



**Big Era Seven  
The Age of Revolutions  
1750-1914 CE**



**Landscape Teaching Unit 7.4  
Humans in a Hurry: Nineteenth-Century Migrations  
1830-1914 CE**

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## Why this unit?

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Big Era Seven is about the immense changes brought about by vastly expanded interconnections around the globe. This unit, the study of human movement from around 1830 through the early twentieth century, gives students an understanding of how these revolutions in science and communications affected individual lives.

The revolutions that occurred in Big Era Seven had a significant impact on how humans interacted with each other, with ideas, and with the environment. The increasingly efficient use of **fossil fuels** made transportation (shipping, railways) over long distances far faster and more convenient than had ever been available. As people moved, they carried information. As the era progressed, new methods of communicating via electronic wires moved ideas to still wider audiences at still faster rates. This created an atmosphere in which news and information became available on a previously unknown scale.

The availability of news informed people about new opportunities far from home—or new threats at home—that led to massive human migration. In some cases, they were drawn to new opportunities. In others, factors such as disease or oppression pushed people from their homes. In some ways, migration offered people the chance to improve their lives, but there were negative aspects as well. The concentration of workers in industrial centers offered employment and housing. However, the burning of fossil fuels in those centers and the crowding of people into cramped, often filthy homes created an unhealthy setting. Also, urban expansion to accommodate more industry and people led to the destruction of surrounding ecosystems. The very factors that may have initially drawn people to a region could become the factors that subsequently pushed them away.

For students, a study of human movement during Big Era Seven provides a number of useful tools. In studying this unit, students will come to understand how the world was transformed into a tighter global community than ever before. They will learn how to take historical data from varied sources to create a hypothesis about human responses to various pressures. Perhaps more importantly, they will develop an understanding of the factors which led the world to the tremendous conflicts that took place during Big Era Eight, and they will gain a sense of historical continuity connecting what may appear to be very diverse events.

## Unit objectives

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*Upon completing this unit, students will be able to:*

1. Describe the chronological movements which set the stage for Big Era Eight.
2. Explain the communications innovations of the period.
3. Explain factors which contribute to human migration.
4. Analyze a given context and create a hypothesis regarding the potential for human movement in that context.

## **Time and materials**

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This Teaching Unit is presented in five lessons, each designed to take approximately 45 minutes. Lessons 2 and 3 can be completed within this time, though it may be advisable to break each one over two class periods to allow for a more complete discussion and exposition of related information. Any of the lessons can be shortened as necessary or augmented with additional activities.

Materials required include: white board/markers, an overhead or computer projector, transparency (world map), and Internet connection.

## **Author**

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The author is Ian Kelly. He recently completed his doctorate in history at the University of Aberdeen (Scotland). Dr Kelly is active with world history associations and has presented papers to faculty and students in the United States and the United Kingdom. Along with his specialty of military history, his work encompasses concepts of group identity and nationalism. Dr Kelly has written the handouts and exercises included in this Teaching Unit.

## **The historical context**

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The difference between the dawn of Big Era Seven and its conclusion could hardly be more striking. This lesson focuses on how people, things, and ideas were able to travel farther and at a faster rate and how technological innovations made such movement possible.

In 1750, at the opening of Big Era Seven, the process of obtaining energy from indirect sources was in its infancy, even though, during the first century CE, Heron of Alexandria had turned steam into motion, if only as a novelty. Towards the end of Big Era Six, inventors like Thomas Savery, Thomas Newcomen, and James Watt, made advances in steam technology, but on a scale far too cumbersome to be applied to transportation. Transportation power had to be drawn from muscle (human or animal), wind, or water, and the capacity to sustain movement was limited by physical endurance or climatic conditions. The 600-kilometer (396 mile) journey, for example, from London to Edinburgh required five days of bumping along millennia-old Roman roads. Under the best conditions, it would take at least three months to travel around the Cape of Good Hope to reach South Asia.

The changes in energy technology that matured during Big Era Seven allowed for unprecedented advances in communications, but at the same time brought a new set of challenges. Navigation of the seas was the first frontier to be crossed with the development of engines small enough to fit on ships, yet large enough to drive them. Designs by John Fitch and Robert Fulton were applied to paddle-driven ships, but it was not until John Ericsson matched steam engines with a screw propeller (1839) that a true leap in speed and practical application was achieved. Towards the end of Big Era Seven, long-distance voyages came to be counted in terms of weeks, not months. Although engines used for land transportation started a bit later than naval engines, they allowed railway systems to proliferate far faster. Within twenty years of the first public railway

in England (1830), more than 32,000 kilometers (19,800 miles) of track had been laid, primarily in Europe, North America, and regions which European states were colonizing. The trip from London to Edinburgh was reduced to less than a day, and it became possible to traverse North America (New York to San Francisco) in seven days. Towards the end of Big Era Seven, the completion of the Trans-Siberian Railway, connecting Moscow with the Pacific port city of Vladivostok, opened up vast new territories to immigrants. Moving materials and products were of interest to railways and shipping firms, but passenger service also expanded rapidly.

In the midst of these advances, the news was not all positive. The negative environmental impact was unmistakable. Urban centers experienced the debilitating effects of air pollution as world coal production, centered primarily in North America and Europe, increased from 32,248 metric tons in 1830 to 1,234,486 metric tons at the close of Big Era Seven. As humans entered new ecosystems, animal and plant populations experienced previously-unknown stresses. Indigenous populations faced overwhelming pressures as well, as incoming migrants disrupted existing social structures and subsistence patterns. Across North America and Australia, increasingly-aggressive stances between immigrant and indigenous populations led to death and destruction on both sides, and indigenous peoples were marginalized and/or forced into unsuitable reservations. West Africa witnessed the forcible removal of several millions into slavery in the Americas and southwest Asia.

