

Whitney Biennial Visualization

CS171 Final Process Book

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Overview and Motivation

The Whitney Museum of American Art's 77th Biennial Exhibition opened on March 7th, 2014. Held every two years by the Whitney, the Biennial has been a significant event for both professionals in the arts and for the public since their inaugural exhibition of 1932.

The biennials have been of particular value because of their level of accessibility to people who, like me, are not fluent in the language of contemporary art. The whitney biennial has provided gatherings of works that have proven (often in retrospect) to be thoughtful representations of their zeitgeists.

The motivation for this project lies in the belief that information about these exhibitions should be made readily accessible. As the shows provide accessibility through a gathering of diverse but representative work, the visualization would do the same for its history - summarizing overviews provided by the map and calendar serve as portals for users to navigate to more indepth information.

The overview also provides immediate identification of trends - the traffic between New York, Los Angeles, and San Francisco show a clear concentration of artists at work; the calendar view shows a peak of artists aged between 25 and 35; and outliers - the youngest and oldest artists standing apart from the pack at age 20, and 89 are both women.

A quick internet search revealed that records of the artists represented in the Whitney Biennial before 2000 are not easily accessible. A list of participating artists on Wikipedia also only date back to 2000.

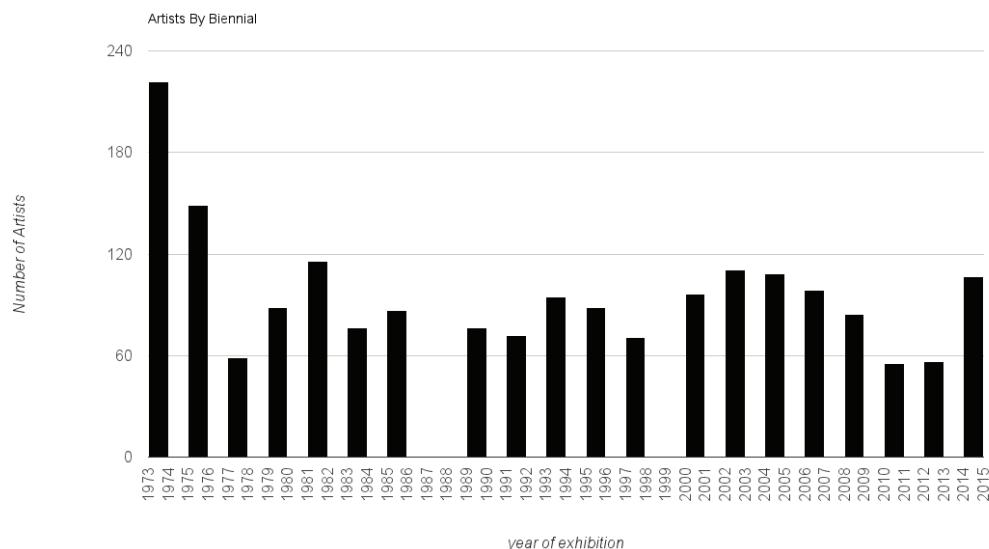
This lack of digitized, verified, and accessible data sits in sharp contrast to the vast trove of editorial writing about the exhibitions available on the internet. It is likely that this lack is more than a simple oversight. It could point to how we want exhibitions to be remembered, as impressions cast in their curatorial contexts and guided by expert voices rather than lists and charts. Nevertheless, here is an attempt to do the opposite, hoping that this visualization aids engagement not already made by what is out there.

Preliminary Data Exploration

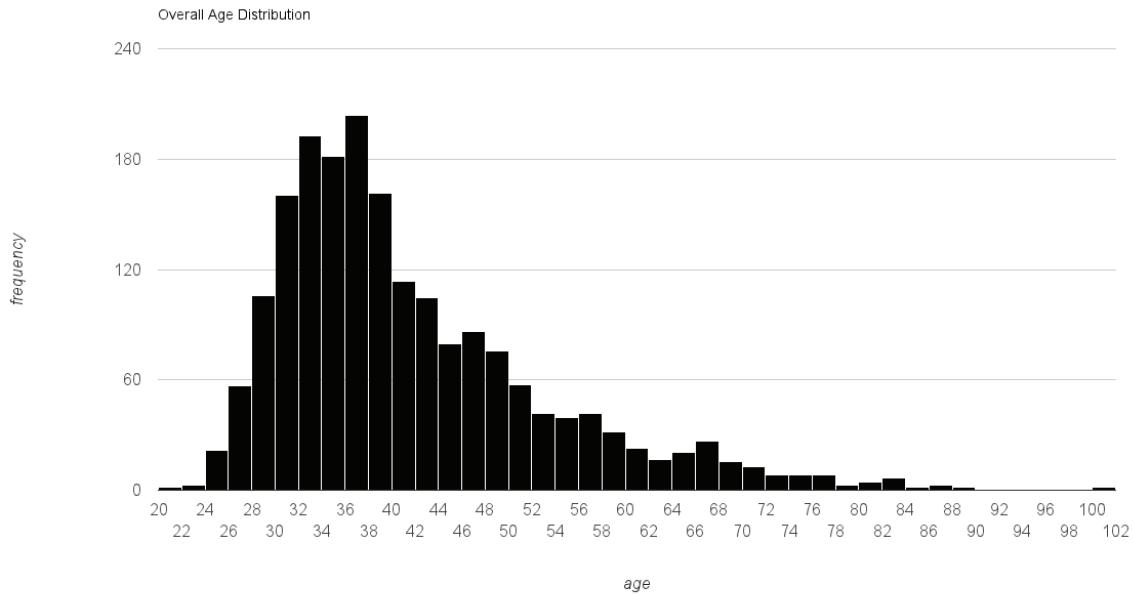
A summary of multiple exhibitions provides an unique opportunity to explore questions that are often posed towards specific professions. What is the “peak” age of productivity for a given profession? Is there a tendency for the Whitney exhibitions to be emerging in some years and established in others depending on larger artworld economic trends? How young are the biennials in relation to eachother? or how old are artists?

These, along with other questions that can be answered by basic artist biographical data presented by the catalogues were explored first.

