

# Data Visualization & Design

**Week 6**

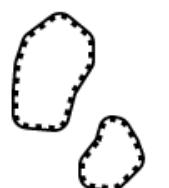
This week in **visualization**...

500km

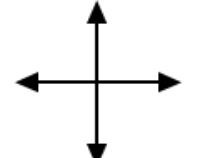


## PHANTOM ISLANDS – A SONIC ATLAS

Phantom Islands are artifacts of the age of maritime discovery and colonial expansion. During centuries of ocean exploration these islands were sighted, charted, described and even explored – but their existence has never been ultimately verified. Poised somewhere between cartographical fact and maritime fiction, they haunted seafarers' maps for hundreds of years, inspiring legends, fantasies, and counterfactual histories. Phantom Islands – A Sonic Atlas interprets and presents these imaginations in the form of an interactive map which charts the sounds of a number of historical phantom islands.



Zoom in on individual phantom islands to hear their musical, biophonic and geophonic soundscapes.



Navigate around the map and click on islands' names to learn the circumstances of their discovery and the dates of their cartographical existence.

...or engage CRUISE MODE to be taken on an audio tour of all the Phantom Islands.

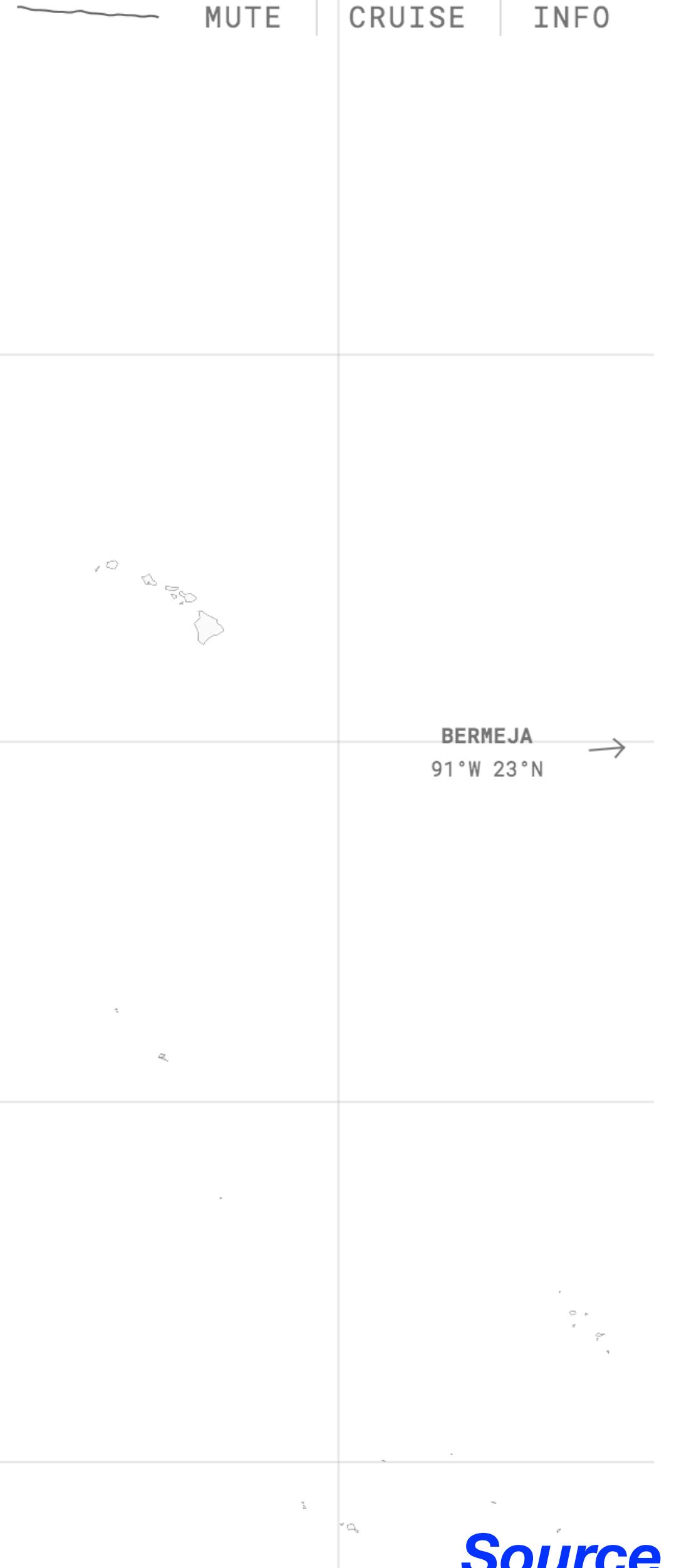
Start



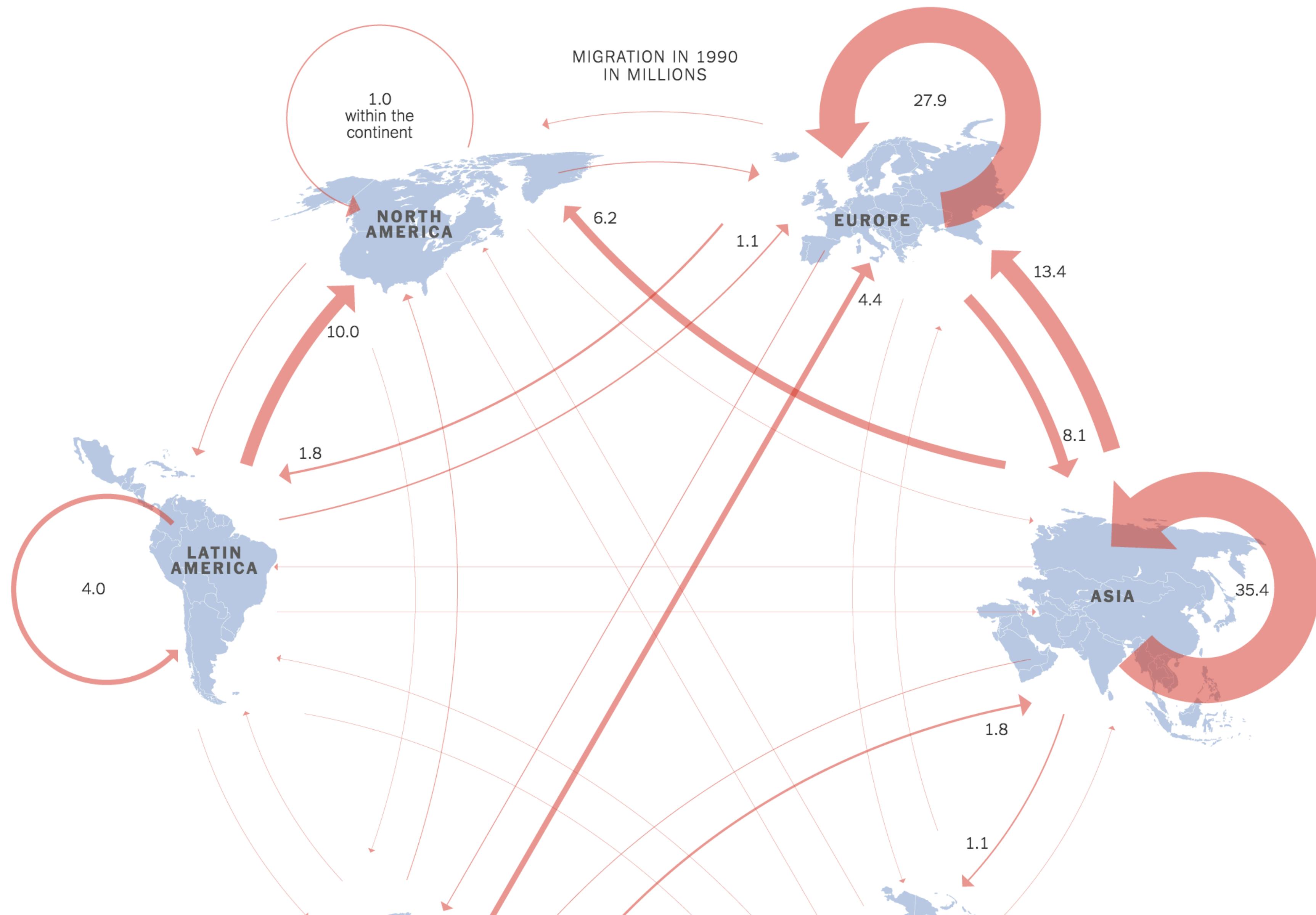
MUTE

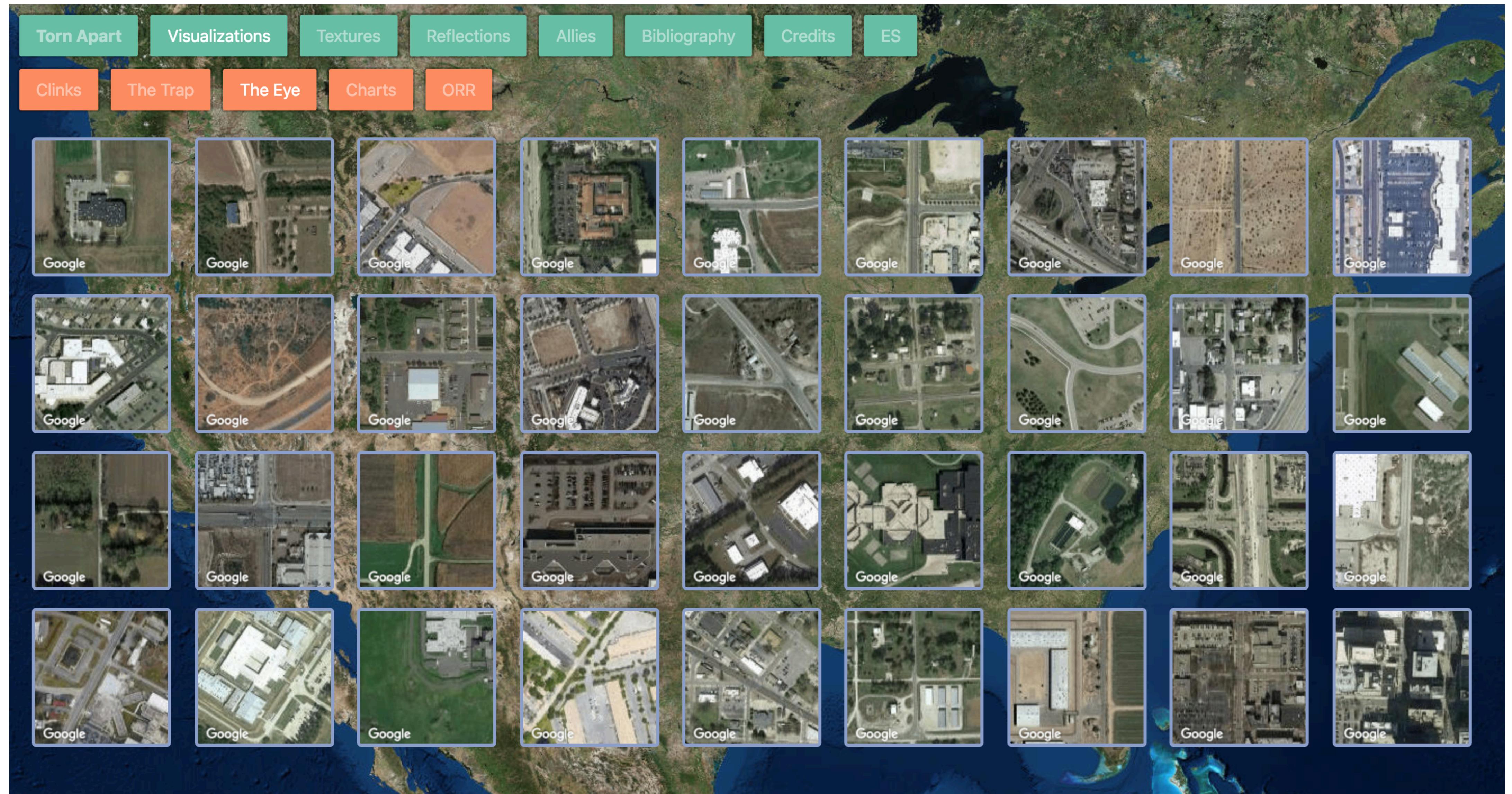
CRUISE

