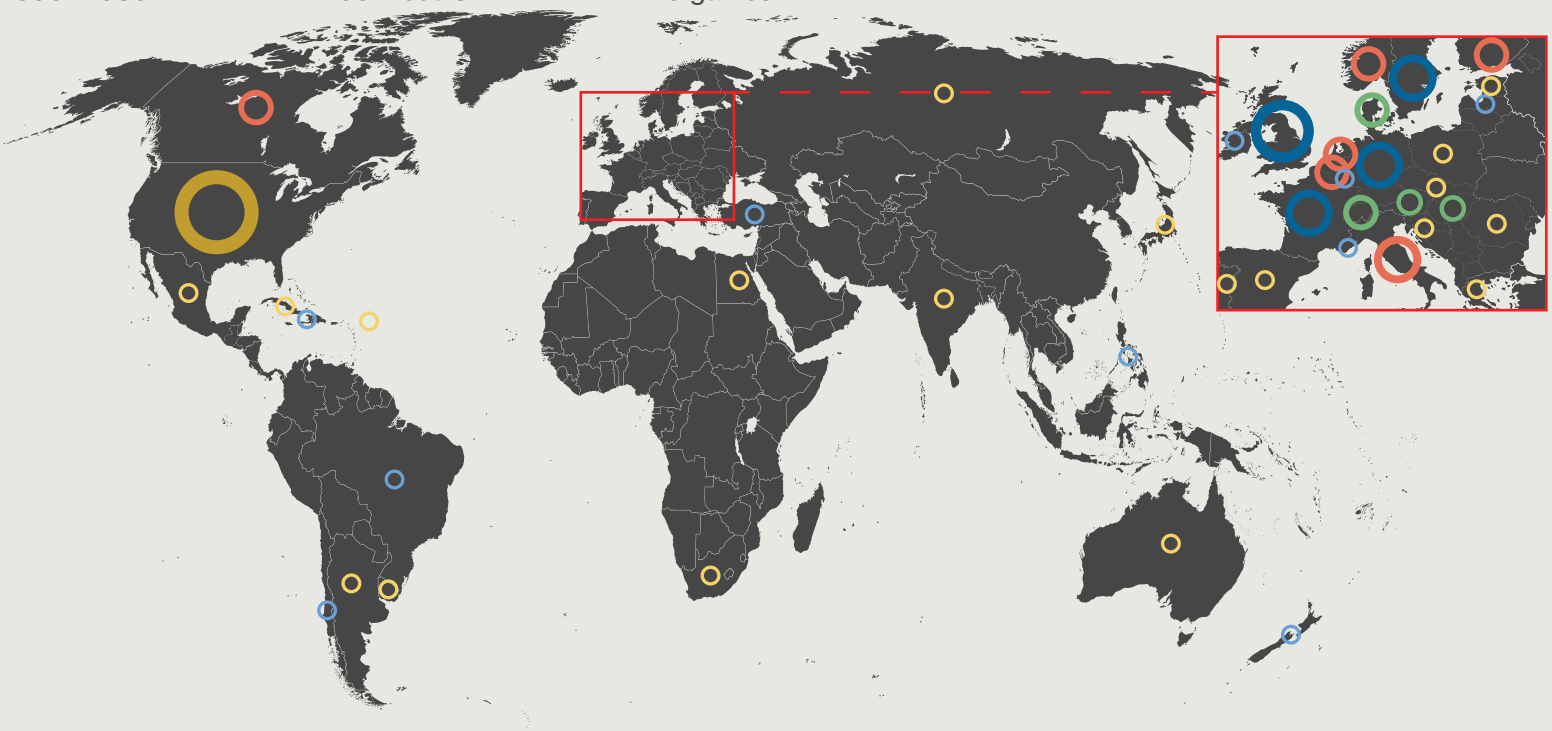
Success at the summer Olympics became more globalised as a result of World War 2

