Chuan Tai recognized that ‘Sowerby’s self-identification as a sportsman-naturalist was repeatedly reflected in his writings and activities’,⁴⁵ but this hyphenated identity ‘sportsman-naturalist’ obscures his transformation from a ‘sportsman’ to a ‘naturalist’. Between 1909 and 1919, Sowerby fashioned himself mostly as a hunter-sportsman. This is manifested in his

⁴⁴ Arthur de Carle Sowerby Correspondence Series, Sterling and Francine Clark Papers, Sterling and Francine Clark Art Institute, Williamstown, Massachusetts: <https://digital.clarkart.edu/digital/collection/p15001coll1/> (accessed on 16 March 2023).

⁴⁵ Tai, *op. cit.* (note 42), p. 124.

lexical style and ways of representation in three monographs that appeared in the 1910s, namely *Fur and feather in north China* (1914), *A sportsman's miscellany* (1917) and *Sport and science on the Sino-Mongolian frontier* (1918).⁴⁶ Before delving into each of these books, it is worth mentioning that all three texts were published prior to his five-volume *The naturalist in Manchuria* (1922–1930). Reading in this pre-1922 context, the three books in succession represent his transition from a domineering sportsman who trampled on nature for trophy hunting to a scholar-scientist who sought to uncover knowledge of China's flora and fauna and then disseminated what he found to a broad reading audience. It is as much an attempt of an amateur making a scientific career for himself as it is a redemptive turn to spark conservation initiatives for preserving rapidly disappearing natural animal habitats.

The 1914 *Fur and feather in north China* catalogued an array of fur-bearing and feather-bearing animals in northern China. Using animals as the organizing principle, the majority of the book is about huntable big game ranging from wild boars, musk, wild sheep and antelope to hare and pheasants, while the rest of the book is about non-huntable fauna such as bats and some freshwater fish. Unlike travel writings, which are usually chronologically structured, this 1914 text is not an expedition account but a combination of big-game hunting genre with some natural history elements. In describing the huntable animals, he immersed the readers with details that capture the thrill of shooting. For example, chapter three under the title of 'wild sheep' began with a narrative of his experience of hunting the 'head of heads feeding out of range':

Day after day the hunter goes out, and climbs the steep and rocky ascents to the sheep range ... he keeps spying, spying, spying, till one day he sees on some far distant ridge a ram bearing the 'head of heads' he is seeking. Immediately he is seized with an overwhelming desire to have that head at all costs. If luck is with him, he may secure it in the next two hours; or he may have a long tiring day's work before he gets it; or it may take him days and even weeks. Men have gone mad in the pursuit of such a head, others have broken themselves in the endeavour to answer this, the most powerful call of the Red Gods.⁴⁷

What this narrative shows is Sowerby's obsession with hunting to acquire the trophy of a sheep's head, which is illustrated in portraits of him posing alongside a captured ram (figure 2). Sowerby's fondness of picturing himself with a ram is also shown in a similar image that appeared in *Sterling Clark in China* for the centenary anniversary of the Clark expedition (figure 3),⁴⁸ but what Sowerby intends to depict was more than the materiality of 'head of heads'—for the operative word of 'hunting a sheep' is 'hunting'. Rather than developing a fetish for sheep heads, Sowerby was emphasizing the process of shooting, which is contingent on external factors such as weather forecast and landscape pattern, as well as personal factors such as marksmanship, courage, patience and serendipity; and Sowerby seemed to thoroughly enjoy himself in this manly pursuit. Hunting was a life-altering experience for Sowerby, as he remarked: 'Those who survive it and come out triumphant will be changed men—the more so the longer and harder the chase. Perhaps

⁴⁶ Arthur de Carle Sowerby, *Fur and feather in north China* (Tientsin Press, Tientsin, 1914); Sowerby, *A sportsman's miscellany* (Tientsin Press, Tientsin, 1917); Sowerby, *Sport and science on the Sino-Mongolian frontier* (Andrew Melrose Ltd, London, 1918).