INFO



**Source**

[Source](#)



[\*\*Source\*\*](#)

Quick **Excel** tip

# Capitalize only the **first letter** of a string

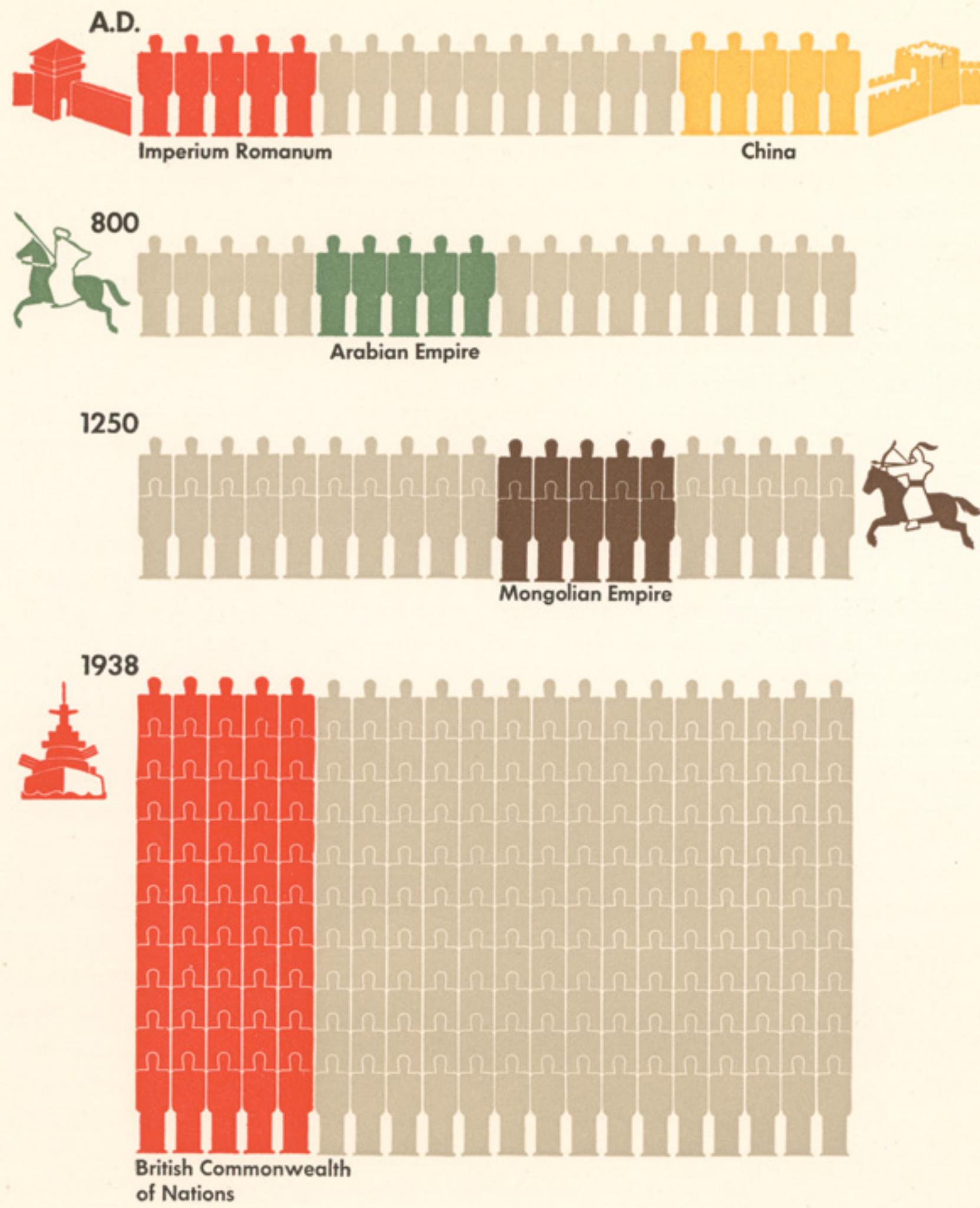
The screenshot shows the Microsoft Excel interface with the Home tab selected in the ribbon. The formula bar displays the formula `=UPPER(LEFT(A1,1))&LOWER(RIGHT(A1,LEN(A1)-1))`. The cell B1 contains the text "This is A Testtttt". The rest of the cells in the row are empty. The ribbon includes tabs for File, Home, Insert, Page Layout, Formulas, Data, Review, View, and EDS Plug-In. The Home tab has sections for Clipboard, Font, Alignment, Number, Styles, Cells, and Editing.

