

Historical Perspectives of Geography



Basic Descriptions

- Geography
 - Literally means “Earth Study”, the science of the Earth’s land and peoples
- Cartography
 - The study and maps and the science of making maps



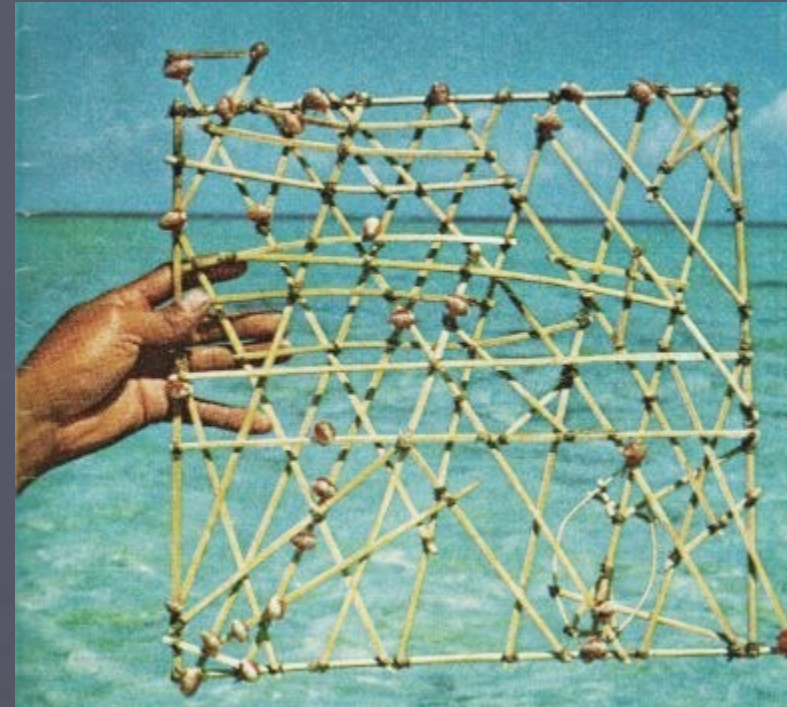
Connections to Astronomy

- Early geographers had to rely on measurements using the stars to measure distance and angles
 - Developed to the point of being able to get fairly accurate calculations
 - Developed tools like sextant and star charts to track courses



Earliest Map Representations

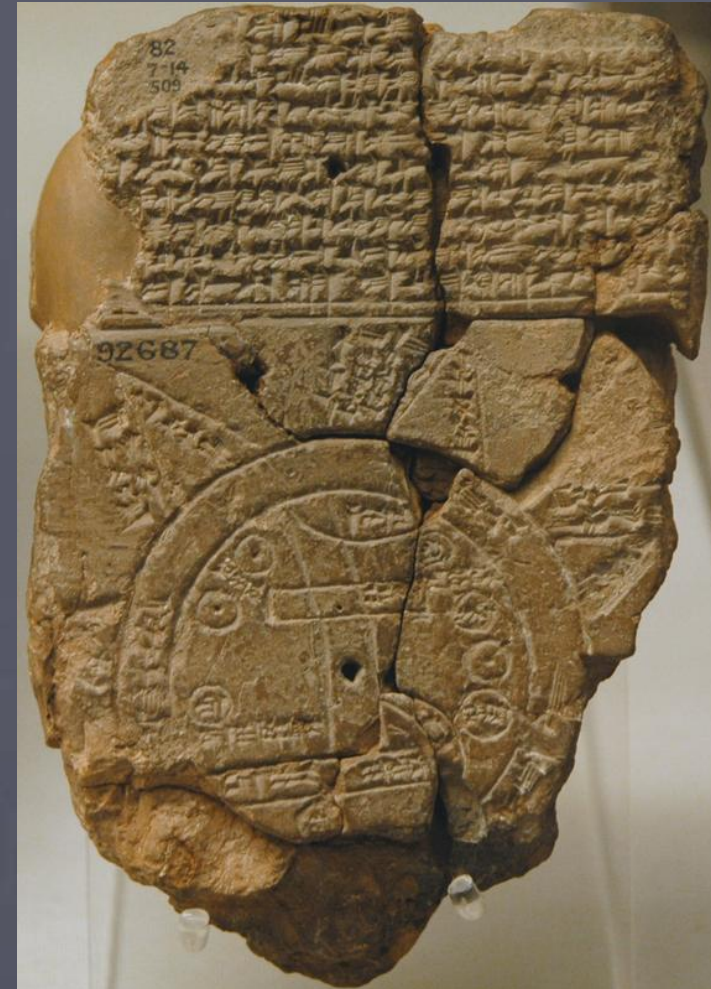
- Earliest maps date back thousands of years
 - Represent the location of major land forms, and hunting grounds
 - Maps have been evolving and changing based off the needs and resources of people
 - Example – Babylonian maps on clay tablets, Polynesians used interwoven sticks, and Greeks used paper