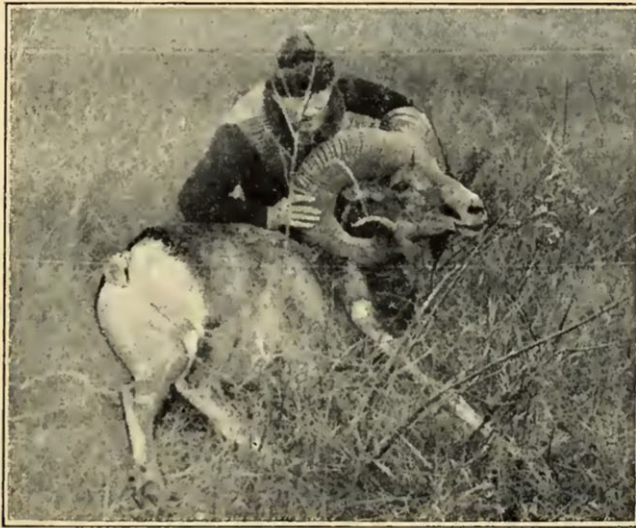
⁴⁷ Sowerby, *Fur and feather*, *op. cit.* (note 46), p. 15.

⁴⁸ Loughman, *op. cit.* (note 28).

Plate V.



THE WILD SHEEP OF NORTH CHINA.
(*Ovis jubata*).



THE AUTHOR WITH HIS BEST RAM.
Length of horn :—50 inches.
Girth of horn :—17½ inches.

Figure 2. Upper panel: a portrait of a dead wild sheep. Lower panel: portrait of Arthur de Carle Sowerby, as the author of *Fur and feather in north China*, posing with 'his best ram', which presumably is the same ram portrayed in the upper panel. This 'Plate V' was part of the richly illustrated *Fur and feather in north China* (see note 46).

