

## Submission Guidelines

Collaborate with your team on your case study presentation. When it is complete, the team leader is responsible for submitting it in the Assignment Lab, or for making sure that another team member submits it. Please note that all learners should visit the assignment lab and provide feedback on at least 2 other team presentations, before the deadline.

As a reminder, your presentation should:

1. Be limited to no more than 750 words
2. Engage the materials in the case studies, lectures, and text.
3. You are free to import material from outside the course, but this is not necessary and may detract you and teammates from the task. Don't go overboard!

## Instructions

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Step 1: Read the case study introduction, background information, and the primary sources below.

Step 2: Work with your team to answer the challenge question for this case study.

Step 3: Go to the Assignment Lab to post your response, and to read and comment on other learners' submissions.

### Track B, Case study 4: The spread of telegraphs and the growth of empires

#### STEP 1

#### Case Study Introduction

Here we will focus on how the spread of telegraphs reshaped global relationships and power, bringing worlds apart closer together and shortening the time distance between urban centers and their imperial outposts. We will consider the important question of how the technology to communicate almost instantly transformed power relations and people's sense of identity, ownership, and belonging around the world. You can think of how, even today, communication plays a vital role in creating commonalities (for example, in national identity or cultural relations) and also in fostering difference and a sense of otherness of those using separate networks and communication systems.

#### Background Information

After 1850, North America and the countries of western Europe entered an accelerated phase of industrial transformation. It was an age of expansion and systemization of industry, scientific formalization and discovery, with technological advances that synchronized with both. It was also an age of increased national awareness, in which the peoples of North America and the countries of Western Europe built-up beliefs of their own advancement, civilization, and entitlement.

After a period of decline, the Ottoman empire during the nineteenth century underwent a process of reorganization and modernization known as Tanzimat and again became powerful. This was despite the loss of territory, especially in the Balkan regions where national consciousness informed the establishment of new countries. In contrast, for the countries and nascent empires of Western Europe, the late nineteenth century was an age of conquest and territorial expansion.

As empires became increasingly important in the flow of raw materials to the metropole and consumer goods back to the colonial periphery, the importance of networks uniting distant communities and areas became paramount. While railways and steamships carried people and goods from coast to coast, it was the advent of almost instantaneous communication – and thus flow of information – that proved an ultimate advantage in commerce and in conquest.

One of the technological wonders of the nineteenth century was the telegraph system. In our interconnected age it is hard to appreciate just how much the advent of the electric telegraph changed the world: in the late nineteenth century it was a marvel, with songs written about it, books praising it, and newspapers named after it. Along with railways and steamships, telegraphs and newspapers connected the world in ways never previously imagined, building connected communities despite distance and place.

Interesting, the development of telegraph systems progressed across multiple countries in Europe and in North America through the course of the nineteenth century. For example, an early telegraph was that of Claude Chappe. Chappe's optical telegraph system of the late eighteenth century was used throughout France and European areas controlled by France under Napoleon Bonaparte. Cooke and Wheatstone developed the first commercial telegraph, which they patented in Britain in 1837. In 1847, Samuel Morse introduced the telegraph in Turkey: Sultan Abdülmeçid I tested the new invention himself before issuing the patent. That year, work on the Turkish telegraph line began. By the 1850s the electric telegraph (invented in the 1830s), which used electrical wiring to transmit coded electric signals, was in widespread use around the world. In 1851, the Morse telegraph was adopted as the international system for communication, and in 1865 International Morse Code became the international standard. By the end of the nineteenth century, much of the world could communicate in a matter of minutes despite distance and even oceans that separated people. Easier long-distance communications and flow of information also bolstered imperial expansion and integration. It fostered a common sense of identity between those who shared these networks and excluded those who did not.

