



# Museum of Modern Art Catalogue

An Exploratory Analysis:  
Asher Tures



# Intro to the data set

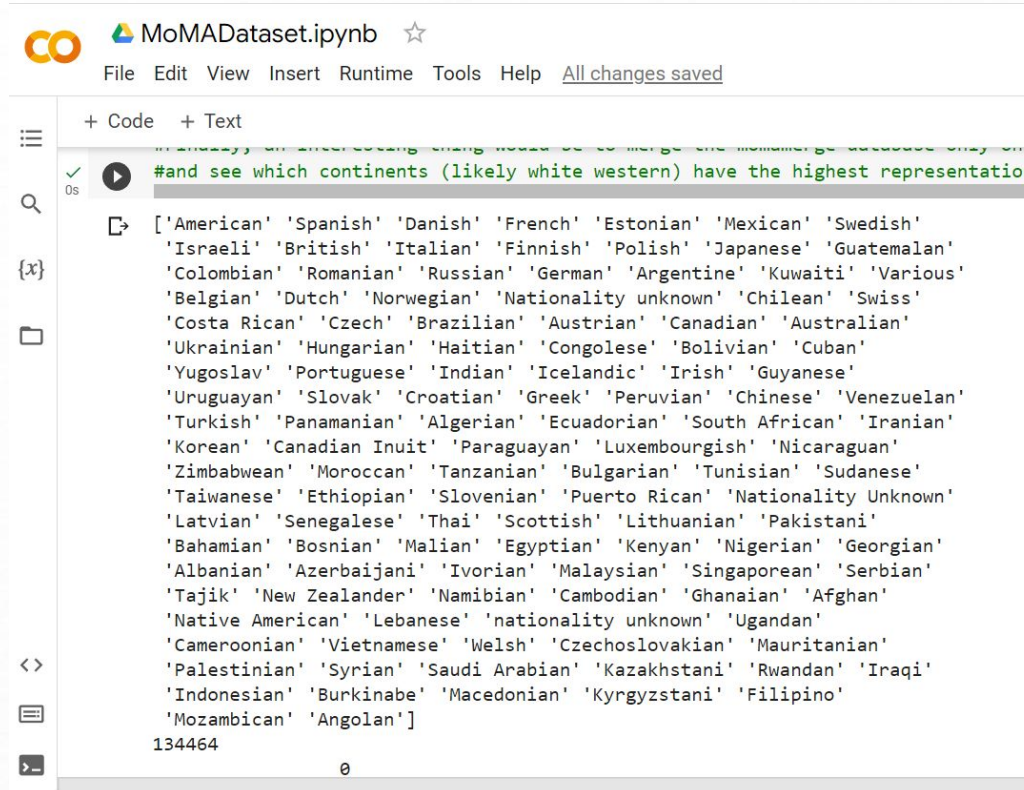
- I chose this dataset both due to my interest in art history and my specific recent focuses
- Wanted to know about cataloguing process
- Wanted to know about demographics
  - Nationality
  - Gender
  - Classification Types



<https://alphacityguides.com/new-york/attractions/museum-of-modern-art>

# Data cleaning

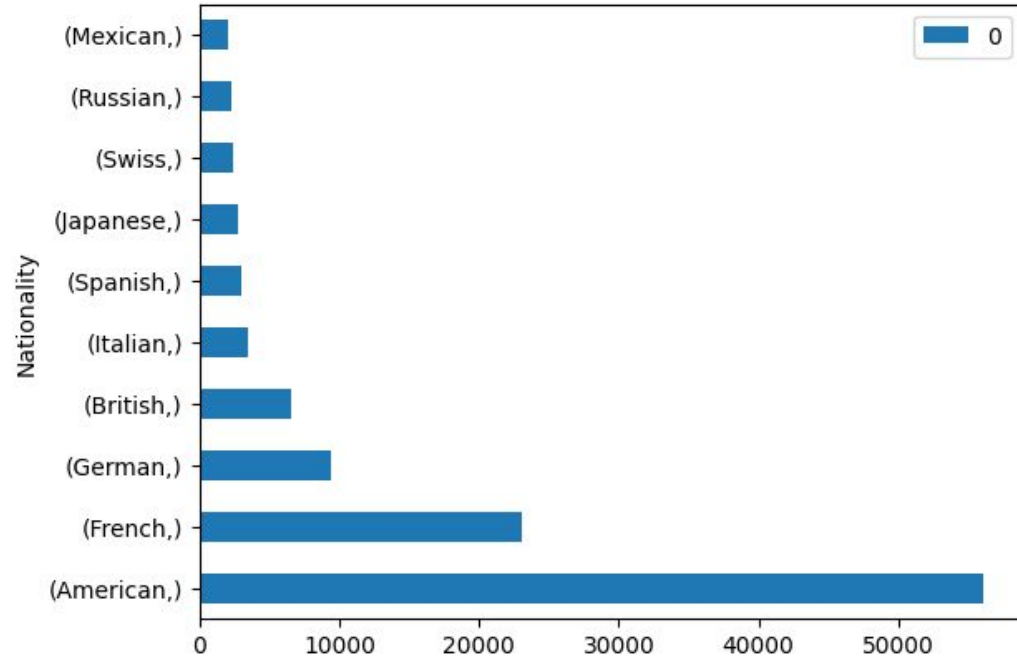
- To clean the data, I had a lot of NaN values to drop and clean, and when I began my analysis of medium and titling, I converted to lowercase
  - Lack of information in museum cataloging processes
- Also merged a catalog of artists and artworks on the column of artist names for accurate informations on demographics
- Had to tweak code based on dataset length (138,000+ values)



