

Data Visualization & Design

Week 6

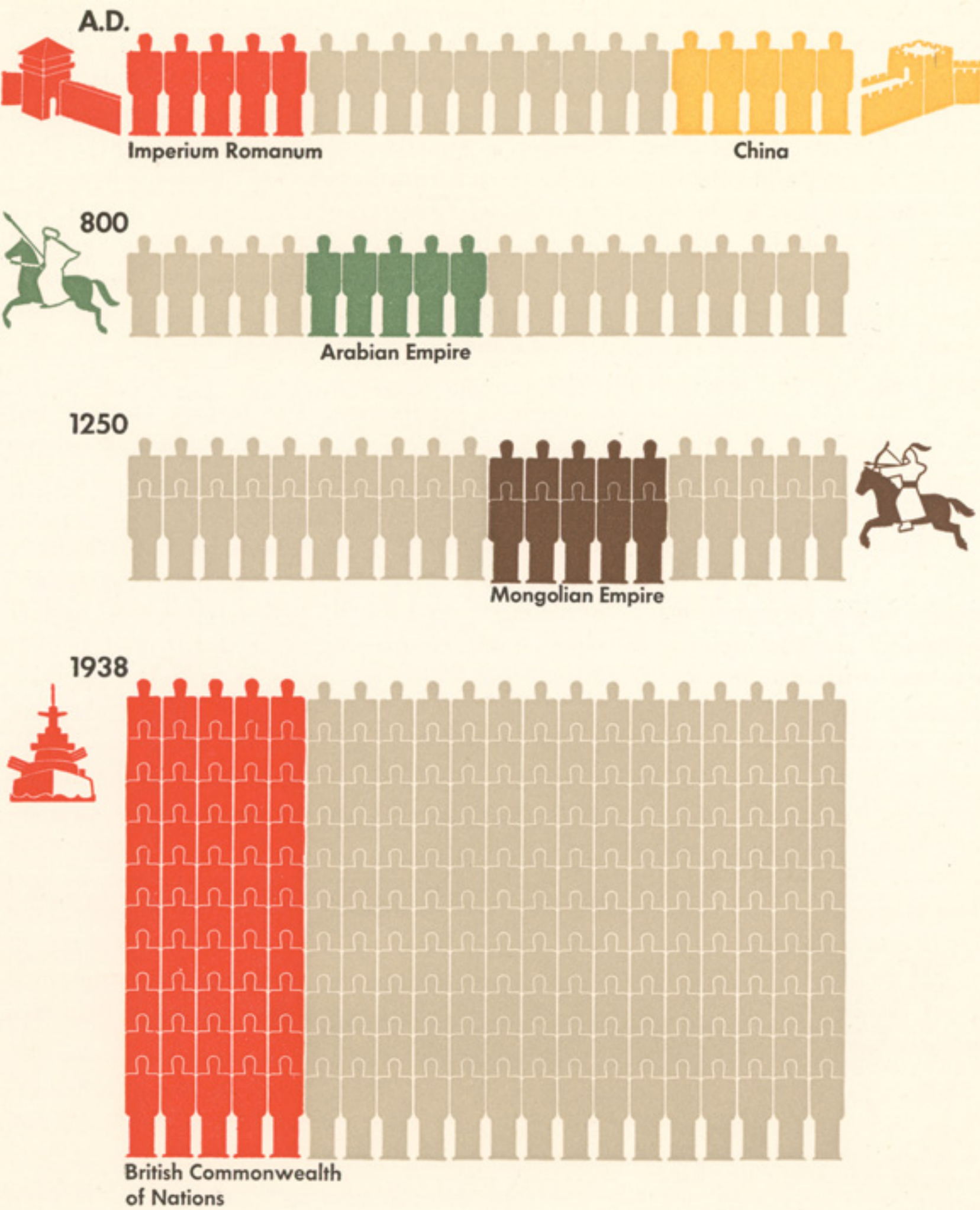
1. A brief history of **Isotype**
2. Studio: Visualizing **Time** in Tableau

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Isotype:

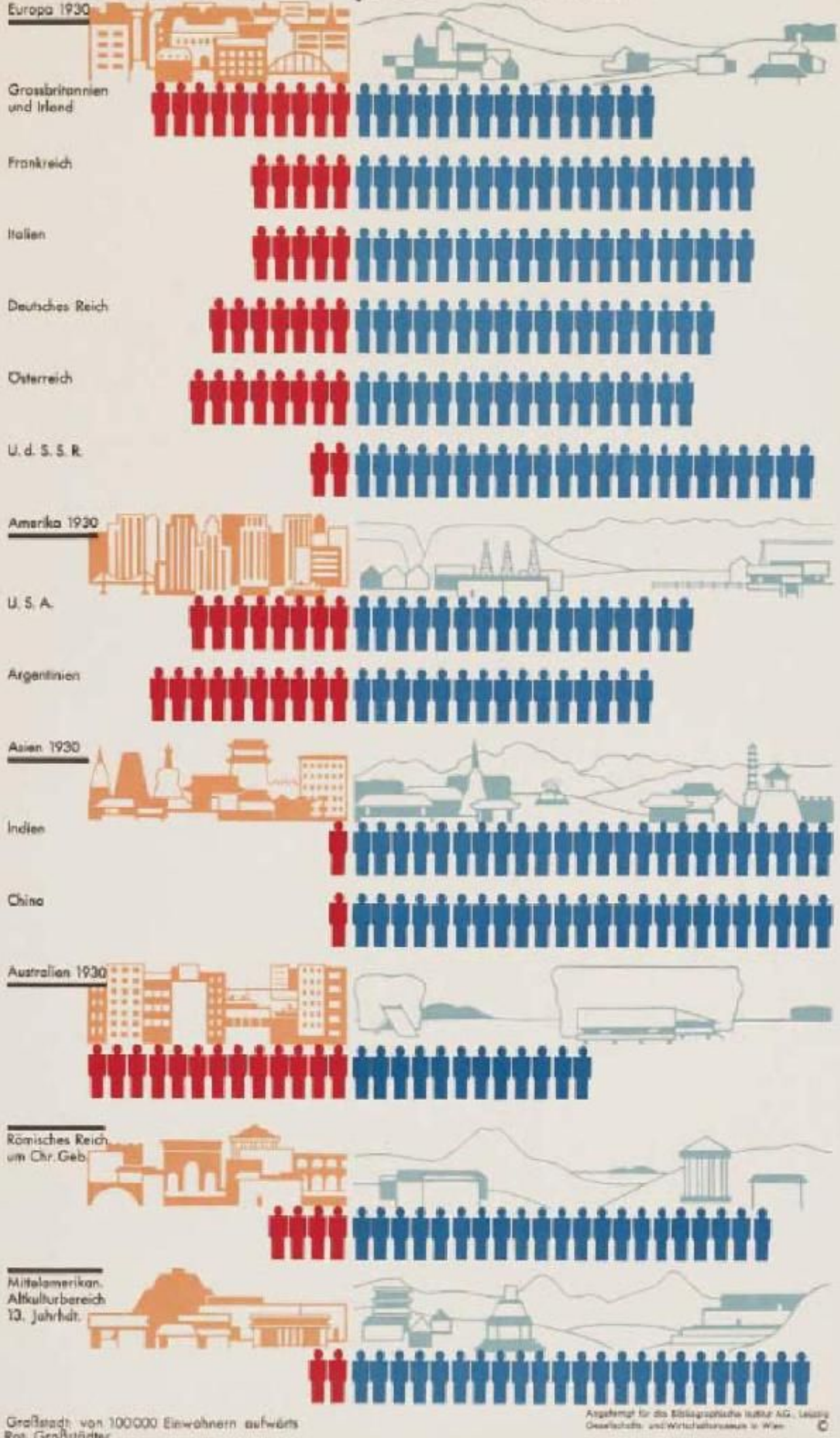
“International System Of Typographic Picture Education”