Mattang Stick Map from Polynesia

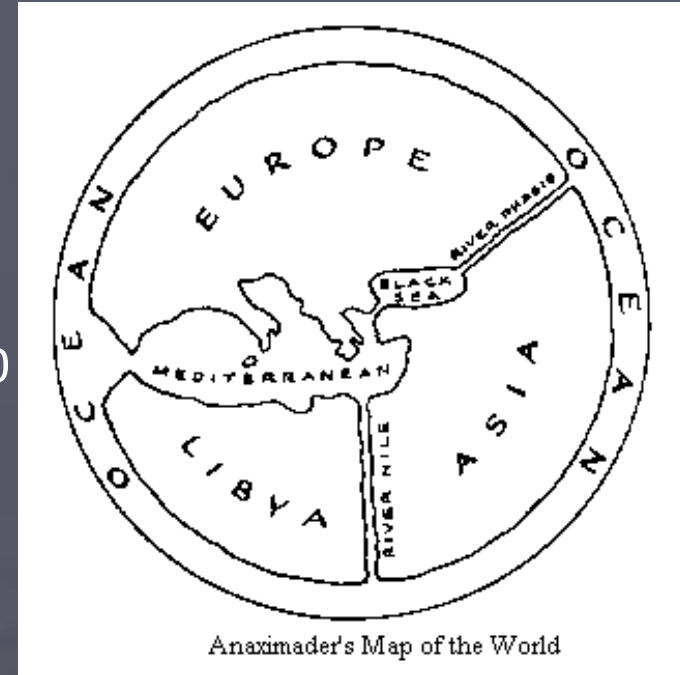
Babylonian Cartographers

- Babylonians were skilled surveyors, making maps of their empire
 - Surveyors take measurements and make maps of boundaries
 - Helpful for construction, map making, and defining property lines