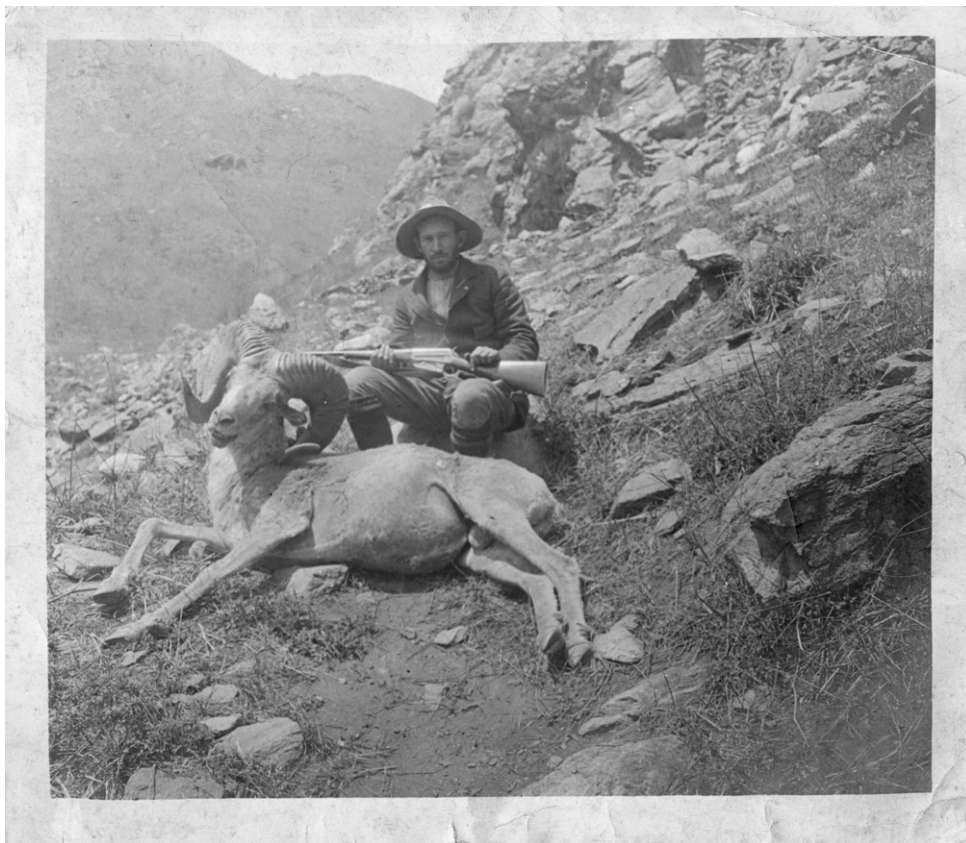


Figure 3. Portrait of Arthur de Carle Sowerby posing with a mountain ram during the Clark expedition, ca 1909. Collection: Arthur de Carle Sowerby Papers, Smithsonian Institution Archives. Image #SIA2008-3152. Reproduced with permissions from Smithsonian Institution Archives.

the change will not be noticeable to the outside world, but from that time on he will never look upon life in quite the same way.’⁴⁹ Needless to say, what appears to be a youthful experience to cultivate manhood smacked of imperialistic violence against wildlife.

Tainted with blood and cruelty, Sowerby’s engagement with blood sports nevertheless shows he was an effective hunter and shooter. This point is worth reinforcing because it contradicts a recent analysis from Ying-Kit Chan, who asserted: ‘Having never learned to shoot well, Sowerby saw himself more of a naturalist than a hunter, and in this regard, he admired Caldwell, who had mastered the Savage rifle.’⁵⁰ Focusing on the tiger-hunting evangelical activities of Harry R. Caldwell (1876–1970), an American Methodist who spent time in Fujian as both a missionary and a hunter, Chan’s article used Sowerby as a comparative case to shed light on different types of masculinity embodied by Anglo-American naturalists in early twentieth-century China. In Chan’s analysis, Sowerby

49 Sowerby, *Fur and feather*, *op. cit.* (note 46), pp. 15–16.

50 Ying-Kit Chan, ‘Manly civilization in China: Harry R. Caldwell, the “Blue Tiger” and the American Museum of Natural History’, *Mod. Asian Stud.* 53, 1381–1414 (2019), p. 1407.

embodied what he called ‘aristocratic masculinity’ because ‘Sowerby was wealthy and well educated’ and his British lineage and identity predisposed him to pursue hunting as a symbol of his upper-middle class status.⁵¹ Caldwell, on the other hand, manifested what Chan called ‘rugged masculinity’ because of his upbringing in the settled frontier in Tennessee. However, the empirical basis of Chan’s article was mostly letters and books written by Harry Caldwell. There is no evidence that the author consulted any of the writings by Arthur de Carle Sowerby himself. As such, Chan’s comparative analysis was based on Caldwell’s perception of Sowerby’s hunting skills and style of masculinity, rather than those in Sowerby’s self-representation. Maybe Sowerby over-estimated himself as a hunter; maybe Caldwell misunderstood Sowerby’s background; maybe there was a competition between the two. At the very least, there seemed to be a gap between Sowerby’s representation of himself and others’ perception of him.

The co-production of hunting and scientific knowledge was the subject of Sowerby’s 1917 book titled *A sportsman’s miscellany*. Although Sowerby declared in the preface that this book was ‘not intended to be a contribution to science’,⁵² a substantial part of the content was drawing on the premise that ‘it is only a thorough knowledge of their habits and ways, combined with much patience and good luck that will enable the sportsman to secure a decent bag of these much-to-be-desired members of the feathered world’.⁵³ In other words, Sowerby was arguing that natural knowledge increased the chances of success for the sportsman. To illustrate why hunters and nature-lovers need scientific knowledge in their quest for wild animals, he offered a mathematical formula for ‘finding the correct lead to give a bird flying overhead or passing in a line at right angles to one’s line of vision’ after repeated failures at shooting flying birds at long ranges. What matters more than the precision of the formula (speed of one’s shot in feet per second times that of the bird’s flight as miles per hour and their range as yards or feet) was the marshalling of ‘scientific’ knowledge to locate the whereabouts of game birds. As another example to popularize science to sportsmen, he used the theory of evolution to illustrate different species of wild geese according to the shape of their bills (long-billed or thick-billed), spread of wings, length of heads and body, weight and plumage. A typology of different types of geese was listed, followed by an accompanying sketch showing the relative shapes and sizes of the heads and bills of these wild geese, to explain why birds tend to fly in the V-shaped formation from an evolutionary perspective.