World Imperia



Each man symbol represents 10 million population

Großstädter unter je 25 Personen

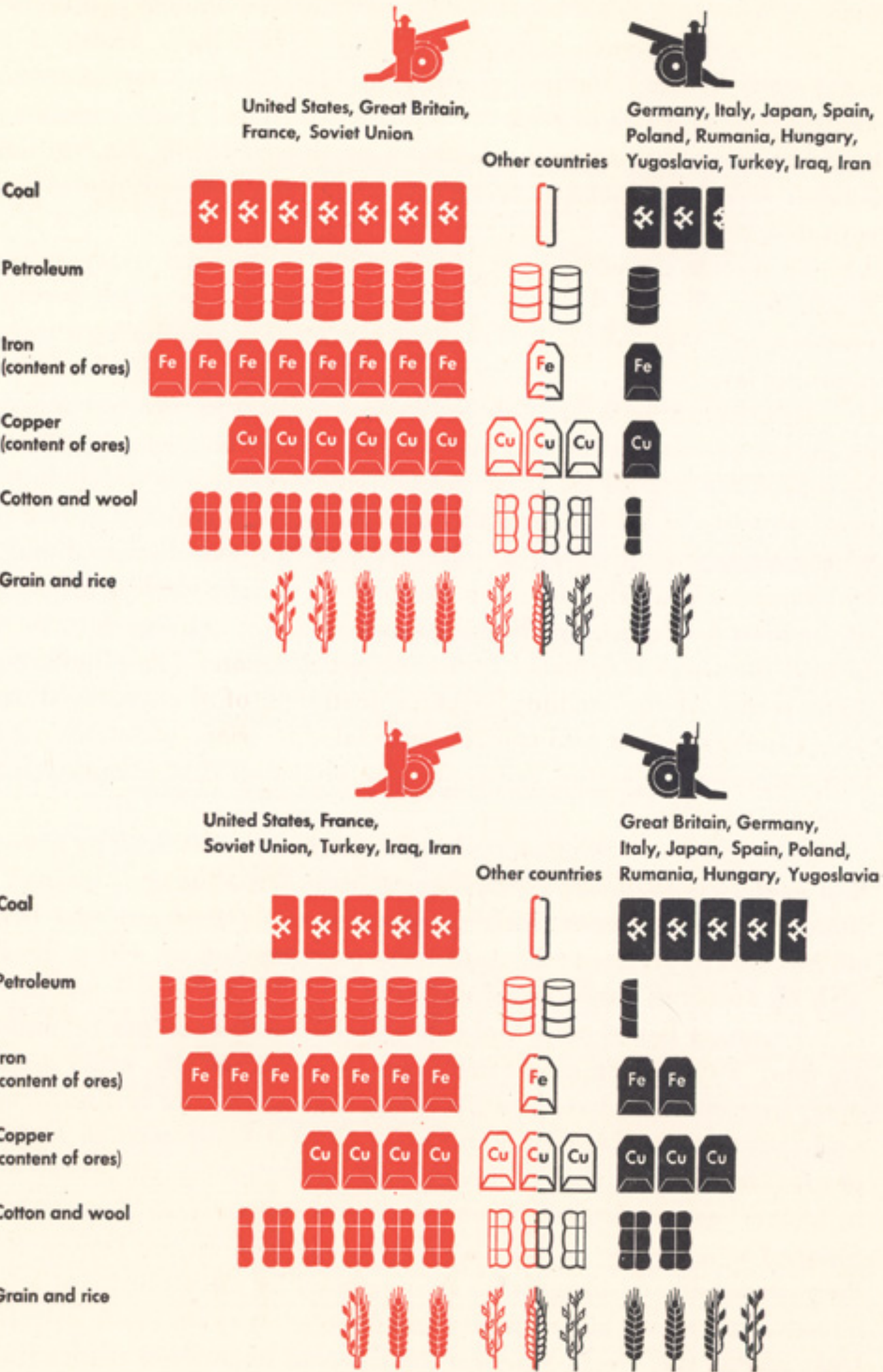


ISOTYPE

Großstadt von 100000 Einwohnern aufwärts

Angelehnt für die Biographische Kultur AG, Leipzig Gesellschafts- und Wirtschaftslexikon in Wien