1. A brief history of **Isotype**
2. Visualizing **Time** in Tableau

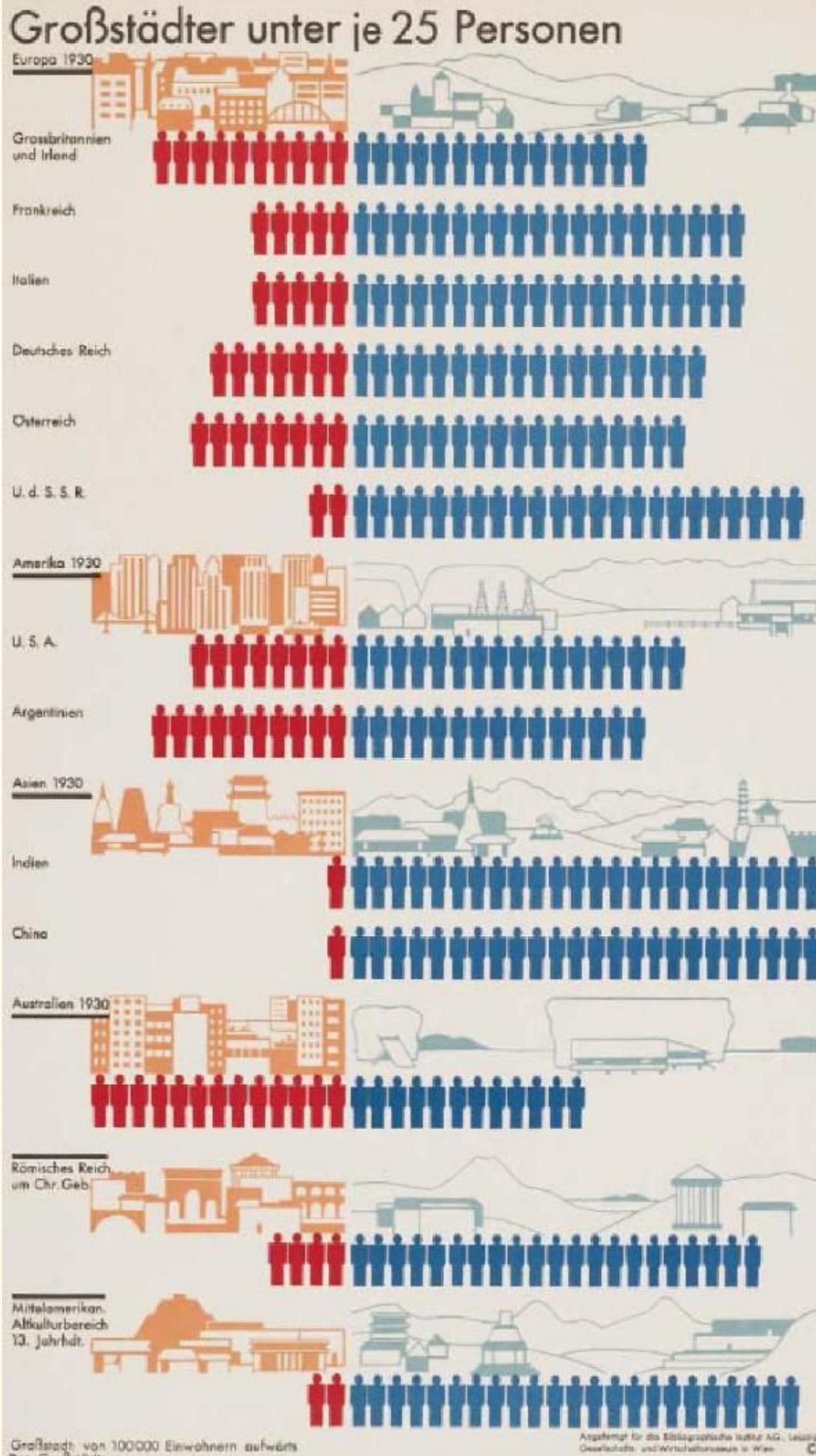
1. A brief history of **Isotype**
2. Visualizing **Time** in Tableau