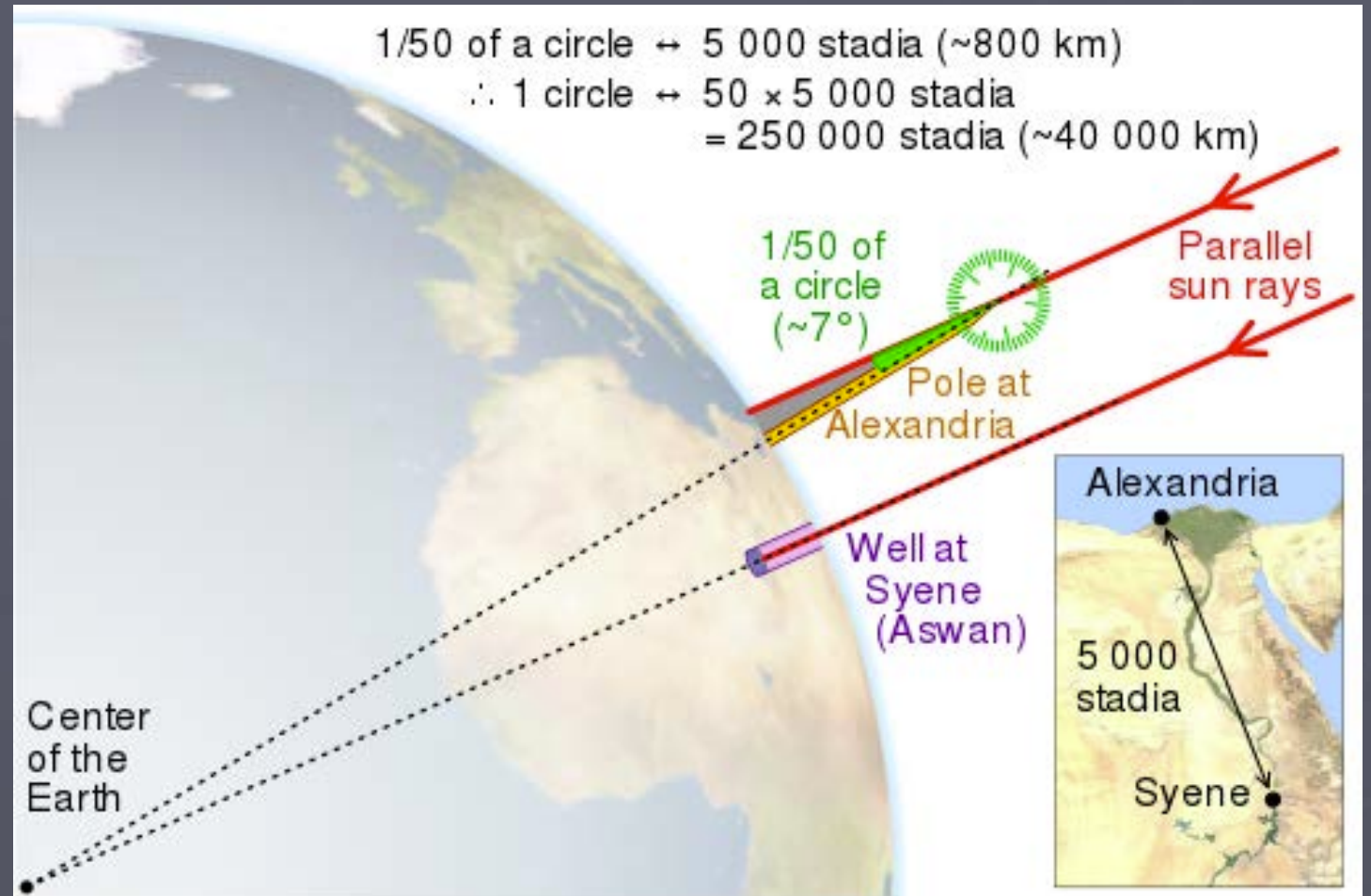


Greek Geographers

- Made major contributions to cartography and development of geography
 - Anaximander considered to be first true cartographer
 - Made first map of the world around 550 B.C.E.
- Almost always drew Greece as center of the world



Eratosthenes (276–194 B.C.E)



Ptolemy

- Greek Philosopher (est. 90-170 C.E.) who lived in Alexandria and wrote 8 volume book on geography
 - Came up with idea of Longitude and Latitude, Map Grids, and compiled maps into an Atlas
 - Influenced Roman and early Modern European Map makers
 - Came up with idea of a Southern Continent



Ptolemy's World Map



Chinese Geographers

- Cartography began around the 5th century B.C.E
 - Maps made on wood, stone, and silk
 - Developed over centuries
 - Grew in accuracy after invention of compass in 11th century C.E.
 - Reached its peak around 15th century C.E.
- China was source of most geographic information in East Asia until 20th century



Da Ming Hun Yi Tu from 1389 C.E.

Islamic Geographers

- Muslim cartographers had access to books from both East and West
 - Translated and study many Latin Maps
 - Sent out expeditions to map and study Islamic regions
 - Influential in North Africa, Southwest Asia, and East and Central Asia
- Muhammad al-Idrisi (1099-1165)
 - Worked for the king of Sicily to make a accurate description of the Earth

Al-Idrisi's Map of the Known World 1154 C.E.



European Exploration

- Age of Exploration starts in 15th Century renewed European interest in the world
 - Especially interested in the Americas, Africa, and trade routes to Asia
 - Competition among empires to discover more
 - Led to expeditions to Pacific Islands, Antarctica, Interiors of continents, and Arctic