As a monograph targeted at sportsmen, there was scatter-shot discussion of hunting techniques. But instead of relating the excitement of capturing the head of a sheep, his attention seemed to be placed on the comfort he found wandering in the wilds, with his rifle under his arm:

Once in the cool of an autumn evening I was wandering alone along the trackless slopes of a range of foothills in Shansi, enjoying the fresh breeze that came gently down from the mountains, sighing through the tops of the pines, and passing on to the heat-laden plains, spreading peace and a new lease of life after the scorching heat of the day. My rifle lay in the crook of my arm, not because I expected to shoot anything, but because

51 *Ibid.*, p. 1410.

52 Sowerby, *Sportsman’s miscellany*, *op. cit.* (note 46), p. iv.

53 *Ibid.*, p. 15.

the old weapon had become a sort of companion to me, and it made me feel more a part of the wilds to have it with me.⁵⁴

Sowerby pictures himself as a lonely man finding refuge from the hustle and bustle of urban life. Yet this seemingly idyllic picture is punctured by the presence of his rifle, a man-made weapon. To justify the awkwardness of this scene, Sowerby reasoned that the rifle was with him at all times, not because he ‘expected to shoot anything’. But does it mean he wasn’t prepared to shoot ‘anyone’, such as thieves and perhaps hostile natives? Aside from the practical necessity of carrying arms for self-protection, his confession of taking the rifle as a companion also reveals his loneliness. His inability to find warmth and solace in human company led him to lavish praise and affection on his dog, an English pointer named Jimmy. In the chapter titled ‘Jimmy’, Sowerby introduced how Jimmy and another sporting dog named Keck were brought in as members of the Clark expedition as watch dogs. Sowerby was attached to Jimmy’s intelligence and loyalty. He was heartbroken when Jimmy went missing one day, and he mourned ‘I have never ceased missing him or mourning his loss’. His attachment with Jimmy was reflected as he paraphrased Kipling: ‘I think of my Jimmy, and I vow that never, no, never will I ever again “give my heart for a dog to tear”.’⁵⁵

In sharp contrast to his heart-felt sorrow over the loss of Jimmy, Sowerby was much less attached to his first wife, who accompanied him during his multiple journeys in northern China during the 1910s. While Sowerby devoted a whole chapter of *A sportsman’s miscellany* to his beloved dog, he only gave marginal description of his spouse. More information of his first wife, Mary Anne Mesny (nicknamed May), can be found in his unpublished autobiography, *The Sowerby saga*, which was co-authored with his third wife Alice Muriel Sowerby and an assistant named Joan Evelyn Stone. In this unpublished and unfinished autobiography, Sowerby recalled May’s departure from the expedition after the 1911 revolution in order to take care of their son, his only child. Instead of expressing feelings of gratitude and loving kindness towards his wife, Sowerby felt he ‘had lost a travelling companion and assistant in my work ... I must go on from there alone’.⁵⁶ His apparent sadness was not over the departure of a loved one, but the inconvenience of losing a work partner. It is clear that Sowerby’s emotional bond with his dog is much deeper than that with his first wife, from whom he eventually split.

Turning from the gaze of a sportsman to the trained eye of a naturalist is his 1918 *Sport and science on the Sino-Mongolian frontier*. This book was written in 1914, but published in 1918, interrupted by World War I. The structure of the book reflects Sowerby’s transition from a hunter-sportsman to a naturalist-biologist. The first half of the book captures the first keyword of its title ‘sport’, as chapters 1–7 are written mostly as a hunting journey; the second half of the book corresponds to the second keyword of the title ‘science’, as chapters 8–10 read like a naturalist’s account. Compared to the aforementioned two books, two themes emerge which highlight Sowerby’s transformed identity from a sportsman to a scientist. The first is his changing attitude towards the nomenclature of plants and animals. In *Fur and feather in north China*, he was critical of ‘the quarrels of the learned about varieties and species’.⁵⁷ He distanced himself from Latin names, saying that the controversy

⁵⁴ *Ibid.*, p. 219.