**Isotype:**  
“International System Of Typographic Picture Education”

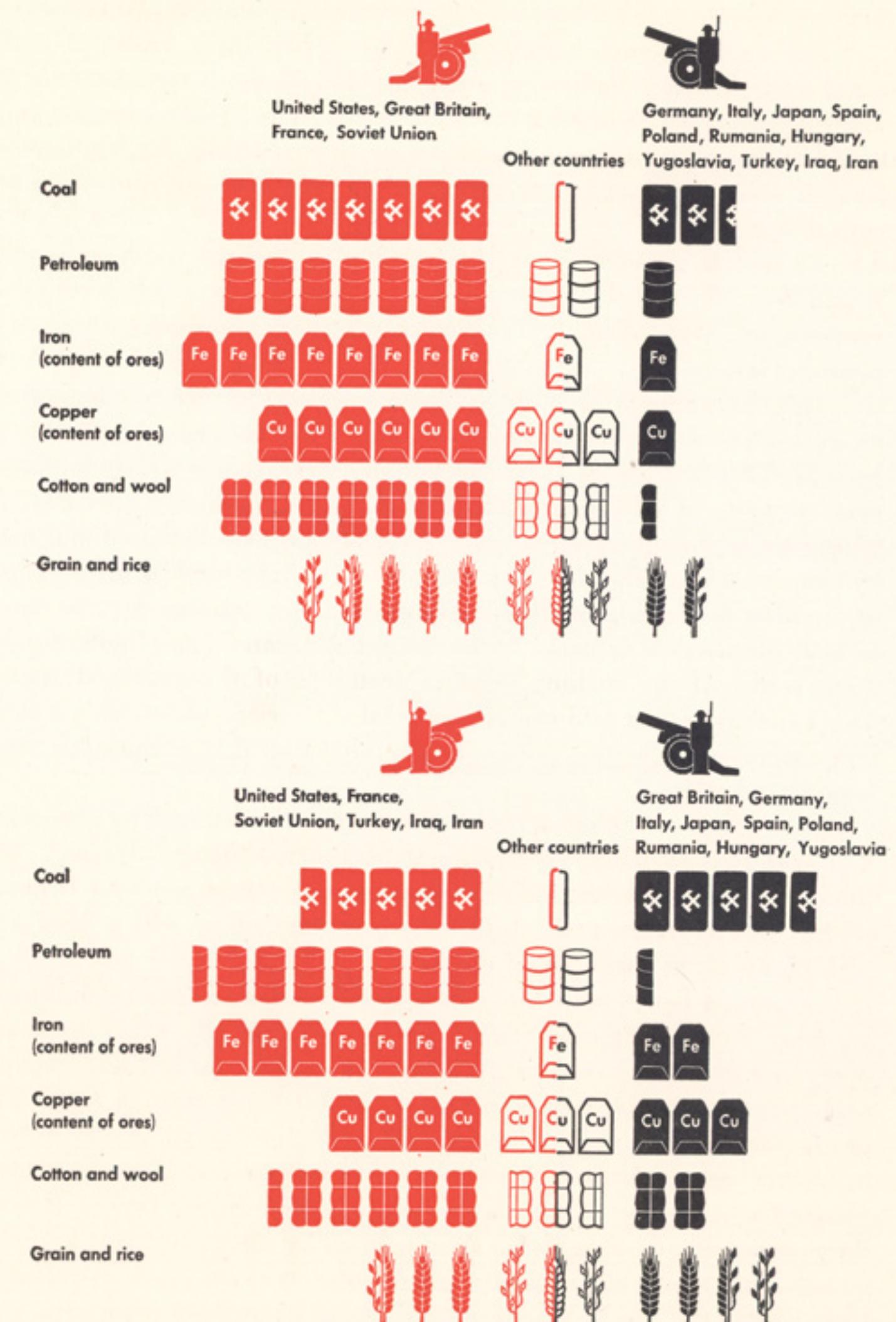
## World Imperia

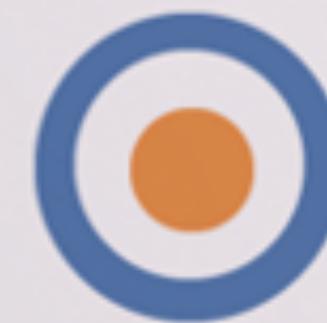


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## Silhouettes of War Economy





Allies

USA, British Empire, France, Belgium,  
Italy, Serbia, Romania, Russia, Japan a.s.o.



Central Power

Germany, Austria, Hungary, Bulgaria, Turkey

## Great War 1914-18

Each figure 1 million soldiers

(killed, wounded, others returning home)

The **isotype** was initiated by **Otto Neurath** in  
collaboration with **Gerd Arntz**.

# Origins of Isotype

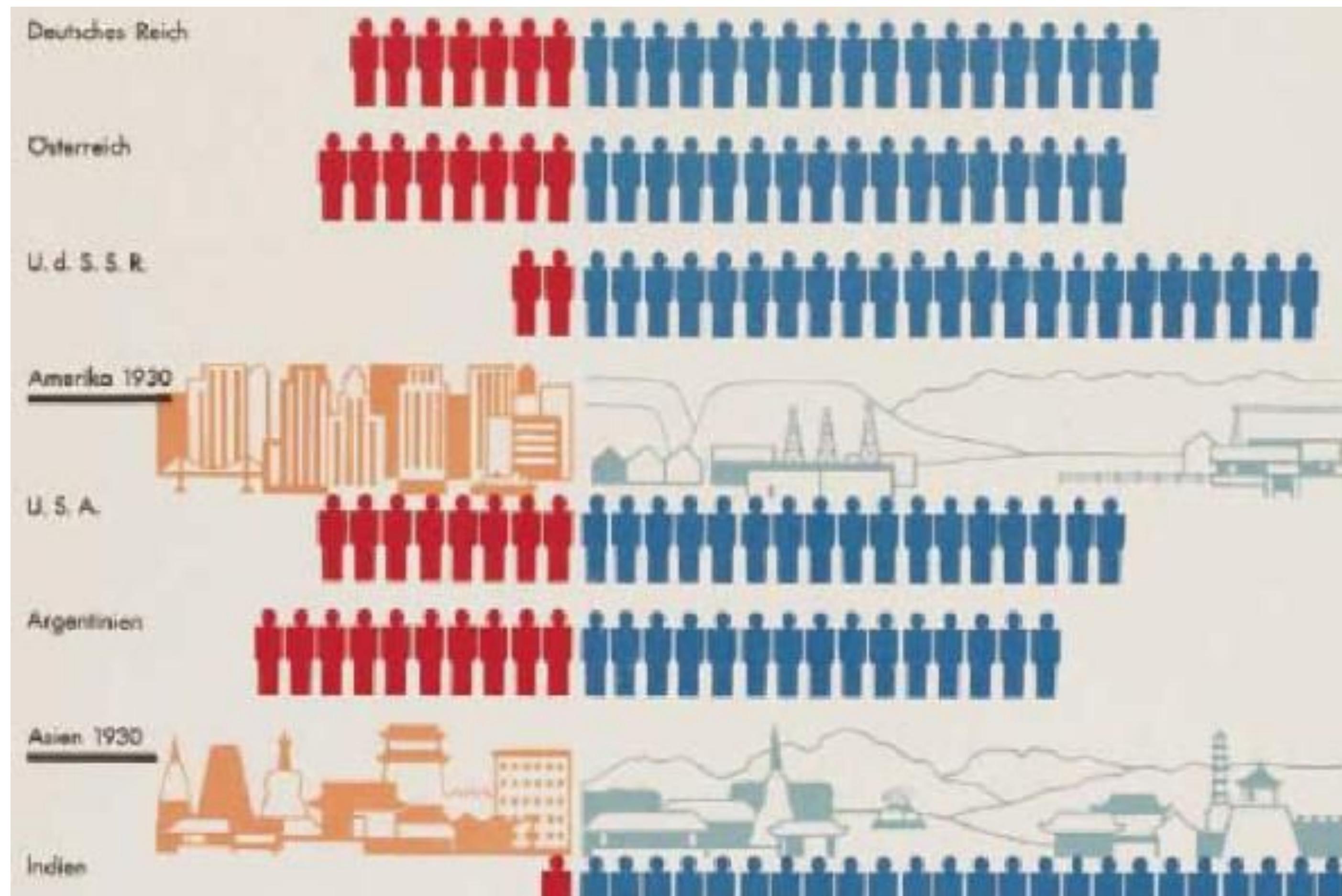
- Developed at the Social and Economic Museum of Vienna between **1925-1934**
- Neurath believed the museum should be a teaching museum, not a repository of artifacts
- First known as the **Vienna Method of Pictorial Statistics**
- Its aim was to “represent social facts pictorially” and to bring “dead statistics” to life, by making them more visually memorable

