Materiality and Montage: Film Archives and the Visualization of Time-Based Media

Adelheid Heftberger
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Or:
From Microstructure to Macrostructure

Or:
from Dziga Vertov to On Broadway
When pictures carry the weight of clarity in a scene, they free words to explore a wider area.
Every two minutes we now take as many photographs as were taken during the entire 19th century.

(Jeffrey Schnapp)
I estimate that there have been 2.7 billion videos uploaded to YouTube since 2005. 400 hours of video are added to the site every minute.

(Luke Mc Kernan)
We need similar techniques which would allow us to observe vast “media universes” and quickly detect all interesting patterns.

(Lev Manovich)
Visualization

“In all the arts it’s the surface that people appreciate most easily, like an Apple chosen for its shiny skin.”

Scott McCloud: Understanding Comics
Digital Formalism (2007-2010)

Annotation Software, developed 2003 by Michael Kipp
Film Style is a film's systematic and significant use of techniques of the medium.

Film studies, it seems to me, is an effort to understand films and the processes through which they’re made and consumed.

(David Bordwell)
Schlemmer Frame Collection (Austrian Film Museum)

https://www.filmmuseum.at/en/collections/special_collections/schlemmer_frame_collection
Brightness in single frames from „The Eleventh Year“ (Dziga Vertov, 1928) [Lev Manovich/Software Studies Initiative]
1/100 Frames from „The Adventures of Prince Achmed“ (Lotte Reiniger, 1926) [Adelheid Heftberger/ImageJ]
1/100 Frames from „Oliver Twist“ (Márton Garas, 1919)
[Adelheid Heftberger/ImageJ]
Fig. 59.—Plan of directions of kinetic movement in the frame.
1 Frame per Shot from „The Eleventh Year“ (Dziga Vertov, 1928)
[Lev Manovich/Software Studies Initiative]
Sports in Slow Motion in „Man with a Movie Camera“ (Dziga Vertov, 1929)
[Adelheid Heftberger/ImageJ]
All faces in CU from „The Eleventh Year“ (Dziga Vertov, 1928)
[Adelheid Heftberger/ImageJ]
Visualization of the sequence „Electricity“ from „The Eleventh Year“ (Dziga Vertov, 1928) [Lev Manovich/Software Studies Initiative]
Visualization of two sequences containing faces in CU from „The Eleventh Year“ (Dziga Vertov, 1928) [Lev Manovich/Software Studies Initiative]
Three different ways of visualizing the shot lengths of faces in CU from „The Eleventh Year“ (Dziga Vertov, 1928) [Lev Manovich/Software Studies Initiative]
1/100 Frames of a trailer for „Spione“ (Fritz Lang, 1928) [Adelheid Heftberger/ImageJ]
Start frame and end frame of a shot from a trailer for „Spione“ (Fritz Lang, 1928) [Adelheid Heftberger/ImageJ]
Which places come to mind when you think of the time of the Fall of the Wall and German reunification? You can probably remember Berlin's Brandenburg Gate and other border checkpoints, the best of you can maybe even recall the events in Hungary and Leipzig. But how did people in places such as Suhl, Gotha, Plauen or Mödlareuth experience the time?

More than 20 years on, only a few places represent an experience that extended throughout large parts of Europe. Our map however, is dotted with a multitude of flags, because the internet archive presents images from places that did not make it into the attention of the media, as well as new perspectives on well-known ones. Our photographs, films and memories give room to different possibilities for observation.
On Broadway (Daniel Goddemeyer, Moritz Stefaner, Dominikus Baur, Lev Manovich) (http://on-broadway.nyc/)
On Broadway (Daniel Goddemeyer, Moritz Stefaner, Dominikus Baur, Lev Manovich) (http://on-broadway.nyc/)
THIS SORT OF CATEGORIZATION IS AN INEXACT SCIENCE AT BEST, BUT BY USING OUR TRANSITION SCALE AS A TOOL -- We can begin to unravel some of the mysteries surrounding the invisible art of comics storytelling!

1. MOMENT-TO-MOMENT
2. ACTION-TO-ACTION
3. SUBJECT-TO-SUBJECT
4. SCENE-TO-SCENE
5. ASPECT-TO-ASPECT
6. NON-SEQUENTIAL

Most mainstream comics in America employ storytelling techniques first introduced by Jack Kirby, so let's start by examining this Lee-Kirby comic from 1966.

Altogether, I count ninety-five panel-to-panel transitions. Let's see how they break down proportionately.

Scott McCloud (Understanding Comics): Storytelling
New York Public Library Visualization

(http://publicdomain.nypl.org/pd-visualization/)
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(http://publicdomain.nypl.org/pd-visualization/)
New York Public Library Visualization

(http://digitalcollections.nypl.org/items/859ad6c0-2289-0132-01d6-58d385a7bbd0)
Thank you for your attention!

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Siehe auch:

flickr: „Vertov films comparisons“
https://www.flickr.com/photos/culturevis/albums/72157622608431194