The screenshot shows a Jupyter Notebook window titled "MoMADataset.ipynb". The interface includes a top menu bar with "File", "Edit", "View", "Insert", "Runtime", "Tools", "Help", and "All changes saved". Below the menu, there are tabs for "+ Code" and "+ Text". The main area displays a code cell with a green comment: "#and see which continents (likely white western) have the highest representation". Below the comment is a list of nationalities enclosed in square brackets and separated by single quotes. The list includes: ['American', 'Spanish', 'Danish', 'French', 'Estonian', 'Mexican', 'Swedish', 'Israeli', 'British', 'Italian', 'Finnish', 'Polish', 'Japanese', 'Guatemalan', 'Colombian', 'Romanian', 'Russian', 'German', 'Argentine', 'Kuwaiti', 'Various', 'Belgian', 'Dutch', 'Norwegian', 'Nationality unknown', 'Chilean', 'Swiss', 'Costa Rican', 'Czech', 'Brazilian', 'Austrian', 'Canadian', 'Australian', 'Ukrainian', 'Hungarian', 'Haitian', 'Congolese', 'Bolivian', 'Cuban', 'Yugoslav', 'Portuguese', 'Indian', 'Icelandic', 'Irish', 'Guyanese', 'Uruguayan', 'Slovak', 'Croatian', 'Greek', 'Peruvian', 'Chinese', 'Venezuelan', 'Turkish', 'Panamanian', 'Algerian', 'Ecuadorian', 'South African', 'Iranian', 'Korean', 'Canadian Inuit', 'Paraguayan', 'Luxembourgish', 'Nicaraguan', 'Zimbabwean', 'Moroccan', 'Tanzanian', 'Bulgarian', 'Tunisian', 'Sudanese', 'Taiwanese', 'Ethiopian', 'Slovenian', 'Puerto Rican', 'Nationality Unknown', 'Latvian', 'Senegalese', 'Thai', 'Scottish', 'Lithuanian', 'Pakistani', 'Bahamian', 'Bosnian', 'Malian', 'Egyptian', 'Kenyan', 'Nigerian', 'Georgian', 'Albanian', 'Azerbaijani', 'Ivorian', 'Malaysian', 'Singaporean', 'Serbian', 'Tajik', 'New Zealander', 'Namibian', 'Cambodian', 'Ghanaian', 'Afghan', 'Native American', 'Lebanese', 'nationality unknown', 'Ugandan', 'Cameroonian', 'Vietnamese', 'Welsh', 'Czechoslovakian', 'Mauritanian', 'Palestinian', 'Syrian', 'Saudi Arabian', 'Kazakhstani', 'Rwandan', 'Iraqi', 'Indonesian', 'Burkinabe', 'Macedonian', 'Kyrgyzstani', 'Filipino', 'Mozambican', 'Angolan']. The list ends with a closing bracket and a line number "134464".

