Graphical Embellishments

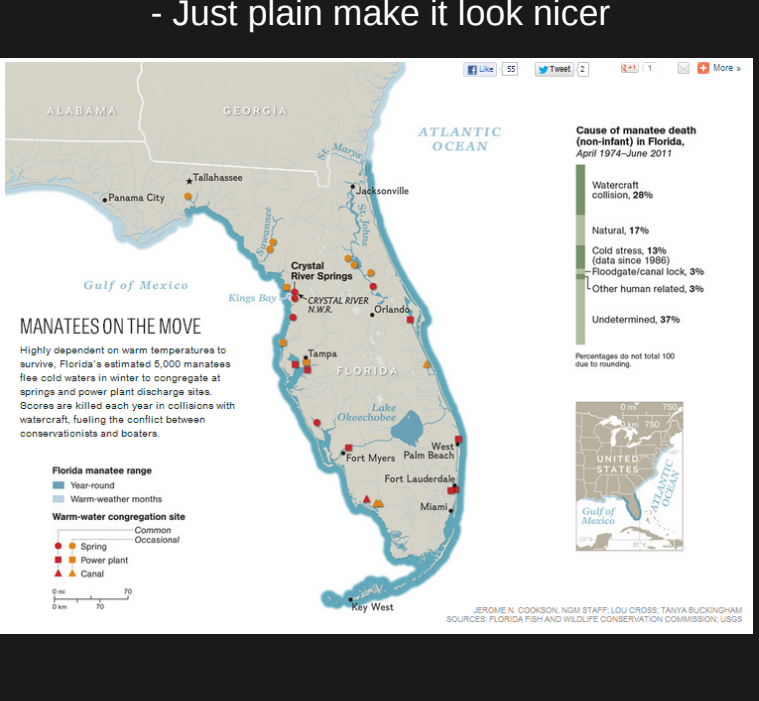
(or: how to make your maps look cooler)
Marty Elmer - for GEO 370 - 4/25/13

For the sake of a formal definition:

Graphical embellishments are subtle graphical effects employed within a map (or any graphic, really).

These are so much more than decoration, though*.
* eat it, Tufte

Intelligent use of graphical embellishments can:
- Enhance visual hierarchy
- Add structure and logic to the image
- Contribute to the map's aesthetic
- Just plain make it look nicer



Unintelligent use of graphical embellishments does the exact opposite.

Needless to say, it's up to the designer to ensure that their implementation of graphical embellishments helps, rather than hurts, their graphic.

My general goals today are to:
- Introduce these techniques into your 'toolkit'
- Discuss when and why you'd want to use them
- Swamp you with inspiration

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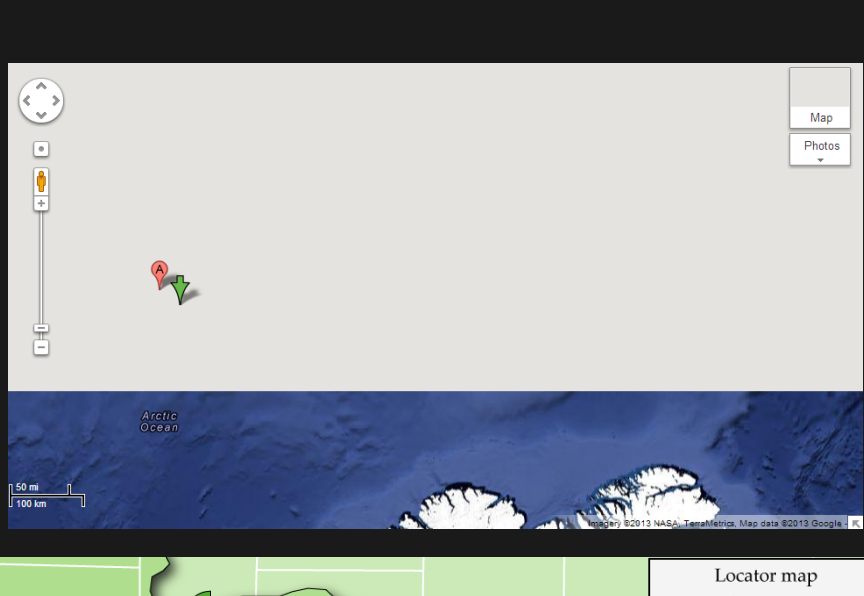
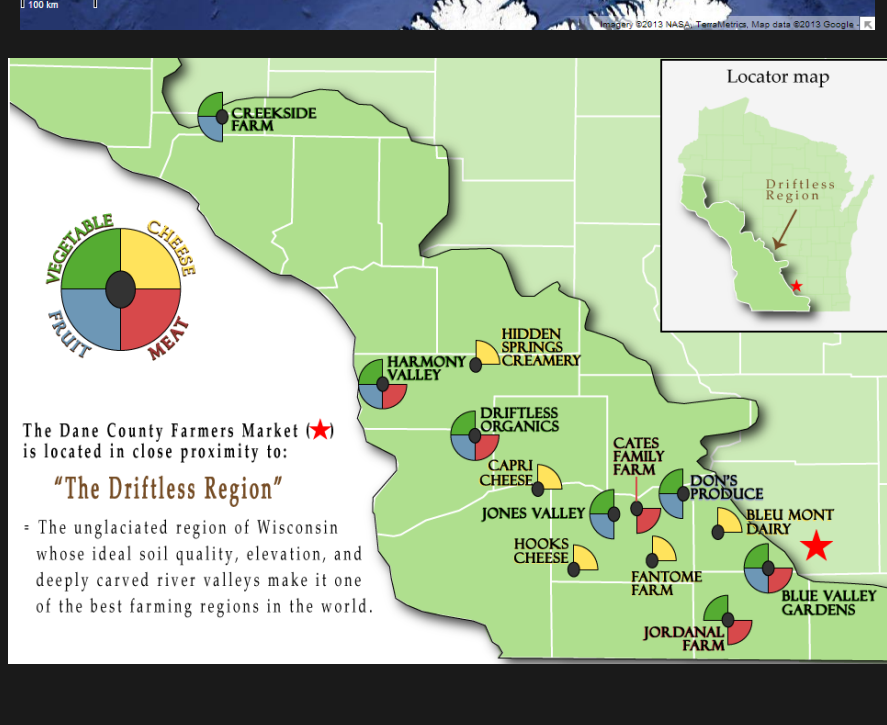
Part I: Techniques for Depth