Silhouettes of War Economy



Each symbol represents 10 % of world production

ISOTYPE



Central Power

Germany, Austria, Hungary, Bulgaria, Turkey



Allies

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

Great War 1914-18

Each figure 1 million soldiers
(killed, wounded, others returning home)

ISOTYPE



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

Origins of Isotype

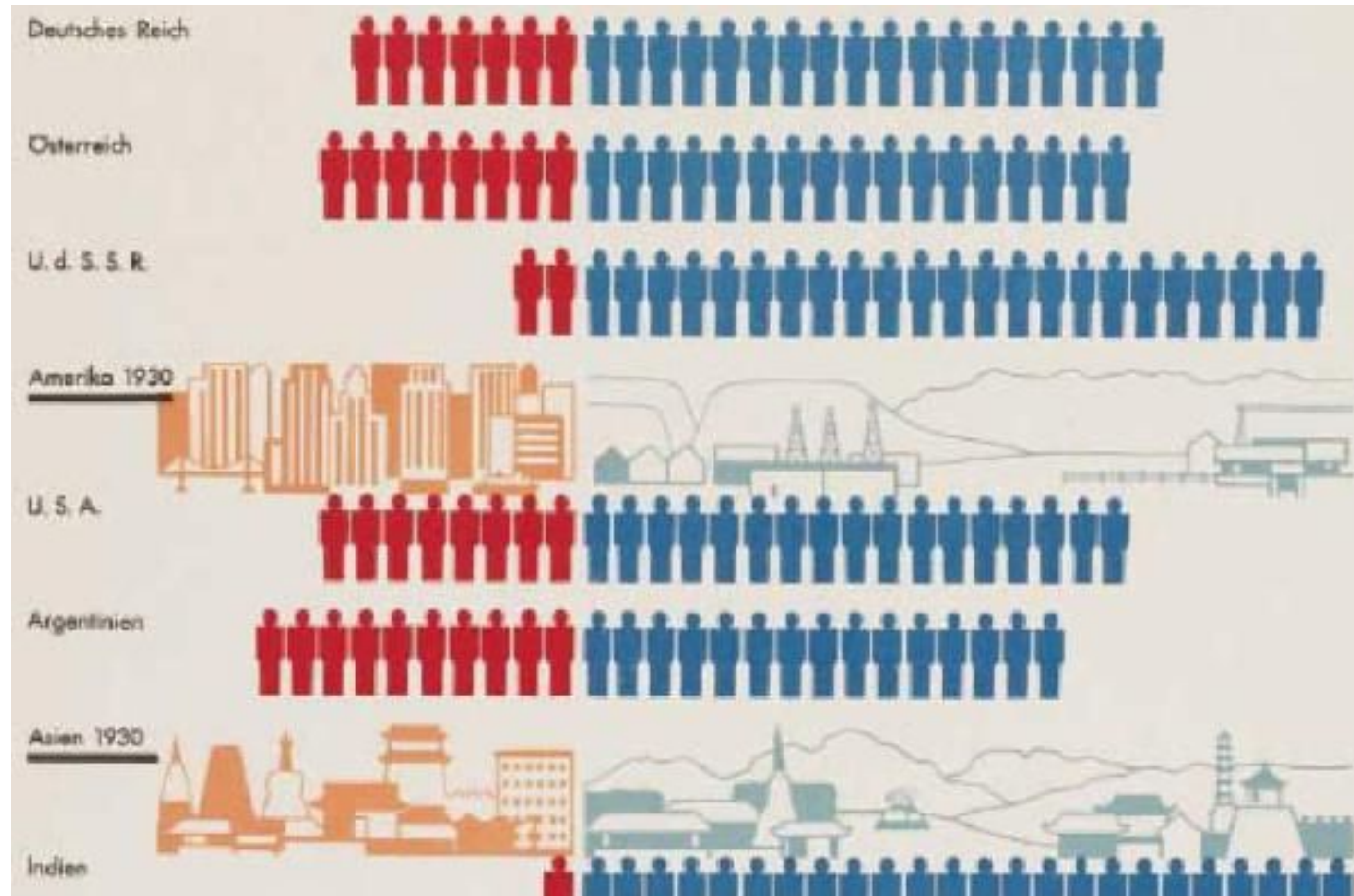
- Developed at the Social and Economic Museum of Vienna between **1925-1934**
- Neurath believed the museum should be a teaching museum, not a repository of artifacts
- First known as the **Vienna Method of Pictorial Statistics**
- Its aim was to “represent social facts pictorially” and to bring “dead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