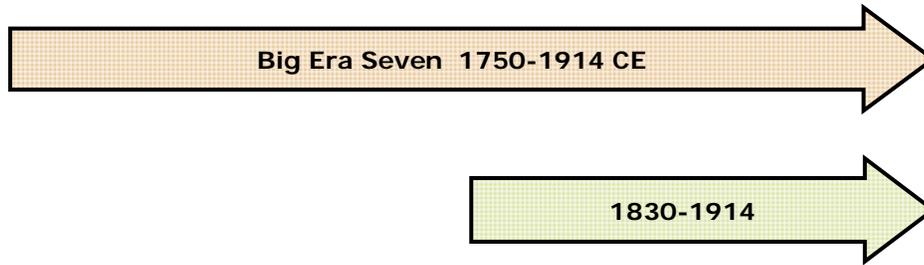
Big Era Seven also saw a communications revolution in the exchange of information. Lord Stanhope's redesign of the printing press, further enhanced by Friedrich Koenig's steam power, made it possible to print large quantities of inexpensive books and newspapers, making news and ideas available to a wider segment of the population. The pace further increased with the advance of electromagnetic communications, first the telegraph (Samuel Morse, 1844) and then the telephone (A. G. Bell, E. Gray, 1876).

Humans, increasingly more aware of the world around them, and with the capacity to move long distances easily, participated in unprecedented movements focused largely on the temperate zones of the Americas and Eastern Asia. The drives to move are characterized in this teaching unit as high pressure "pushes" and low pressure "pulls." Pushes are those aspects of life, such as the environment, political conditions, or poverty, which drive people from their homes. Many of these push elements were compounded by the rapid increase in population. Pulls are those aspects, such as financial gain, access to resources, or perceived freedoms, which attract people. How these migrations took place varied considerably. For some, the pull to move was to temporary (Southeast Asia "sojourners") or seasonal opportunities (e.g., from rural regions to urban centers), while others left home with no plan to return.

At the close of Big Era Seven the machinery was in place to generate the international economic, political, and, ultimately military competition that characterizes Big Era Eight.

## This unit in the Big Era Timeline

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**Claude Monet**  
**Gare Saint Lazare: Arrival of a Train.**  
**1877**

Fogg Art Museum, Cambridge MA  
©Kathleen Cohen, art02007  
WorldImages  
<http://worldimages.sjsu.edu>

## *Lesson 1*

### *An Introduction to Human Movement*

#### **Preparation**

An overhead projector and a transparency map of the world (or, if more appropriate to your students, a continental or national map) will be needed for the exercises. Teachers may also wish to use computer projection. The goal of this lesson is to encourage students to consider factors which cause human movement—past, present, and future—in imaginative ways.

#### **Introduction**

1. The intent of this lesson is to encourage students to think in terms of human movement.
2. Human movement in Big Era Seven was comprised of several main themes. First, methods of transportation (fossil fuels powering ships and trains) provided for improved capacity for movement. At about the same time, the development of electronic communications increased in speed thanks to the development of steam-driven printing presses and electronic forms, especially the telegraph and telephone. These provided the means and awareness to respond to pressures to move (e.g., opportunities elsewhere, troubles at home).
3. In general, Europeans who left Europe either permanently or temporarily gravitated to other temperate regions of the world, that is, places that had climates not radically different from that of Europe. These regions included North America, the southern cone of South America, Algeria, South Africa, Australia, New Zealand, and Siberia. Asian and African migrants moved to these regions in some numbers but more commonly to tropical and semi-tropical latitudes, where they sought employment on plantations, in mines, or in commerce.

#### **Activities**

1. Personal and close experience of human movement.
  - a. Have all the students stand up. Ask those who were born in the local area of the school to sit, then those who were born in the state/province where the school is located, then those who were born in the same country. Among students who remain standing, make a list of the countries where they were born. Ask all students who were not born locally to offer reasons that they or their families moved either short or long distances. Guide students in categorizing these reasons on the blackboard. Reasons might include “change of parent’s work,” “parents search for new employment,” “need for safety,” etc. Lead a discussion to arrive at generalizations about why people move.
  - b. Identify by a similar stand-up-sit-down exercise students who moved from rural areas to cities or large towns. Guide students in categorizing reasons for moves as in “a.” above.

- c. Ask students whose parents or grandparents were born in a different country to raise their hands. (If your community has a low immigrant population, ask for those who were born in a different state/province or city.) Using an overhead world (or national/regional) map, draw a line from the parents'/grandparents' place of origin to your location. Talk about the distances involved and how the move might have been accomplished (e.g., car, boat, on foot).

## 2. Remote experience of human movement

Discuss with students the human movement described Big Era Two, which brought about the initial peopling of all the world's landmasses except for Antarctica. (The Overview PowerPoint Presentation for Big Era Two includes an animated map of the peopling of the earth.) Ask students to speculate on the reasons that people were on the move in Big Era Two. Compare their responses to the categories developed in "1.a." above.

## 3. The Future

Describe the following scenario: A group of space explorers has gone to Mars and established a small colony there. A second group has built an undersea colony in the Indian Ocean. Find out what would have to be present on Mars or under the sea for people to be willing to move there. Suppose a group of people were *forced* to move to one or the other place. Which one would they choose? Why?

## Assessment

For this introductory lesson, the method of assessment is informal. Teachers observe student participation for comprehension of basic terms (push, pull, communication, transportation) as they relate to the topic.

## *Lesson 2*

### *The Communications Revolution*

#### **Preparation**

The subject of world-wide communications is a vast subject, so this lesson is designed to provide an overview of the topic, which students will independently broaden through research. Depending on the amount of time available, it may be worthwhile to divide this lesson into two class sessions.

#### **Introduction**

1. “Communications” can be used to mean both the ways in which people move things (products, livestock, mail, people) and the ways in which people exchange ideas. In Big Era Six, communications could be made only with naturally-existing power, mainly human or animal muscle, wind, and water current. This meant that goods and information moved only as fast as nature would allow, and was dependent on physical endurance, weather, etc.
2. In Big Era Seven, humans learned to create energy for transportation. Newcomen and Watt developed steam pumps for mining in the eighteenth century. Symington and Fulton developed portable engines for boats (late eighteenth century) and shortly after that, Trevithick developed portable engines for railways (early nineteenth century). These developments increased the demand for fossil fuels, primarily coal, provided a seemingly unlimited source of power, and made long distance travel more practical.
3. In Big Era Seven, people also learned to exchange ideas more rapidly. Koenig and Bauer developed the steam-powered printing press (1814), which was capable of turning out 1,100 sheets per hour. This reduced the costs of printing. Also, reductions in newspaper taxation made them less expensive and available to more people.
4. Electronic communication developed, which made information available to a wider segment of the population and made information available faster than before. Morse developed the telegraph in 1844, and the first trans-Atlantic cable was laid in 1858. Bell and Gray developed the telephone in 1876, which uses technology similar to that used in the telegraph, to transmit sound. This made rapid and long-distance communication accessible to a wider segment of the population.
5. The changes in the methods of communications had a profound impact on the environment through mining and pollution, provided a method for people to encounter other populations via the newspaper or travel, and allowed ideas to spread faster and more widely.