⁵⁵ *Ibid.*, p. 182.

⁵⁶ Sowerby, *op. cit.* (note 22), p. 157.

⁵⁷ Sowerby, *Fur and feather*, *op. cit.* (note 46), p. 91.

between scientific and popular names of species and forms was unimportant. However, when sportsmen are no longer his sole audience, he becomes more cognizant of the necessity of names to distinguish different species of plants and animals. In chapter 8, titled 'biological work', he writes as a professional naturalist, with a very different tone from the previous chapters, in which he writes as a journeyman and a hunter. The majority of this chapter is his description and illustration of 45 types of mammals that he collected on the various expeditions subsequent to the Clark expedition. In this itemized catalogue, matching popular names with scientific names and naturalists' names, a hedgehog is listed alongside *Erinaceus deadlbatus* and Swinhoe, who was credited as the naturalist who discovered this new species of hedgehog. Similarly, what was popularly known as 'Sowerby's hare' is scientifically listed as '*Leus swinhoei sowerbyae*' and credited to the naturalist named Hollister.⁵⁸ In this schema of popular name–scientific name–naturalist/discoverer, the gap between the popular and scientific names of an animal is reduced. It also reflects Sowerby's growing interest in making his name known in scientific nomenclature.

Sport and science on the Sino-Mongolian frontier marks Sowerby's first foray into botany. Unlike his previous craze with hunting fur- and feather-bearing game animals, 'the flora of the Sino-Mongolian frontier' is the title of chapter 9. Sowerby first humbly admits that he can only give nothing more than 'a very superficial account of the flora of the country along the Chinese frontiers of Mongolia' due to the perceived 'wealth and variety of vegetable forms' in this part of the country.⁵⁹ Given the vast botanical complexity and his lack of familiarity with flora in general, why did he bother to include botany? Sowerby was trying to expand his knowledge of natural history beyond just animals. Zoological specimens only constitute part of the 'science' component of the book. The botanical world cannot be omitted if he wants to claim the scientific title as a 'naturalist' (and not just a zoologist) of this region. Lending support to this analysis is his coverage of geology in chapter 10, in which he lays out the geological formations of rocks that he collected along the Ordos border and into Western Shansi (aka Shanxi) during the Anderson expedition and the Clark expedition.

Systems of nomenclature are related to the boundary-drawing activities among specialists. At one point, Sowerby asked his sportsman audience to ignore the names of different species of hare, because 'from a sporting point of view they are all alike' and 'the variations being only such as a Zoologist would appreciate'.⁶⁰ In other words, he secured his identity as a hunter-sportsman by drawing a boundary between himself and zoologists, and he was neither interested in nor qualified to speak for the latter. Yet in *Sport and science on the Sino-Mongolian frontier*, he begins to take up the role of a zoologist, and is keen on distinguishing different species and subspecies of mammals. The chapter on 'biological work' begins with his contribution to the endeavour in turning the biological collections gathered during the expedition into scientific publication.⁶¹

Sowerby's collection of some 20 species of mammals from the Anderson expedition were published by Thomas Oldfield, from the British Museum, in the 1908 issue of *Proceedings of the Zoological Society of London*.⁶² Although Sowerby was not listed as the author of this

58 Sowerby, *Sport and science*, *op. cit.* (note 46), pp. 181–184.

59 *Ibid.*, p. 215.

