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*Part I  
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Royal  
Geographical  
Society  
with IBG

# | Table of Contents

<b>Introduction</b>	<b>3</b>
<b>Colonialism in Africa</b>	<b>4</b>
<b>Geographical Photography</b>	<b>7</b>
<b>Early Weather and Climate Studies</b>	<b>9</b>
<b>Introducing Automated Text Recognition (ATR)</b>	<b>11</b>
<b>About the Royal Geographical Society (with IBG) Part I archive</b>	<b>12</b>



# | Introduction

Geography is, in the broadest sense, an education for life and for living.

– *Royal Geographical Society (with IBG)*

Where we live. Where we work. Who we are. Our world as we know it today.

The fundamental tenets of our society—people, cultures, places, environment—and how they influence and interact with each other are at the core of the geographic discipline. Those that came before us—the likes of David Livingstone, Henryk Arctowski, Richard Francis Burton, John Hanning Speke, and many more—not only traced and discovered parts unknown, but they did not so much with the promise of success, but the incredible probability of failure.

From colonialism in Africa to studies on Antarctic climate, this lookbook demonstrates the interdisciplinary scope of geographical research and provides a window into the foremost geographers and expeditions of our time.

To learn more about the stories in the Royal Geographical Society (with IBG) Part I archive, visit [wileydigitalarchives.com/rgs](https://wileydigitalarchives.com/rgs).

# Colonialism in Africa



*River Shire from Lake Nyassa to the Sea. The River Shire from the Murchison Cataracts to the River Zambezi Reduced from an Original by Dr. Livingstone and Mr. Thornton. [1867].* Map, 1867. Wiley Digital Archives.



## FILE THIS UNDER

Geography, African Studies, Colonial History, Cartography, Anthropology, International Relations, Economic History



## HISTORICAL CONTEXT

Throughout the nineteenth century, maps of Africa became symbols of British missionary, scientific and imperial endeavour. No meeting concerning Africa – whether to promote missionary activity, to debate the location of rivers and lakes, or to contemplate imperial schemes – was complete without a large map of the continent. Founded in 1830, the Royal Geographical Society (with IBG) served as an information exchange for explorers, soldiers, administrators and naturalists, providing intelligence and advice for a range of government departments; its extensive map room was a frequent source of information for the military.





## WHO

David Livingstone, generally considered to be the most famous European explorer of Africa in the 19th century



## WHY HE'S NOTABLE

David Livingstone (1813 – 1873), a Scottish physician, scientific explorer, imperial reformer, anti-slavery crusader, and Christian missionary, created many of the first maps of Africa that live in the RGS-IBG archives today. One of the most popular British heroes of the late 19th-century Victorian era, he was an advocate of commercial and colonial expansion as a means to replace the slave trade he detested with a legitimate form of commerce.

Livingstone's obsession with learning the sources of the Nile River was founded on the belief that the discovery would give him the influence to end the East African Arab-Swahili slave trade during the culmination of the classic period of European geographical discovery and colonial penetration of Africa.

His missionary travels and eventual death in Africa led to the founding of several major central African Christian missionary initiatives in the era of the European "Scramble for Africa."



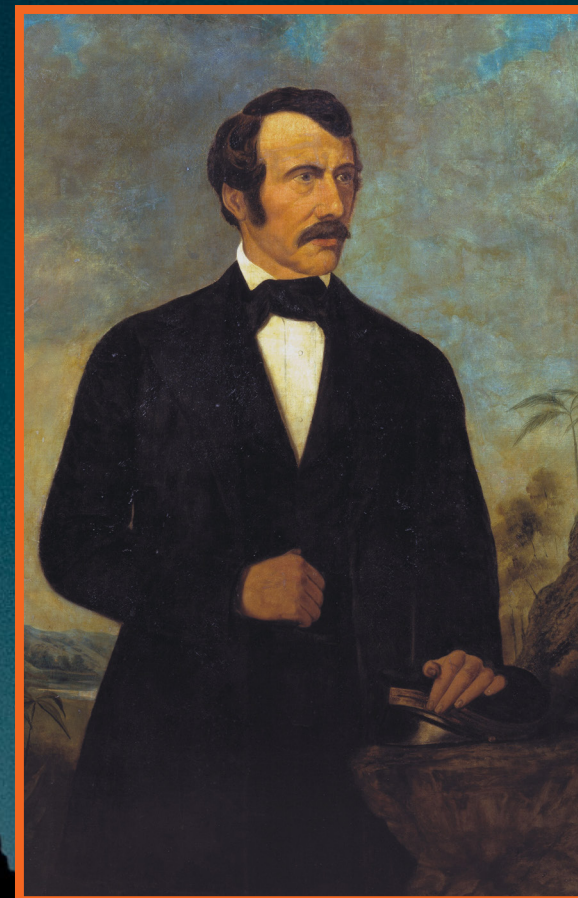
## EXPEDITION HIGHLIGHTS

Livingstone's passion for exploring Africa wasn't without challenges. In 1858, Livingstone set out on the Zambezi Expedition to examine the resources of southeastern Africa and open up the Zambezi River. His crew consisted of several members: his brother Charles, a photographer; John Kirk, a botanist; Richard Thornton, a geologist; and **Thomas Baines**, the official artist.