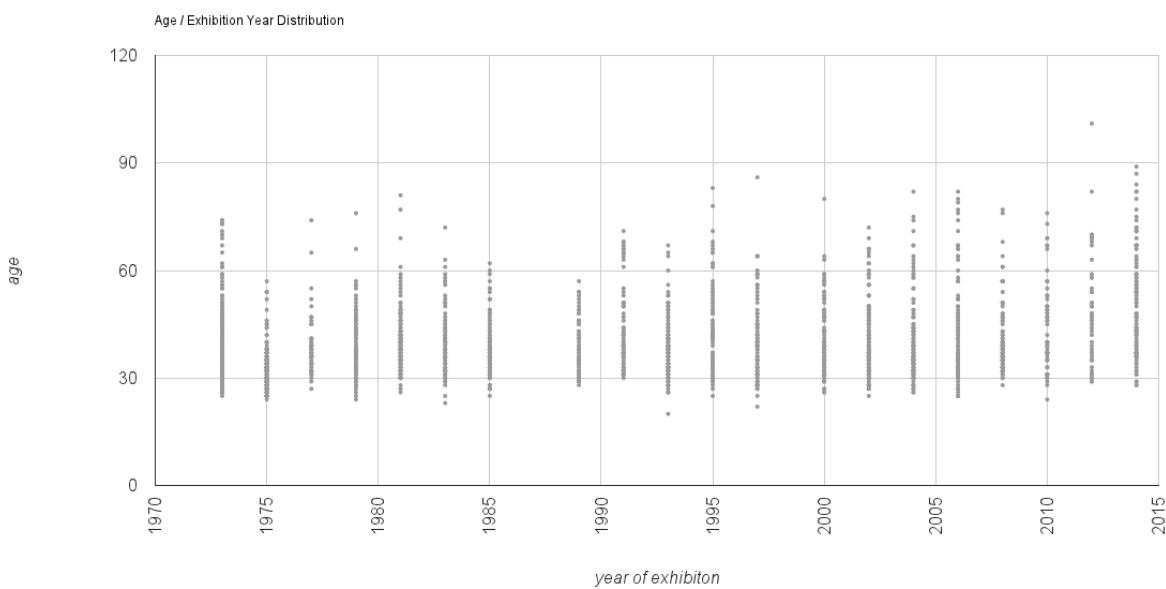
Number of Artists Per Year



Overall Age Distribution



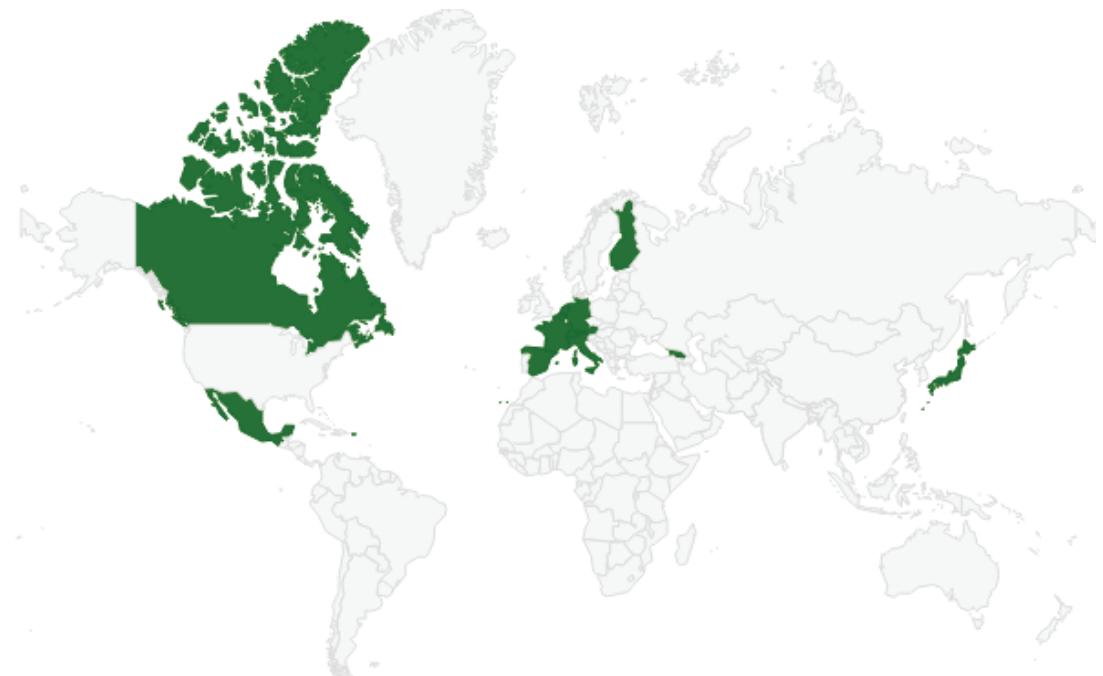
Age Distribution by Year



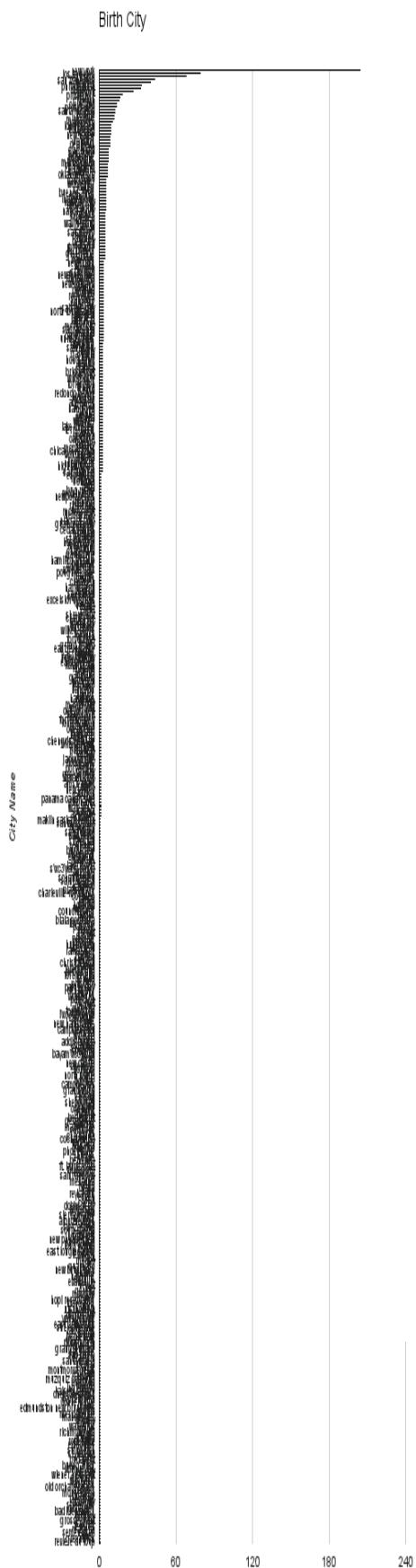
Where Artists are Born



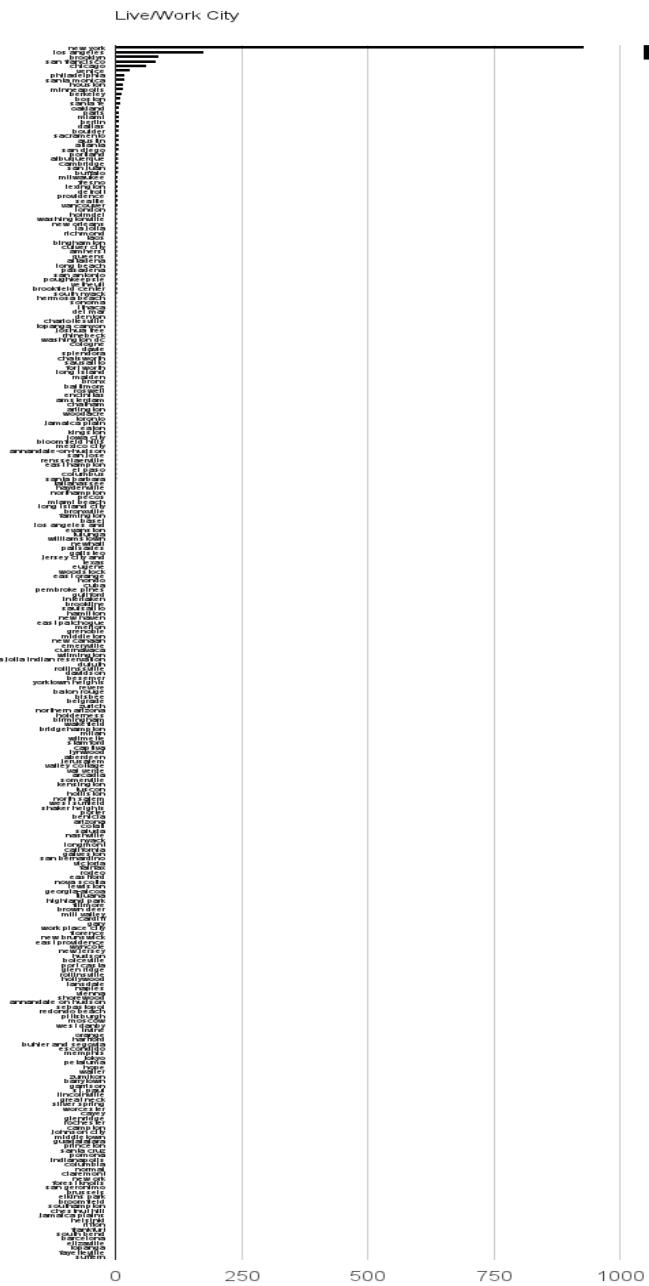
Where Artists are Live and Work