## Activities

### Points for Discussion:

1. If coal made faster travel and mechanized industry possible, why have we sought other sources of energy?
2. Have there been any technological developments in recent years that have had an impact similar to that of the telegraph and the telephone?
3. The advancement to electronic communication allowed information to travel around the world in a matter of days instead of months. What impact would this have had on business? Social life? Politics? The environment?

### Research Activities:

1. Cooperative Learning (Oral Presentation).
  - a. Divide the class into appropriately-sized groups and assign each group a topic to be investigated, for example, steam ships, railways, coal mining, telephone, or telegraph.
  - b. Have student groups research their topics in such organizational categories as development, technology involved, how it spread around the world, uses, etc.
  - c. Have groups present 10-15 minute oral reports to the class on their topic.
2. Cooperative Learning (Written Presentation).

Do the same as in “1” but ask groups to present their findings in written form. Alternatively, the groups may perform the research collectively, with individual students providing their own paper.
3. Essay
  - a. Have the students read:
    - i. Chapters 1-8 of James L. Tyson’s *Diary of a Physician in California; Being the Results of Actual Experience, Including Notes of the Journey by Land and Water, and Observations on the Climate, Soil, Resources of the Country, etc.* (Alameda, CA: Bio-Books-Oakland, 1955). The full text of the diary may be found at: [http://memory.loc.gov/cgi-bin/query/r?ammem/calbk:@field\(DOCID+@lit\(calbk124\)\)](http://memory.loc.gov/cgi-bin/query/r?ammem/calbk:@field(DOCID+@lit(calbk124)))
    - ii. George Bonniwell’s *The Gold Rush Diary of George Bonniwell, transcribed by J. R. Tompkins*, unpublished diary. The full text of the diary can be found at: <http://www.emigrantroad.com/gold01.html>

- iii. *The Diary of an Emigrant* (1893), Norway Heritage: Hands across the Sea, unpublished diary. The full text of the diary can be found at:  
<http://www.norwayheritage.com/articles/templates/voyages.asp?articleid=63&zoneid=6>.
- b. Give out Student Handout 2.1. Ask students to discuss the selected quotations and the associated questions as preparation for writing an essay.
- c. Assign students to write an essay which addresses various topics in these diaries, for example, modes of transportation, speed of travel, troubles encountered on the trip, and environmental impact.

### Assessment

Students can be informally assessed by their in-class participation. Formal assessment can be made through the activities suggested above and with Student Handout 2.



**Fitz Hugh Lane**  
**Sailing Ships Off the New England Coast.**  
**c. 1824-1865**

**The vessel on the left is a square-rigged vessel, which means that it has three or four sails that are square rigged on all masts.**

Henry E. Huntington Art Gallery and Library, San Marino, CA  
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WorldImages  
<http://worldimages.sjsu.edu>

## Lesson 2

### *Student Handout 2.1*

Read the following paragraphs and answer the questions that follow:

James Tyson wrote:

On the ever memorable 16<sup>th</sup> of January, 1849, I sailed from Baltimore on board the schooner Sovereign. ... We were now fairly out of sight of land, and it became an object of some interest and importance to know *whither* we should go.

Source: James L. Tyson, *Diary of a Physician in California; Being the Results of Actual Experience, Including Notes of the Journey by Land and Water, and Observations on the Climate, Soil, Resources of the Country, etc.* (Alameda, CA: Bio-Books-Oakland, 1955), 5, 7.

George Bonniwell wrote:

*First Day, Friday, April 12<sup>th</sup>, 1850*—Left Milwaukee at 1 o'clock for California with 6 wagons and 16 men. Cold day. Roads very bad. Went 19 miles.

Source: George Bonniwell, *The Gold Rush Diary of George Bonniwell, transcribed by J.R. Tompkins*, unpublished diary. From: <http://www.emigrantroad.com/gold01.html>

A Norwegian immigrant wrote:

June 1 [1893]. The ship S/S *Juno* left Trondheim [Norway] at 12 midday, and arrived Kristiansund at 8 in the evening, and from Kristiansund she left at 10 o'clock the same evening. ... June 2. Arrived at Aalesund at 5 in the morning. From Aalesund the course was set for Hull [England], and at 6 in the afternoon we lost Norway of sight. Good weather, but fog.

Source: *The Diary of an Emigrant* (1893), Norway Heritage: Hands across the Sea, unpublished diary. From: <http://www.norwayheritage.com/articles/templates/voyages.asp?articleid=63&zoneid=6>

1. What type of transport power made Dr. Tyson's trip possible? What problems or limitations might that type of power have?
2. What type of power made Bonniwell's trip possible? What problems or limitations might that type of power have?
3. What type of power made the Norwegian's trip possible? What problems or limitations might that type of power have?
4. Whose trip started better? Why?

Read the following paragraphs and answer the questions that follow:

*Wednesday May 15 and 34 day out*– ... Passed an Indian grave. There was about 150 horses heads in a circle, and about 100 yards from that was an Indian village, all wigwams, curiously constructed, capable of containing several thousand Indians. ... A man has just come up and told us that the Indians has stolen 4 mules and 3 horses and left him without team and 1 thousand miles from home with only 25 dollars of money in his pocket.

*Saturday May 18 and 37 day out*– ... At Fort Kearney, 220 miles from Council Bluffs. ... The officer in command sent 1 sergeant and 3 soldiers yesterday to recover the horses and mules that was stolen from the emigrants on Wednesday. If the chief don't give them up, they will send out the soldiers and destroy their village.