Riddled with illness and drama amongst the crew, the Zambezi Expedition was by no means smooth sailing. After an argument that led to both Thornton's and Baines' dismissal, Livingstone's steamer, the Ma Robert, began leaking, forcing members to continue on foot. They changed course to travel along the River Shire, Lake Nyassa and the Rovuma but still faced obstacles with navigation and the encroachment of local Africans and slave traders.

At this point, Livingstone's wife Mary joined her husband but contracted malaria and died. Subsequently, Livingstone faced the threat of mutiny when he dragged the steamer over miles of sandbanks before being ordered home by the British government with disappointing results.

Though the failure to circumnavigate and fully navigate the lake was a major disappointment to British geographers, the Expedition brought back some profitable results, including various botanical and zoological specimens.



Craig, Alexander. "David Livingstone (1813-1873)." RGS Images Online, 1 Jan. 1856. Wiley Digital Archives.

**Related items & special collections in the RGS-IBG Archive:** Maps, manuscripts, Livingstone's account of his search for the source of the Nile, **historic photographs**, accounts and artworks of pioneering journeys of Livingstone, **Samuel Baker**, John Hanning Speke, Richard Francis Burton, and more.



## WHO

John Hanning Speke, English explorer and officer in the British Indian Army who made three exploratory expeditions to Africa

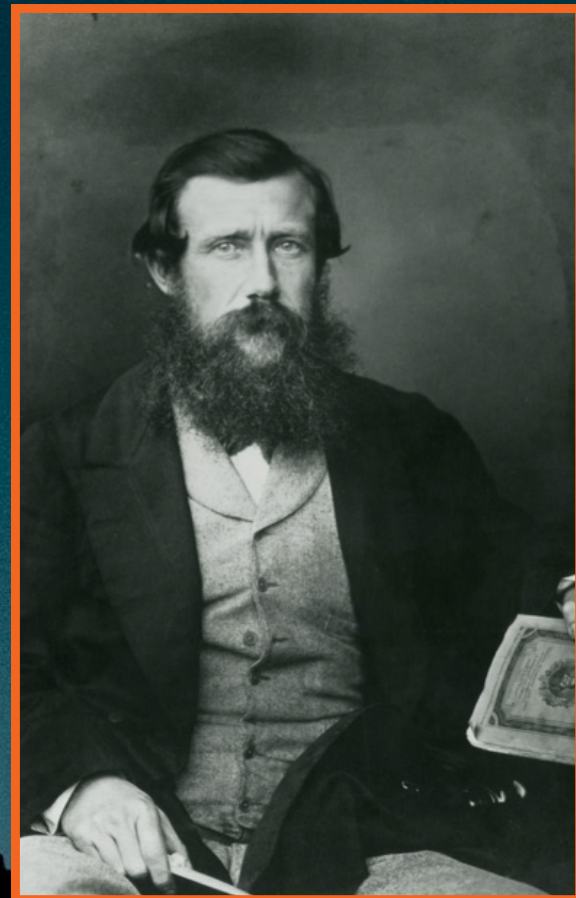


## WHY HE'S NOTABLE

Commissioned by the British Indian Army in 1844, John Hanning Speke served in the Punjab and travelled in the Himalayas and Tibet. In April 1855, while Speke was a member of Richard Burton's party attempting to explore Somaliland, he was severely wounded in an attack by the Somalis that broke up the expedition. In December 1856, he rejoined Burton on the island of Zanzibar. Their intention was to find a great lake said to lie in the heart of Africa and be the origin of the Nile.

After exploring the East African coast for six months to find the best route inland, the two men became the first Europeans to reach Lake Tanganyika in February 1858. During the return trip, Speke left Burton and struck out northward alone. On July 30, he reached Lake Victoria, which he correctly identified as a source of the Nile and named in honor of Queen Victoria. Speke's conclusion about the lake as a Nile source was rejected by Burton (and was disputed by many in England), but the Royal Geographical Society, which had sponsored the expedition, honored Speke for his exploits and commissioned a second expedition in 1860 to resolve the dispute. Speke and Captain James Grant mapped a portion of Lake Victoria, and in July 1862, Speke, unaccompanied by Grant, found the Nile's exit from the lake and named it Ripon Falls.