Cities Artists are Born

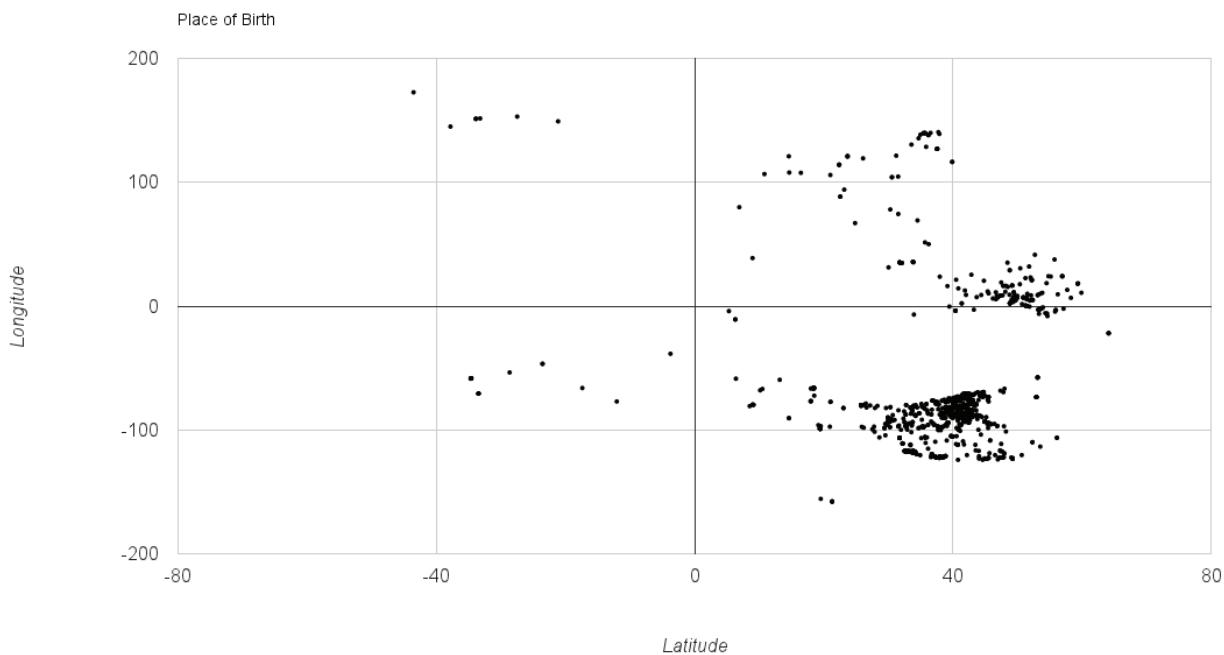


Cities Artists Live and Work



These bar graphs are too small to read in print. The overall shape of these show that there are much more cities where artists are born than live and work. It also shows the growth of New York between the two graphs.