Source: George Bonniwell, *The Gold Rush Diary of George Bonniwell, transcribed by J.R. Tompkins*, unpublished diary. From: <http://www.emigrantroad.com/gold01.html>

1. What does this passage tells us about the importance of draught animals in this migration?
2. What does it tell us about the value placed on the indigenous people?

Read the following paragraph and answer the question that follows:

A sailing-vessel is not adapted, nay, it is totally unfit for the Pacific. None but steamers should ever attempt to plough its waters. With a constant succession of calms, or the wind blowing steadily in one direction, and that from the north, for some distance from the coast the greater part of the year, it is almost impossible to make any headway in a sailing-vessel.

Source: James L. Tyson, *Diary of a Physician in California; Being the Results of Actual Experience, Including Notes of the Journey by Land and Water, and Observations on the Climate, Soil, Resources of the Country, etc.* (Alameda, CA: Bio-Books-Oakland, 1955), 42.

1. If we take Dr Tyson's opinion as true, how does the environment determine what type of transportation is most effective in the Pacific Ocean?

Read the following paragraph and answer the question that follows:

In 1858, when a cable was finally successfully laid across the Atlantic Ocean, Queen Victoria sent a telegram from London to President Buchanan in Washington, D.C. It took about 17 hours for the message to make its way from station to station and across the ocean. At the same time, the SS *Persia* held the "Blue Riband" (the record for the fastest trip across the Atlantic) for her dash of 8 days, 23 hours, 19 minutes.

1. How might this faster means of communication make a difference in people's thoughts and actions?

## *Lesson 3*

### *Pressures to Migrate*

#### **Preparation**

For this lesson, you will need copies of Student Handout 3, an overhead or computer projector, and a world map. The goal of this lesson is to help students understand the forces which compel people to move. In order to participate in one of the optional activities, students will need to have read the diaries listed under the essay activity of Lesson 2.

Depending on the amount of time available during a single class period, it may be advisable to break this lesson into two sessions.

#### **Introduction**

1. It is recommended that the information developed during the previous lesson be briefly reviewed. Lesson 1 developed some ideas about why people leave home.
2. “Pulls” or “low pressure” elements are those which tend to attract immigrants to a particular area, much as the term is used in meteorology. Environmental pulls include the availability of in-demand natural resources (forests, fishing, ores), arable land, or a physical setting that is favorable to humans (temperate, reduced exposure to disease). Human pulls include the availability of employment or a means to support oneself, of easy communications (harbors, rivers, mountain passes), favorable social structure support, or reunification with friends and family. Ideological pulls may include the perception of greater freedoms or reduced persecution.
3. “Pushes” or “high pressure” motivations are those elements which tend to force people away from a particular region. Environmental pushes include limited natural resources, famine, or a setting that is not conducive to human life (pollution, illness, temperature extremes). Human pushes include poverty, poor communication (isolation from others), or oppressive social/political situations. Ideological pushes can include the perception of lesser freedoms or persecution.
4. Forced migration is a specific form of a “push” element. American-style slavery moved millions of people from west and central Africa to the Americas. Suppression efforts began in the early nineteenth century, but Brazil continued to allow the practice until the 1880s. Forced migration based on persecution is the ejection of peoples from territory due to ethnic, religious, or other identities. Examples of these include the Jewish expulsions from Russia and the relocations of Native Americans and Australians.
5. All regions possess pushes and pulls simultaneously. The key to migration is to consider the total context of a region, both high and low pressure elements.

## Activities

### Points for Discussion:

1. Ask students for elements or conditions that would cause them to consider moving to a different region. Explore common characteristics (e.g., environmental, social, employment), and see what type of correspondence there may be with the motives for movement in Big Era Seven.
2. If the students have read the diaries noted in the essay activity of Lesson 2, what appears to have drawn the travelers into migration? If it is unclear, what types of additional documentation would give a hint?
3. Can we learn anything about a person's values, hopes, or needs from the types of low pressure elements they pursue? For example, a family was drawn to a farm in Manitoba (Canada) instead of to the Gold Fields of California. Can we make any guesses about their priorities?
4. Were people always able to make a full comparison of pushes and pulls before migrating?
5. During Big Era Seven, industrializing countries experienced rapidly-increasing pollution and deforestation. Are there parallels with industrializing countries of today?
6. What types of persecution or oppression exist in the world today? Does this appear to be causing population shifts?

### Research:

1. Mapping: This exercise is designed to help students visualize areas which recommended themselves to becoming migration destinations. It should be stressed to them that this approach to mapping is not intended to be an absolute indication of a region's desirability but rather suggests areas which may represent "low pressure," or pulling, regions.
  - a. Modeling: Teacher's Guide 3 provides a series of statements related to various regions around the globe. Using a world map overhead transparency (or a transparency from Teacher's Guide 3), mark the given locations with a "+" to indicate a pull function or a "-" to show a push factor. After going through the series of statements, develop a hypothesis based on the findings.
  - b. Student application: Students independently run through the same steps using Student Handout 3.

2. Cooperative Learning (Oral or Written):
  - a. Determine a timeframe on which to concentrate (not more than a decade).
  - b. Divide the class into appropriate teams. Assign each team with a region or continent. (Be careful to avoid using current national boundaries.) The teams will research the potential high and/or low pressure elements for the given region during the given time.
  - c. Teams will produce an oral (or written) report of their findings.