Depth can enhance your graphic by making certain elements 'pop' from their background. This can be used to:
- Call attention to these elements
- Establish a visual hierarchy with these elements
- Make the map look more tactile (add richness)

Drop Shadows:

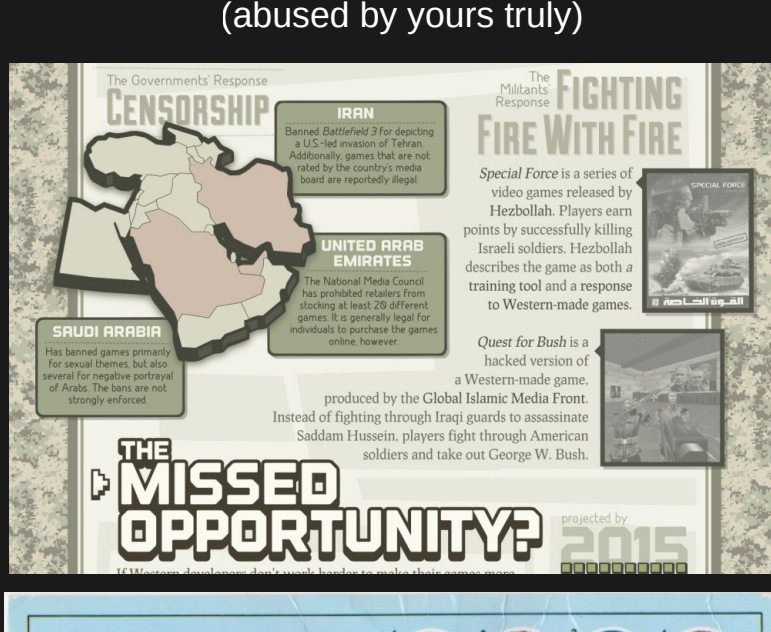
Offset shapes that make it look like an object is casting a shadow.
Consider: the color, transparency, and blur of the drop shadow

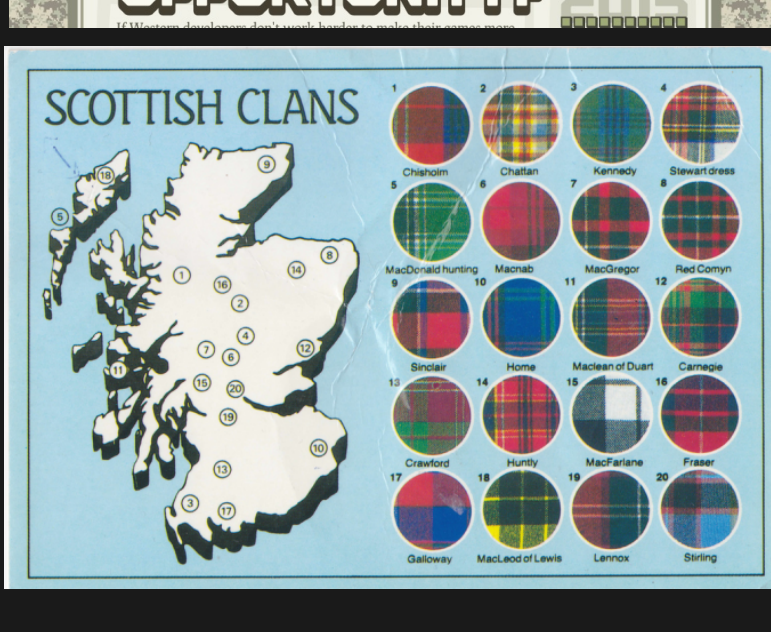




Extrude

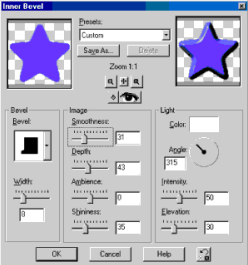
Similar to a drop shadow, but provides the illusion of the object being a 3D shape
(abused by yours truly)

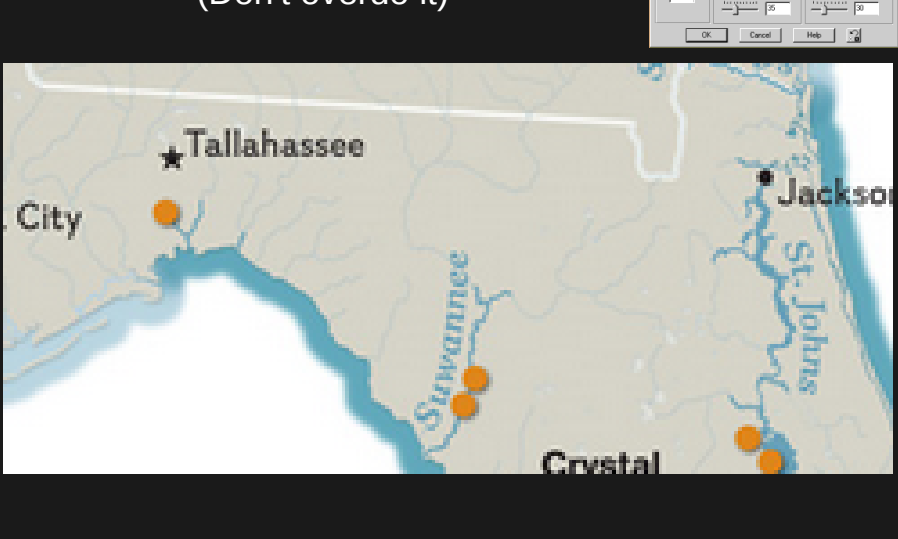




Bevel

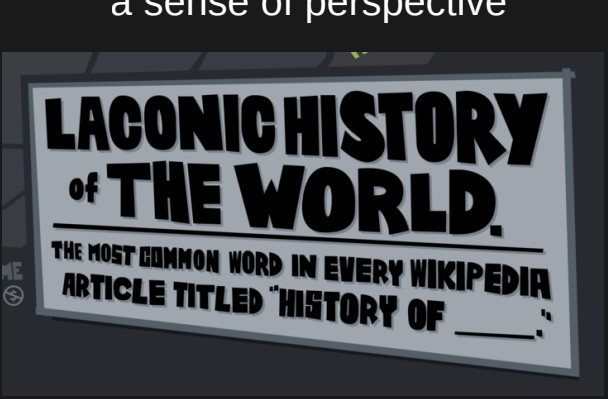
Applies a lighting model to the element, giving it a 'raised' appearance
(Don't overdo it)