# Principles of Isotype

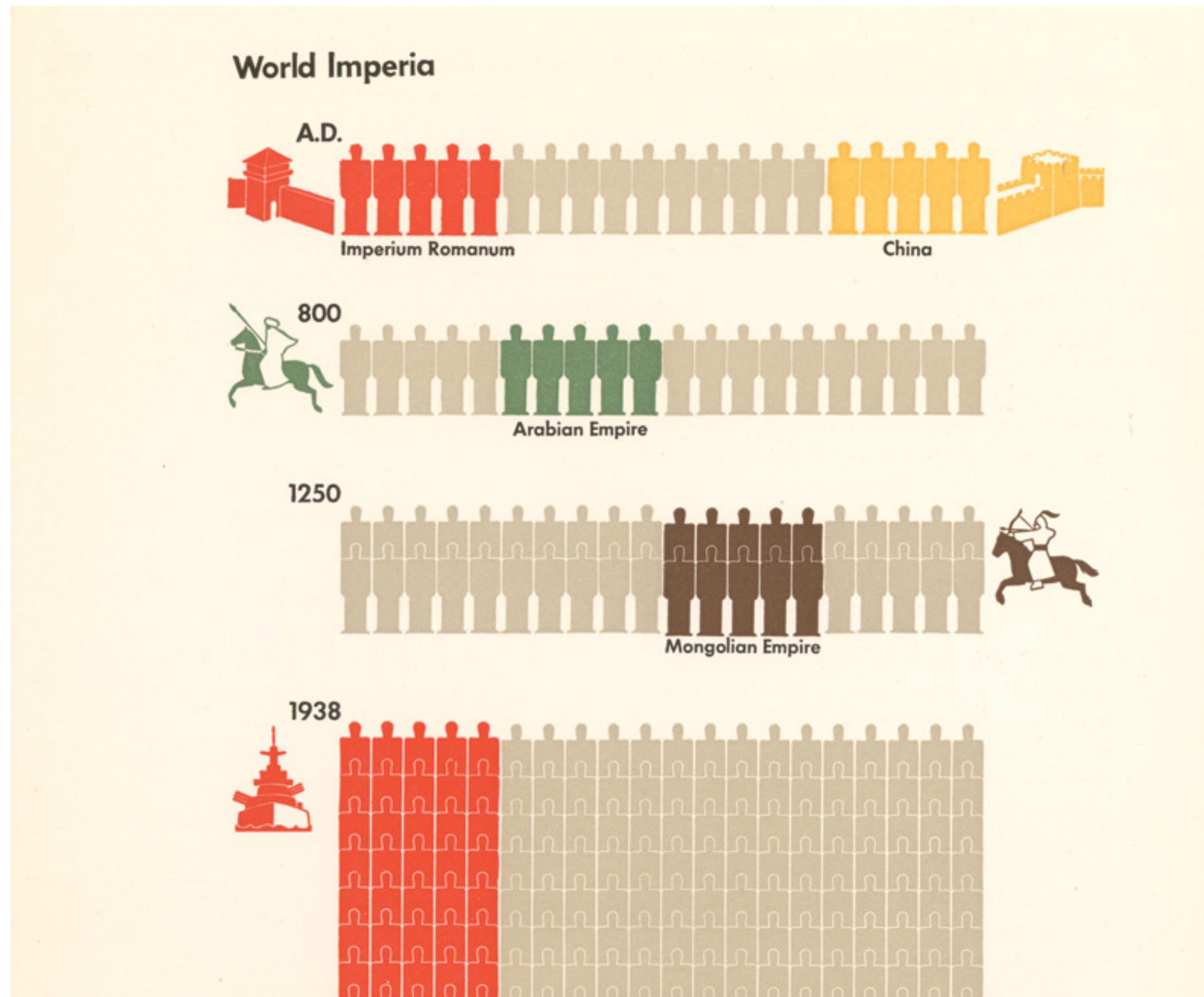
- Greater quantities are not represented by an enlarged pictogram, but by **a greater number of the same-sized pictogram**
- In Neurath's view, variation in size does not allow accurate comparison
- Variation in multiples does, because multiple pictograms can be counted
- To avoid distortion, pictograms are represented as flat (rarely in perspective)
- Focused on **visual education**

When incorporating Isotype into data-driven designs, be **rigorous**, **transparent**, and **precise**.