Principles of Isotype

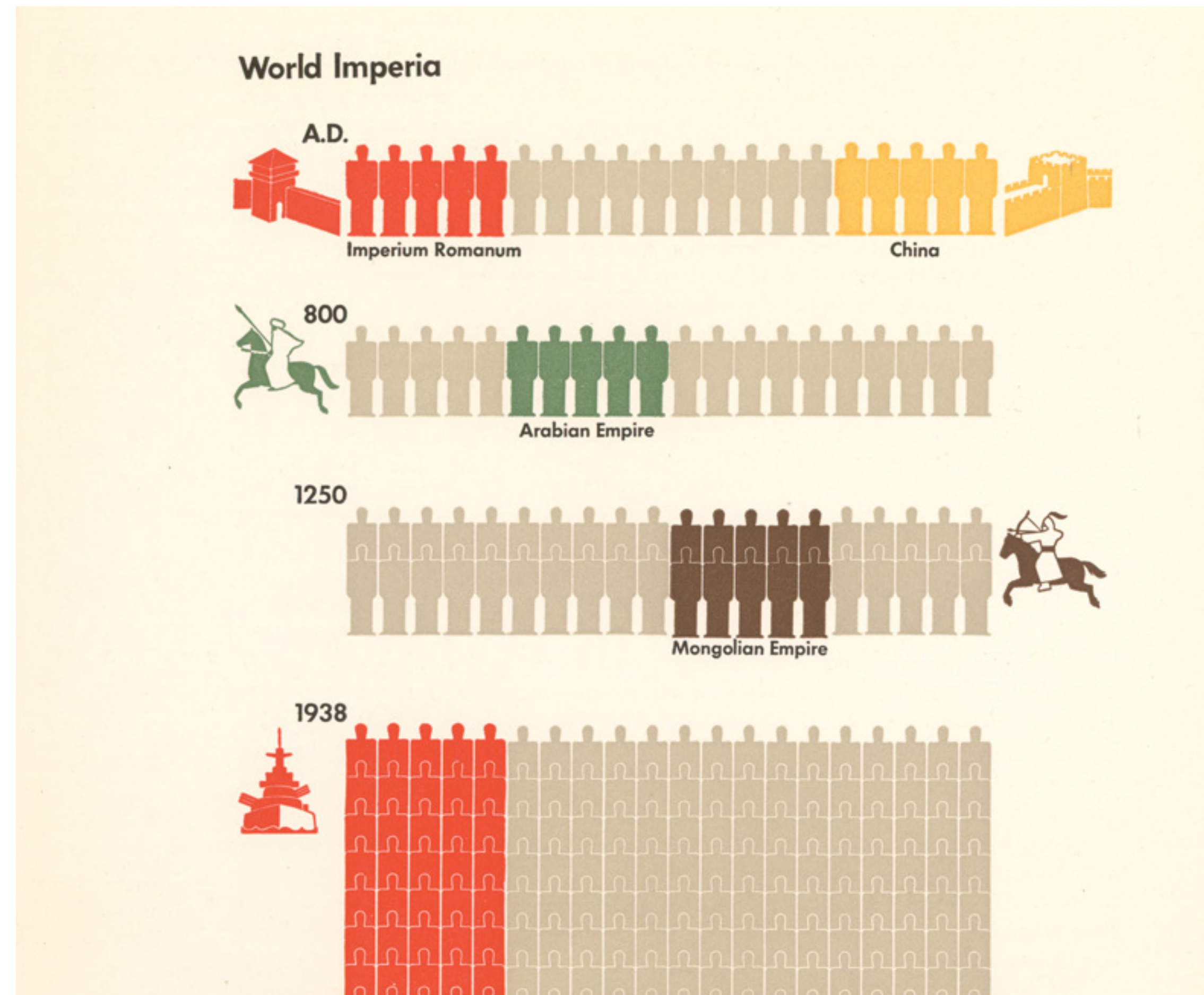
- Greater quantities are not represented by an enlarged pictogram, but by **a greater number of the same-sized pictogram**
- In Neurath's view, variation in size does not allow accurate comparison
- Variation in multiples does, because multiple pictograms can be counted
- To avoid distortion, pictograms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