3D Distort

Skews the element in a way that provides a sense of perspective


LACONIC HISTORY of THE WORLD.
THE MOST COMMON WORD IN EVERY WIKIPEDIA ARTICLE TITLED "HISTORY OF ____"

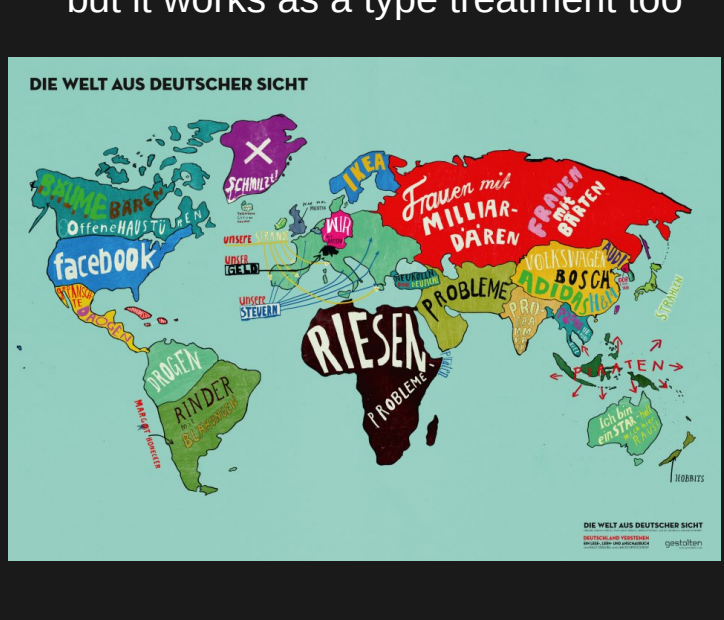
* * *

Part II: Type Treatment

Techniques well-suited to make your text more decorative.
(Make sure this conforms to your aesthetic!)

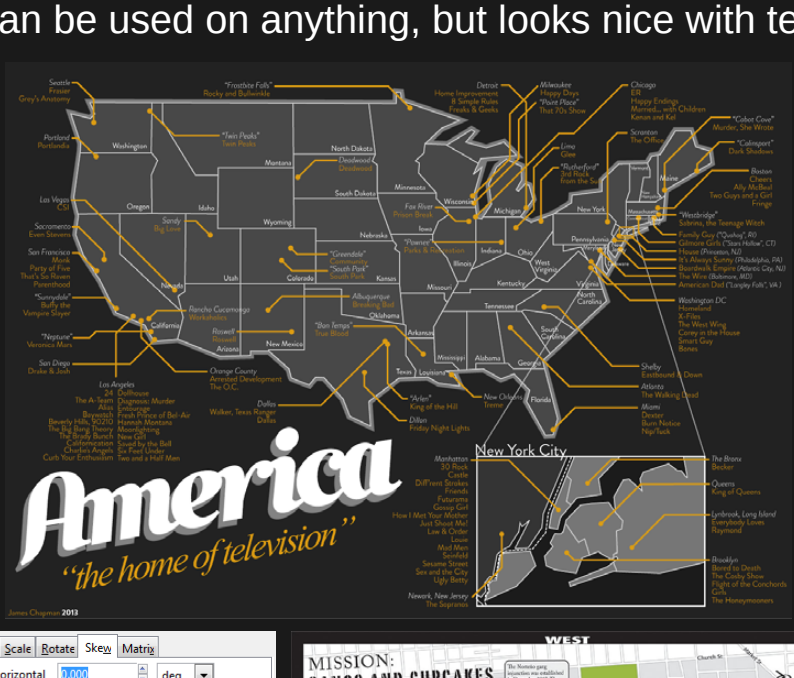
Text on Path

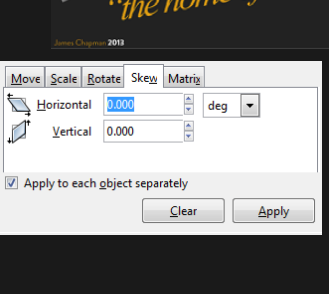
You're used to this for labeling purposes, but it works as a type treatment too



Transform

Skewing, Rotating
(can be used on anything, but looks nice with text)





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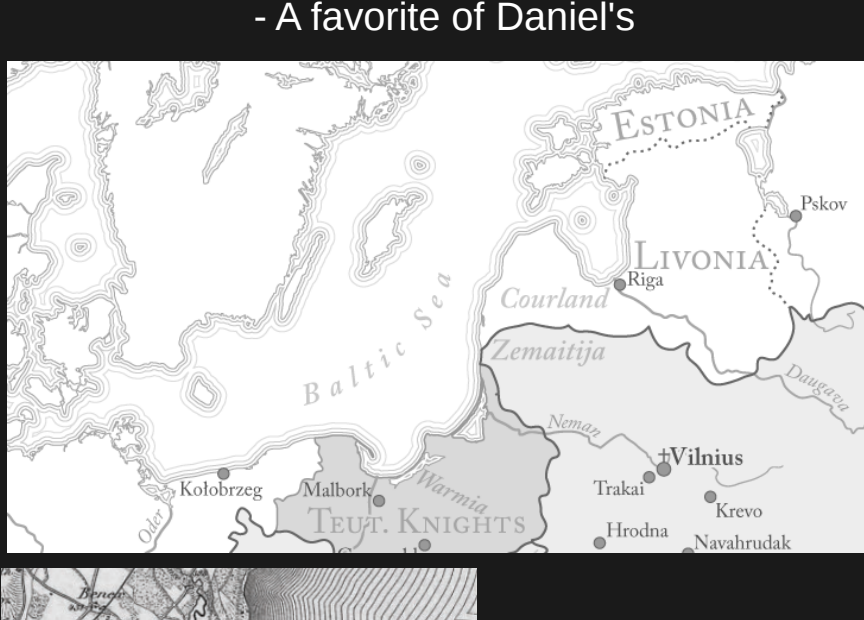
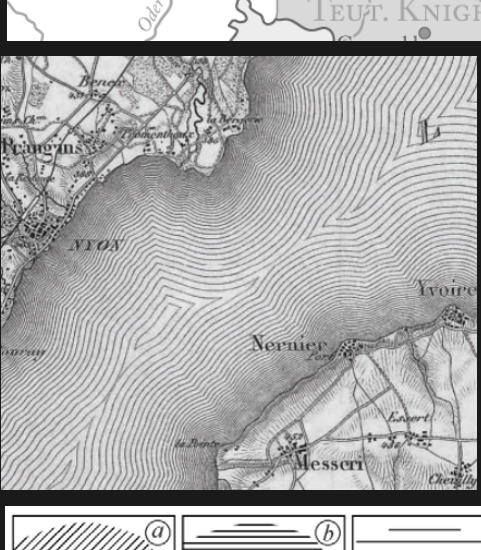
Part III: Terrain Representation

Jazzing up physical geographic features.