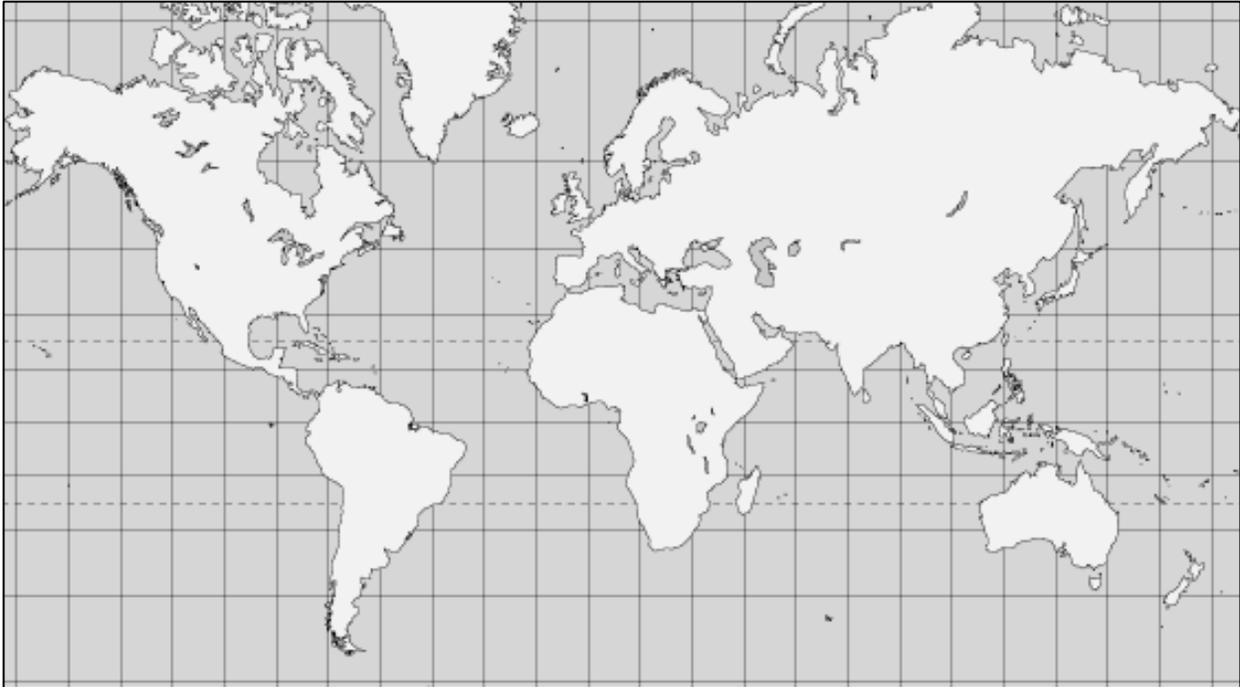
### Assessment

Students may be informally assessed during the lesson. Formal assessment can be made using the students' work on Student Handout 3 or through the oral/written presentation.



**Szanto Karoly**  
**Immigrants: the Flow**  
**1952-1956**

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<http://worldimages.sjsu.edu>

**Lesson 3*****Teacher's Guide 3***

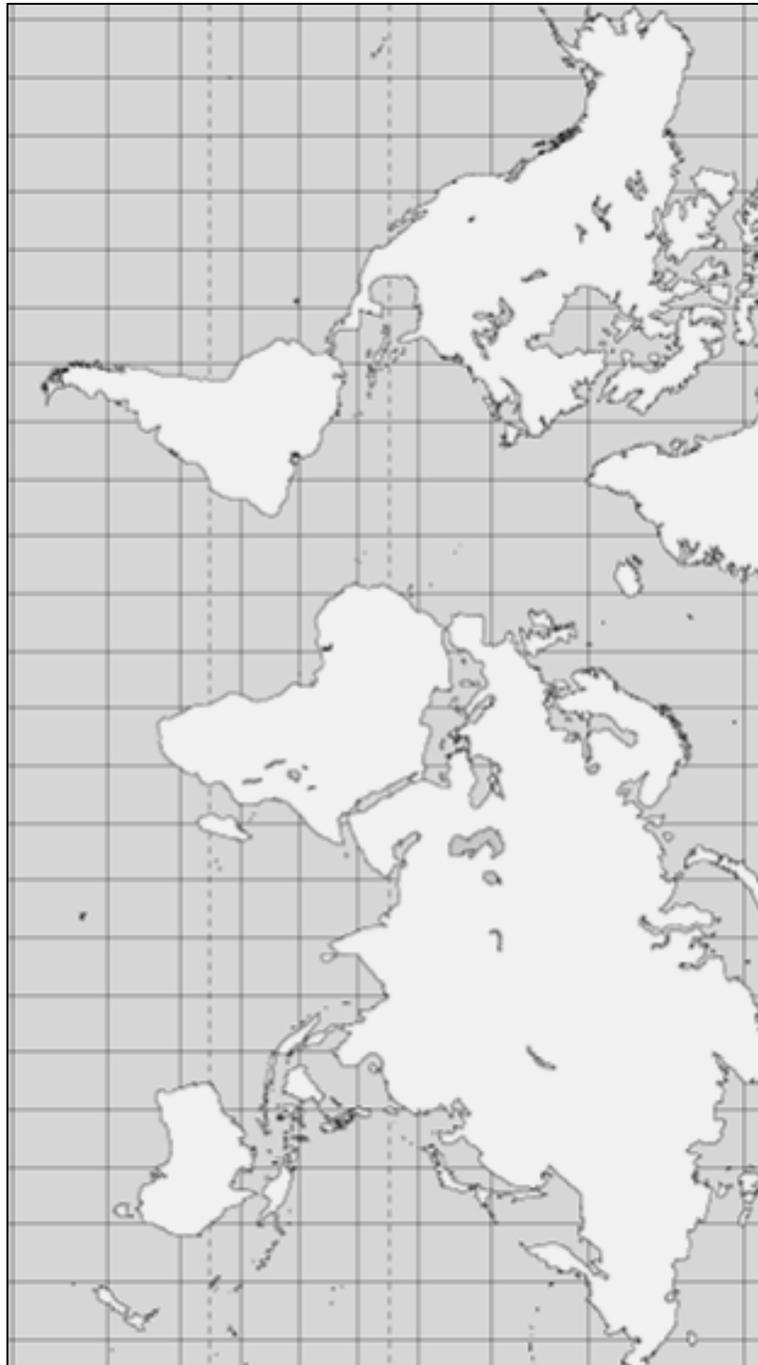
1. Cape Town, San Francisco, and Havana have access to good and safe harbors.
2. It was easy to move across the rolling hills along the California coast and the flatter terrain in the Central Valley.
3. The drifts, mountains, and rivers in South Africa made movement difficult.
4. Havana developed a railway system in the early nineteenth century.
5. South Africa and the San Francisco area had abundant natural resources (precious metals), which could provide employment.