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

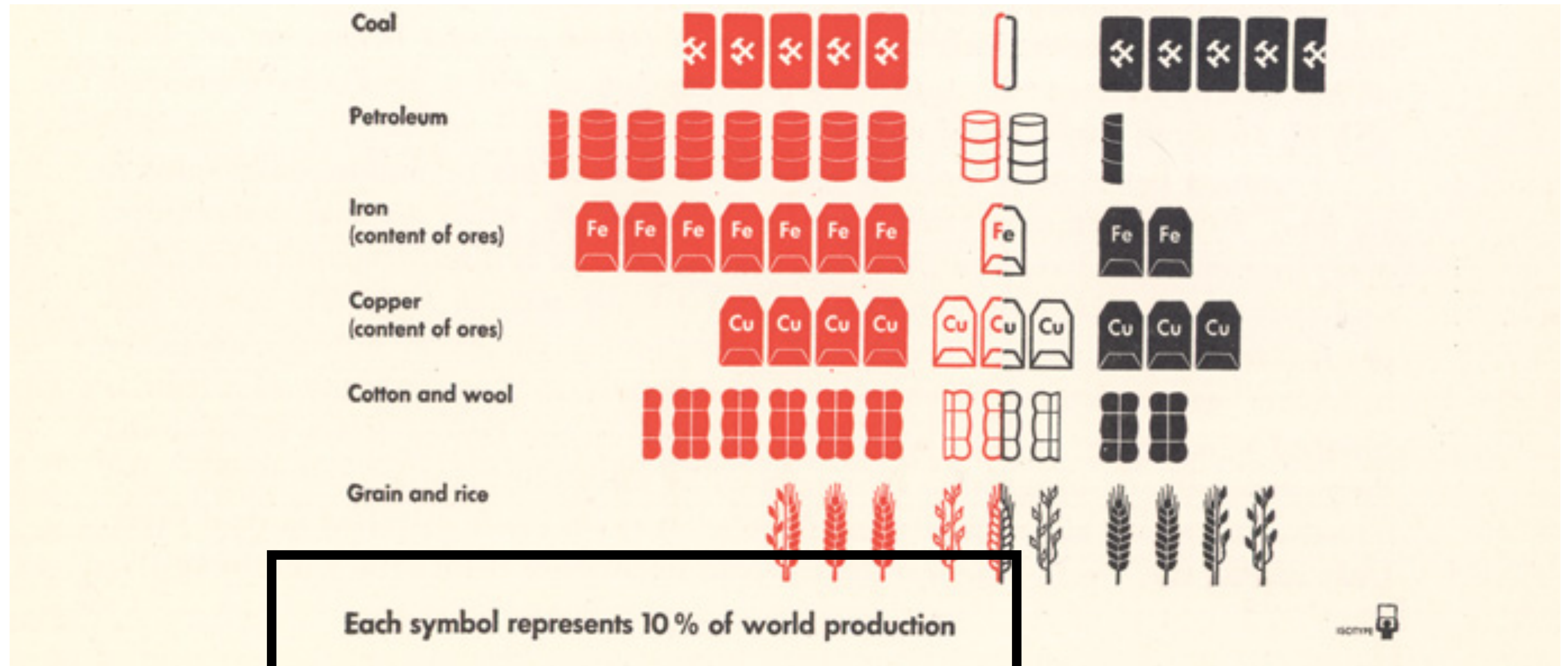
