

2 History of Geography

Prof. Anthony Grande
Hunter College Geography

Lecture design, content and presentation GAG 0138. Individual images and illustrations may be subject to prior copyright.

Flow Diagram The Five Fundamental Themes of Geography

Source: Michigan Geographic Alliance

This handout is available on the course homepage for viewing and printing.

ACCESSING COURSE MATERIAL

1. Access via Geography Dept Home Page <http://www.hunter.cuny.edu> > Academic depts > Geography **NOT on BlackBoard.** <http://www.geo.hunter.cuny.edu/courses/cwpages.html> : direct link to course listings
2. Click on Course Syllabi
3. **GEOG 10100**
4. Scroll to our course/section number and click on the link.

ACCESSING COURSE MATERIAL

5. Access the links to get the material you wish to view or copy, including *Power Point* lecture slides, handouts and assignments.

Tabs at the top get you to the course material.

http://www.geo.hunter.cuny.edu/courses/geog101_grande/
Direct link to home page

Five Fundamental Themes

1. LOCATION

Addresses the question: **Where?**
There are 2 types of location:

A. SITE: absolute location
This is exact placement on earth's surface: *latitude and longitude or another grid-based system.*

B. SITUATION: relative location
This is location in relation to other sites: *includes aspects of accessibility, connectivity, change through technology, strategic positioning.*

Five Fundamental Themes

2. PLACE

Addresses the special features or characteristics of a location that make it **unique**.

Includes:

- **Size** (how large or small)
- **Land surface** (terrain, river systems, coastlines)
- **Physical characteristics** (climate, geologic features, soils, water bodies, ecosystems)
- **Human characteristics** (population, ethnicity, land use, architectural styles, transportation networks)

Five Fundamental Themes

3. MOVEMENT

Addresses the idea of **mobility to, from and within a location.**

- ✓ Studies the **flow and repositioning** of people, wildlife, disease, goods and ideas on the earth's surface.
- ✓ Analyzes **diffusion (or spread)** from a point of origin.

How the Zika virus spread around the world

Both spatial and temporal movements

7

Five Fundamental Themes

4. REGION

Addresses the **unifying factors of location.**

- Identifies similar characteristics.
- Studies formation.
- Tracks change over time.

Climate Regions of Mexico

Texas Sub-regions

DNA Tribes

8

Five Fundamental Themes

5. HUMAN-ENVIRONMENT INTERACTION

Addresses the **relationships within locations between people and the physical environment.**

- > Perception
- > Technology
- > Land use decisions
- > Impact

9

Five Fundamental Themes Plus One

To the Five we add the **Earth science tradition of geography.**

Addresses the **processes, cycles and systems** that constantly modify the natural world and therefore influence people.

These include:

- geologic and atmospheric processes.
- seasonal and ecological cycles.
- biomes and ecosystems (unique zones of life).

10

The Five Fundamental Themes of Geography

Source: Michigan Geographic Alliance

This handout is available on the course homepage for viewing and printing. Keep a copy of the diagram handy throughout the semester, especially as you do the textbook readings.

Geography

Five Themes to Help Understand the World and its People

11

Origins of Geography

Roots

- ❖ Geography's origin goes back as far as humans began interacting with their environment and making decisions.

Awareness

- Early humans developed an awareness of their surroundings:
 - An awareness of the **component parts** of the physical environment.
 - An awareness of the **sequence of events**.
 - An awareness of the **natural cycles**.

Survival

- > People have always made decisions about habitat use.
 - Food, water and shelter (protection) were needed to survive.

12

Natural Curiosity

Why does it happen?
How does it happen?
When does it happen?
Why does it happen here?
Where else does it happen?

13

Origins of Geography

❖ The Ancients divided knowledge into two categories: **TIME** and **PLACE**

- **TIME** >>> *When?* >>> History
- **PLACE** >>> *Where?* >>> Geography

From these all other fields of study evolved as people became specialists by narrowing their areas of study.

