

The Museum of Modern Art (MoMA) is a museum in New York City that is dedicated exclusively to modern art. According to their mission statement, they aim to “connect people from around the world to the art of our time.” The dataset used for this project is a record of all artworks that are included in their collections. It has 156,738 observations, each corresponding to a piece of art, and 30 columns that include information such as artist name, birth/death dates, and gender, and the medium and dimensions of the work. Most important to my analysis, it also includes the date that the museum acquired the work, as well as the nationality of the artist. As a result of the data cleaning process, 141,466 out of 156,738 total observations were included in the data used to make the visualizations. Rows were removed if their “Nationality” value was NA, “()”, “(Nationality unknown)”, or if more than one artist was associated with the work. Despite these removals, over 90% of the original dataset was used to create the visualizations. The data was then merged with an outside csv file that mapped country names to nationality, and then merged with the world map data from R.

According to the MoMA’s website, they strive to be an inclusive community “where diverse cultural, artistic, social, and political positions are welcome.” Thus it is important that the artworks on display and in the collection are diverse as well. Focusing on the cultural aspect of diversity, with my visualizations I aim to answer the following research questions: what nationalities are represented in the MoMA’s collection, and how does this representation change over time? To illustrate this, I first created a map depicting the total number of artworks per country, according to the nationality of the artist for each artwork. The total number of artworks per country ranged from 0 to over 70,000, so to more clearly show the intermediate range of values, the fill color is scaled logarithmically. A country that is white on the map has no data, or 0 artworks made by an artist from that country. The lightest purple color, as seen for Tanzania, corresponds to 1 artwork in the collection, and the darkest color, as seen for the USA, corresponds to 72,900 artworks in the collection. Thus we can conclude that most of the artworks in the MoMA’s collection are made by artists of American nationality, followed by a lot of art made by artists of European nationality. Based on the amount of countries with either no data or light color, Africa seems to be the continent with the least amount of artwork in the collection. The second visualization I made is a multi line graph of the 15 countries of artist nationality with the most artworks in the MoMA’s collection, showing cumulative total artworks animated over acquisition year, or the year that the MoMA acquired that artwork. The years included cover the MoMA’s entire history, from their founding in 1929 updated through to September 2024. This graph does not include a logarithmic scale, so it is easy to see just how many more American artworks are in the collection, followed by artworks by artists from France, Germany, the UK, and Spain, which again shows a slightly more American and European trend.

As mentioned before, some artworks were not included in the data due to the incompleteness or multiplicity of data, and there are other limitations to this exploration of data. First, some artist nationalities in the dataset correspond to countries that no longer exist in the present day, so they were mapped to whichever country currently occupies that location on the globe. Secondly, 113 countries of nationality appeared in the data after cleaning, but only 15 were included in the second visualization for ease of viewing. In general, it is important to keep in mind that artist nationality is only one aspect of cultural diversity, as many other things also contribute to the cultural position of an artist or artwork, including gender, time period of creation, location of creation, and other inherent personal qualities of the artist. The MoMA should continue to strive for diversity of artist nationality in the work they add to their collections, but also keep in mind other important factors to create an inclusive community.

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