Where Artists are Born

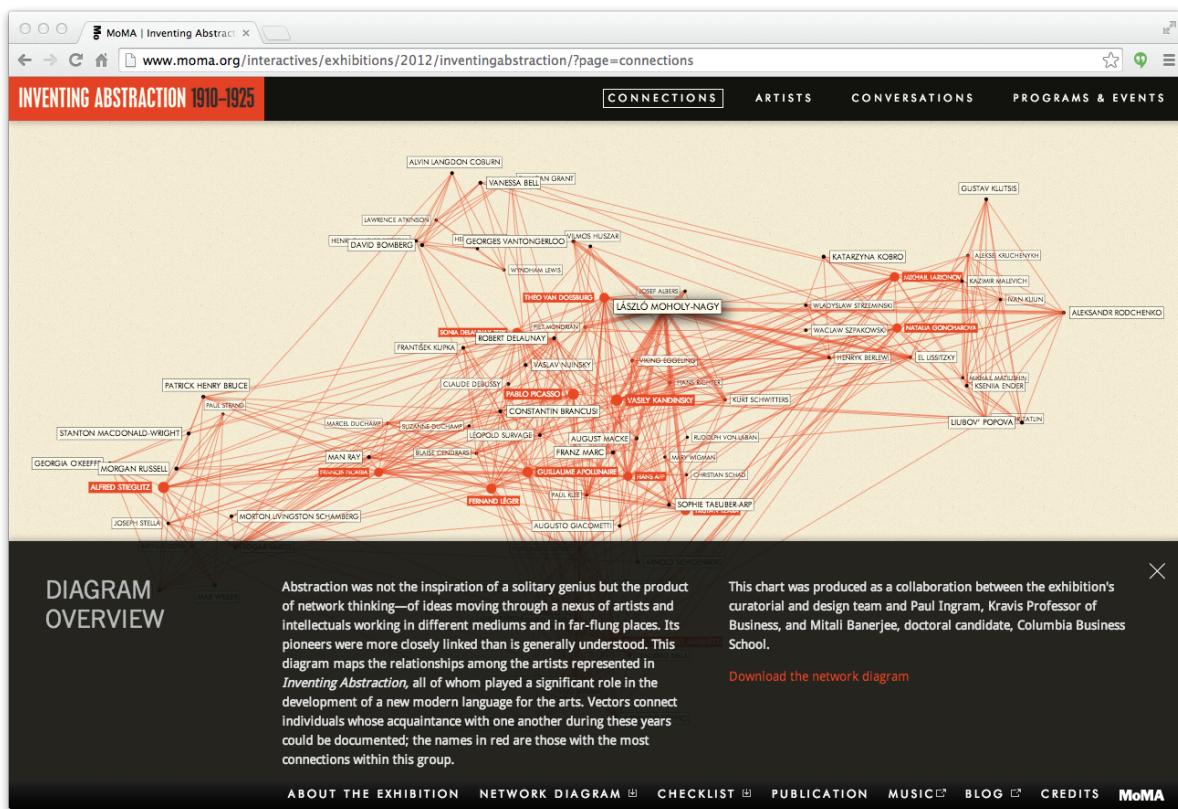


An experiment with plotting just the lattitude and longitudes of where artists are born on a scatter plot. This confirmed the clusters of concentrations in New York that previous graphs displayed.

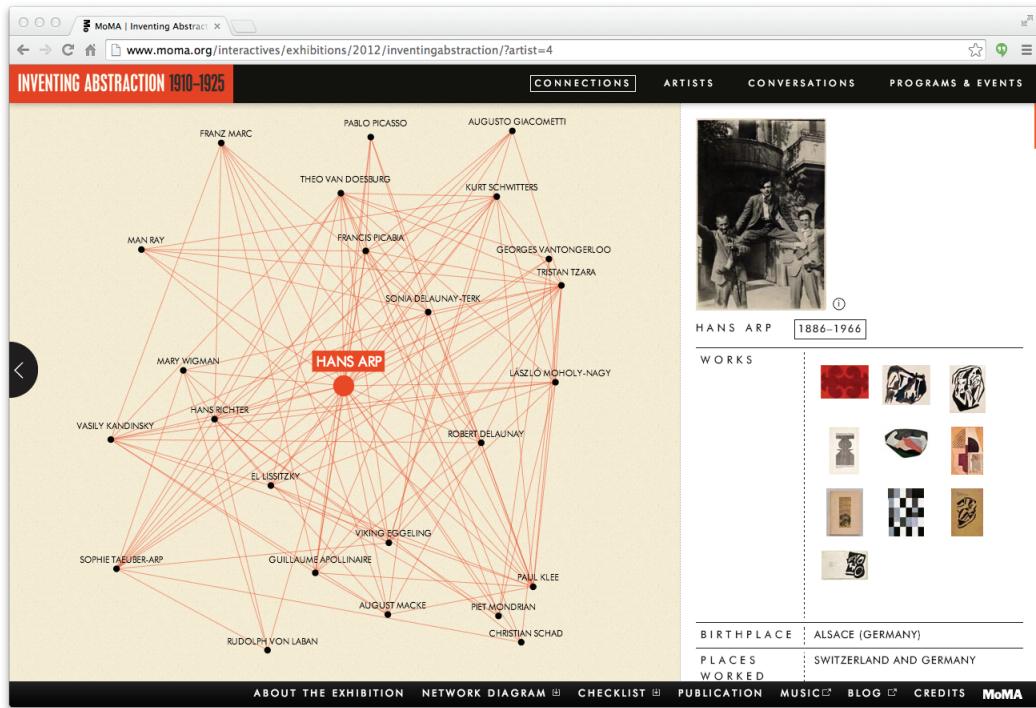
Related Work

Much of the work I referred to in beginning this project was shared in the milestone 1 processbook. The most important and relavent however was a later discovery.

The Museum of Modern Art's network visualization of the abstraction movement was especially important because it is a rare venture to quantify something that is inherently qualitative and driven by careers and lives of artists rather than data that lends itself to visualization.



The visualization provides several views. The first is a summary of the movement as seen through the relationships of artists belonging to the movement.