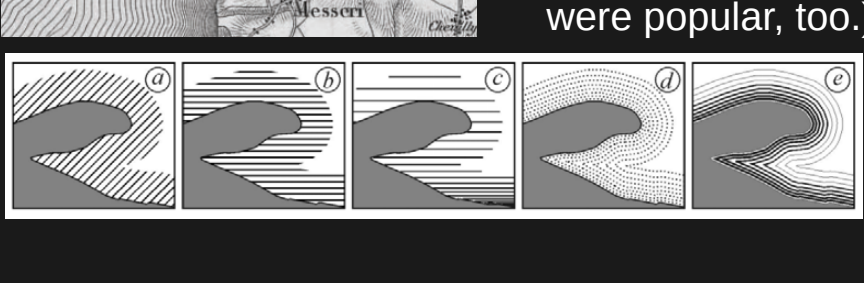
Waterlining

Concentric lines surrounding the edge of a shoreline.
- Not to be confused with actual bathymetry
- A common technique in older maps
- A favorite of Daniel's



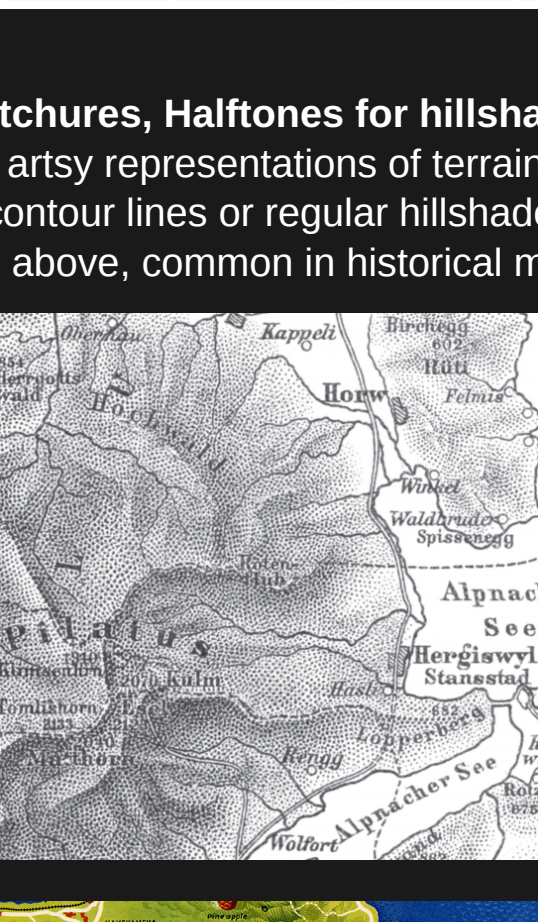


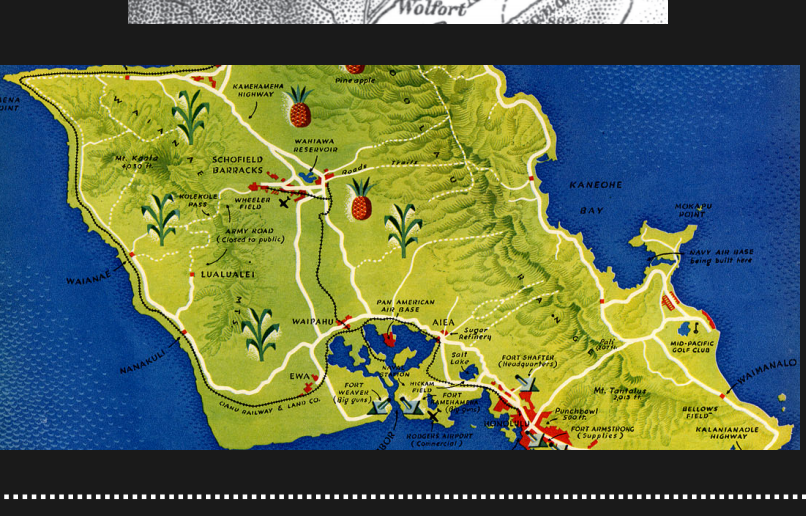
(Straight lines were popular, too.)



Hatchures, Halftones for hillshade

More artsy representations of terrain than contour lines or regular hillshade
(Like above, common in historical maps)





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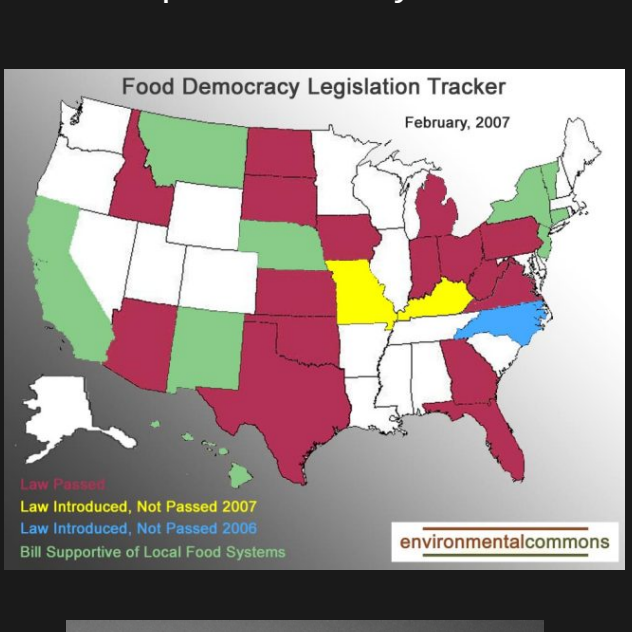
Part IV: General Richness Techniques

Breaking up flat planes of color.