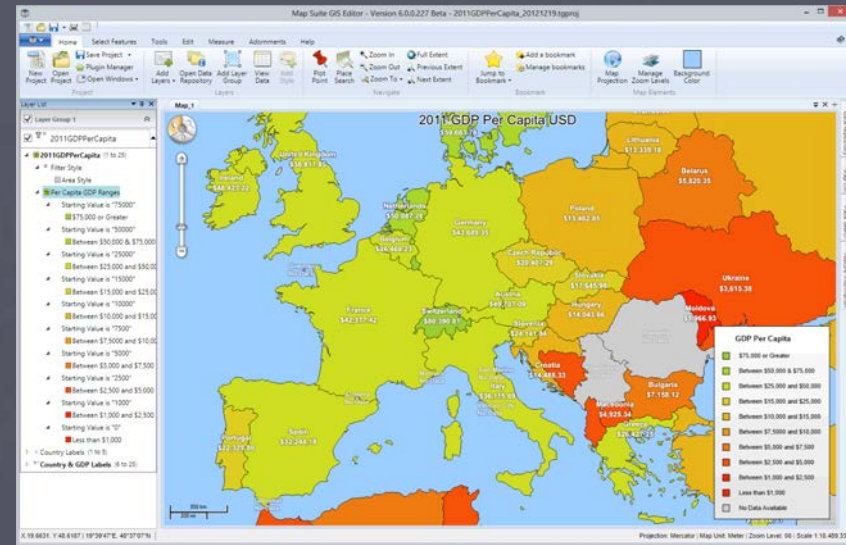
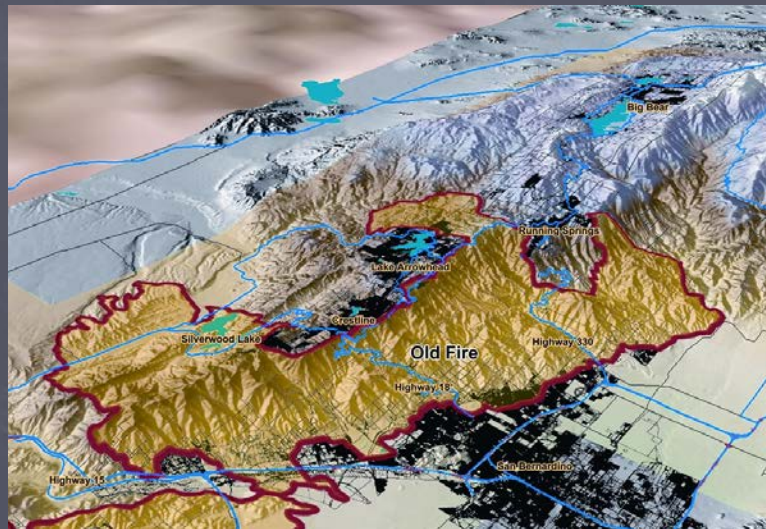
Christopher Columbus, Ernst Shackleton, and Mungo Park

John Harrison and the Chronometer



Modern Cartography

- Modern cartography uses technology like satellites and GPS to take accurate measurement
- Geographic Information Systems (GIS) allows the collection, organization, analysis, & visualization of geographic data on a massive scale (in real time).