## Primary Sources

Please refer to these primary sources, provided below, for this case study:

1. Commemorative Postcard, "The Eighth Wonder of the World," 1866
2. Ottoman Empire Telegraphic Network, 1874
3. *The Deep-Sea Cables* by Rudyard Kipling, 1896
4. *The All Red Line: The Annals and Aims of the Pacific Cable Project. The Problem of an Empire-Girdling State Owned Telegraph System*  
Source One: Excerpt from "An Empire-Girdling, State-owned Telegraphic Service," letter from Sir Sandford Fleming to Right Honourable Joseph Chamberlain, Secretary of State for the Colonies, 1898  
Source Two: Frontispiece to and endorsements of *The All Red Line: The Annals and Aims of the Pacific Cable Project. The Problem of an Empire-Girdling State Owned Telegraph System*, 1903
5. Maps - 'Eastern Telegraph Company System and its General Connections,' 1901 and 'Carte générale des grandes communications télégraphiques du monde,' 1903

## Primary Source One: The Eighth Wonder of the World, 1866

### Background

This 1866 commemorative postcard celebrates the Atlantic Cable telegraph, “the Eighth Wonder of the World.”



Source: “The Eighth wonder of the world - the Atlantic cable,” color lithograph, N.Y. : Kimmel & Forster, [1866], Prints and Photographs Division, Library of Congress, Reproduction Number LC-DIG-ds-04508, Washington D.C..

### COMPASS POINTS

- Note what two countries are being united by the cable.
- The Atlantic Cable’s American financier, Cyrus West Field, pivotal to the establishment of the Atlantic Telegraph Company, is shown center top, above the flags of Britain and the United States.

### Description

Commemorative postcard with allegorical scene showing Neptune with a trident in the foreground, and a lion representing Great Britain holding one end of the Atlantic cable and an eagle representing the United States

*holding the other end of the cable, with ocean between them and cities behind them. Includes portrait of the inventor, Cyrus Field, at top center.*

## Primary Source Two: Ottoman Empire Telegraphic Network, 1874

This map shows the extent of the telegraph network of the Ottoman Empire by 1874.



Source: Public domain.

### COMPASS POINTS

- 1874 Ottoman Empire Telegram Network.
- Solid Black dots show international stations and black and white dots show national only stations.
- The Ottoman Turkish calligraphy says: ممالك محروسه شاهانه تلغراف خريطه سيبر (the map of royal protected states' telegraph [network]).

### Description

This image is a black and white map from 1874, with Ottoman Turkish Calligraphy saying, “the map of royal protected states' telegraph.” It depicts the area of the Ottoman Empire above the Mediterranean Sea. There are hundreds of interconnected black dots on the map indicating telegraph stations and thus showing the extensive electric telegraph network that was in place by this time.

## Primary Source Three: *The Deep-Sea Cables* by Rudyard Kipling, 1896

### Background

This is a poem by British writer Rudyard Kipling. The transatlantic telegraph cable joined the United Kingdom and North America, shortening communication time from ten days (the quickest time a message could travel by ship) to less than ten minutes. The first successful communication via the underwater telegraph was on August 16, 1858.

### *The Deep-Sea Cables* by Rudyard Kipling

The wrecks dissolve above us; their dust drops down from afar—  
Down to the dark, to the utter dark, where the blind white sea-snakes are.  
There is no sound, no echo of sound, in the deserts of the deep,  
Or the great grey level plains of ooze where the shell-burred cables creep.

Here in the womb of the world—here on the tie-ribs of earth  
Words, and the words of men, flicker and flutter and beat—  
Warning, sorrow and gain, salutation and mirth -  
For a Power troubles the Still that has neither voice nor feet.

They have wakened the timeless Things;  
they have killed their father Time  
Joining hands in the gloom, a league from the last of the sun.  
Hush! Men talk to-day o'er the waste of the ultimate slime,  
And a new Word runs between: whispering, 'Let us be one!'

Source: "The Deep-Sea Cables," Rudyard Kipling, *The Seven Seas* (London: Methuen & Co., 1896). Public domain.

### COMPASS POINTS

- Note in the first line of this poem how Kipling indicates the depth of the transoceanic cables: even shipwrecks are above them.
- In the first stanza of the poem Kipling likens the cables to creeping blind sea snakes: this shows his distrust of the nature of what the cables represent. This is reinforced in the last stanza when Kipling shows the cables linking up in the gloom, far from the sun.
- To say that voices of men "have awakened the timeless things" is to remind the reader that people rarely know the consequences of their actions: the effect of the cables on the world will bring about changes beyond human control.
- They have "killed their father time" by, for the first time in human history, making long-distance communication almost instantaneous.
- Most significantly, the cables say, "Let us be one!": subjects of empires with a common sense of purpose could now be linked in ways that minimized the significance of distance and place.