Speke's claim to have found the Nile source was challenged in England, and, on the day he was to debate the subject publicly with Richard Burton, he was killed by his own gun while hunting. Accounts of his explorations were published in 1863 and 1864.



"Captain John Hanning Speke." RGS Images Online, 1 Jan. 1860, Wiley Digital Archives: Royal Geographical Society (with IBG)

**Related items & special collections in the RGS-IBG Archive:** Maps, manuscripts, Livingstone's account of his search for the source of the Nile, **historic photographs**, accounts and artworks of pioneering journeys of **David Livingstone**, **Samuel Baker**, **Richard Francis Burton**, and more.



# Geographical Photography



*"A Half Century of Geographical Progress." Lantern Slides, 1860–1915.  
Wiley Digital Archives: Royal Geographical Society (with IBG).*



## FILE THIS UNDER

Photography, Exploration Photography, Mapping, Art History, Design, Media, Geography, Colonial History, Cartography, Anthropology



## HISTORICAL CONTEXT

Centuries of advances in chemistry and optics, including the invention of the camera obscura, set the stage for the world's first photograph, taken in 1826 by French scientist Joseph Nicéphore Niépce. Niépce's success led to a number of other experiments, and photography progressed very rapidly. Daguerreotypes, emulsion plates, and wet plates were developed almost simultaneously in the mid- to late-1800s. With each type of emulsion, photographers experimented with different chemicals and techniques.

At a time when travel was embraced as a way of seeing and knowing the world, photographs of all types offered a new means of acquiring, ordering, and disseminating geographical information. For example, photographic lantern slides took off in the late 19th century as a popular form of entertainment, and in addition to educators, missionaries and explorers soon began to use lantern slides to visually entice the audience while educating, spreading messages, and sharing discoveries.

Interest in topographic photographs grew in line with other developments that characterized the Victorian age, particularly travel and the growth of the railways. In addition, new legislation introduced mandatory holidays for working people for the first time, enabling them to vacation at the coast or in the country. Set against the background of imperial expansion, this growth in tourism, coupled with the emergence of the new middle class, prompted a powerful new desire for knowledge—to see new things and experience more of the world.





## WHO

Francis Frith, Victorian topographical photographer who ran a large photographic business



## WHY HE'S NOTABLE

Francis Frith was born in 1822 in Chesterfield, Derbyshire. During his early life, he was apprenticed to a cutlery firm before he began working as a wholesale grocer. He turned his attention to photography sometime in the 1850s, and he became one of the founding members of the Liverpool Photographic Society in 1859.

He specialized in producing photographic prints of British beauty spots and other tourist views including landmark buildings. In 1856, Frith made an extended trip to Egypt, traveling up the Nile from Cairo to Abu Simbel. He photographed along the entire way, using three different cameras. During this trip, he was one of the first to experiment with glass negatives. This allowed him to capture both the expanse and the detail of Eastern subjects. Each photograph took a few minutes to create, eliminating temporary and moving objects. Frith prepared and fixed the photographs in a tent or ancient tomb, despite the danger of using explosive materials such as liquid ether and gun cotton in the desert heat.

The success of these images financed Frith's next trip to Palestine, Syria, and Egypt in late 1857. He published these images between 1858 and 1860. In the summer of 1859, Frith returned to Egypt, traveling up the Nile to the Fifth Cataract - farther than any earlier photographer had gone.

An astute entrepreneur as well as an adventurer, Frith established his own business, Francis Frith & Co., in 1860. Francis Frith & Co. was the first specialist photographic publisher to photograph every town and village in Britain, and by the time of Frith's death in 1898, he had opened branches all over the world.



Francis Frith & Co. "A Village on a Hillside." RGS Images Online, 1 Jan. 1860. Wiley Digital Archives: Royal Geographical Society (with IBG).

**Related items & special collections in the RGS-IBG Archive:** Maps, *manuscripts*, and several *collections of lantern slides* from the 19th century. Work related to photographers such as *Julia Margaret Cameron, Thomas Annan, Frank Hurley, Herbert Ponting*, and many more.

**Source:** <https://www.getty.edu/art/collection/artists/1756/francis-frith-english-1822-1898/>



# Early Weather and Climate Studies

Sur le climat antarctique.  
(on the antarctic climate)

by  
Henry Arctowski.