60 Sowerby, *Fur and feather*, *op. cit.* (note 46), pp. 60–61.

61 Sowerby, *Sport and science*, *op. cit.* (note 46), p. 173.

62 Thomas Oldfield, 'The Duke of Bedford's zoological exploration in Eastern Asia—XI: on mammals from the provinces of Shan-si and Shen-si, northern China', *Proc. Zool. Soc. Lond.* **78**, 963–983 (1908).

academic article, he seemed to long for a chance to establish his scientific reputation by publishing in this eminent scientific journal. Indeed, Sowerby would publish his single-authored articles in the same periodical starting in 1917.⁶³ His ambition to claim scientific authority via authorship differentiated the ‘science’ section from the ‘sport’ section of this popular work.

Sowerby became a Captain in the Chinese Labor Corps in 1916, when he served behind the American front for World War I. As a China-born Briton serving for the Anglo-American allied forces, Sowerby leveraged his language ability and also negotiated his identity as a China-born Caucasian for the great war among European colonial powers. After he came back from his military service, he was invited to deliver a speech at a meeting of the Royal Geographical Society on 26 May 1919. His speech was published in the August 1919 issue of *The Geographical Journal*, in which Sowerby was introduced to the audience by Thomas Holdich, then president of the Royal Geographical Society, as ‘a man of great scientific reputation as a naturalist’. Holdich presented Sowerby as a keen scientist who ‘has always been a close observer in the particular branch of science to which he is devoted’.⁶⁴ This was the professional coming-out party for Sowerby, as he was presented to the scientific community as a man of science, not a bloodthirsty hunter. Sowerby reaffirmed the host’s introductory remark by adopting the identity of a naturalist who has earned the right to speak as an expert on the natural landscape of Manchuria. He walked the audience through the early history of the territory known as Manchuria and wrote ‘as a naturalist’ he was ‘concerned primarily with the fauna and to a lesser extent the flora and geology rather than with the geography of these districts’.⁶⁵ Sowerby’s preoccupation with the zoological and botanical over geographical aspects of Manchuria was a direct response to Holdich’s invitation to ask him to discuss ‘the geographical features of the country’ and give the audience some useful information about ‘the geography of Manchuria’.⁶⁶ His disciplinary attachment to zoology was also disclosed in his authorial signature as ‘Captain Arthur de C. Sowerby, F. Z. S.’, in which the last three letters stand for ‘Fellow of the Zoological Society’.⁶⁷ As a *bona fide* zoologist, Sowerby characterized himself ‘as one of the most recent scientific travelers in Manchuria’ because he had journeyed into Manchuria for the sake of natural history.⁶⁸ Ceasing to call himself a sportsman or a hunter, he declared his identity as a naturalist as well as his professional affiliation with the Smithsonian: ‘As a field naturalist I have been working under the auspices of the United States National Museum, better known, perhaps, under the name of the Smithsonian Institution’.⁶⁹ This is one of the earliest indications of Sowerby’s affiliation with the Smithsonian Institution. His correspondence with the United States National Museum in Washington, DC, intensified after he took up curatorship and directorship at the Shanghai Museum in 1923 and 1932, respectively. His partnership with the Smithsonian lasted until the end of his life. After he left China in 1946, he settled in Washington, DC, the home base of the Smithsonian, rather than his hometown in England. Choosing to spend the

63 Arthur de Carle Sowerby, ‘On Heude’s collection of pigs, sika, serows, and gorals in the Sikawei Museum, Shanghai’, *Proc. Zool. Soc. Lond.* **87**, 7–26 (1917).

64 Sowerby, *op. cit.* (note 8), p. 89.

65 *Ibid.*, p. 74.

66 *Ibid.*, p. 89.

67 *Ibid.*, p. 73.

68 *Ibid.*, p. 74.

69 *Ibid.*, pp. 74–75.

final years of his life in Washington, DC, is his display of love and loyalty to the eminent scientific institution. To this day, the Smithsonian Institution Archives keep his original manuscripts in the ‘Arthur de Carle Sowerby Papers’ collection.