**Primary Source Four: *The All Red Line: The Annals and Aims of the Pacific Cable Project. The Problem of an Empire-Girdling State Owned Telegraph System, 1898***

**First Source:** Excerpt from “An Empire-Girdling, State-owned Telegraphic Service,” letter from Sir Sandford Fleming to Right Honourable Joseph Chamberlain, Secretary of State for the Colonies, 1898.

The conditions of the Empire are totally different to what they were some years back. When Her Majesty (Queen Victoria) ascended the throne there was not a single mile of electric telegraph anywhere. There was not an iron ship of any class afloat, and mail steamships were practically unknown. From that period the conditions have been continually changing, and the process of growth and development still goes on. True, change has met with resistance from individuals and companies and classes, but resist it who may, the law of development follows its steady course, and continually makes demands on science and skill to meet the ever changing conditions. We are living in an age of transformation; the spirit of discovery and enterprise, of invention and achievement, has extended and expanded the British Empire from the small islands on the coast of Europe to new territories, continental in extent, in both hemispheres. The development of mercantile marine has carried the flag of our country over every mile of sea to meridians far distant from the Motherland. In these distant territories, communities have established themselves under the protection of that flag. They have drawn riches from the forests, the soil and the mine. They have caused noble cities to spring up, rivalling in the splendor of their streets and buildings the finest cities of the old world. These young nations, full of hope and vigour, have made progress in every direction; they are imbued with lofty aspirations, and their most ardent desire is to give their energy and strength to the building up of a greater British Empire, on the firm foundation of common interest and common sentiment.

At an earlier period of the world's history it would have been difficult to conceive the possibility of any lasting political union between countries so widely separated by intervening seas. The problem is, however, being solved, not by old methods, but by the application of wise principles of government, aided in a wonderful way by the highest resources of modern science. Steam has made the separating oceans no longer barriers, but the general medium of union. Electricity has furnished the means by which the British people in all parts of the globe may exchange thought as freely as those within speaking distance. These twin agencies of civilization are pregnant with stupendous possibilities. Already the one, as the prime factor in sea-carriage, has rendered universal penny postage possible. The other has made it equally possible to bring the British people, so widely sundered geographically, within the same neighborhood telegraphically.

..... The telegraph, on the other hand, practically annihilates space, and in this one respect has immeasurably the advantage over the ordinary postal service, especially in the case of correspondents who are separated by the greatest distances.

...

To sum up the commercial, social and political exigencies of the Empire demand with ever increasing urgency a system of imperial telegraphy. The whole course of postal development throughout the Victorian era points in the same direction. In establishing such a system, we should be merely extending the operation of principles which have already been approved by the conspicuous success. A considerable part of the undertaking has already been achieved in the construction of the Pacific cable. Can we doubt that it is sure to reach full consummation? Can we doubt that not many years will pass before the realization of a Pan-Britannic telegraph service will bring the ends of the earth within speaking distance of each other, and knit all men of British blood, the whole world over, into a national union as effective as now prevails within the British Islands themselves?

That is the obvious meaning of the great undertaking now completed. That is the true purpose of the outcome of a joint arrangement entered into by six British governments on the last day of the century. A partnership unique in history and a date co-incident with the close of the glorious Victorian era. Now we find ourselves the inheritors of an accomplished fact pregnant with beneficent consequences, not for the Empire but for humanity generally.

Source: Excerpt from letter from Sir Sandford Fleming to Right Honourable Joseph Chamberlain, Secretary of State for the Colonies, Ottawa, October 28, 1898 in *The All Red Line: The Annals and Aims of the Pacific Cable Project*, ed. George Johnson, (Ottawa: James Hope & Sons, 1903), 471-73 & 485-86.