La présente notice n'est qu'un résumé préliminaire de quelques uns des faits acquis par l'Expédition Antarctique Belge. Sans nos connaissances de la météorologie de la région du pôle Sud.

Cette région désolée, et, encore si peu connue de nos jours, est des plus intéressante au point de vue du phénomène naturel qui s'y passent. Ainsi, la question du climat antarctique a déjà été discutée dans le temps par Collie, et par d'autres, et, elle sera à nouveau le sujet de longues discussions. Les quelques chiffres que je viens de rassembler, n'étaient pas originellement destinés à être publiés, tels quels, car pour ce qui concerne les températures et les pressions moyennes, il ne m'a pas encore été possible de faire les calculs définitifs, ces moyennes ne sont donc que approximatives. Pourtant, ces chiffres suffisent provisoirement, car une grande exactitude n'est pas indispensable pour nous rendre compte du régime météorologique, surtout quand il s'agit du pôle sud où il fait



## FILE THIS UNDER

Climate Studies, Geography, Meteorology, Anthropology, Chemistry, History, Climate Change



## HISTORICAL CONTEXT

The study of climate and weather gained a foothold during the 19th century. Previously, the sky was considered by many a divine realm, not a place for science. Storms continued to blow over Britain without warning, sinking ships and fishing boats as they passed. In the 1850s, more than 1,000 sailors drowned off the British coast each year. Yet when weather forecasting began around 1861 with huge popular appeal, it remained highly controversial; religious men doubted whether anyone could pretend to know the mind of God.

Climate change is the long-term alteration in Earth's climate and weather patterns. It took nearly a century of research and data to convince most of the scientific community that human activity could alter the climate of our entire planet. In the 1800s, experiments suggesting that human-produced carbon dioxide (CO<sub>2</sub>) and other gases could collect in the atmosphere and insulate Earth were met with more curiosity than concern.

By the 1890s, for example, the concept of warming the planet was remote and even welcomed. As Swedish chemist Svante Arrhenius, who concluded that industrial-age coal burning would enhance the natural "greenhouse effect" wrote, "By the influence of the increasing percentage of carbonic acid [CO<sub>2</sub>] in the atmosphere, we may hope to enjoy ages with more equable and better climates, especially as regards the colder regions of the earth."

Arctowski, Henry. "The Antarctic Climate." Journal Manuscripts. Wiley Digital Archives: Royal Geographical Society (with IBG).

**Sources:** Sources: <https://www.history.com/topics/natural-disasters-and-environment/history-of-climate-change>  
<https://www.nytimes.com/2015/08/09/opinion/sunday/the-great-victorian-climate-debate.html>





## WHO

Henryk Arctowski



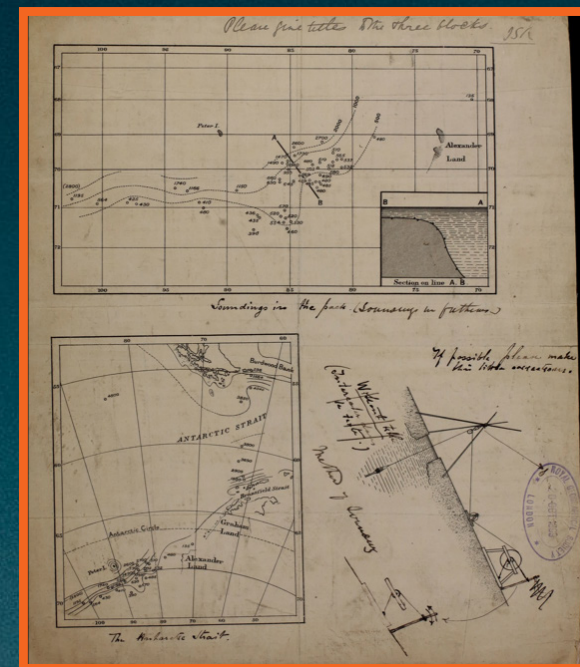
## WHY HE'S NOTABLE

Henryk Arctowski was born in 1871. In 1888, he started studying mathematics, physics, and astronomy at the University of Liège, and chemistry and geology at the Sorbonne. Upon completion in 1893, he returned to Liège where he worked in the laboratory of Professor Spring in the chemistry department.

From 1897 to 1899, he accompanied the Belgian explorer Baron Adrien de Gerlache on the Belgian Antarctic Expedition "Belgica", the first expedition to spend the winter in the Antarctic. As a meteorologist, he proposed the original notion of a wind chill factor, arguing that wind could be as damaging to human flesh as cold in harsh climates. He coordinated the scientific work and performed physical observations himself before returning from the Antarctic and living in Brussels, where he analyzed the results of the expedition at the Royal Observatory of Belgium.