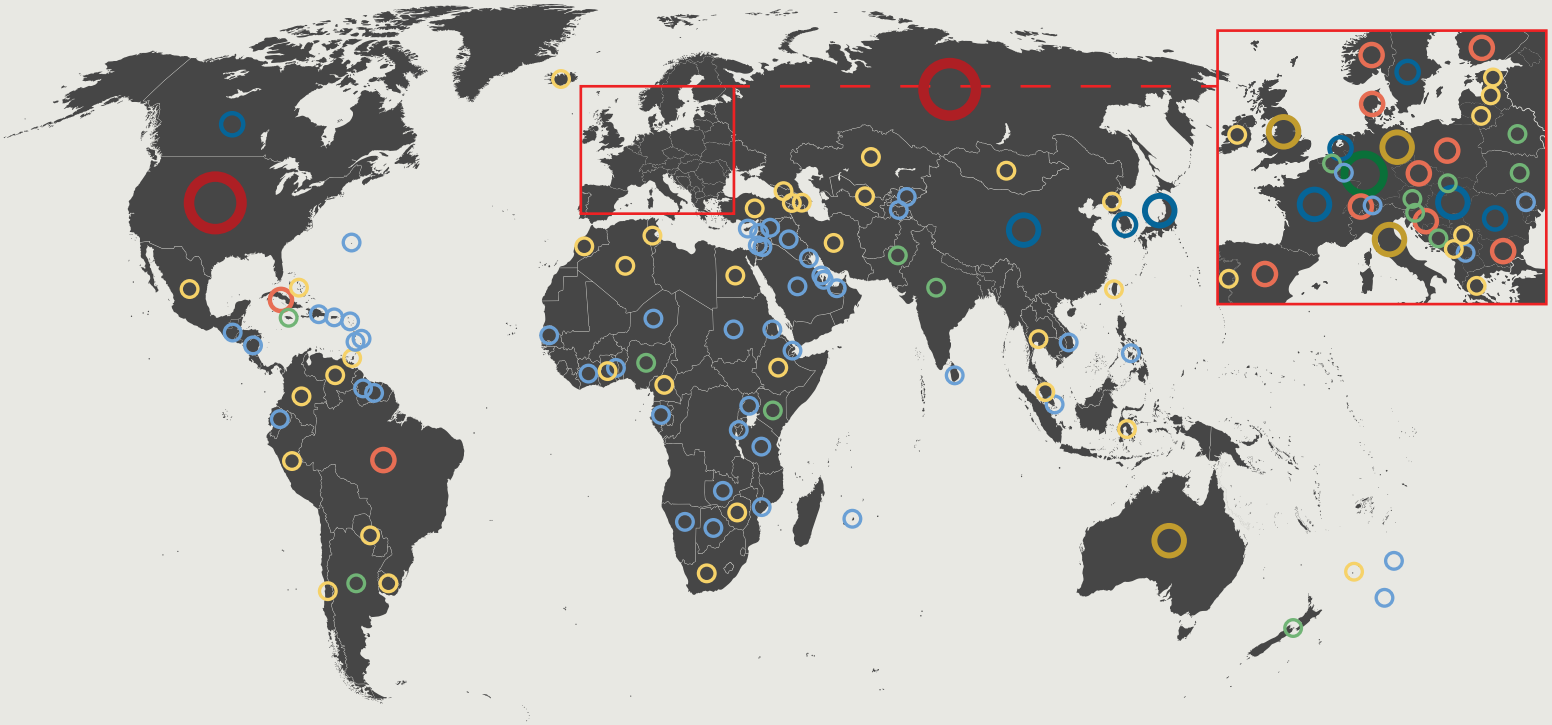
Pre World War 2

1896 - 1936 | 7798 medals | 10 games

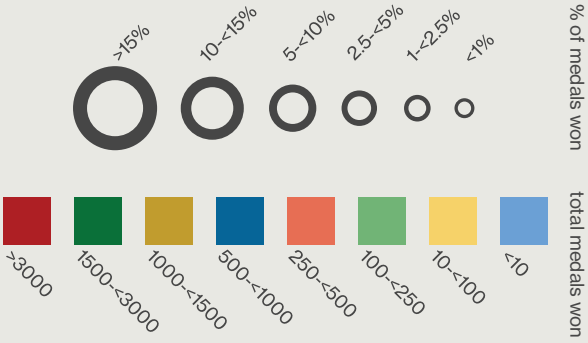


Post World War 2

1948 - 2016 | 29064 medals | 18 games



Legend



This data visualisation contains two heat maps showing the number of medals won and percentage of medals won by every country both before and after World War 2 (WW2). The size of the rings placed on each country represents the percentage of medals won by that country; the colour represents the absolute number of medals won.