>>> *The Why?*

14

CLASSICAL GEOGRAPHY

PLACE
ANCIENTS: Egypt, Mesopotamia, China, Babylon, Indus Valley, Americas

←-----→
GREECE
Oldest known maps (3800 BC, clay tablets)
Domestication of animals
Development of technology
Navigational skills
Trade

←-----→
ROME
Descriptive writing, Systematic study

←-----→
CHINA
Exploration, Mapping, Inventories

←-----→
ARABIA
Travel, Mapping, Inventories, Natural processes

←-----→
SCANDINAVIA
Preservation of the works of Greeks and Romans
Exploration, Record keeping, Research

←-----→
RENAISSANCE EUROPE
Exploration of Northern Lands (N.Eur., Iceland, Greenland, N.Am.)
Great Explorations, Scholarship, Earth Sciences

This chart is available on the course home page for viewing and printing.

Earlier ← -3500 -2500 -1500 -500 500 800 1300 1700 →

TIME (in 500-yr intervals) BC - AD (in 100-yr intervals)

15

Clay Tablets, Babylonia

Oldest known maps are clay tablets from Mesopotamia dating back to the 3800s BC (5800 years ago).

Map of the world, c.600s BC

British Museum Collection

Map of city of Nippur, c.1400s BC

16

Present-day Map of Europe

17

The World of Homer

9th century BC (3000 yrs ago)

Homer's writing reflected the geographical concepts of his time.

Maps of coastal areas made by the Ancient Greeks were fairly accurate.

Sailors tended to avoid the open seas and vessels hugged coastlines.

18

World of Herodotus

5th century BC (2500 yrs ago)

Herodotus (a Greek living in Italy) gained much of his information about the earth from his extensive travels. He was one of the early group of people who believed the earth was round.

19

Father of Geography

Over 2200 years ago, Eratosthenes estimated the earth's circumference to be 25,000 mi by recording the angle of the sun's shadow in a deep wells at noon.

Eratosthenes's World Map

3rd century BC

20

The World of Strabo

1st century AD

❖ Strabo's "*Geography*" is a series of 17 books written 2000 years ago that recount the historical geography of Greece and Rome.

- It was used to educate statesmen and military leaders of the Roman Empire.
- He used Eratosthenes's map of the world as a base.

21

Last of the ancient classical geographers.

Ptolemy's World Map

2nd century AD

Ptolemy's estimate of the size of the earth made it **smaller** than Eratosthenes's earth.

Columbus based his calculations on Ptolemy's measurements. These numbers were used into the 1500s when explorers traveling the distances began to prove him in error.

22

Non-Western Contributions

- The "*Tribute to Yu*" was an inventory of the Chinese empire written c.2,600 years ago (5th century BC).
 - The **oldest Chinese maps** date from 4th century BC.
- The **libraries of the Arab world** preserved the works of the ancient Greeks and Romans. Scholars continued earth-focused studies during the period in Europe called the "Middle Ages" or "Dark Age" (5th - 10th centuries AD).
- Arab scholars**, esp. **al-Idrisi** (d. 1154), **ibn-Battuta** (d. 1378), and **ibn-Khaldun** (d. 1406) were travelers who wrote detailed descriptions of places they visited (Mediterranean, North Africa, Southwest Asia and India).
- Asian scholars and merchants** recorded info and mapped areas as they traveled overland across central Asia to Europe and by ship to SE Asia, India and E. Africa.
- No record exists** of exploration outside their region by **empires in Africa and the Americas**.

23


Kangnido Map, Korea - 1402

Compiled in the late 1300s this map drew on the knowledge of traders from Korea, Japan, China, Arabia, and from Islamic scholars. It shows India, Africa and part of Europe. *Note size and place distortions.*

24

Martin Waldseemüller's Map of the World - 1507

This is the first map in which the name AMERICA is used to designate the lands of the western hemisphere.



Note shape of North America and South America


25

Munster Map of the New World: 1552

First map devoted to western hemisphere.

Note location of Japan (called Zipangri) next to Mexico.


Ornate but very general.



26

Juan Bellerio Map of the Americas 1554


This is one of the first maps devoted just to the Western Hemisphere.



27

Nova Orbis Tabula in Lucem Edita Frederick de Wit, c. 1665

Maps like this were used as wall decoration in the grand rooms of palaces and estates.