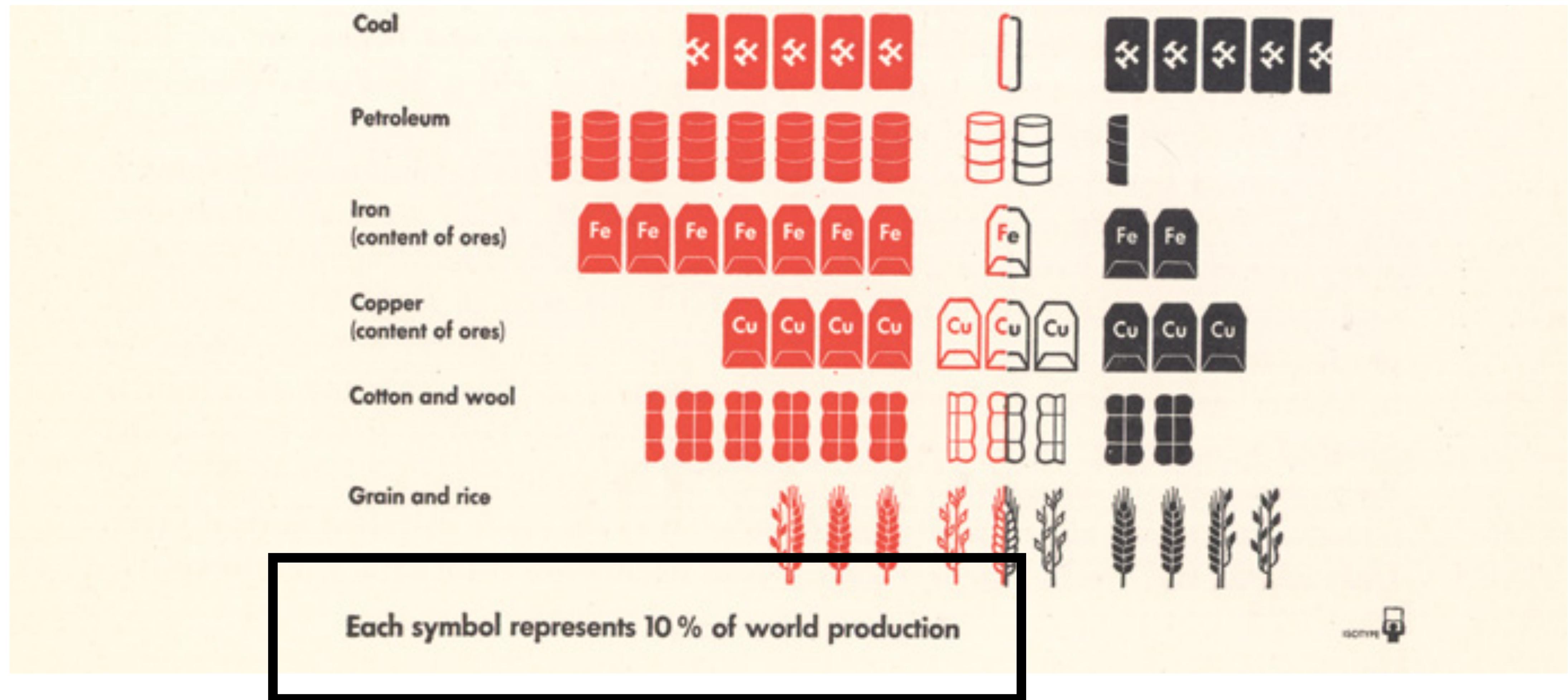
# 1. Make the icons the same size



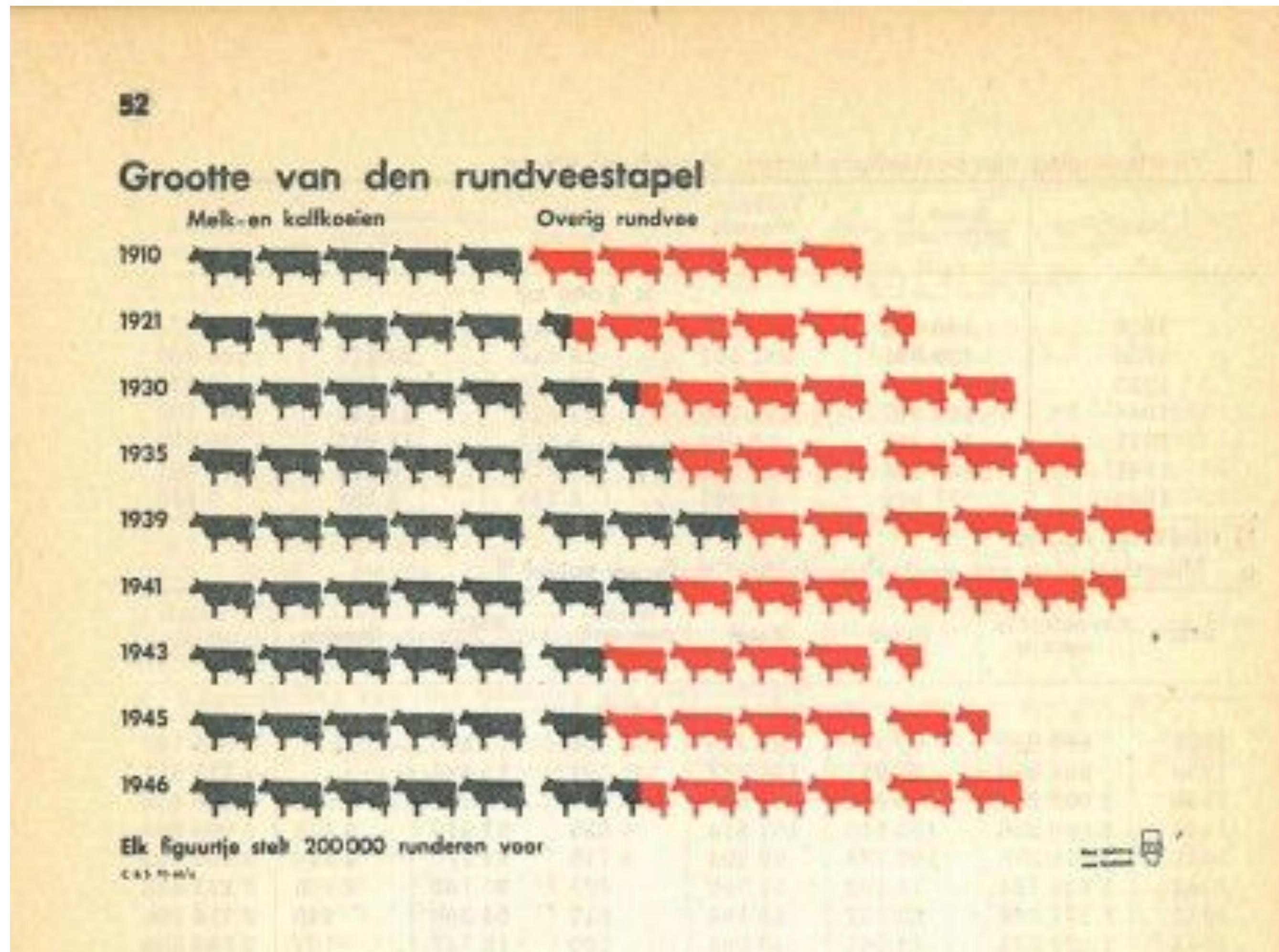
## 2. Use color sparingly (for categories)