Hereford Mappa
Mundi
ca. 1285

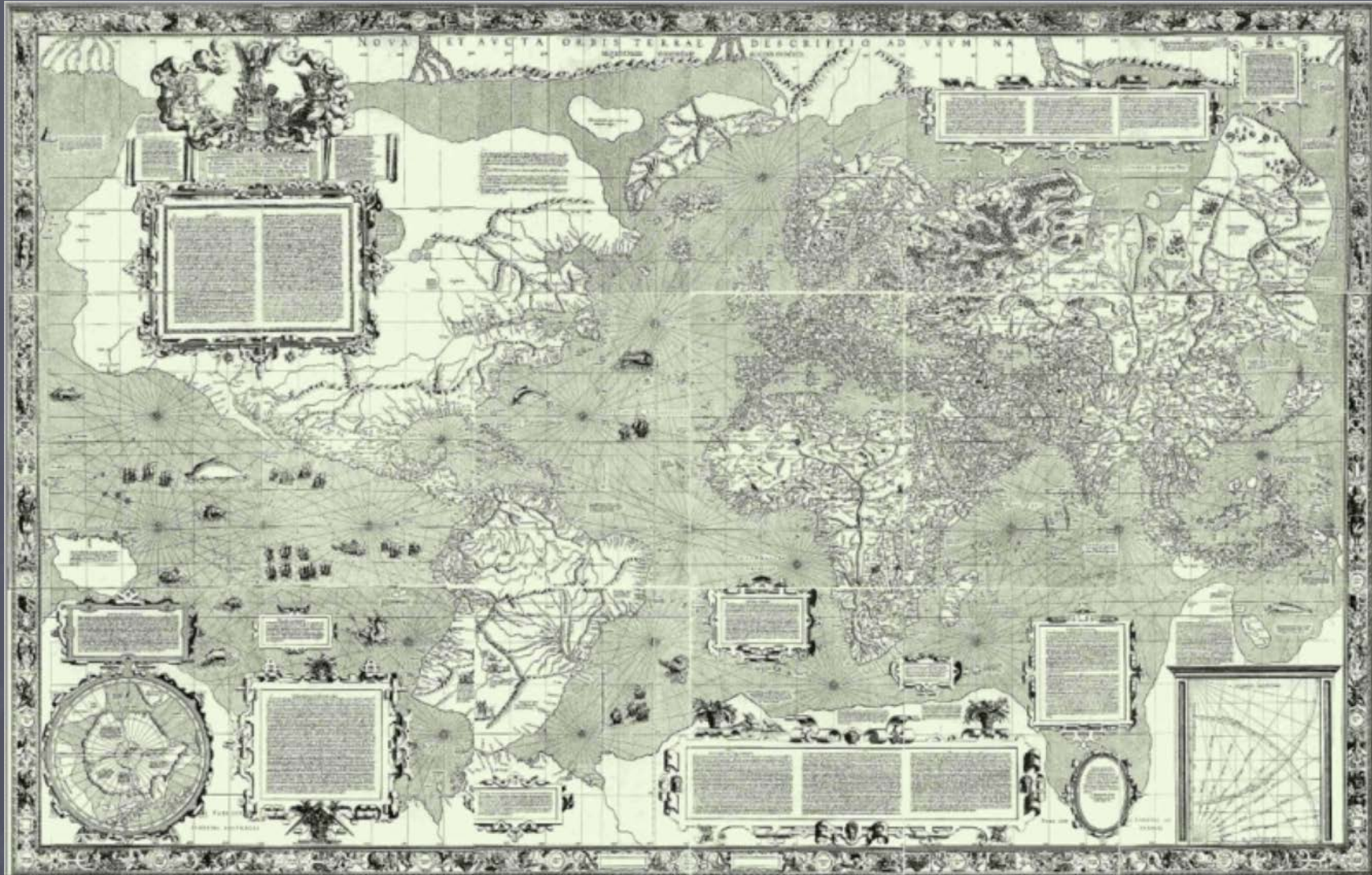


Piri Reis Map c. 1513 Ottoman Map



Dünya Haritası, Piri Reis
Topkapı Sarayı Müzesi Kütüphanesi, No. H. 1824
The World Map, Piri Reis
Library of Topkapı Palace Museum, No. H. 1824