### **COMPASS POINTS**

- Note the tone of cultural superiority of the author: the author feels that technological advances both make British global expansion possible and justify it.
- The line, “True, change has met with resistance from individuals and companies and classes,” shows that it was not just the poet Kipling who felt trepidation about the effects of technological advances such as the undersea telegraph.
- Note the idea of the uniting of British blood across long distance. Where does this leave colonized people?
- Observe how the author presumes that the spread of empire benefits humanity more broadly.



**Second source:** Frontispiece to and endorsements of *The All Red Line: The Annals and Aims of the Pacific Cable Project. The Problem of an Empire-Girdling State Owned Telegraph System*, 1903

(SIR HENRY PARKS)

"The crimson thread of kinship."

(RIGHT HON. JOSEPH CHAMBERLAIN)

"Our great ideal is unity of the Empire. In the words of a Canadian poet "

"Unite the Empire—make it stand compact  
Shoulder to shoulder let its members feel  
The touch of British brotherhood; and act  
As one great nation—strong and true as steel."

(RIGHT HON. SIR EDMUND BARTON)

"Congratulations on the completion of the Pacific Cable. I trust that the connection, and with it the community of feeling and interest between the sister Dominions may strengthen them and the whole Empire."

(RIGHT HON. R. J. SEDDON)

"New Zealand extends hearty congratulations to Canada on completion of Pacific Cable, forming strong link in chain of communication through all our great Empire, bringing dominions over the seas into closer contact."

(RIGHT HON. SIR WILFRID LAURIER)

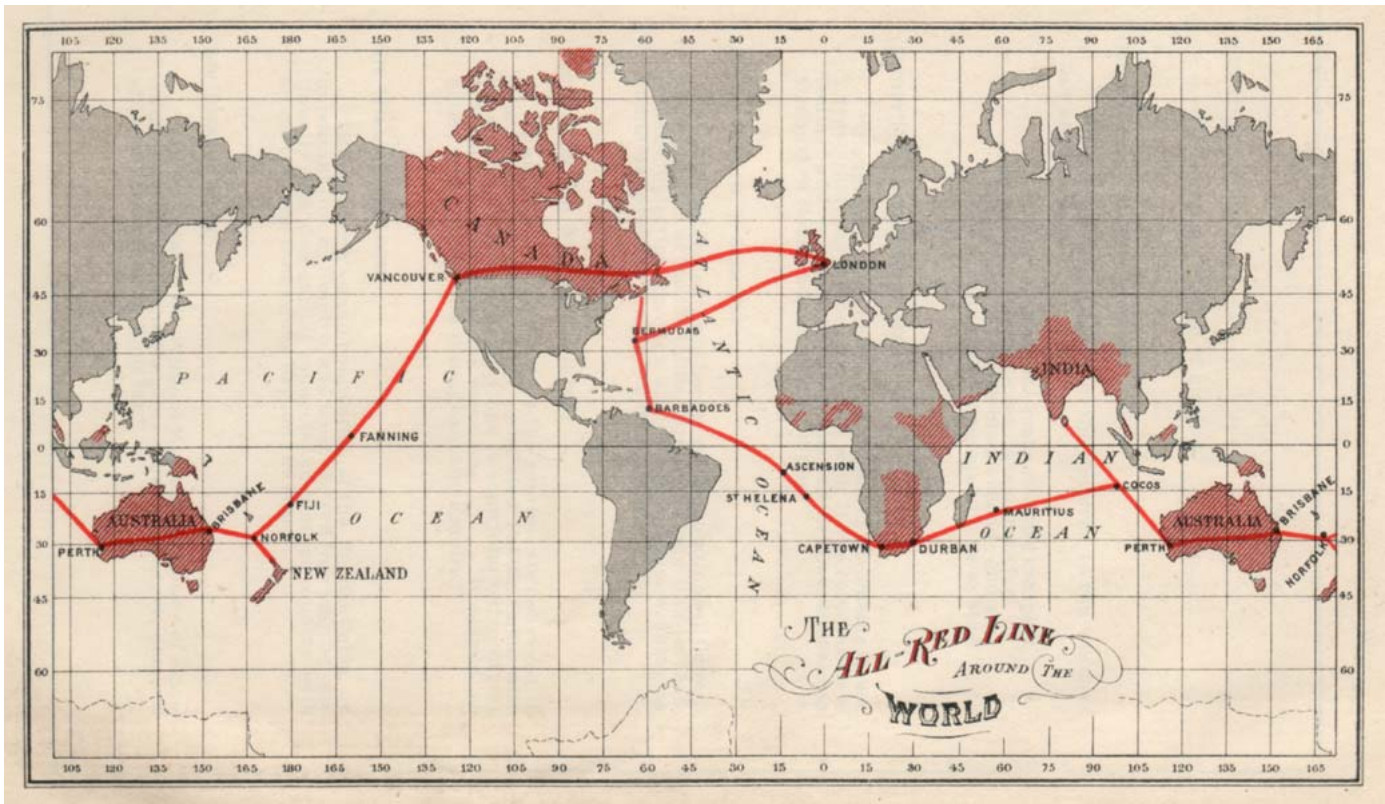
"Canada fully reciprocates the sentiments conveyed in your message over the newly completed Pacific Cable with the sincere hope that the step may be soon followed by others still more important in the same line . . . It should be hailed with satisfaction throughout the Empire."