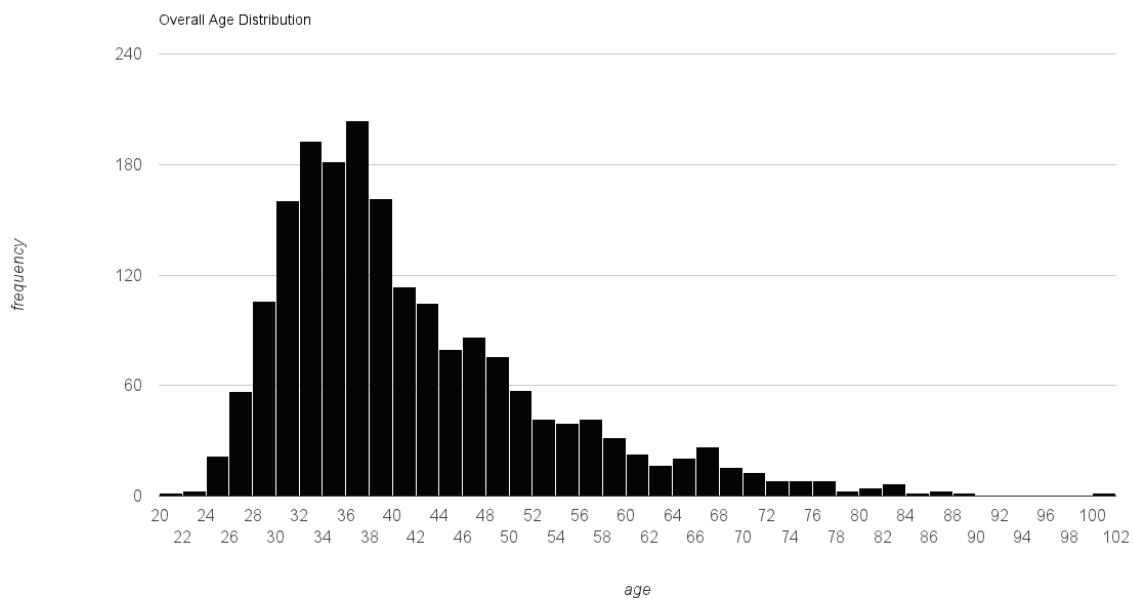
Details are provided of individual nodes. This led to the decision to include wikipedia entries as an endpoint to the visualization. Although the images of artworks were important in this visualization, I found it difficult to include artwork images in my own visualization because the diversity of the work confused rather than elucidated the collections of artwork the exhibitions assembled.

Questions

My visualization aimed to answer questions posed by visitors of how the biennials have evolved over the past 40 years. Although exhibitions varied from year to year, they share the significance of their placement within the art-world. Each biennial is a collection of work assembled to represent a much larger body of work, and therefore somewhat democratic in its selection.

Besides the purpose of providing an overview, the visualization also explores the idea of “peaks” in an artist’s career. How old are artists when they are at their most productive, most lucrative? Some artists produce work only over a few years while others persist over their entire lives. Is there a concentration of ages at which the Whitney biennial exhibits artists?

The data shows that there is a high concentration of artists between the ages of 25 and 35. This is translated as an important point in the final visualization by making the age of artists an axis on its own that persists through both views.



Data

Because making data accessible online is a part of the project, data entry took a significant amount of time.

For years 1973 - 1985, digitized exhibition catalogues are available through archive.org*.

For the following years up to 2008, physical print catalogues were acquired from MIT's Rotch library and when necessary through amazon's used books. However, the 1987 catalogue, because of a shipping error, was lost. This data will be filled in when the book arrives the first week of May.

For the years 2008, 2010, 2012, and 2014, the data was taken from the museum's own exhibiton website, Whitney.org.

This project contributed to wikipedia by completing the list of participating artists between 1973 and 2000. (with the exception of 1987). This data can be found here:https://en.wikipedia.org/wiki/List_of_recent_Whitney_Biennials_artists

The final cleaned and formated data can be accessed here:
<https://docs.google.com/spreadsheets/d/1wHuMRKNzKXg97rwIz4f-WagCf-UJKcHBDrsZJm2lhNmo/edit#gid=366897073>

*<http://archive.org/search.php?query=creator%3A%22Whitney%20Museum%20of%20American%20Art%22%20AND%20%28whitney%20m>

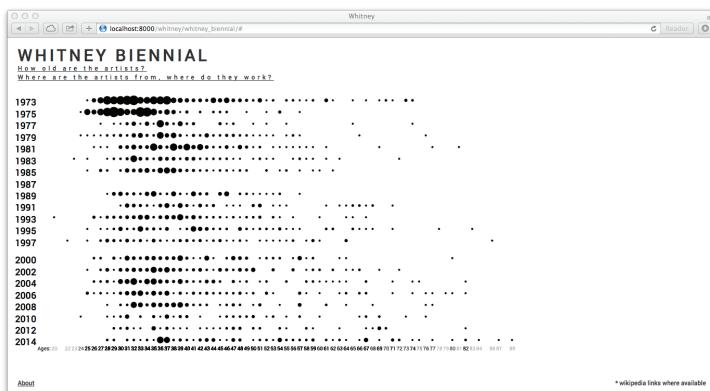
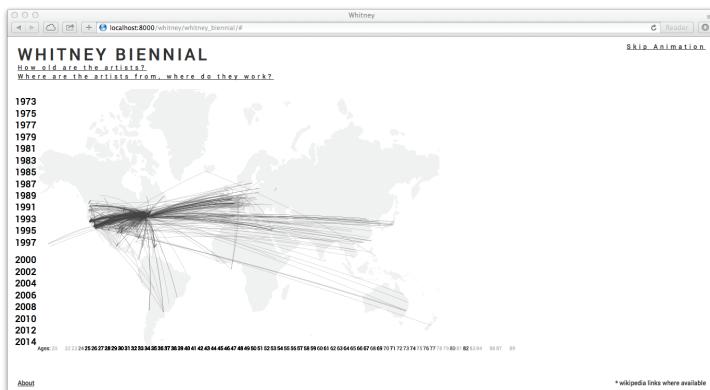
Design Evolution

A map view and a calendar view were included in the original design. The map went through several iterations, including a choropleth version. However it was decided that the drawn arcs represent movement better and is visually stronger.

The choropleth code is included in the final implementation as a function and can be displayed by calling the function.