Gradients

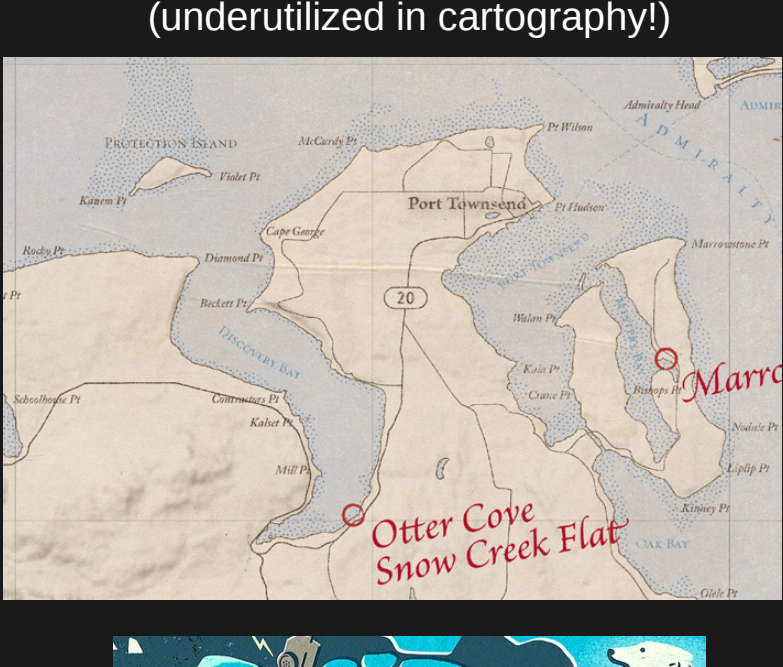
Smooth transition from one color to another.
They have many uses, but another technique that's easy to overdo

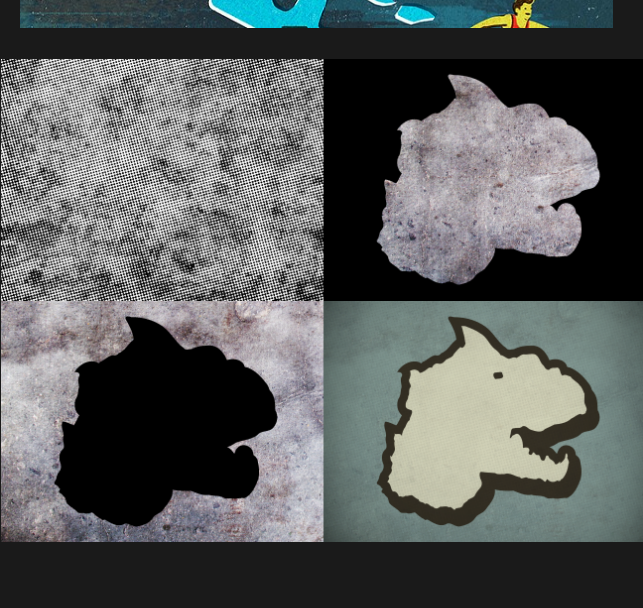

Food Democracy Legislation Tracker
February, 2007
Law Passed
Law Introduced, Not Passed 2007
Law Introduced, Not Passed 2006
Bill Supportive of Local Food Systems
environmentalcommons

DON'T LET THEM FALL
Let's win the fight here in WISCONSIN
Call your senator. Call your representative.
Tell them to keep our state standing!

Texture

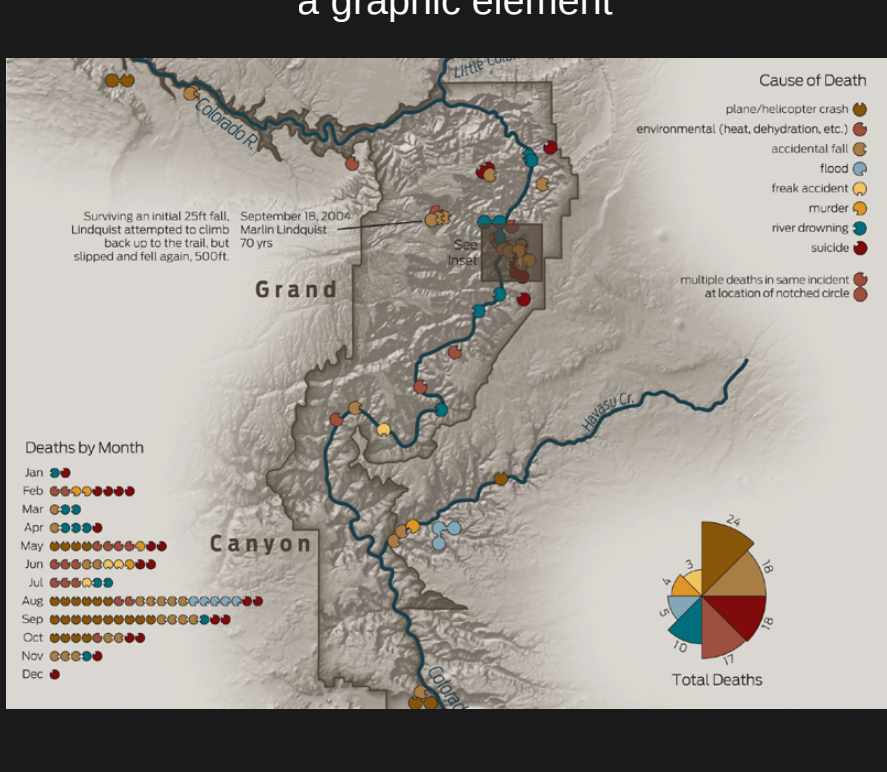
Semitransparent raster overlays, used to provide a weathered, less 'digital' look
(underutilized in cartography!)