He worked for many years meticulously processing and cataloguing all the data from the expedition. In the early 1900's, he worked as a head of the science division of the New York Public Library. He then began his large-scale research on climate change and worked on this topic for the rest of his life.

The Polish research station on King George Island, Henryk Arctowski Polish Antarctic Station, is named after him.



*"Charts of Soundings Made by Dr. H. Arctowski in the Falkland Is. Dependencies during the Belgian Antarctic Exp. 1898 under the Leadership of Comm. de Gerlache." Map. Wiley Digital Archives: Royal Geographical Society (with IBG).*

**Related items & special collections in the RGS-IBG Archive:** *Manuscripts, studies* on Antarctic climate, *studies* on the climate of *North America*, *sketches* related to climate in *Africa* and *South America*, and much more.



# Introducing Automated Text Recognition (ATR)

ATR is an AI-driven image recognition program that analyzes handwritten documents, runs the images against a variety of datasets to determine the best match, then attempts to recognize words within these handwritten documents. ATR differs from Optical Character Recognition (OCR), which is the standard for most digital archival collections, in that OCR focuses on each individual letter in typeset materials but cannot read handwriting.

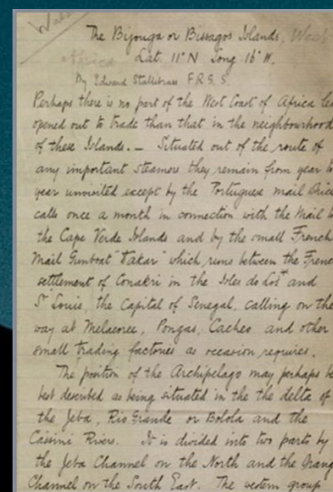
Without ATR, a manuscript page can only be found via top-level metadata. The text isn't searchable, and it can only be analyzed by reading it, which can be a taxing and time-consuming process. Through the introduction of ATR, manuscript pages are converted into typeset, the text is searchable, and it can be translated, cited, and analyzed with textual analysis tools.

There are hundreds of thousands of pages of handwritten text within the Wiley Digital Archives program, spread out across each archive. Through the incorporation of ATR into the WDA program, our analysis results will be different. New connections can be discovered, old paradigms or accepted wisdom can be challenged, and new discoveries will inevitably be made.

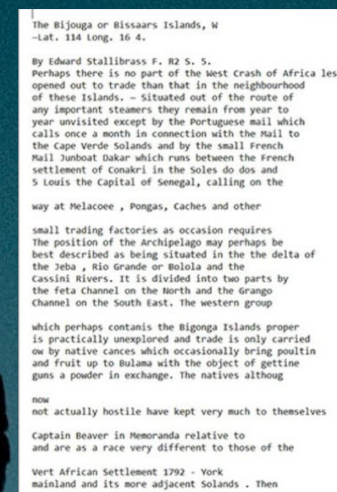
The implementation of ATR means that manuscripts and printed materials will come close to parity in their discoverability. ATR at this scale has the potential to change the nature of manuscript research and open the field to new researchers struggling with the requirements and skillset needed for intensive manuscript reading. WDA will be the only commercial archival program to implement ATR across all of our archival offerings.

To learn more about Wiley Digital Archives, request a demo, or start a free trial, visit: <https://www.wileydigitalarchives.com/contact-us/>.

Before



After



Stallibrass, Edward. "The Bijouga or Bissagos Islands, W. Africa." *Journal Manuscripts*, 1889. Wiley Digital Archives: Royal Geographical Society (with IBG).

# About the Royal Geographical Society (with IBG) Part I archive

Wiley Digital Archives' Royal Geographical Society (with IBG) Part I archive spans all aspects of geographical thought and includes materials from the society's library, as well as its extensive archives and maps collections. Over a hundred thousand maps and charts are complemented by manuscript material, fieldnotes, correspondence, drawings, photographs, pamphlets, atlases, gazetteers, and a range of other published and unpublished material.

The archive sheds light on the impact of geographical science on history, exploration, colonialism, and diplomatic policies, as well as natural resources, cultural studies, anthropology, and ethnography. Researchers can explore one of the world's largest private collections of maps and charts from their earliest geographical delineations. RGS-IBG Part I dates from 1482 to the end of the 19th century. The collections in this archive create new pathways for interdisciplinary research and education, while, at the same time, preserving one of the world's most important geographical archives.

Visit [wileydigitalarchives.com/rgs](https://wileydigitalarchives.com/rgs) to learn more about the Royal Geographical Society (with IBG) Part I archive.