Hypothesis:

**Lesson 3*****Student Handout 3***

Instructions:

Read each statement below. For each statement that describes a pull to incoming migrants, draw a “+” at the appropriate place on the map below; draw a “-” at the appropriate place for a push element. Create a hypothesis using the information you have charted.



## Statements:

1. The Great Hunger, a famine from 1845 to 1850, took the lives of up to one million Irish men, women, and children.
2. The northern reaches of Europe are famous for long, cold winters.
3. The government of Argentina invested heavily in schools during the 1860s.
4. Some South American governments paid for people from south and Southeast Asia to migrate to South America.
5. Pandemics of cholera broke out in Europe, Russia, London, and New York.
6. South America offered safety to persecuted Catholics.
7. Peace and improvements in public health practices led to increasing population in Europe.
8. Gold was found in northern California (United States, 1849), New South Wales (Australia, 1851), and the Transvaal (South Africa, 1886).
9. People in West Africa sometimes kidnapped other Africans and sold them into slavery.
10. The Trans-Siberian Railway connected Moscow to Vladivostok on the Pacific coast.
11. Elections in Argentina during the late nineteenth century were not open and honest.
12. When Brazil outlawed slavery in 1888, thousands of new workers were needed for plantations.
13. British export laws flooded India with inexpensive cotton material; Indians had a difficult time earning a living.
14. Wages increased significantly in the industrial cities of North America and Europe, while income for rural workers rose very moderately.
15. Russia's "May Laws" of 1882 required Jewish people living in "The Pale of Settlement" (between the Baltic and Black seas) to live in specific communities and limited them to working in minor trades or as merchants.
16. China, especially along the Pacific coast, experienced many years of famine and war in the nineteenth century.
17. The Americas were perceived to be full of opportunities, wealth, and freedom.
18. Australia had very few workers, so jobs could easily be obtained.
19. Germany, Russia, and Siam (modern-day Thailand) forced young men to serve in the army.
20. Industrial towns along the east coast of the United States grew very rapidly and experienced overcrowding, pollution, and epidemics.
21. Harbors at San Francisco (U.S.), Sydney (Australia), Valparaiso (Chile), Alexandria (Egypt), and Rio de Janeiro (Brazil) were developed to make it easier to move goods and people.

## Hypothesis:

## ***Lesson 4***

### ***Forms of Migration***

#### **Preparation**

For this lesson, direct lecture may be the most effective means of presenting the information. Alternatively, an overhead or projected map previously marked to reflect pushes/pulls on regional and long-distance levels (such as in Lesson 3) may be used to illustrate the concepts.

#### **Introduction**

1. It is recommended that the information developed in the previous lesson be reviewed. Lesson 2 developed ideas of how travel over long distances became more practical. The means and speed of travel had an influence on how humans migrated. The distances involved in migration also varied depending on the pushes and pulls involved.
2. Internal migration refers to travel within a particular region, normally from rural to urban settings. External migration refers to a complete change of region, often across seas and in the context of colonization.
3. Chain migration suggests that people did not move in a single step but rather undertook a series of movements, frequently starting as internal migration and later becoming external.
4. Migration did not always mean a permanent move to a new location. Temporary movement was common, especially for internal migration, such as for seasonal employment. Sojourners (such as many Chinese laborers) made external migrations with the intent of someday returning home, hopefully in better financial position.

#### **Activities**

Points of Discussion:

1. What factors might help to explain (or predict) the form of migration a person (or group) engaged in?
2. Why would some people engage in chain migrations (as opposed to single-step migrations)?

#### **Assessment**

Students can be informally assessed during the lesson. Formal assessment can be made using the students' work on Student Handout 4 or through the oral/written presentation.

## Lesson 4

### *Student Handout 4*

#### **Instructions:**

Read the information provided below and plot each fictional immigrant's experience on a timeline. The timeline should start with the year of the individual's birth. Once each timeline is finished, indicate the migration form involved.

#### **Fergus MacDonald**

I was born on the Isle of Skye in 1860 and worked on the family farm until I was 15 years old. After the harvest in October 1875, I traveled for the first time to Glasgow to work in a mill for a few months. I went back home to help with planting in March 1876, then returned to Glasgow the following October. I kept this up for six years, until my father died and I took over the farm permanently.

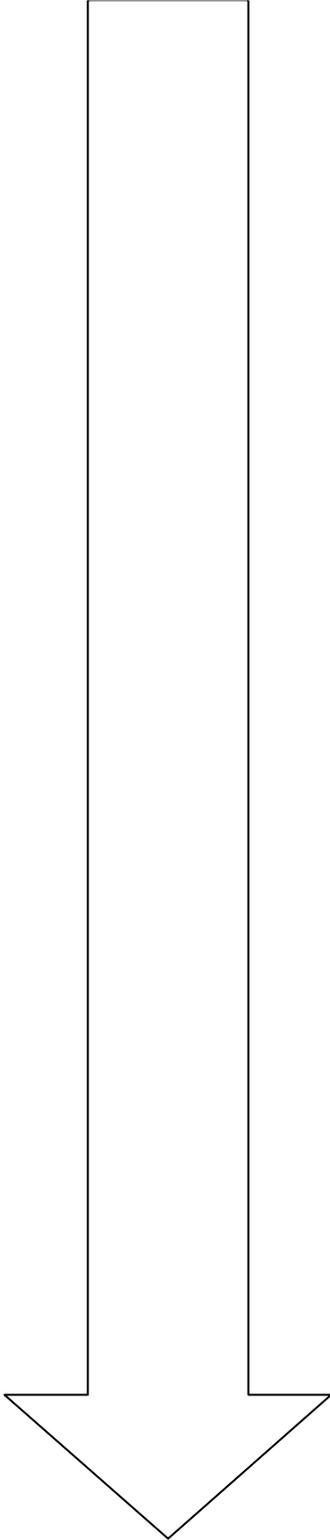
#### **Sacha Koltsov**

When I was born in 1840, my father worked the land for a *boyar* [nobleman] near Kiev. When I turned six, my brother, Alexis, was told that he had to join the army, and we knew that meant we would never see him alive again. Instead, my family escaped from Kiev, and my parents found work in Upper Silesia (southwest Poland). The crops failed the following year, and food could not be found for any amount of money. We left there and made our way to England where my father and Alexis found work at the docks. Smoke from the factories and chimneys was very bad and made father sick. In August 1854, he died from having to work in the filthy air. A man came to the room in which we lived and told us that a group of people had put up money to help families such as ours to move to America. With few other choices, mama agreed. We sailed from Southampton in October 1854, landing in the great city of New York after just two weeks on the ocean. Both Alexis and I found work quickly, and we have been able to find a room where we and mama can live well enough.