The first iteration presented at milestone 1 used 2 preexisting layouts. The final implementation of the calendar view is built from scratch. The final map view uses multiple instances of the datamaps library layered on top of each other to achieve the time lapse animation.

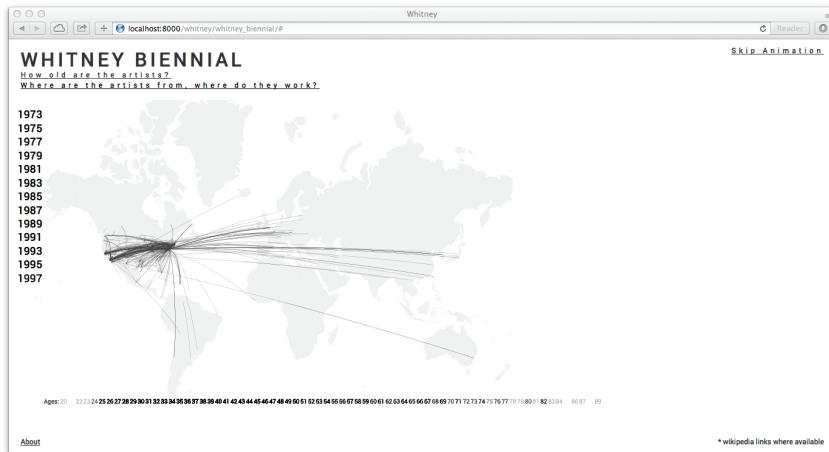
Final Views:



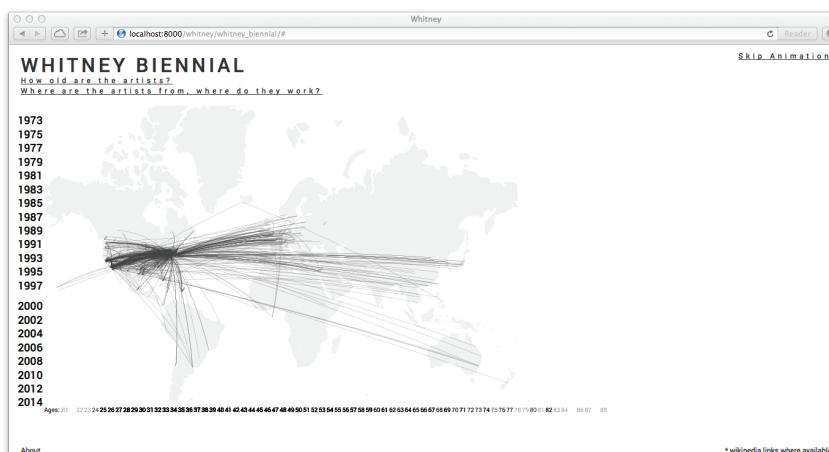
Implementation

The following screenshots shows the interactivity of each view.

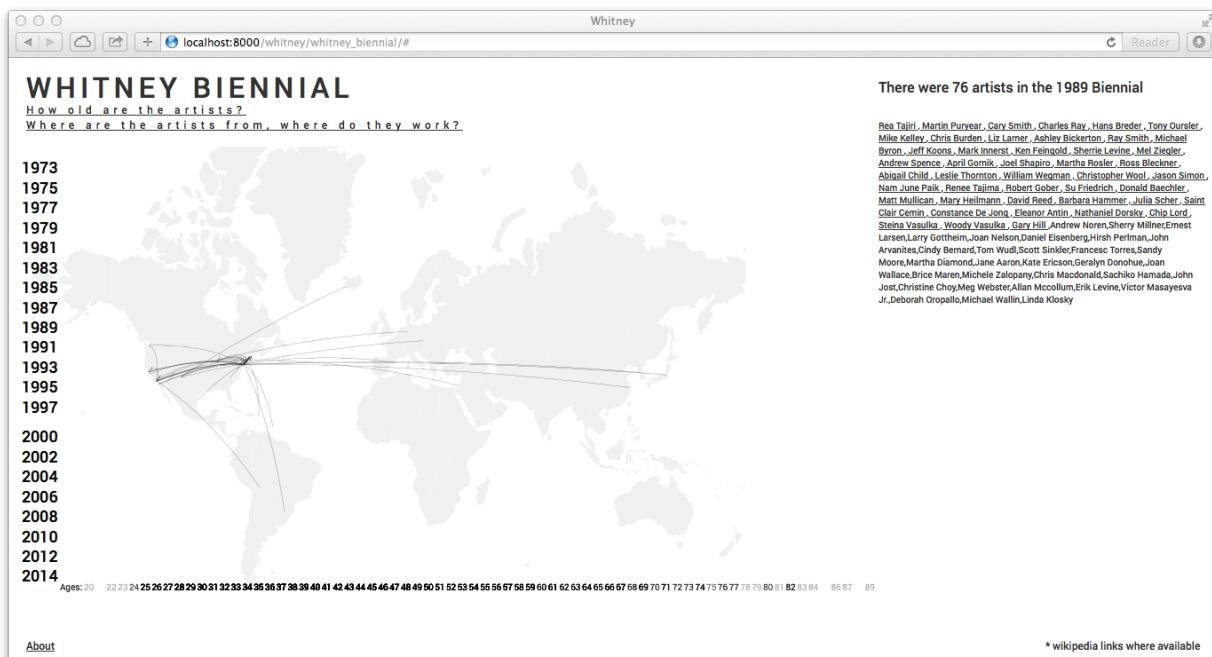
Upon initial loading, the map animates through each year both on the map and the year axis at left.



This animation can be skipped by clicking on the upper right corner.