1. Make the icons the same size



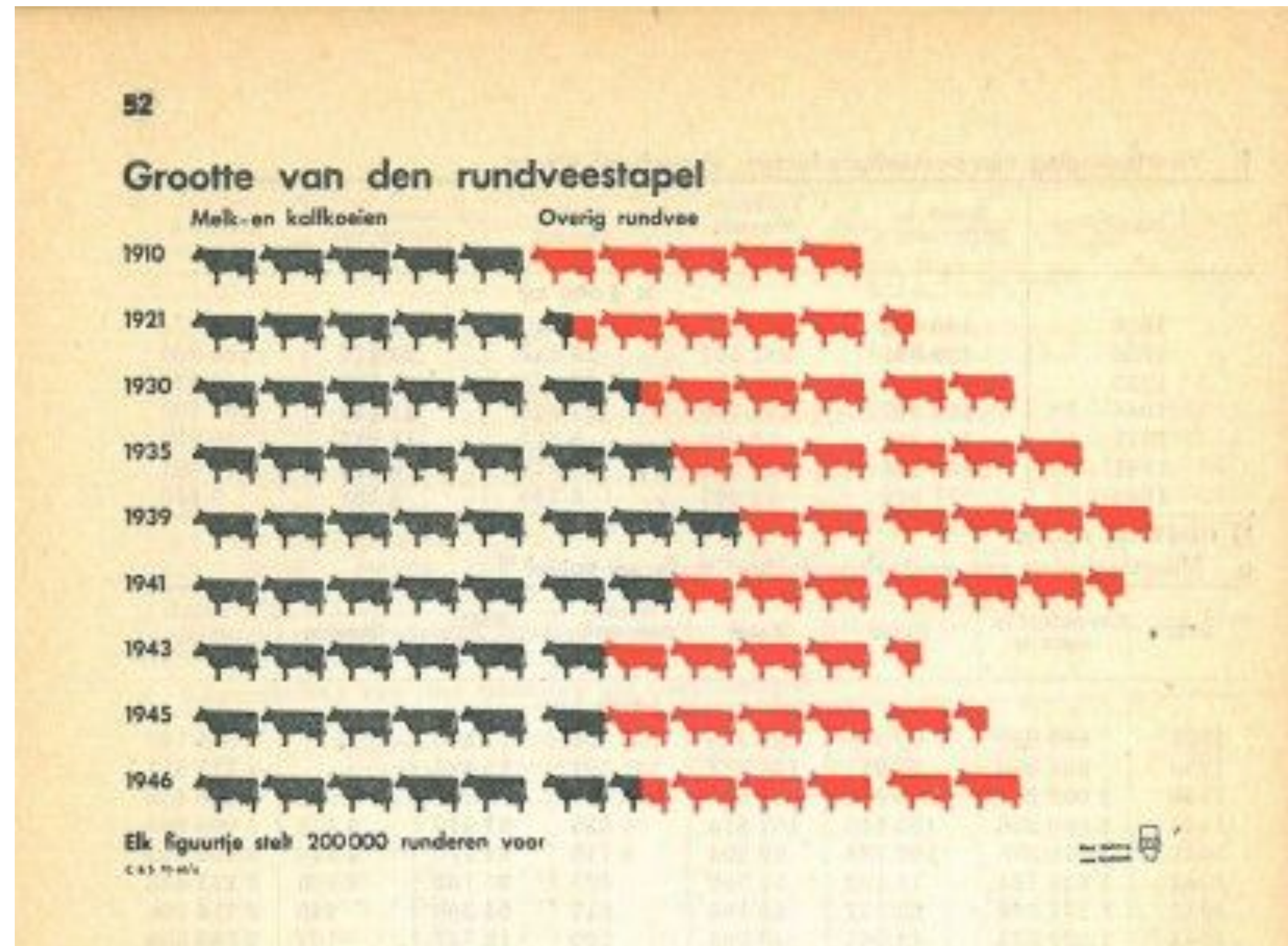
2. Use color sparingly (for categories)