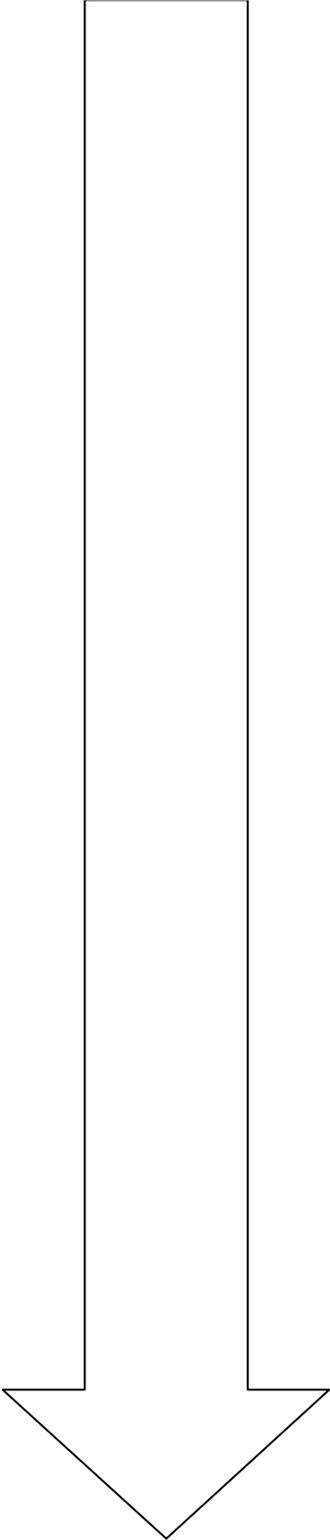
#### **Zhang Kaiping**

I was born in 1865, and my dream had always been to go to America, to become rich, and to come home a wealthy man. I knew that many Chinese had gone, that they lived a hard life, building railroads or performing other forms of physical labor. But I felt I could be different. Even though laws made it difficult for me to go, I arrived in San Francisco at the age of 25 in March 1890; to me it was a very big city! For 15 years, I worked in a shop in "Chinatown," and I managed to save about \$5 every month. Even though I liked America, I felt the need to go home. In June 1905 I returned to China, having saved three times as much as I would if I had stayed in China.

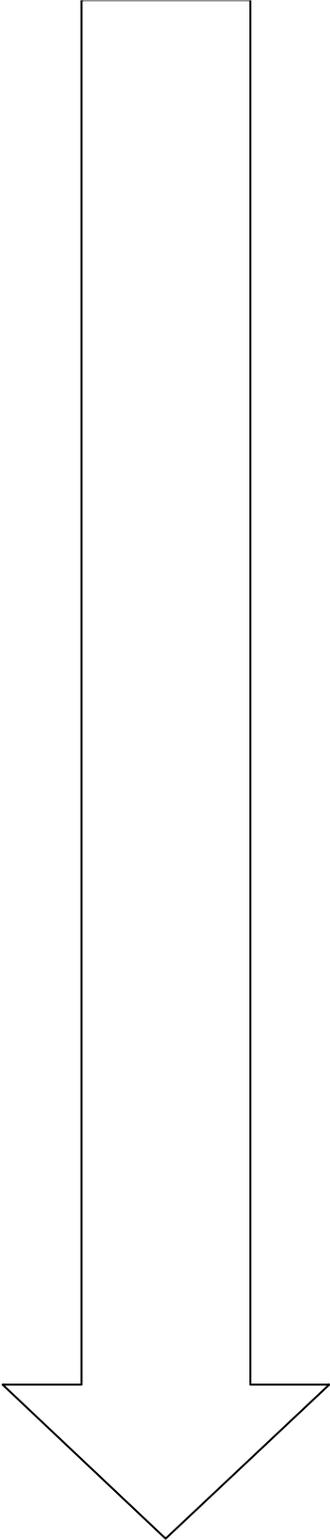
**Fergus  
MacDonald**



**Sacha  
Koltsov**



**Zhang  
Kaiping**



## ***Lesson 5***

### ***Wrap-Up***

#### **Preparation**

Much of this summary lesson is conducted through class discussion of the issues that have been discussed over the previous several sessions.

#### **Introduction**

1. This set of lessons has focused on how the capacity to move goods and people created a context for humans in a hurry. The use of fossil fuels was central to these developments.
2. Communications changes provided geographical connections through shipping and railways, and made ideas spread rapidly to a larger segment of the world's population.
3. Pulls and pushes created a desire for people to leave or move to various regions. This created the potential for conflict between immigrants and indigenous peoples.
4. Migrations could be internal (within a region) or external (frequently intercontinental) on a temporary or permanent basis.
5. All of these changes contributed to both a wider sense of global community and greater tension between social classes and between states. They set the stage for the widespread conflicts of Big Era Eight.

#### **Activities**

Points for Discussion: Refer to the questions in This Unit and the Three Essential Questions below.

