

## Met Museum: 3 Project Ideas February 2018: Clare Churchouse

### Project 1: Gender representation

Investigate the Modern and Contemporary Art collection (ModCont) by gender: find out how many male and how many female artists are represented in the ModCont, and look at this by number of artworks acquired that date by the Met, date of accession and artist's country of origin.

- Interested in making gender representation in the ModCont collection available since it is not currently easy to find out, and collections have often not historically been particularly inclusive of work by female artists. Scanning the collection online suggests a bias to male artists and an American/European narrative.
- Use the ModCont collection - 13,611 artworks
- At first, do a subset of this to work out the gender identification - select by:
  - canvas: 1,492
  - sculpture: 906

Takes db down to 2,398 - manageable size to identify artist by gender id (<https://store.genderize.io/>, wiki), and if this turns out to be an easy process, do the 13,611 db of ModCont artworks

Show number of artworks acquired that an artist by year. Include accession date, place of birth to get more information on paintings and sculpture in contemporary collection, with the aim of highlighting gender information that is currently not being tracked in the csv db.

Visualize chart timeline with small images of artworks, color-coded by gender, semi-transparent to give spatial effect and deal with overlapping images, small images floating on grid. Based on ideas from <http://www.centrernyc.org/calculus-of-race> Have float / click pop-up detail for each image listing artist name, gender, place of birth, list of artworks w/url acquired that year. On side of chart include stacked bar with number of artworks by female, male, and unknown in the collection. Count is by artwork (on both chart and bar). Compare information on gender representation to MoMA / Tate / Whitney – single bar chart for each museum composed of stacked images by gender, include bar chart for Met. Maura Reilly, ArtNews 5/15 “Curators have done in-depth research on the women artists in the [MoMA] museum’s collection, where the ratio of male-to-female artists is about 5 to 1” <http://www.artnews.com/2015/05/26/taking-the-measure-of-sexism-facts-figures-and-fixes/> <https://www.apollo-magazine.com/inquiry-wall-flowers-women-historical-art-collections/> <http://nymag.com/arts/art/features/40979/>

### Project 2: Image affect: structural similarity search on visual uncertainty

Create an exploratory dataset of images within the Met canvas artworks, based on image appearance. Look at connections by image affect: Met website has filters and is searchable, but searches are based on text identification. Entering “uncertainty” in the search brings up images that have “uncertainty” in a text field, but there is not an image recognition function.

“uncertainty” search results in 38 out of the 451,772 website collection, of which only 1 is in the 13,611 ModCont images: The Street, Philip Guston - this has “uncertainty” in the label text description. Over the past months I have been identifying artworks in gallery and museum databases (including MoMA and Tate dbs) that I assess convey uncertainty in some ways. This project incorporates some ideas from the uncertainty project and approaches the Met artworks db from an image recognition perspective:

- Select probably 6 artworks in the Met db, 3 of which has uncertainty in their text field, and 3 that seem to convey a sense of uncertainty (the Frankenthaler lithograph is in the visual uncertainty project db):



○ The Street, Philip Guston (American (born Canada), Montreal 1913–1980 Woodstock, New York), 1977, oil on canvas, 69 in. x 9 ft. 3 in.  
<https://www.metmuseum.org/art/collection/search/482740?sortBy=Relevance&deptids=21&ft=uncertainty&offset=0&rpp=100&pos=1>



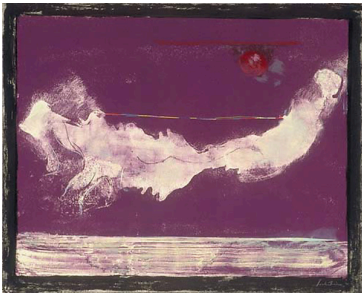
○ Selyp, György Kepes (American (born Hungary) 1906–2002 Cambridge, Massachusetts), 1930, printed later, gelatin silver print, 3 3/8 x 4 5/16 in.  
<https://www.metmuseum.org/art/collection/search/283294?sortBy=Relevance&ao=on&ft=Gy%C3%B6rgy+Kepes&offset=0&rpp=20&pos=2>



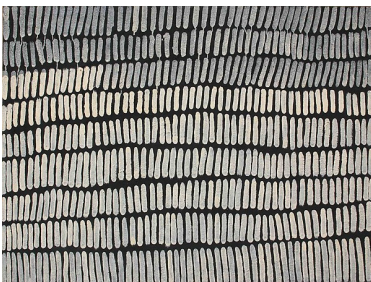
○ Portrait Dans un Miroir, Raoul Ubac (Belgian, Malmèdy 1910–1985 Dieudonné), 1938, gelatin silver print, 11 5/8 x 9 3/8 in,  
<https://www.metmuseum.org/art/collection/search/265064?sortBy=Relevance&ao=on&ft=ubac&offset=0&rpp=20&pos=2>