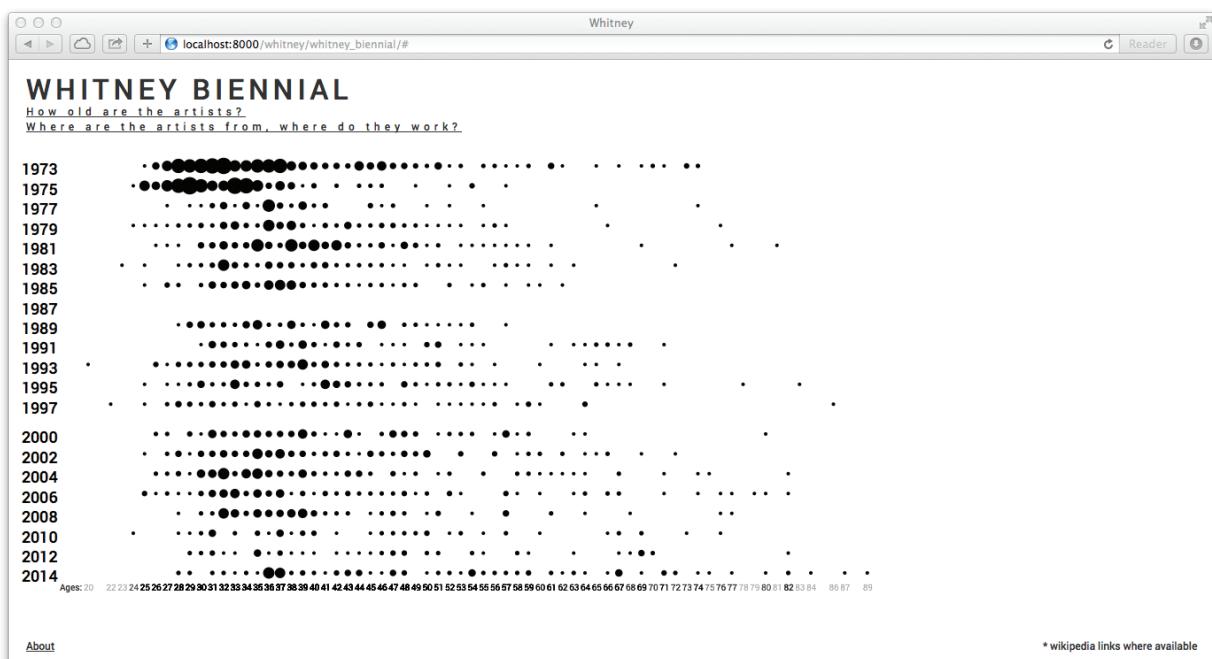


Years and ages can be selected to show on the map and also in the details panel at right.



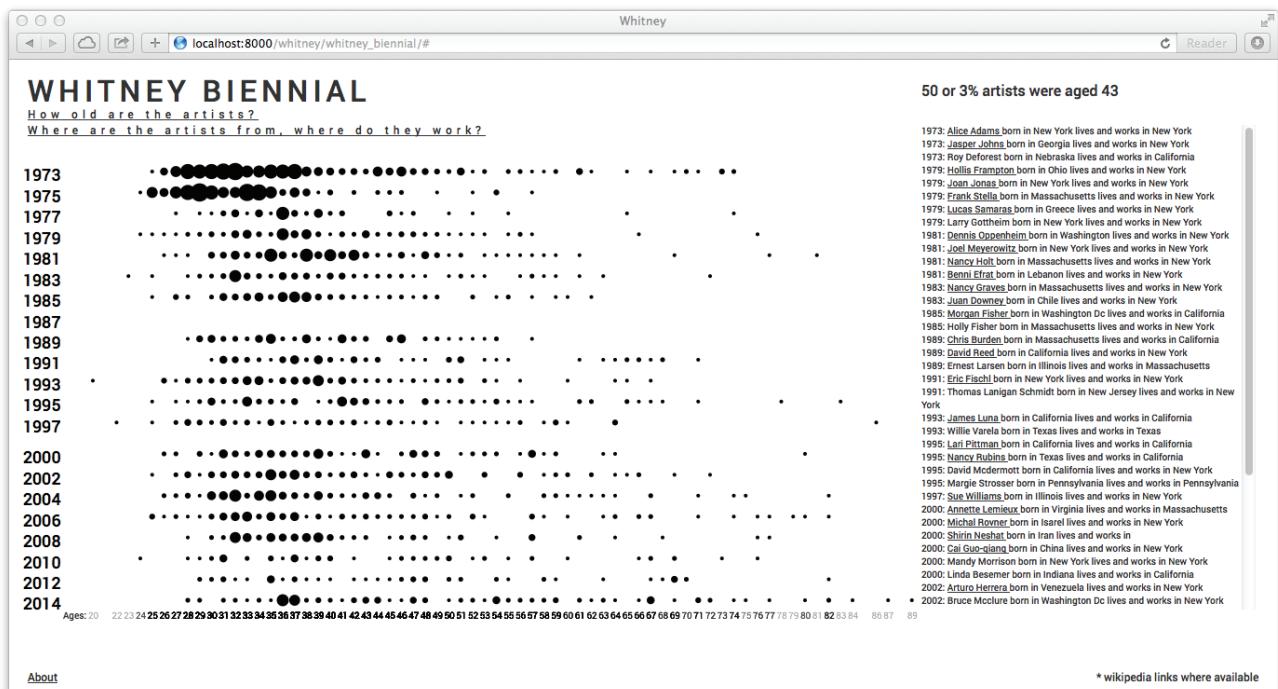
The age axis at the bottom is also a distribution of the ages, the ages that appear the least are in lighter colors. The variation between light and dark shows the distribution of the ages of artists and acts as a interactive axis at the same time.

The calendar view shows the distribution of ages by year of exhibition.



