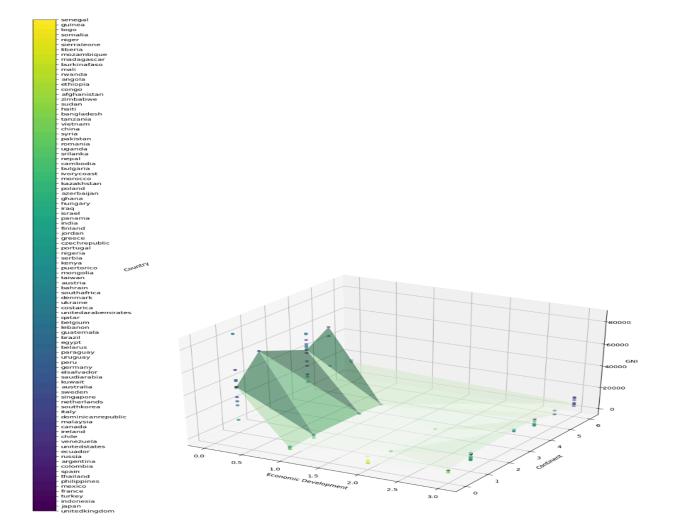
Name: Ayan Das Date: 04/08/2024

HW 2 Visualization Graphs and Summaries:

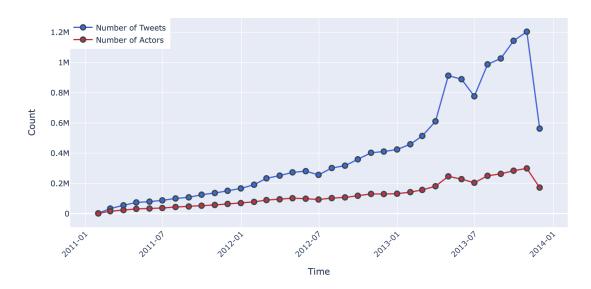
Image File Name: Ayan\_Das\_24073854\_hw2\_t1v1.png



**Graph Summary:** The graph represents a 3D scatter plot illustrating the relationship between economic development, continent and gross national income (GNI) by country. Each data point on the plot represents a city, with its position determined by it's economic development (x-axis), continent (y-axis), and GNI (z-axis). The color of each data point corresponds to the country it belong to, as indicated by the color bar on the left side of the plot. Additionally, there's a surface connecting the scatter plot points, visualized with a green colormap, which may represent some aggregated trend or pattern in data. The legend on the right side of the plot lists the cities included in the visualization. Overall, the graph provides a comprehensive view of the relationship between economic development, continent and GNI across different countries and cities.

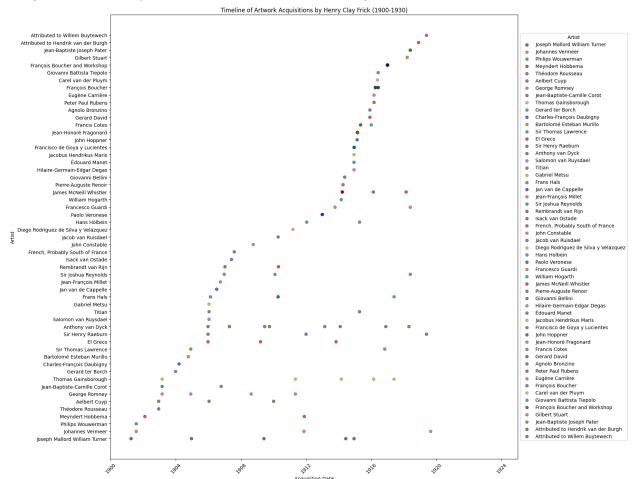
Image File Name: Ayan Das 24073854 hw2 t1v2.png





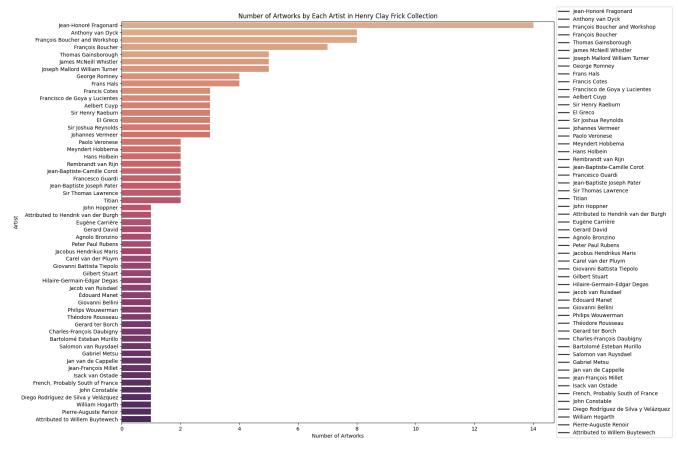
**Graph Summary:** The graph illustrates the trend of tweets and actors over time, where the y-axis represents the count of tweets and actors. The blue line with markers represents the number of tweets, while the red line markers represents the number of actors. Each point on the graph represents the count of tweets and actors at a specific time point, with markers indicating the data points and lines connecting them to visualize the trend over time. The graph provides insights into how the number of tweets and actors have evolved over the specified time period, allowing viewers to identify any patterns or fluctuations in activity. The legend on the graph clarifies which line represents the tweets and which represents actors, providing additional context for interpretation.

## Image File Name: Ayan\_Das\_24073854\_hw2\_t2v1.png



**Graph Summary:** The graph illustrates the timeline of artwork acquisitions by Henry Clay Frick from 1900 to 1930. Each point on the graph represents an artwork acquisition, with the x-axis indicating the acquisition date and the y-axis representing the artist associated with each acquisition. The scatter plot visualizes the distribution of acquisitions over time for different artists, with each artist represented by a unique color. The legend on the right side identifies each artist by name. From the graph, we can observe patterns in the acquisition history, such as periods of increased activity or preference for specific artists. Additionally, the fluctuations in the density of points over time may indicate periods of heightened or reduced acquisition activity. Overall, the graph provides insights into the chronological distribution of artwork acquisitions and potential patterns in Henry Clay Frick's collecting habits during the specified period.

Image File Name: Ayan\_Das\_24073854\_hw2\_t2v2.png



**Graph Summary:** The bar plot visualizes the number of artworks contributed by each artist in the Henry Clay Frick Collection. Each bar represents a different artist, with the length of the bar indicating the count of artworks attributed to that artist. The y-axis displays the names of the artists, while the x-axis represents the number of artworks. The colors of the bars are chosen from a dark color palette, distinguishing each artist's contribution. The legend on the right side provides the names of the artist corresponding to the bars. From the graph, we can observe patterns in the distribution of artworks among artists, identifying which artists have the highest and lowest number of artworks in the collection. Additionally, the graph may reveal insights into the diversity of the collection, showcasing whether it is dominated by a few prolific artists or features a more balanced representation across multiple artists.