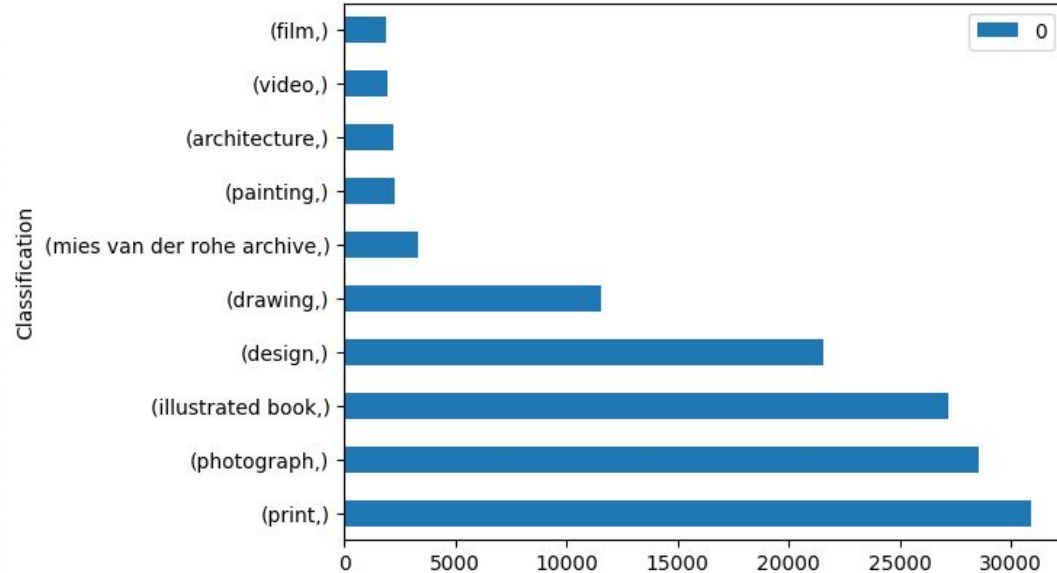
# Exploratory analysis

- Questions regarding:
  - Gender
  - Classification (broad category of artwork)
    - Medium as another category
  - Nationality
    - Specific nations/conventions of identifications of artwork
  - Title Text
  - Medium Text
  - Year of making/year of acquisition



# Research question(s)

- Which ten nationalities have the highest number of artworks in the Museum of Modern Art Dataset?
  - Understanding the prevalence of and focus on, historically, western art.
    - New finding: specific African nations mentioned rather than the continent
- Which ten classes of art are most prevalent
  - Print/photograph being highest: reproducibility allowing for multitude of art, series, etc.
    - Mies van der rohe archive?



# Word cloud

- Word cloud analysis of the dataset of titles
  - Interest question: what words recur in studies of art naming principles?
- Word cloud analysis of the dataset and the entered texts for mediums
  - What materials are commonly used?
  - Are these materials best for art, most used in modern art, or best as commodities/most accessible or affordable?