(SIR WILLIAM MULOCK)

"Rejoice with you in completion of the Pacific Cable, an important link of Empire, and trust the red line may be continually extended until it connects the mother country with all parts of the Dominions beyond the seas."

(SIR JOSEPH WARD) *PMGNZ*

"Glad to hear of Sir William Mulock's advocacy of state-owned cables within the Empire. That is what we, one and all, should strenuously fight for."



Source: George Johnson (editor), *The All Red Line: The Annals and Aims of the Pacific Cable Project* (Ottawa: James Hope & Sons, 1903), 3.

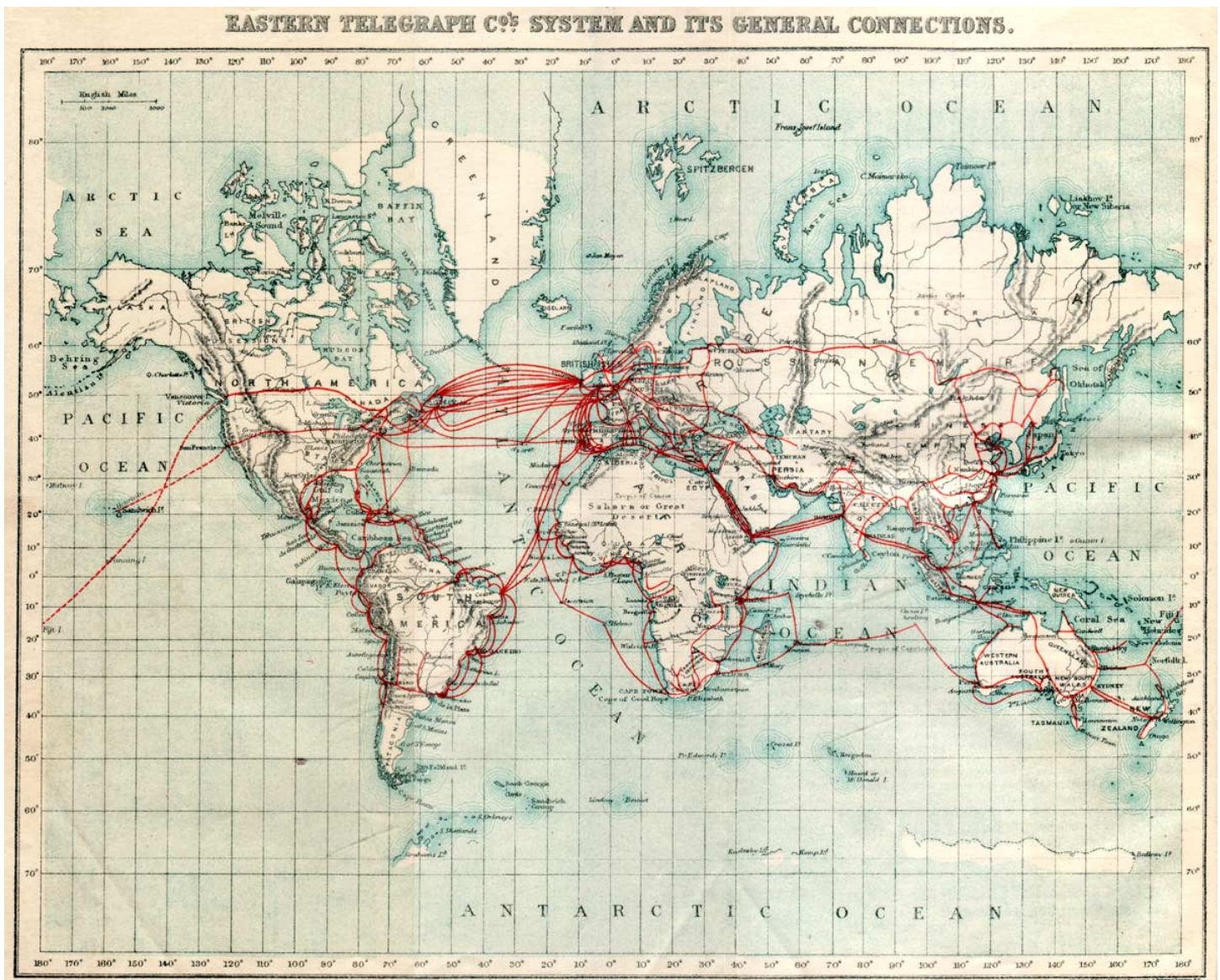
### COMPASS POINTS

- Note that the endorsements for the book (and, by implication the project of an Empire-girdling state-owned telegraph system) are all provided by elite ('Sir') white, British or colonial men.
- Note how many of the endorsements emphasize Empire, kinship and unity, bringing 'dominions' closer to the 'mother' country (Britain).
- Look at which countries on the map are colored in red, and united by a red line. In 1903 each of these was a part of the British Empire.
- The map is entitled, "The All-Red Line around the World." This suggests ownership and power: British rule, including language, culture, and 'civilization,' has encircled the globe.

