

DATA VISUALIZATION

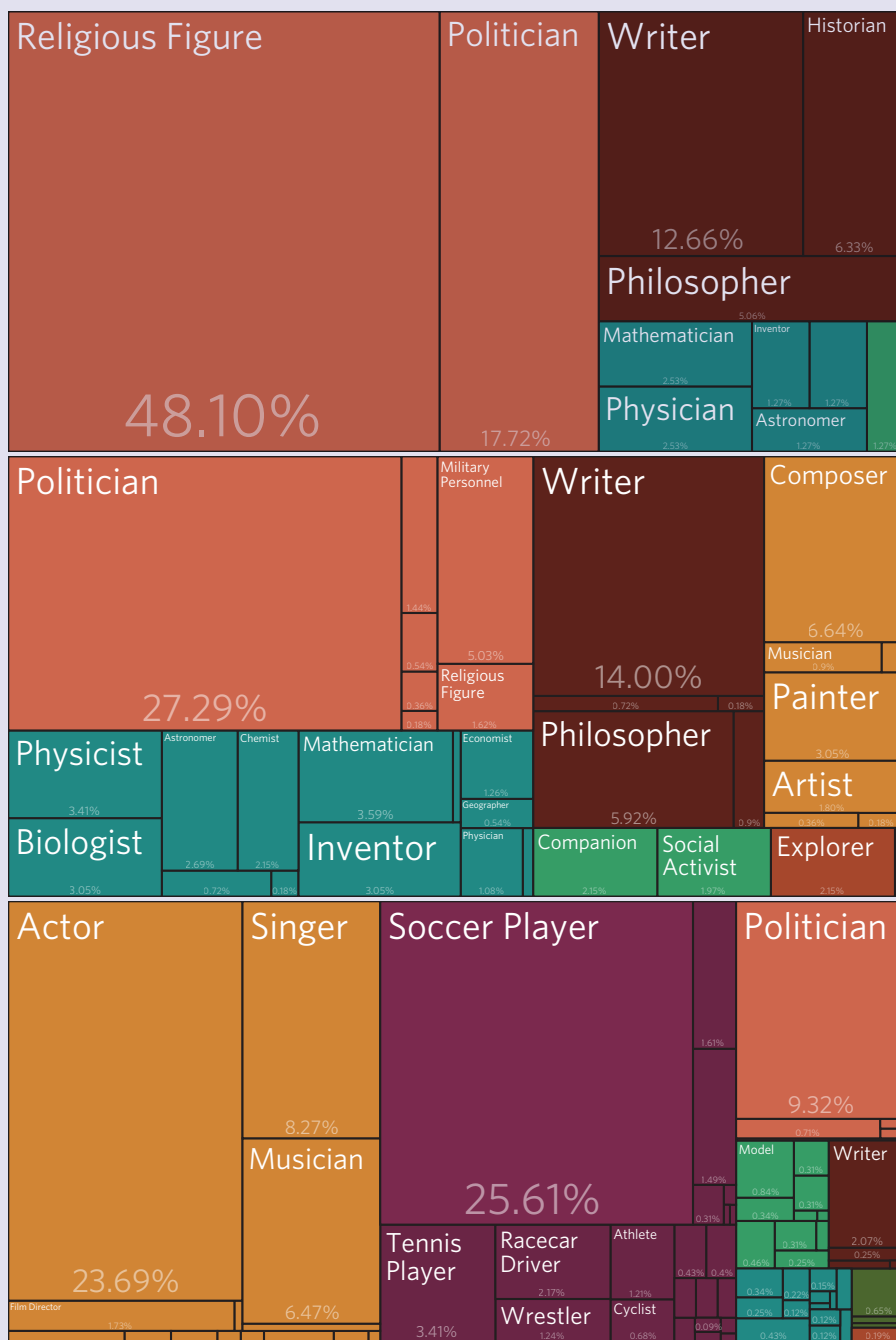
Hall of fame

Isaac Newton, Albert Einstein, Michael Faraday, Alessandro Volta, Max Planck, Wilhelm Röntgen, Stephen Hawking, Christiaan Huygens, James Clerk Maxwell, Enrico Fermi. This may, or may not, match your own top ten list of physicists, but it is what most people around the world seem to agree on, according to Pantheon 1.0 — a manually curated dataset of globally famous people. Amy Zhao Yu and colleagues created this dataset from over 11,000 biographies appearing in more than 25 language editions of Wikipedia (*Sci. Data* **3**, 150075; 2016).

Yu *et al.* checked the demographic information manually, and created a detailed taxonomy of professions, including domain (for example, science and technology), industry (natural sciences) and occupation (physicist). A visualization tool allows one to track the data through time, geographic region or specific domain. This provides a fascinating perspective on who mattered most at different moments in history.

In the first century AD (pictured, top panel), politicians and religious figures dominate Pantheon, whereas over the following thousand years, writers, philosophers and historians start to appear on the scene. With the Renaissance, artists and explorers gain importance, and the Enlightenment (middle panel) brings scientists to the public attention. The latter half of the twentieth century (bottom panel) sees the rise of other professions such as actors, musicians and athletes. These changes are likely correlated to the evolution of the means of communication from oral and the written word to mass print, radio and television.

Another way to look at this wealth of data is by rankings. Yu *et al.* included two popularity measures in their dataset: the number of language editions in Wikipedia and the historical popularity index, which also takes into account the age of the individual and the distribution of page views among different languages. For physicists, the two metrics provide the same top ten personalities. But how good are these measures? This is a difficult question to answer in general, but for some specific occupations — such as Formula 1 drivers, tennis players, swimmers and



chess players — the two metrics used by Yu and colleagues agree well with other measures of accomplishment, such as the number of championship titles won or points scored.

Pantheon 1.0 does not give a definite answer as to whether fame is well deserved, nor is it intended to, after all,

this is a very complex question. But it does offer an abundance of information to be used in future studies on the social dynamics of popularity. And it also may provide hints as to how our collective memory has changed throughout history.

IULIA GEORGESCU

NPG