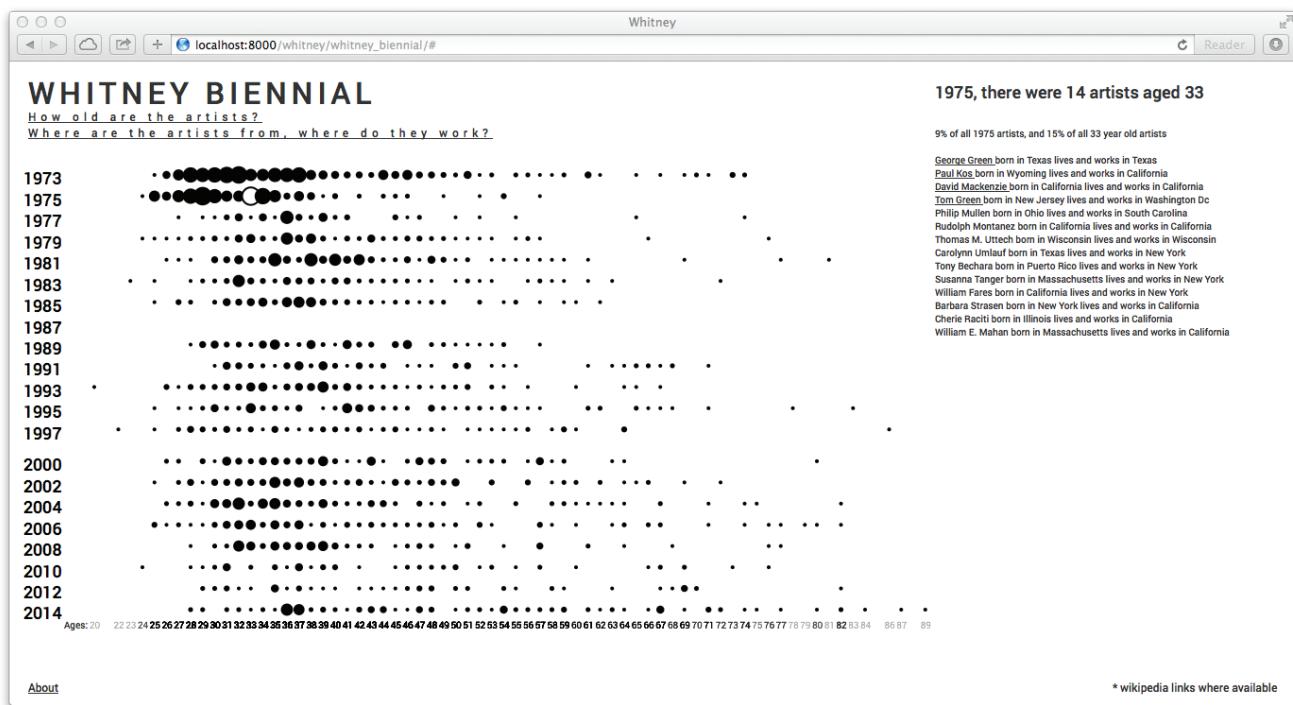
The year axis and age axis are clickable to show details of the filtered artists.

Clicking on the age axis will bring up the details panel on the right.



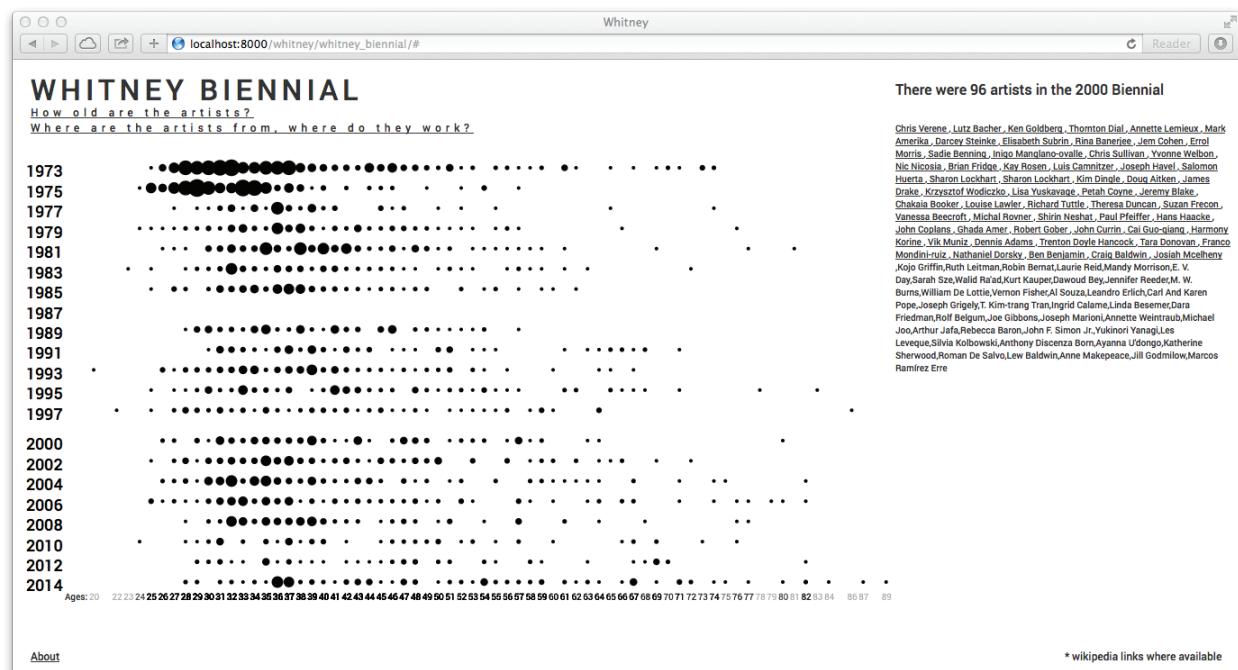
The percentage of artists at the highlighted ages is calculated and displayed. The artists names and information are also displayed.

Clicking on a circle in the calendar filters the list by both age and year



The corresponding details displays statistics for artists of that age and that year as well as their details.

The details panel at right is a link to the wikipedia information about the artist. When artists have wikipedias pages, their names are underlined to indicate a link.



The about page can be accessed from the bottom left corner and shows the introduction text as well as the video for the project.

The screenshot shows a web browser window titled "Whitney" with the URL "localhost:8000/whitney/whitney.biennial/#". The page content is as follows:

WHITNEY BIENNIAL

[About](#)

Data

This project contributed to wikipedia by completing the list of participating artists between 1973 and 2000. (with the exception of 1987)

Data can be reused through this [google spreadsheet](#).

How it's Made

This visualization is made with D3, JQuery and D3 Datamaps and a lot of help online and off. Data is cleaned, sorted and verified with python.

CS171 Video

CS 171 is from? Where do they live and work?

there are a few outliers every year and they can be filtered

CS 171 from [jia_zhang](#) on Vimeo.

01:09

vimeo

* wikipedia links where available

Future Directions

There are several immediate improvements to the interactivity that I would like to incorporate.

Cross highlighting - visually indicating when something is active.
Filter by Country - making the map clickable to filter by country.

Additional improvements could be made on the completeness of the data and in incorporation of multiple views. I would like to include these other views of the data in the future.

Materials/Medium
Size/Dimensions of Work
Age of Work
Name of Work
Keyword evaluations of curatorial statement