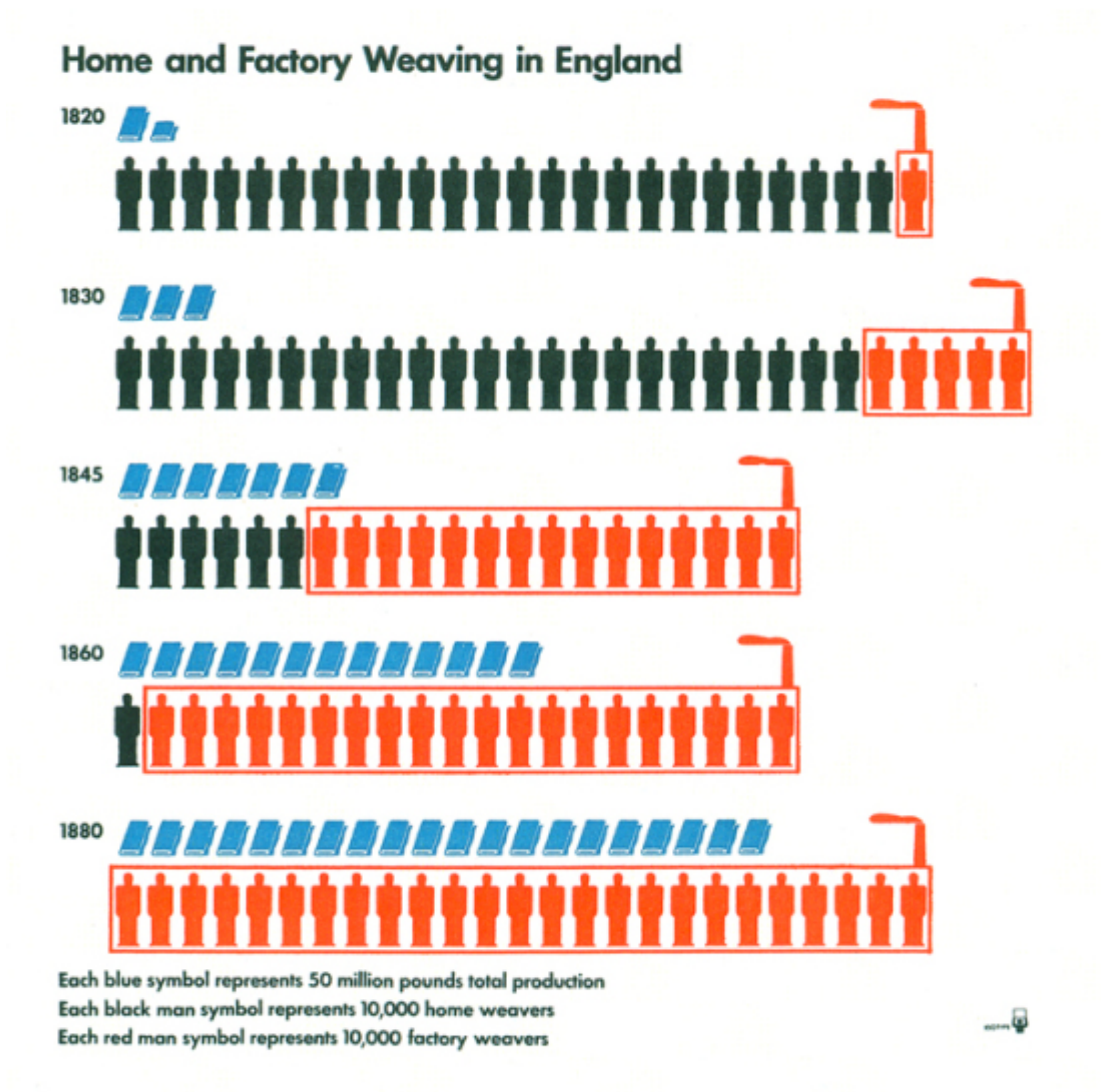
3. ALWAYS include a legend



4. Include *partial* icons if needed



5. Include *enough* symbols



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

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

**[https://github.com/emilyfuhrman/
datavis_design/blob/master/2018_Fall/Studios/
04_Visualizing_Time_in_Tableau.md](https://github.com/emilyfuhrman/datavis_design/blob/master/2018_Fall/Studios/04_Visualizing_Time_in_Tableau.md)**

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