## This unit and the Three Essential Questions

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 <p>HUMANS &amp; the ENVIRONMENT</p>	<p>Human migration of any type invariably has an impact on the immediate environment, and, if sustained over time and in large numbers, can reach implications of global proportions. In Big Era Seven, millions more people moved than ever before, cities and agricultural areas expanded, and migrants made homes where no one had lived before. What would more people in a concentrated area mean for nearby forests, rivers, and lakes? What impact did the use of coal for factories, steamships, and trains have on the environment?</p>
 <p>HUMANS &amp; other HUMANS</p>	<p>The drive to migrate—the push and pull factors—were often directly related to how people interacted with one another. For the first time, cities became self-sustaining, yet continued to draw surplus population from rural areas. The reunification of families and different employment potentials elsewhere also had their effect on the decision to relocate. Was increased population mainly a push or a pull factor, or could it be both. Why? What drew people to new settlements? What types of new challenges arose between immigrants and indigenous populations?</p>
 <p>HUMANS &amp; IDEAS</p>	<p>During Big Era Seven, Europe witnessed a broad liberalization in government. At the same time, methods of communication made it possible for information and ideas to be communicated rapidly across very long distances. How did migration mirror concepts of race and economics? What methods of communication made the exchange of information much easier and faster?</p>

## This unit and the Seven Key Themes

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This unit emphasizes:

Key Theme 1: Patterns of Population

Key Theme 2: Economic Networks and Exchange

Key Theme 4: Haves and Have-Nots

## This unit and the Standards in Historical Thinking

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Historical Thinking Standard 1: Chronological Thinking

The student is able to (B) identify in historical narratives the temporal structure of a historical narrative or story.

**Historical Thinking Standard 2: Historical Comprehension**

The student is able to (C) read historical narratives imaginatively.

**Historical Thinking Standard 3: Historical Analysis and Interpretation**

The student is able to (E) analyze cause-and-effect relationships and multiple causation, including the importance of the individual, the influence of ideas, and the role of chance.

**Historical Thinking Standard 4: Historical Research Capabilities**

The student is able to (C) interrogate historical data.

**Historical Thinking Standard 5: Historical Issues-Analysis and Decision-Making**

The student is able to (B) marshal evidence of antecedent circumstances and contemporary factors contributing to problems and alternative courses of action.

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**Resources**

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***Resources for teachers***

Crosby, Alfred W. *Ecological Imperialism: The Biological Expansion of Europe, 900-1900*. Cambridge: Cambridge UP, 2004.

Crowley, David and Paul Heyer, eds. *Communication in History: Technology, Culture, Society*. White Plains, N.Y.: Longman, 1995.

Eltis, David. *Coerced and Free Migration: Global Perspectives*. Stanford, CA: Stanford UP, 2002.

Freese, Barbara E. *Coal: A Human History*. Cambridge: Perseus, 2003.

Headrick, Daniel R. *The Tentacles of Progress: Technology Transfers in the Age of Imperialism, 1850-1940*. Oxford: Oxford UP, 1988

Hoerder, Dirk. *Cultures in Contact: World Migration in the Second Millennium*. Durham, NC: Duke UP, 2002.

Manning, Patrick. *Migration in World History*. New York: Routledge, 2005.

McKeown, Adam. "Global Migration, 1846-1940," *Journal of World History* 15 (June 2004): 115-189.

McNeill, William H. "Historical Patterns of Migration." *Current Anthropology* 20:1 (1979), 95-102.

Northrup, David. *Indentured Labor in the Age of Imperialism, 1834-1922*. Cambridge: Cambridge UP, 1995.

Ward, Ken. *Mass Communications and the Modern World*. Basingstoke, England: MacMillan, 1989.

### ***Resources for students***

Frost, Helen. *Russian Immigrants, 1860–1915*. Mankato, MN: Blue Earth Books, 2003.

Hoffman, Frances. *Across the Water: Ontario Immigrants' Experiences, 1820-1850*. Milton, Ontario, Canada: Global Heritage Press, 1999.

Perl, Lila. *To the Golden Mountain: the Story of the Chinese who Built the Transcontinental Railway*. New York: Benchmark Books, 2003.

Toussaint-Samson, Mme. Adèle. *A Parisian in Brazil: The Travel Account of a Frenchwoman in Nineteenth-Century Rio de Janeiro*. Trans. Emma Toussaint. Wilmington, DE: SR Books, 2001.

## **Correlations to National and State Standards**

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### ***National Standards for World History***

Era 7: An Age of Revolutions, 1750-1914. 6A: The student understands major global trends from 1750 to 1914. Therefore, the student is able to: Describe major patterns of long-distance migration of Europeans, Africans, and Asians and analyze causes and consequences of these movements.

### ***Illinois Learning Standards***

16.E.4b (W) Describe how migration has altered the world's environment since 1450.

### ***New York: Social Studies Resource Guide with Core Curriculum***

Unit Five: An Age of Revolutions (1750-1914), G. Economic and social revolutions, g. Responses to industrialization: 8) Global migrations (nineteenth century).

### ***Virginia History and Social Science Standards of Learning***

WHII.8: The student will demonstrate knowledge of the effects of the Industrial Revolution during the nineteenth century by: a) citing scientific, technological, and industrial developments and explaining how they brought about urbanization and social and environmental changes.

### **Conceptual links to other teaching units**

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The Industrial Revolution created massive demands for labor not only in new manufacturing centers but any place where entrepreneurs produced food crops, fibers, timber, minerals, and transport infrastructure to supply industrial machines and burgeoning urban populations. Rapid acceleration of population growth in much of the world also made larger work forces available. This convergence of events set loose laboring men and women all over the world, and, compared to the long span of history, at roughly the same time. The consequence was an uprooting and moving of peoples on a scale never known. The overseas migrations of Africans, Europeans, and Asians, however, tell only part of the story of nineteenth-century global movements. Millions more men and women trekked from countryside to city, from one place of seasonal work to another, and from urbanized regions to thinly-populated frontiers.

The revolution in communications and transport in the first half of the nineteenth century made such large-scale migration possible. However, that development, combined with new advances in military technology and in preventing and treating parasitic diseases, also gave colonial armies much more license to penetrate tropical regions of the world. The large-scale migrations of Europeans in the nineteenth century took them mainly to temperate lands, where in the cases of North America, South America, Australia, and New Zealand, newly-introduced diseases ravaged indigenous populations and drastically reduced their ability to resist the intruders. Beginning in the 1870s, however, European forces, seldom preceded or accompanied by settlers, waged wars of conquest in tropical Africa, Southeast Asia, and Oceania, lands where populations were often dense and urbanized. Landscape Teaching Unit 7.5 explores what historians have called the New Imperialism as an encounter between European, Japanese, and American invaders on the one hand and, on the other, peoples of the world's tropical belt.