# I. Eurocentric view and maps of the world

https://en.wikipedia.org/wiki/World\_map



### Map longitudinally centered on Canberra Stuart McArthur (1979)

Arthur Jay Klinghoffer (2006): The Power of Projections: How Maps Reflect Global Politics and History, p. 21

"Prior to Ricci's impact, Chinese cartography was predominantly oriented southward. South was also the royal direction, and Chinese compasses pointed toward magnetic south. Emperors sat with their backs to the north, and their palaces faced south from their location north of the capital's eastwest axis. Islamic mapmaking, which was influenced by the Chinese, also featured a southern orientation."

In Ancient Egypt, the Lower Egypt was the delta (which is "up" in standard maps)



A south-up map centered on the Prime Meridian (at Greenwich?) https://en.wikipedia.org/wiki/South-up\_map\_orientation#/media/File:Blank-map-world-southup.png

http://www.flourish.org/upsidedownmap/



The Blue Marble photograph in its original ("upside-down") orientation (south pole at the top) https://en.wikipedia.org/wiki/File:Apollo17WorldReversed.jpg

Iconic photograph of the Earth, taken on December 7, 1972, by the crew of the Apollo 17 spacecraft, at a distance of about 45,000 kilometers.



The Blue Marble photograph inverted (to fit the traditional view) https://www.nasa.gov/content/blue-marble-image-of-the-earth-from-apollo-17



Mercator projection https://en.wikipedia.org/wiki/File:Mercator\_projection\_SW.jpg

### Typical (Western) depiction of a world map

Europe occupies the central position



#### **Mercator projection**

William A Haviland et al (2010): Evolution and prehistory

Maps codify the miracle of existence. And the man who wrote the codes for the maps we use today was Gerard Mercator, a cobbler's boy born five hundred years ago on a muddy floodplain in northern Europe. In his own time, Mercator was 'the prince of modern geographers', his depictions of the planet and its regions unsurpassed in accuracy, clarity and consistency. More recently, he was crowned by the American scholar Robert W. Karrow as 'the first modern, scientific cartographer'. Mercator was a humble man with a universal vision. Where his contemporaries had adopted a piecemeal approach to cartography, Mercator sought to wrap the world in overlapping, uniform maps. Along the way, he erected a number of historic milestones. He participated in the naming and the mapping of America, and he devised a new method – a 'projection' – of converting the spherical world into a two-dimensional map. He constructed the two most important globes of the sixteenth century, and the title of his pioneering 'modern geography', the Atlas, became the standard term for a book of maps.

N Crane (2002): Mercator: The man who mapped the planet, p. xi



#### **Mercator projection**

Craig A Lockard (2011): Societies, Networks, and Transitions: A Global History, p. xxviii

...the Mercator projection (or spatial presentation) [...], is based on a sixteenth-century European model that distorts the relative size of landmasses, greatly exaggerating Europe, North America, and Greenland while diminishing the lands nearer the equator and in the Southern Hemisphere. Hence, Africa, India, Southeast Asia, China, and South America look much smaller than they actually are. In the United States, maps using a Mercator projection have often tellingly placed the Americas in the middle of the map, cutting Asia in half, suggesting that the United States, appearing larger than it actually is, plays the central role in the world.

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### **Mercator projection**

Arthur Jay Klinghoffer (2006): The Power of Projections: How Maps Reflect Global Politics and History

p. 77



Mollweide (or elliptical) projection (equal-area, pseudocylindrical map projection) https://en.wikipedia.org/wiki/File:Mollweide\_projection\_SW.jpg

https://en.wikipedia.org/wiki/Mollweide\_projection



Mollweide projection William A Haviland et al (2010): Evolution and prehistory



**Van der Grinten projection** William A Haviland et al (2010): Evolution and prehistory



Van der Grinten I projection https://commons.wikimedia.org/wiki/File:Van-der-Grinten-I-projection.jpg



#### **Polar projection**

Arthur Jay Klinghoffer (2006): The Power of Projections: How Maps Reflect Global Politics and History p. 104



Azimuthal equidistant projection https://en.wikipedia.org/wiki/File:Azimuthal\_equidistant\_projection\_SW.jpg



## **Peters projection** Arno Peters' equal-area projection

Arthur Jay Klinghoffer (2006): The Power of Projections: How Maps Reflect Global Politics and History, p. 121



### **Peters projection**

Adopted as the official map of UNESCO. Shows the continents according to relative size. WA Haviland et al (2010): Cultural anthropology



Gall-Peters projection (equal-area cylindric or cylindrical equal-area projection) https://en.wikipedia.org/wiki/Gall%E2%80%93Peters\_projection#/media/File:Gall%E2%80%93Peters\_ \_\_projection\_SW.jpg

https://en.wikipedia.org/wiki/Gall%E2%80%93Peters\_projection



**Robinson projection** William A Haviland et al (2010): Evolution and prehistory



Robinson projection https://en.wikipedia.org/wiki/File:Robinson\_projection\_SW.jpg



**Robinson projection** 

Used by the National Geographic Society until 1998 (replaced by the Winkel triplel projection) WA Haviland et al (2010): Cultural anthropology



**Robinson projection** Richard Bulliet et al (2010): The Earth and its peoples, Volume C



Winkel triplel projection (a low-error map projection) <u>https://en.wikipedia.org/wiki/File:Winkel\_triple\_projection\_SW.jpg</u> Oswald Winkel (1921) Adopted by the National Geographic Society for reference maps since 1998. <u>https://en.wikipedia.org/wiki/Winkel\_tripel\_projection</u>



Japanese map Craig A Lockard (2008) : Societies, networks and transitions, Volume 1, To 1500



Pacific-centric map https://en.wikipedia.org/wiki/File:BlankMap-World-162E-flat.svg



#### **Eckert projection**

Craig A Lockard (2011): Societies, Networks, and Transitions: A Global History, p. xxix

...the oval-shaped Eckert projection uses an ellipse that shows a better balance of size and shape while minimizing distortion of continental areas.

It gives a more accurate view of relative size.

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Eckert II projection https://en.wikipedia.org/wiki/File:Eckert\_II\_projection\_SW.JPG



Eckert IV projection https://en.wikipedia.org/wiki/File:Ecker\_IV\_projection\_SW.jpg



### **Hobo-Dyer projection of the world (cylindrical equal area projection)** John M Hobson (2004): Eastern origins of western civilisation



#### T-O map

O derives from the circularity of the map; T comes from the cross formed by the Mediterranean, the Nile and the Don (Danube). It is a map of religious inspiration: Jerusalem is at the center and the three continents represent the trinity.

Arthur Jay Klinghoffer (2006): The Power of Projections: How Maps Reflect Global Politics and

History

p. 25



Arthur Jay Klinghoffer (2006): The Power of Projections: How Maps Reflect Global Politics and History p. 88

(centering longitudinally on the "pivot area" rather than on the Greenwich meridian)