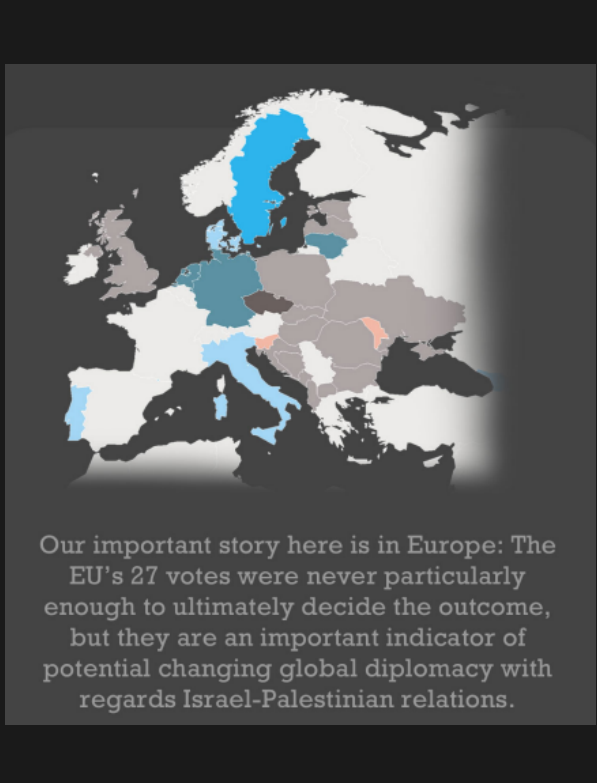




Inner/Outer Glow

Fade-ins or fade-outs at the borders of a graphic element

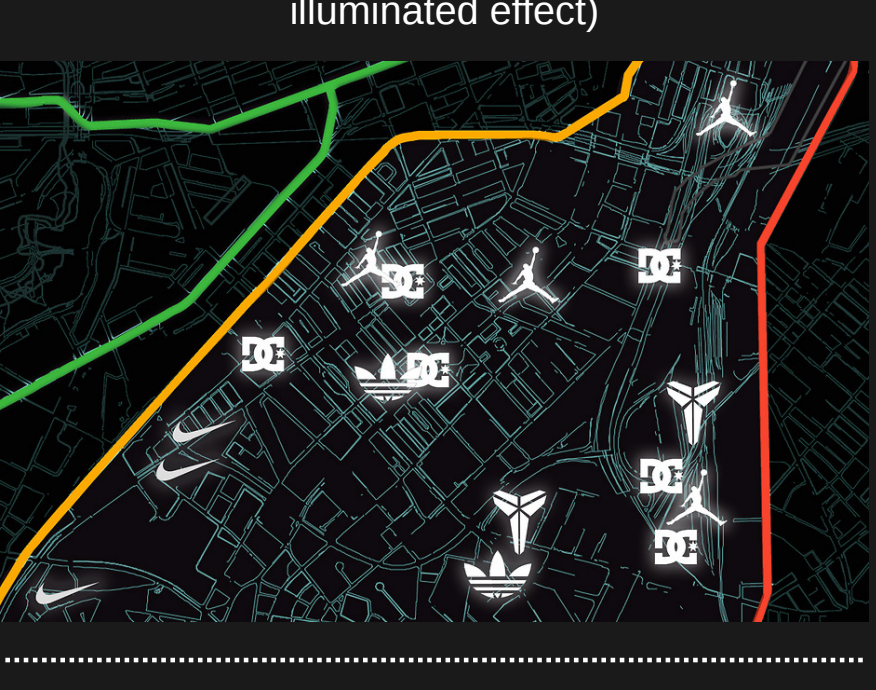




Our important story here is in Europe: The EU's 27 votes were never particularly enough to ultimately decide the outcome, but they are an important indicator of potential changing global diplomacy with regards Israel-Palestinian relations.

Glow

Akin to a drop shadow, but brighter than the background
(underneath the right symbol, gives an illuminated effect)



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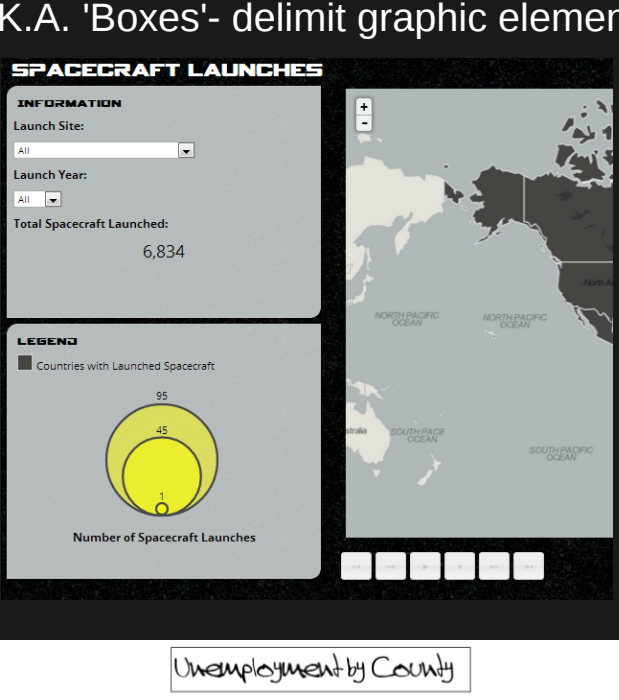
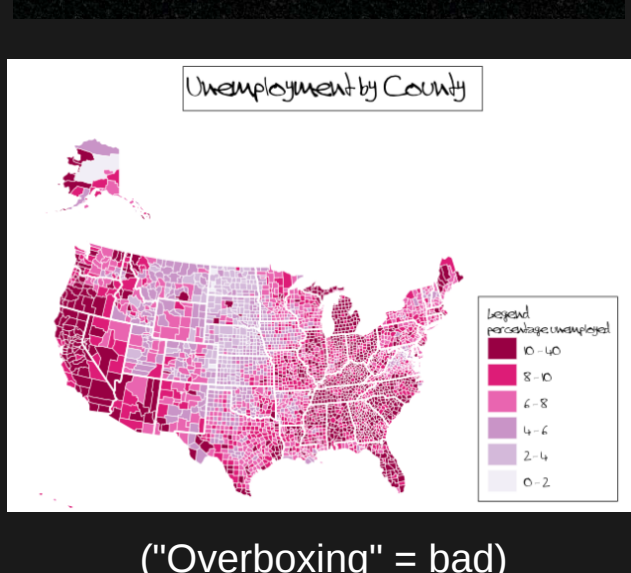
Part V: Functional Techniques