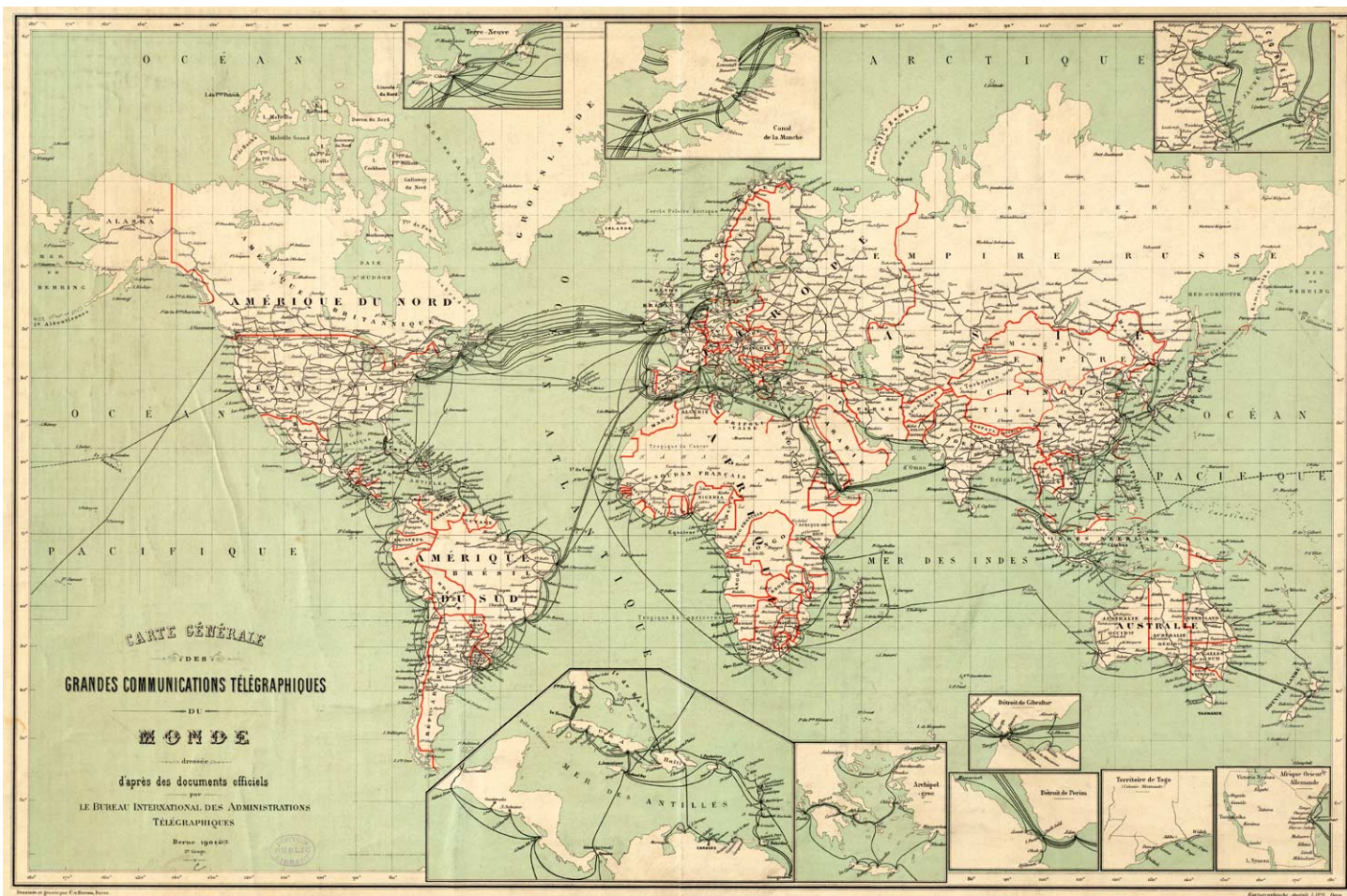
### Description

*This image is a black and white map of the world from 1903, with writing saying, "The All-Red Line around the world." The countries that were a part of the British Empire at that time, including Australia, Canada, India, New Zealand, South Africa, what was then-Rhodesia, Kenya, what was then Malaya, and other British colonies in the West Indies, Africa, and the South Pacific, as well as islands such as St. Helena and the Ascension Islands, are colored in red. Most, but not all are joined by a thick red line, showing the extent of the British electric telegraph service at that time.*

Primary Source Five: 'Eastern Telegraph Company System and its General Connections,' 1901 and 'Carte générale des grandes communications télégraphiques du monde,' 1903



Source: 1901 Eastern Telegraph Company System Map, *A.B.C. Telegraphic Code 5th Edition*, public domain.



Source: Van Hoven, C., and International Telegraph Bureau (Bern, Switzerland). "Carte générale des grandes communications télégraphiques du monde." Map. 1903. *Norman B. Leventhal Map & Education Center*, <https://collections.leventhalmap.org/search/commonwealth:7h149w11c>.

## COMPASS POINTS

- The red lines of the first map and the black lines of the second show the electric telegraph lines linking one area to another.
- In the second map, country boundaries (or, in the case of Australia, state boundaries) of the time are indicated by red lines.
- In the second map, look at the magnified areas in the right-hand corner: note the dense number of telegraph lines in areas central to travel and commerce such as the Strait of Gibraltar.
- On each map, pay special attention to which areas have the most telegraph lines and to where the greatest number of mutually-linking lines can be seen (for example, the north-east coast of the United States and the West coast of the United Kingdom).
- Note how telegraph lines connect the areas being claimed as colonial possessions at the time to the 'motherlands' of Europe (for example, Portugal and Brazil; India and England, et cetera).

### *Description*

*These two images are world maps showing the extent of international electric telegraph coverage at the end of the nineteenth century. Multiple telegraph lines can be seen to join continents and countries, with especial density between North America and Western Europe and within Western Europe itself. The extent to which colonial territories are connected to colonizing powers is evident (for example those in West Africa and*

France). It is also evident that many electric telegraph lines were laid around the coastlines of continents with feeder lines running inland.

### **Case study challenge question**

*Please answer the following question (750-word response):*

How did the growth of telegraph systems influence the growth of empires ideologically and practically in the late nineteenth and early twentieth centuries?