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Distant Viewing

Computational Exploration of Digital Images

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Datasets

We have made all the data and code needed to recreate all the analyses in this text available under an open-source license as part of the book's supplementary materials. Where possible, we also provide or link to the digital images from which we are working. Our hope is that making this information available will encourage others to continue exploring these collections and to apply distant viewing techniques to new collections of digital images. In many cases we have supplied supplementary annotations in addition to those used directly in the text. The following datasets directly correspond to the analyses presented in the previous chapters:

- *FSA-OWI Color Images*: A set of 1,616 color images that are part of the FSA-OWI holdings at the Library of Congress. Notably, these include the image of a shepherd, horse, and dog featured in the first two chapters. All the images are in the public domain as works of the US federal government. Metadata, image region segmentations, and image embeddings are included in the collection.
- *Movie Posters*: A set of 4,669 color images of movie posters, with approximately 100 posters in each year from 1970 to 2019. Metadata, face bounding boxes, and color information are included. Metadata comes from Wikipedia. Links to images on Wikimedia are provided in the metadata; note that copyright of most posters belongs to their respective creators.
- *FSA-OWI Greyscale Images*: A set of 171,180 grayscale images that are part of the FSA-OWI holdings at the Library of Congress. All the images are in the public domain as works of the US federal government. Metadata, image region segmentations, and image embeddings are included

in the collection. Small versions of the images can be directly downloaded; links to larger versions at the Library of Congress are given in the metadata.

- *Bewitched* and *I Dream of Jeannie*: A summary table with one row for each of the 102,334 shots detected from the runs of the two series is provided, giving information about the length of the shot, the characters in the shot, and the framing of the shot. The original materials are under copyright, and therefore we are unable to share them.
- *Metropolitan Museum of Art Collection API*: A set of 288,252 images. We provided image embeddings and metadata for each record. Links to download the images are provided in the metadata. Materials have been released into the public domain (Creative Commons Zero license).

To further continue the use of distant viewing, we also include annotations for the additional collections of digitized images listed here:

- *Detroit Publishing Company*: A set of 25,172 documentary photographs held at the Library of Congress. Photographs consist of images taken by staff photographers working for the company. Annotations include object detection, region segmentation, face detection, and image embeddings. Links to the images are provided in the metadata. All data are images in the public domain.
- *George Grantham Bain Collection*: A set of 41,447 documentary photographs held at the Library of Congress. Created from the archives of one of the earliest news picture agencies in the United States. Annotations include object detection, region segmentation, face detection, and image embeddings. Links to the images are provided in the metadata. There are no known restrictions on distribution of the images and metadata.
- *Harris & Ewing Collection*: A set of 41,542 documentary photographs held at the Library of Congress from the Washington, DC-based news photography firm. Annotations include object detection, region segmentation, face detection, and image embeddings. Links to the images are provided in the metadata. There are no known restrictions on distribution of the images and metadata.
- *National Photo Company Collection*: A set of 35,619 documentary photographs held at the Library of Congress. Annotations include object detection, region segmentation, face detection, and image embeddings.

Links to the images are provided in the metadata. All data are images in the public domain. There are no known restrictions on distribution of the images and metadata.

- *Getty Open Content Program*: A set of 75,362 images from the museum's files. Metadata, image embeddings, and links to the images are provided. All images are believed to be free of restrictions for use and distribution.
- *Rijksmuseum API*: A set of 392,725 images from the museum's files. Metadata, image embeddings, and links to the images are provided. All images are believed to be in the public domain.
- *National Gallery of Art*: A set of 136,567 images from the gallery's files. Metadata, image embeddings, and links to the images are provided. All data are in the public domain, though some images may be subject to copyright restrictions.

We plan to release new annotations for additional collections in other venues as we continue to apply computer vision techniques to the study of visual messages.

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