In sum, Sowerby’s self-representation from a sportsman-hunter to a naturalist marks his transformation from an amateur explorer to a ‘man of science’. This transition was evident from a textual analysis of style of representation in *Fur and feather in north China* (1914), *A sportsman’s miscellany* (1917) and *Sport and science on the Sino-Mongolian frontier* (1918). By the time he spoke at the meeting at the Royal Geographical Society in 1919, this metamorphosis was already complete. He was a ‘Fellow of the Zoological Society’, ‘a man of great scientific reputation as a naturalist’ and a ‘close observer’ in Manchuria’s natural history. He would amplify the hallmark of ‘a naturalist in Manchuria’ in his five-volume treatise *The naturalist in Manchuria*, published after 1922 when ‘Sowerby of Manchuria’ became ‘Sowerby of Shanghai’.

CONCLUSION

In closing, one might ask: what lessons can be drawn from examining the early career of Arthur de Carle Sowerby? Recent scholarly literature on Sowerby mostly characterize him as a Western naturalist who was predisposed to take up the science of natural history due to influence from his family background and upbringing in China. This is the argument put forth by Liyuan Fan and Han Qi.⁷⁰ It is in this scholarly context that I highlight his career transition from a hunter to a naturalist. Sowerby did not begin his career as a naturalist-scientist. He was not a degree holder and he did not receive proper academic training before going on the three expeditions in the 1910s. The Anderson expedition, the Clark expedition and the Shensi Relief expedition allowed him to accumulate hands-on field experience in specimen collecting and geology mapping. The Clark expedition is the most important contributing factor in shaping his career transition from a sportsman-hunter to a naturalist-biologist. Other scholars notice Sowerby’s multifaceted role in museum curatorship, popular dissemination of conservation science and periodicals business after he moved to Shanghai in 1923. His pre-Shanghai career revolved around ‘Sowerby’s self-identification as a sportsman-naturalist’, as Li-Chuan Tai noted.⁷¹

In this article, I unpacked the nuances behind his transition from a sportsman to a naturalist, which was previously condensed or abbreviated as one single form of identity. This transformation could be interpreted as ‘a non-elite practitioner of science gaining access to the elite circle’, as the case of George William Francis showed,⁷² but it is also a case of youthful amateur crafting a scientific selfhood for himself. In this interpretive context, Jan Golinski’s study of finding scientific selfhood in Humphrey Davy’s early nineteenth-century experiments is similar to Sowerby’s redefinition of himself nearly a century later.⁷³ Notwithstanding their common Anglo descent, Sowerby’s identity-shaping in the late

⁷⁰ Fan and Han, *op. cit.* (note 5).

⁷¹ Tai, *op. cit.* (note 42).

⁷² Hsiang-Fu Huang, ‘From Grub Street to the colony: George William Francis and an early Victorian scientific career’, *Notes Rec. R. Soc. Lond.* **76**, 181–208 (2022).

⁷³ Jan Golinski, *The experimental self: Humphrey Davy and the making of a man of science* (University of Chicago Press, Chicago, 2016).

nineteenth and early twentieth centuries recapitulates the notion of ‘self-fashioning’ among men of science in the early modern period, before the term ‘scientist’ was coined. Between the sixteenth and eighteenth centuries, gentlemanly individuals interested in natural philosophy had to conduct themselves in a manner that attracted patronage from aristocrats or ecclesiastics, which provided entry into the close circle of a learned society. As Golinski has suggested, ‘Identity was not conferred on individuals as a condition of employment. Rather, people had to fashion themselves to survive and flourish in the circumstances in which they found themselves.’⁷⁴ Likewise, Sowerby composed himself as an individual who finds his true sense of self when isolating in the wilderness and gradually becoming aware of his surroundings—but in a Chinese context.