28

Regni Mexicani Sie Nova Hispania Ludoviciana, N. Angla

1730 map with detailed information and accurate location.

The David Rumsey Collection (<https://www.davidrumsey.com>) has a very extension collection of scanned images.



29

MODERN GEOGRAPHY

This chart is available on the course homepage for viewing and printing.

Milestones and highlights

Rebirth in Europe. Basic Principles and General Laws of Nature recognized.	Division of the discipline into branches.	Creation of subunits within the branches. American geography grows.	Increased specialization. Less description. Fades as it loses its distinctive nature but 1980s "Back to Basics" movement results in a resurgence.
Humboldt: generalist Von Thünen: specialist Kant: philosopher Ritter: academician	Physical Geography Anthro (human) Geography Schools of thought develop: Environmental Determinism vs Possibilism	Regionalization Cultural landscape studies Geopolitics Accepted as a distinct university discipline	Spatial analysis Data manipulation Quantification Hypothesis testing New technologies Extreme specialization Modeling
Humanistic, theoretical, and scientific points of view espoused. Local area studies.	Qualitative methodologies: Microstudies Social Theory Radicalism: Structuralism: Gender Studies Environmental studies, esp. climate related	Heyday of the great geographic societies.	
Late 1700s to mid-1800s	Mid/late 1800s to early 1900s	Mid/late 1900s	Late 1900s-early 2000s
<----- 1800-----1900-----2000-----present			

GENERAL TIME LINE

©GARGIN7ev
30

MODERN GEOGRAPHY

Full chart is available on the course homepage.

Milestones and highlights

<p>Rebirth in Europe. Basic Principles and General Laws of Nature recognized.</p> <p>Humboldt: generalist Von Thunen: specialist Kant: philosopher Ritter: academician</p> <p>Late 1700s to mid-1800s</p>	<p>Division of the discipline into branches.</p> <p>Physical Geography Anthropo (human) Geography Schools of thought develop: <i>Environmental Determinism vs Possibilism</i></p> <p>Mid/late 1800s to early 1900s</p>	<p>Creation of subunits within the branches. American geography grows.</p> <p>Regionalization Cultural landscape studies Geopolitics</p> <p>Accepted as a distinct university discipline</p> <p><i>Heyday of the great geographic societies.</i></p> <p>1900</p>
---	--	--

< - 1800
1900
1945

MODERN GEOGRAPHY

Full chart is available on the course homepage.

Milestones and Highlights

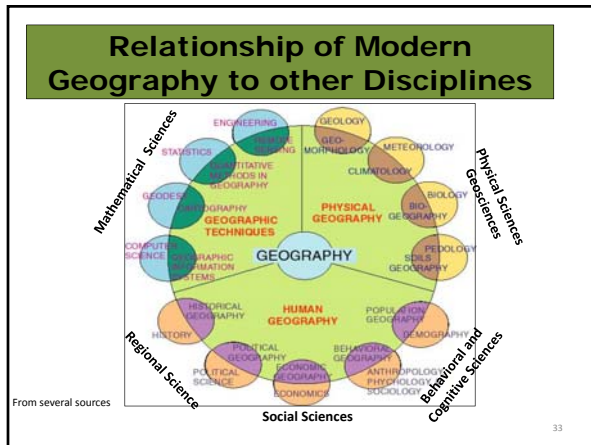
<p>Increased specialization. Less description. Fades as it loses its distinctive nature but 1980s "Back to Basics" movement results in a resurgence.</p> <p>Spatial analysis Quantification Hypothesis testing</p> <p>Mid/late 1900s</p>	<p>Data manipulation Computerization Geographic Educ Geog Info Systems</p> <p>Late 1900s-early 2000s</p>	<p>Qualitative methodologies: Microstudies; Social Theory; Radicalism; Structuralism; Gender Studies; Environmental studies, esp. climate related</p> <p>Late 1900s-early 2000s</p>
--	--	---

1945
2000
present

Since 2000 many geographers have emphasized **spatial analysis** and **qualitative studies**, including **deconstruction** (finding the hidden meaning).

Today geography and geographic applications are everywhere in the form of GPS which locates, tracks and maps our every move.

32



NEXT

Studying Geography

34