Or, at least, more functional than the others

Containers

A.K.A. 'Boxes'- delimit graphic elements

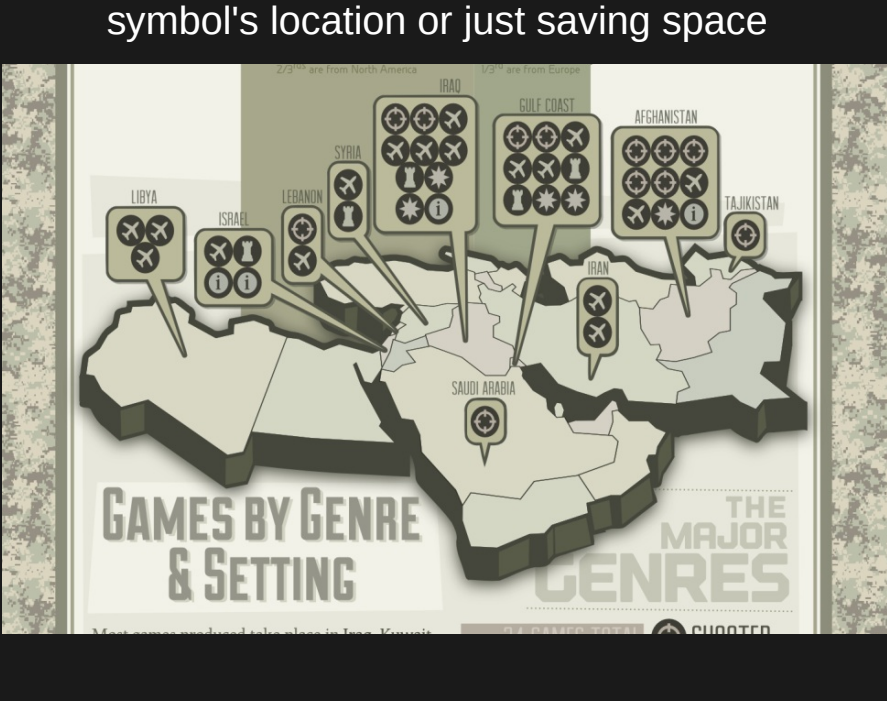

SPACECRAFT LAUNCHES
INFORMATION
Launch Site:
Launch Year:
Total Spacecraft Launched:
6,834
LEGEND
Countries with Launched Spacecraft
Number of Spacecraft Launches



("Overboxing" = bad)

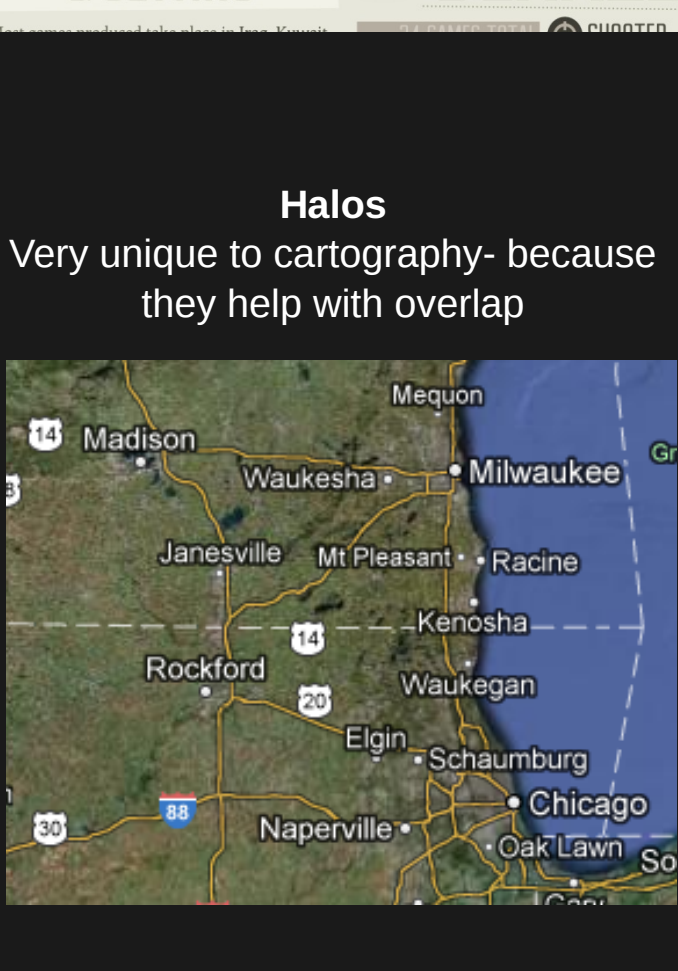
Callouts

'Pointer' for a symbol- handy for specifying a symbol's location or just saving space