China was in flux during Sowerby’s coming-of-age as an adult and as a naturalist, and this opened up both challenges and opportunities for non-elite foreigners. Sowerby’s claim of scientific identity occurred at a time when China was undergoing radical upheavals. The May Fourth Movement intellectual-activists constructed a new Chinese identity based on science and democracy, with a nationalist bent. The late nineteenth and early twentieth centuries witnessed the establishment of modern science in post-imperial China. At the turn of the twentieth century, science and scientists were still associated with the late-Qing ideas of ‘Western learning’ and ‘Westerners’, respectively. The proliferation of Chinese translations of Western science texts in the second half of the nineteenth century gave rise to the founding of new sciences such as modern chemistry and geology. Much of the intellectual activities in the centres of science learning in Beijing and Shanghai focused on translating Western science texts and inventing Chinese neologisms.⁷⁵ Following the work of John Fryer and Xu Shou in Shanghai, the incipient discipline of modern chemistry was transplanted into the new soil of China as ‘the study of change’.⁷⁶ From the late 1910s onwards, chemistry found a new footing in China as a profession with institutional support and specialized journals. Biology followed suit, and institutes and university departments supporting biological research and teaching soon began to emerge. James Reardon-Anderson asserted that, during this period of science disciplinary formation in modern China, ‘[t]here was no biology at all until 1925’.⁷⁷ The year 1925 was marked as the birth of biology in modern China partly because after this point biology became a specialized unit to be separated from its pre-medical curriculum at the elite Peking Union Medical College (PUMC). Founded in 1921 under the auspices of the Rockefeller Foundation, the PUMC put biology under its preparatory departments together with chemistry and physics. That biology was singled out as an independent department in 1925 signalled a policy shift of the China Medical Board. By the mid 1920s, Chinese biologists with doctorates from some of the world’s best universities returned to China to take up important positions as chair professors or founding directors of research institutes.⁷⁸ In this context of science-for-nation-building, Sowerby’s transformation was not just a matter of self-actualization. Without holding even a bachelor’s degree, he had to justify his standing among members of the scientific profession who held doctorates from elite institutions in the West. The fact

74 *Ibid.*, p. 9.

75 Jing Tsu, ‘Historians of science translating the history of science: blur versus grit’, *Isis* **109**, 789–795 (2018).

76 James Reardon-Anderson, *The study of change: chemistry in China 1840–1949* (Cambridge University Press, Cambridge, 1991).

77 *Ibid.*, p. 115.

78 Laurence Schneider, *Biology and revolution in twentieth-century China* (Rowman and Littlefield, Lanham, 2003).

that Sowerby was able to carve out a place for himself sheds new light on the state of science in Republican-era China, which saw the co-existence of a new cadre of professional scientists, with overseas credentials and specialized training, alongside the rank of leisured amateur and practitioners, who saw science as both vocation and avocation.

Sowerby's legacy as 'the naturalist in Manchuria' can be assessed from the reception of his work by some of the PRC scientists after 1949. Scientists at the Chinese Academy of Sciences in the 1950s credited Sowerby as one of the first to offer biogeographical research data in northeast China. In their assessment, *The naturalist in Manchuria* was a pioneering work that connected zoology with geography by mapping faunistic distribution in Manchuria's territory.⁷⁹ Although there was slippage in some of the reported fauna in his work, Sowerby was still celebrated, not just as an intrepid explorer who fearfully trekked the Manchurian terrain, but also as a researcher who produced useful knowledge about the fauna and flora of this borderland region, and was recognized as a naturalist as such. Shi Hongshuai also reaffirmed the scientific achievement of the Clark expedition, setting it apart from other Western expedition activities in early twentieth-century China, for which robbing cultural relics or hunting rare species were common. Contrary to the previous expeditions led by Richthofen from Germany, the Duke of Bedford from Great Britain and the Carnegie Institution of Washington in the US, 'members of the Clark expedition were experienced experts' who were skilful surveyors and acumen collectors.⁸⁰ As a recruited member of the Clark expedition, Sowerby was labelled one of the 'experienced experts'. There are promissory prospects to his membership in this network of expedition patrons and elite scientists, which provided the condition of possibility for Sowerby to make himself into a naturalist between 1885 and 1922.

DATA ACCESSIBILITY

The data that support the findings of this study are available from the author upon request.

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79 Zhongguo keyuan yuan ziran qihua gongzuo weiyuanhui, *Zhongguo dongwu dili qihua yu zhongguo kunchong diqi qihua* (Science Press, Beijing, 1959).

80 Shi, *op. cit.* (note 36), p. 46.