○ An Experiment of Unusual Opportunity, Ellen Gallagher (American, born Providence, Rhode Island 1965), 2008, ink, graphite, oil, and varnish on papers, mounted on canvas, 79 1/2 x 74 in.  
<https://www.metmuseum.org/art/collection/search/499716?sortBy=Relevance&ao=on&ft=Ellen+Gallagher&offset=0&rpp=20&pos=2>



○ Mirabelle, Helen Frankenthaler (American, New York 1928–2011 Darien, Connecticut), 1990, lithograph, 30 x 37 in  
<https://www.metmuseum.org/art/collection/search/493405?sortBy=Relevance&ao=on&ft=frankenthaler&offset=0&rpp=20&pos=15>



○ Jimbala, Lena Nyadbi (Australian (Aboriginal), born ca. 1936), 2003, ochre on canvas, 35 7/16 x 47 1/4 in.  
<https://www.metmuseum.org/art/collection/search#!?showOnly=withImage&offset=0&q=Lena%20Nyadbi&pageSize=0&sortBy=Relevance&sortOrder=asc&perPage=20>

- Run image structural similarity on Met artworks on canvas to identify other images that appear similar (use [http://scikit-image.org/docs/dev/auto\\_examples/transform/plot\\_ssim.html](http://scikit-image.org/docs/dev/auto_examples/transform/plot_ssim.html))
- Use the results as another way of entering the collection, by look / feel / emotion of the image (rather than the website collection's categories and classification).

Aim is to approach the works in terms of their content, aggregating artwork images by what they convey, and to see how well structural similarity works on the collection. And to see how the results from the 6 pieces compare and what artworks they lead to.

Visualize this as a spatial cloud / clusters of images linked - larger, bolder image at front with smaller images around that are connected to it. Use thin, curved lines to join the images to give more 3-d effect, aim for lightness, explore semi-transparency for smaller images.

Clicking on an image resets the image selection. Hovering on an image brings up information about that artwork in a column below the image cloud. Image information would include artist name, object name, date, object type, image url link.

If time, do a comparable spatial cloud with 6 MoMA images <https://www.moma.org/collection> - again the collection search is on text, "uncertainty" results in 15 artworks out of 77,119 online with the word uncertainty in text descriptions. See how the image cloud artworks compare.

### **Project 3: Donations to the Modern and Contemporary Art collection over time**

Understand the ModCont collection from an acquisition history point of view: who are the main donors, when were those donations and what artwork did they donate? Donors are noted on each artwork but there is no donor selection field despite the Met being heavily reliant on donations of works to the collection.

The MetCollects <https://www.metmuseum.org/art/online-features/metcollects> contains some general information over the last 4 years but does not aggregate this and does not show donations over the entire history of the Met collection. This project explores 'credit line' (donors) in ModCont – who / what entity made the donation, what artworks were gifted, accession year, object name, and artist nationality, and compares that to purchases by the museum.

Interested in creating an exploratory timeline to give overview of history of donations versus purchases within the ModCont collection, how donations are changing over time in frequency, size, and donor type.

Mark identifiers on spatial timeline that allows viewer to engage with information and move along timeline. Mark major historical events e.g. wars, natural disasters, technology inventions that might affect donations.

- Select ModCont and create db subset with credit line, artist display name, object date, object name, artwork title, accession year, artist nationality, image url
- Consider if there are obvious world events / innovations that correspond to those donations?
- If price of artwork is in any of the Met dbs, include those numbers (have not found that information so far)

Aim is to see if there are patterns in number of donations to ModCont over time, are gifts by number of artworks increasing or decreasing? And to lay out who is donating and in what amounts, e.g. individuals, private galleries, companies, etc.

Visualize this as a spatial timeline: based on receding timeline of British Museum <https://britishmuseum.withgoogle.com>. Put 2017 closest with receding decades back to the earliest ModCont artwork (about 1872), color outline by type of donor (individual, foundation, private gallery, company, purchase, other), size of artwork by number of pieces in donation (the larger an artwork image, the larger the number of artworks donated by that donor that year.) I'd select one artwork to represent a collection, e.g. the first image by date in that collection. Make the artworks semi-transparent so that overlapping images can be seen. The artwork image on float / click shows popup with donor name & linked lists of works in each donation.

.