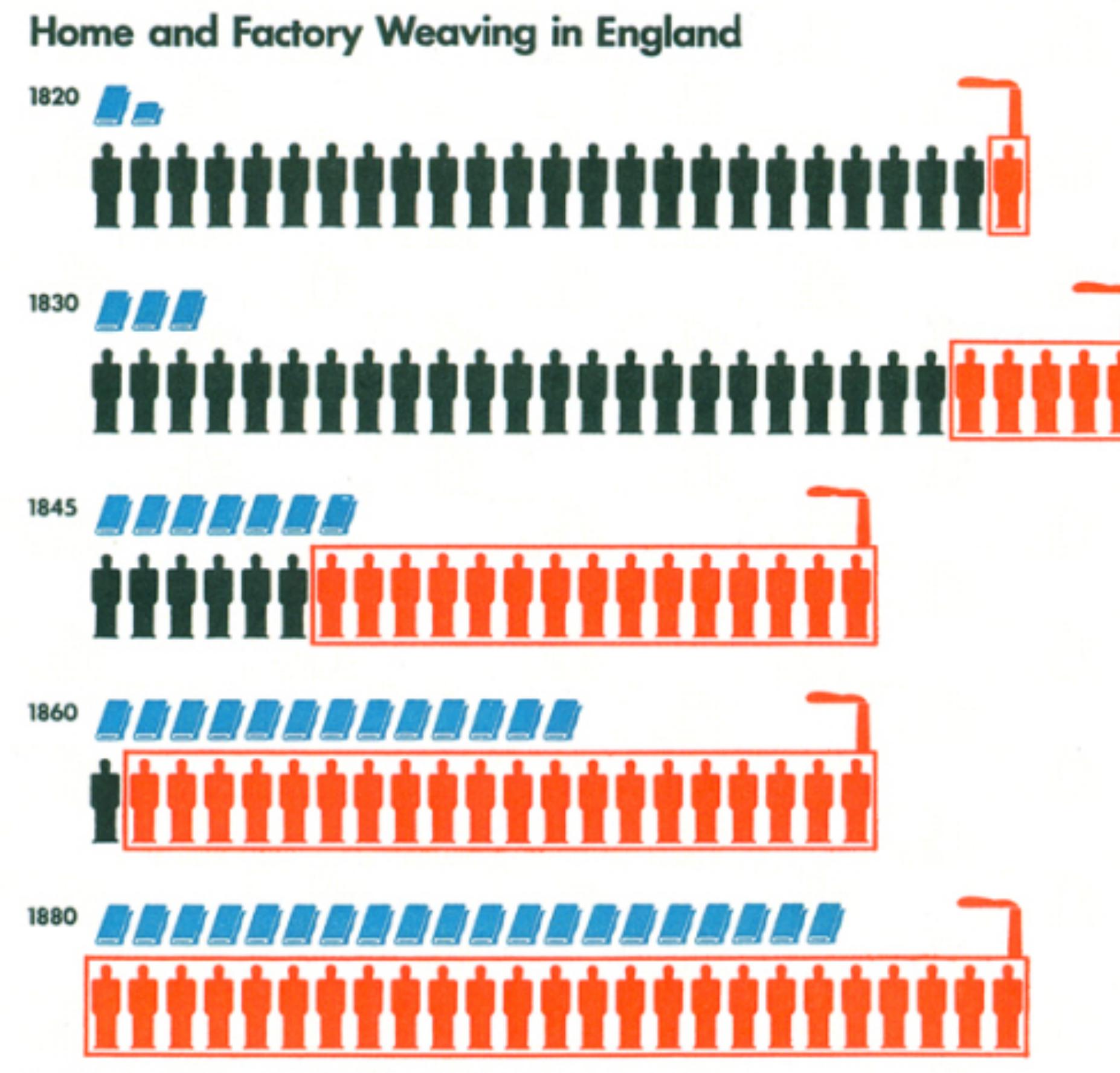
### 3. ALWAYS include a legend



## 4. Include *partial* icons if needed



## 5. Include *enough* symbols



1. A brief history of **Isotype**
2. Visualizing **Time** in Tableau

- Time Series
- Connected Scatterplot
- Animated Scatterplot
- Parallel Coordinates

[https://github.com/emilyfuhrman/  
datavis\\_design/blob/master/2018\\_Summer/  
Studios/02\\_Visualizing\\_Time\\_in\\_Tableau.md](https://github.com/emilyfuhrman/datavis_design/blob/master/2018_Summer/Studios/02_Visualizing_Time_in_Tableau.md)

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