Mercator Map c.1569



The Wright-Hakluyt Map of the World, 1600

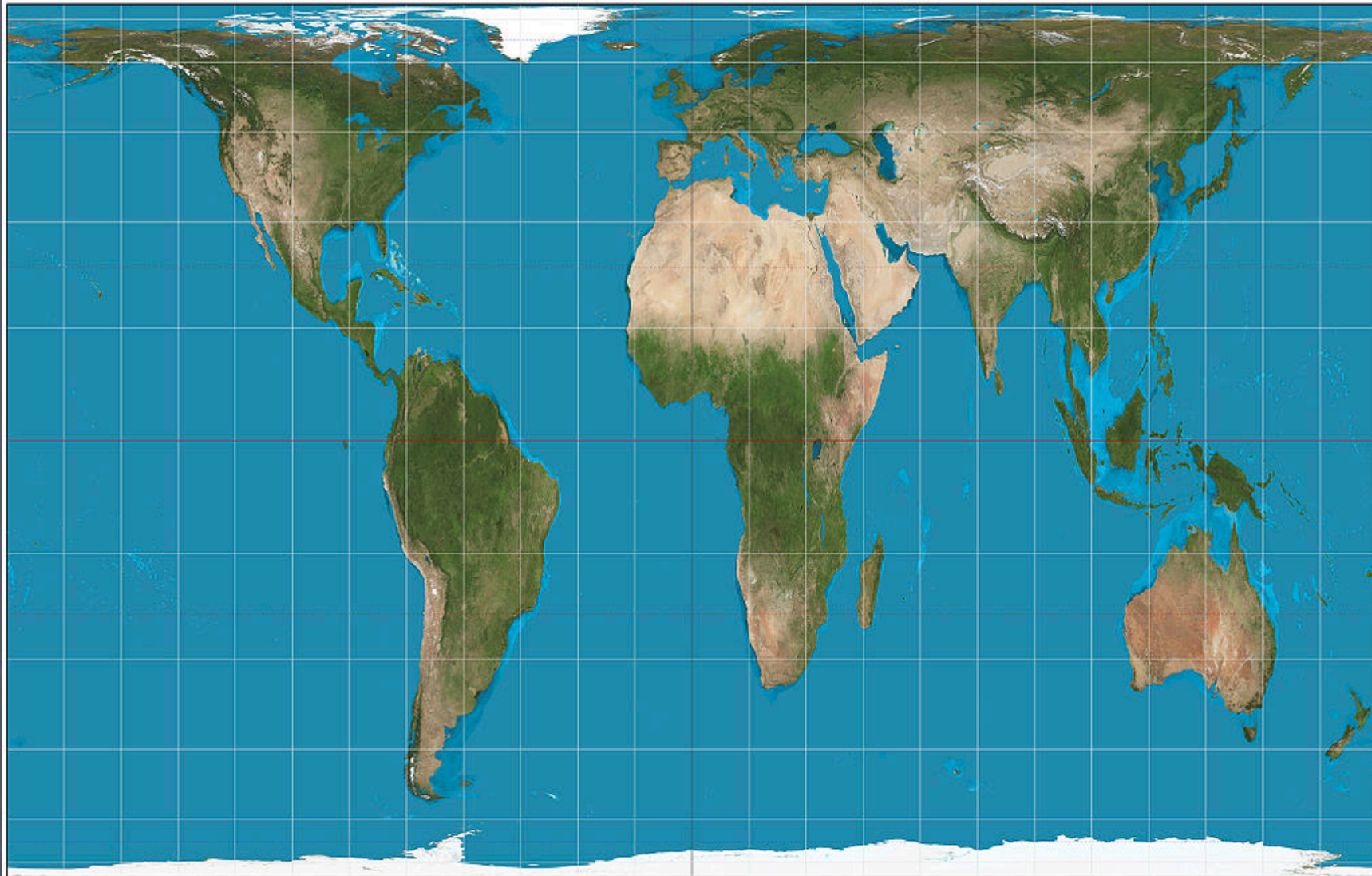


The Wright-Hakluyt Map of A.D. 1600 (Outline sketch).

James Cook's Map of Eastern Coast of New South Wales 1770



Modern Gall-Peters Map



Early Modern Geography

- Immanuel Kant (18th century) – Taught Physical Geography and importance of Space
- Alexander von Humboldt & Carl Ritter (19th Century) – Physical geography and Human Geography
- The Victorian Era Geographers - Jean Baptiste Lamarck, Charles Darwin, Halford Mackinder, William Morris Davis



Quantitative Revolution

- Harvard University closes Geography department 1948
 - Question about inclusion of geography among sciences
- 1950s and 1960s – development of quantitative geography/
theoretical geography/ spatial science
 - Collection and use of mathematical data to make models/representations and generalizations
 - Rooted in Positivism – Belief that... “only things which can be experienced through the senses can count as true knowledge” (Cresswell pg. 82)

Humanistic Geographies

- 1970s reaction to Quantitative geography
 - Argues that geography can not be simplified to numbers and observations, needs to account for the “perspectives of experience” (Cresswell pg. 106)
 - Human experience too complicated for that
 - Led by John Kirkland Wright, Anne Buttimer and Carl Sauer
 - Phenomenology – Discovering the essence of things
 - Helpful in understanding ideas of Place

Marxist Geographies

- 1960s Geographic philosophy concerned with questions of justice, equality, exploitation, & oppression
 - Wanted to use geography to help solve societal issues
- David Harvey, William Bunge, Brian Berry, Neil Smith
 - Core idea is that people shape place
 - Need to look at patterns over time

Feminist Geographies

- Grew out of limited recognition of contribution of women geographers
- Focuses on impact of biological sex, gender, and the marginalization of women
 - “Encouraging geographers to consider women’s daily lives and problems as legitimate, sensible and important areas for research and teaching” (Women and geography study group of the institute of British Geographers. 1984)
 - Ester Boserup, Linda McDowell, Gillian Rose

Postmodernism

- 1980s reaction to Marxist and Feminist Geographies
 - “Postmodernist do not believe in truth, nor in any consistent and knowable “reality” that can be known and represented” (Creesswell pg. 178)
 - Concepts are changing all the time, things that are “true” maybe only for that place at that time
 - Geographers are unable to separate themselves from their study since they are a part of it