The visualised data shows that before WW2 the Olympic games was almost exclusively a competition between western, democratic and European countries but after the war countries of all ethnicities, political ideologies and location were involved and were able to challenge the previously dominating countries.

The pre-WW2 map shows that medals were mostly won by powerful, western countries. The post-WW2 map shows a much more diverse area of the globe winning medals and that many countries won a reasonable percentage of medals but given the dominance of a few nations, this represents a small percentage of the overall tally but still demonstrates that the distribution is becoming increasingly equal. This larger pool of countries were able to find success at the Olympics after WW2 due to changes brought about by a number of factors such as United Nations, globalisation and the increasing importance of international affairs.

Source: Shane Devenshire, 2018, Microsoft Community Forum

Justification

tbre2522

My static visualisation displays two heat maps in the shape of Earth's geographical layout. It shows each countries absolute number and percentage of summer Olympic medals won. The top map shows the values before World War 2 (WW2) and the bottom one shows the values after WW2. The story that this is being conveying is, after WW2 the geographic distribution of medals won greatly increased and the percentage of medals held by each country became more balanced. This is due to the changing, more globalised nature of society after the war. The data was compiled by creating two pivot tables. One for all the games before WW2 and one for all the games after WW2. The pivot tables organised all the countries with the number of times they were attributed to a medal. Additionally, the number of medals they won was divided by the total amount of medals to discover the percentage of all the medals each country won. These values where then plotted on the two maps with rings, the size of which conveyed the percentage won and colour conveying the absolute number won.

I chose this graph type because my data was broken down into individual countries and it made logical and intuitive sense to show the data of a country on their actual landmass. By doing so, countries can be easily and knowingly compared to each other. I also felt that it was an important part of the story to show countries that weren't in the data set (i.e. countries with no medals) and this graph type provided this purely by the nature of them being present.
I chose rings to show the values for each country because it symbolises and draws connections to Olympic iconography. Additionally, the colours of the rings were chosen as they are the actual colours of the Olympic rings. I darkened the original colours so it could be more easily differentiated from the lighter colours.
Initially, I just coloured the countries respective areas based on a gradient scale that showed how many medals a country had won. The issue with this idea was that it was difficult for the viewer to work out the number of medals due to the massive distribution between the number of medals countries had won (i.e. the US had thousands more medals than some other countries). Due to this, I adopted to use the rings and place them on the countries landmass to represent the values instead of a colour from a gradient. The rings offered the potential to embody two variables at once (percentage and absolute numbers) which efficiently provides a clearer story and more information. Furthermore, I changed the gradual scale to multiple different categories that represented a group of numbers, this makes it easy for the viewer to understand the numbers as they can easily determine which category they fall under as they are shown in the legend.

I placed the Olympic ring logo (designed within the style set by my design; i.e. colour and shape) at the top corner of the document so it is immediately understood that the data being viewed is related too the Olympic. The labels for each of the maps also contains additional information relating to the visualised data (years, medals and games) as it is important that the user understands the context and the sample size of the data. It also answers some unanswered questions the viewer may have. I provided a brief paragraph on the document that explains how the graph works and what the data means, to aid the user.
The area most populated with values and with the smallest countries is Europe. Due to this, that part of the would become very cluttered making it impossible to read the data and differentiate the specific countries from one another. To solve this problem, Europe was copied and expanded to another part of the document with a clear line and squares showing the relation. By having this zoomed in area it is a lot easier to see each countries boundary and the values relating to them.
The parts of the visualisation were laid out on a portrait document to maximize the size of the maps in order to make them as legible as possible.

References

Data source
https://answers.microsoft.com/en-us/msoffice/forum/all/excel-2018-olympic-database-download/ef2580cd-5da1-4ee2-9b13-943e631c312a

World vector
https://www.vecteezy.com/vector-art/142990-vector-world-map