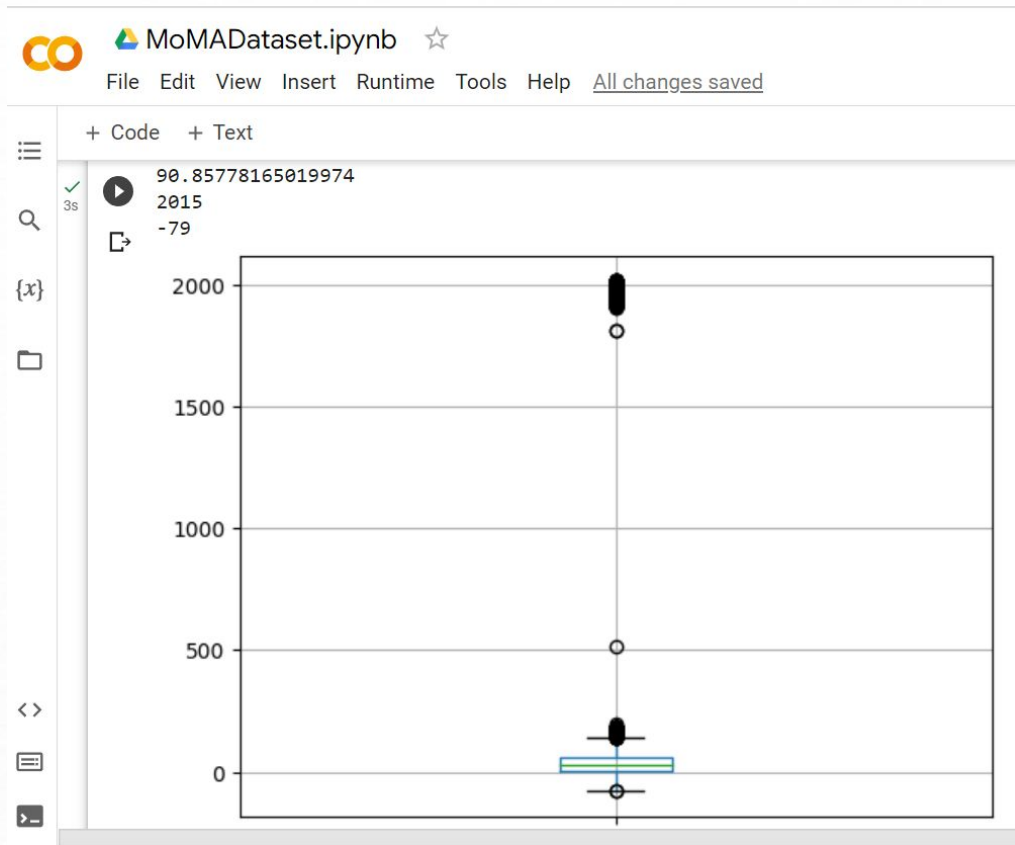


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blackwood engraving printed paper paper  
paper printalbumen pasted paper wood photogravure printed  
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portfolio twenty two video color  
special edition  
felt tip crayon polymer paint  
blackwoodcut printed screenprint  
papercut tip pen film black  
collage colored ink watercolor  
blacketching printed gelatin silver  
black various mediaone papergouache offset label  
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printmatte albumen colorwoodcut printedhand  
drypoint printed  
ground etching colored pencil paperwatercolor  
lithographs including aquatint one soundfilm film tracing paperink  
sound35mm film paperink  
cut aquatint printed chine colle pasted printed  
cut printed drypoint color silanpaper engraving printed six prints  
aquatintetching ten offset lithograph lift ground aquatintstone  
printgelatin silver  
soft ground color print canvasoil series ballpoint pen  
papercharcoal film35mm film35mm color printchromogenic artist s  
soundvideo black offset printed  
silver printgelatin  
albumen silver tracing paperpencil silver printinginch vinyl  
chromogenic color blacketching coloretching colorlithograph printed  
aquatint film transferred printaluminum printaluminum  
relief halftone printchromogenic color white line block  
color sound35mm ten lithographstone  
synthetic polymer printalbumen silver ink  
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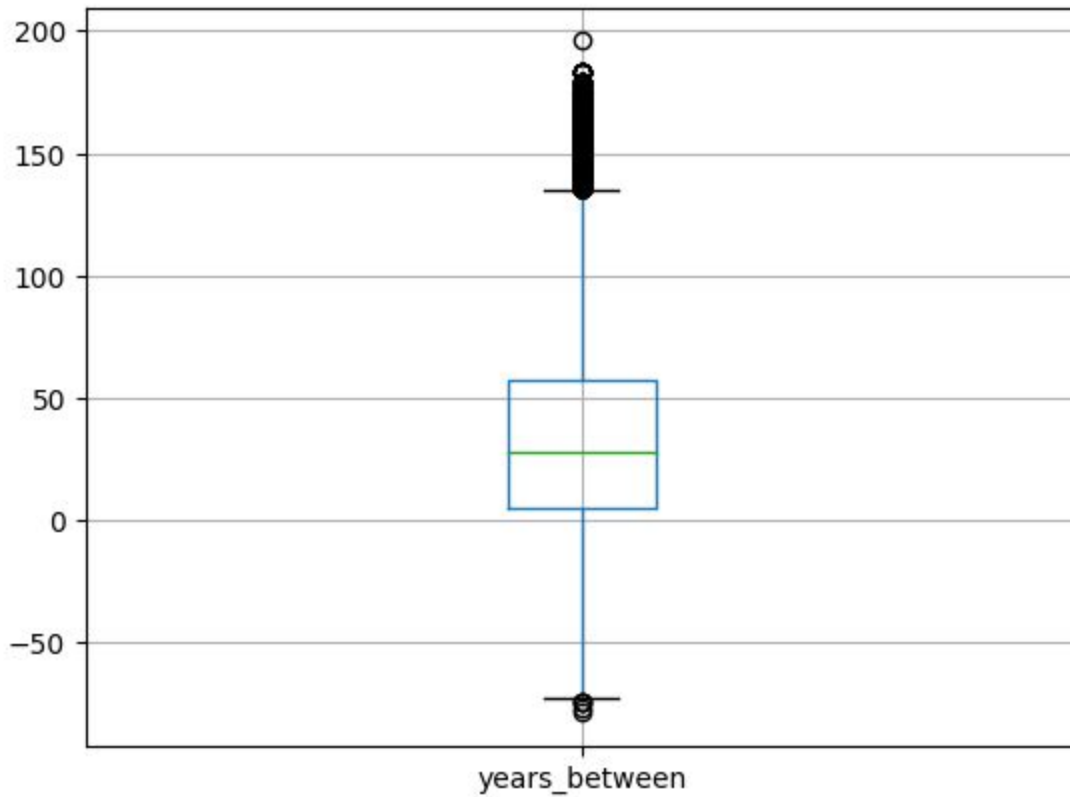


# Techniques not used in Class

- Year conversion and mathematics: Working more with the datetime values, and working to convert float and NaN values in this column to calculate the approximates of minimum and maximum years between making and acquisition
  - Negative values: approximate years, then subtracting specific acquisition years
  - Boxplot to display









# Thank you for your time!

**Dataset:**

<https://www.kaggle.com/datasets/momanyc/museum-collection>