Halos

Very unique to cartography- because they help with overlap



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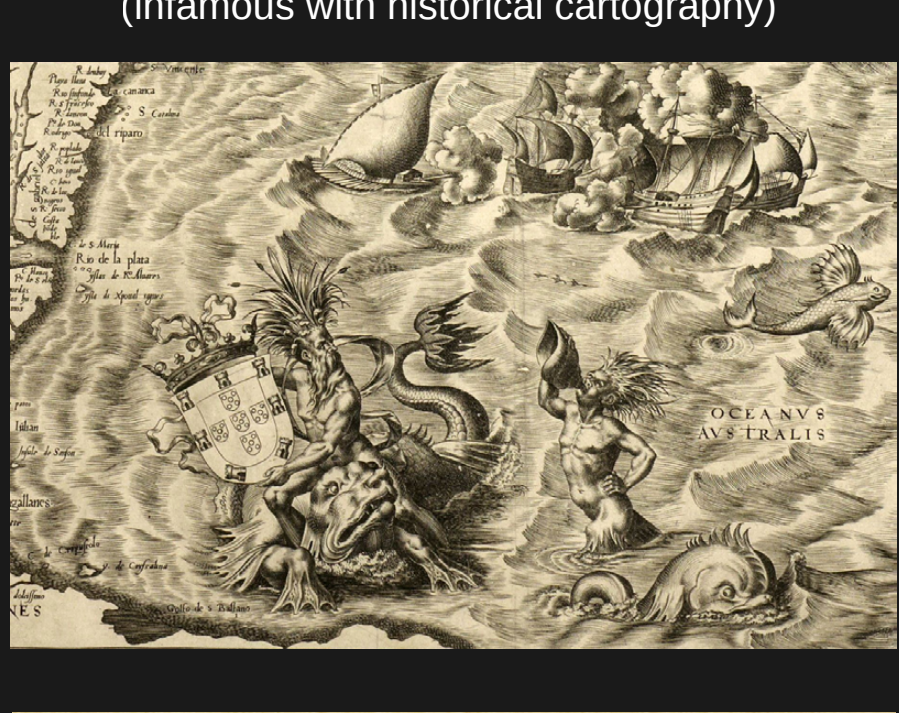
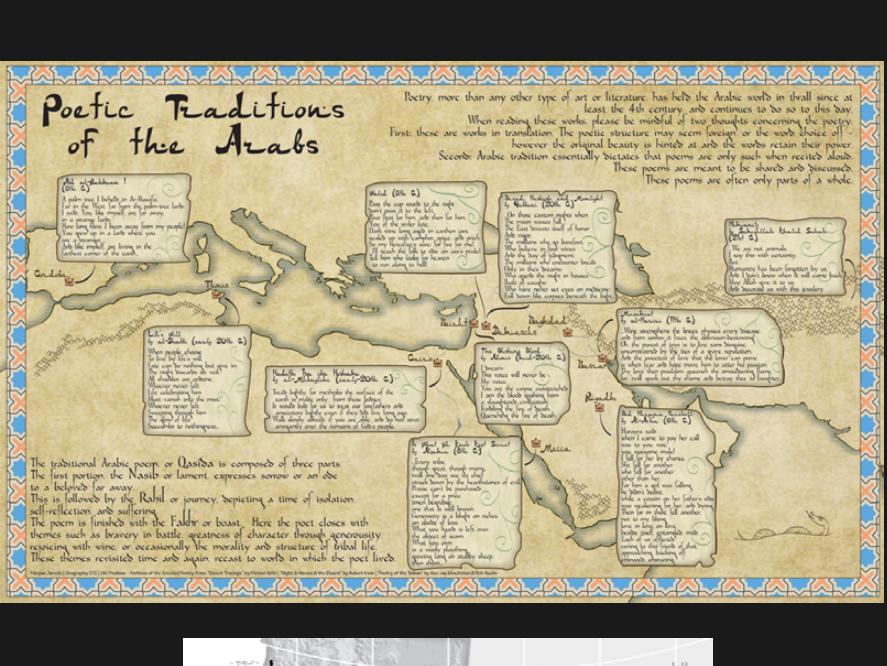
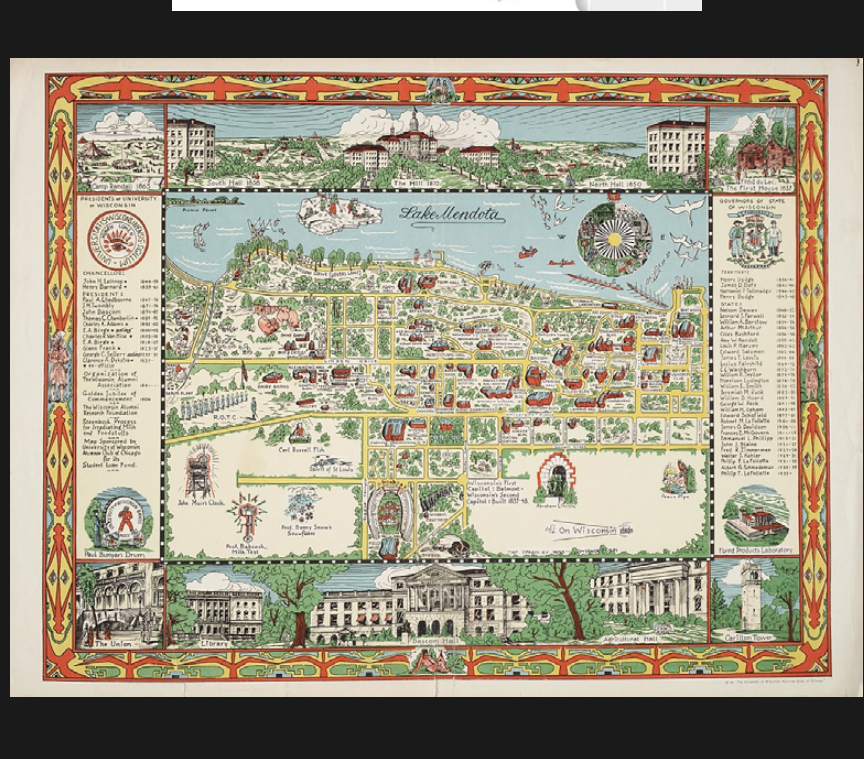
Part VI: A Non-functional Technique?

Marginalia

Patterns, illustrations in the border of the map
(infamous with historical cartography)







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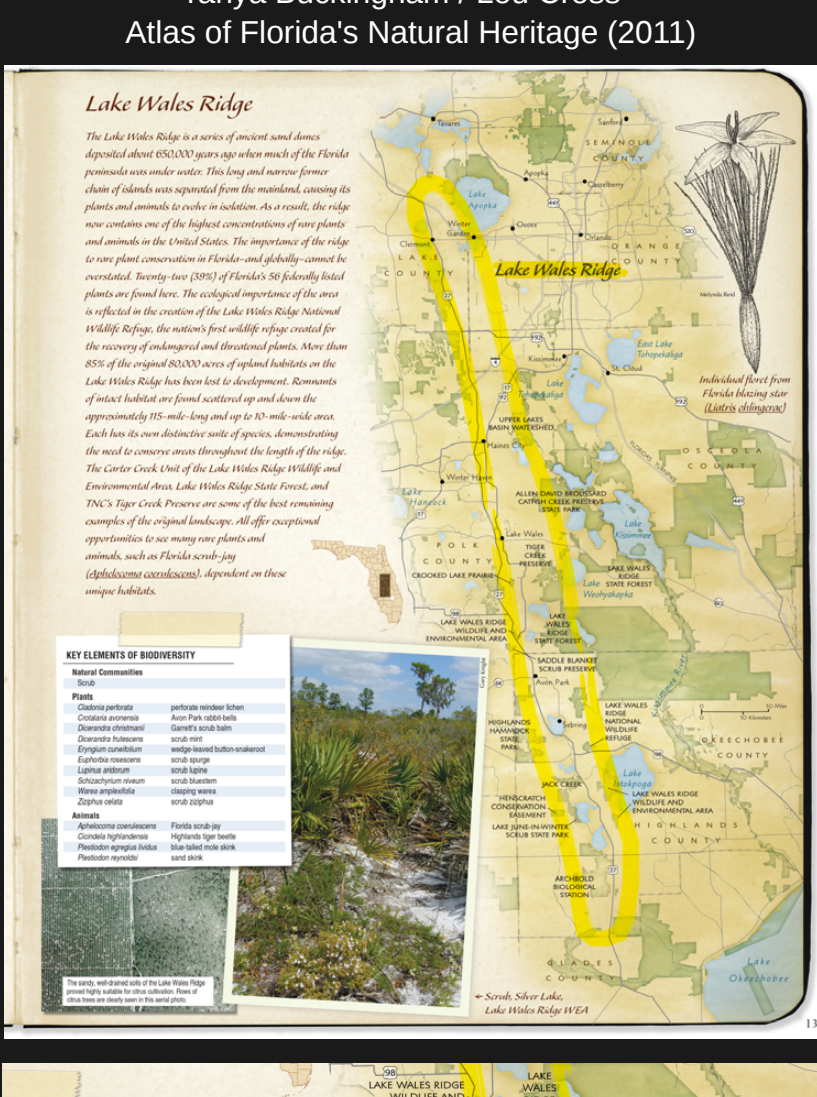
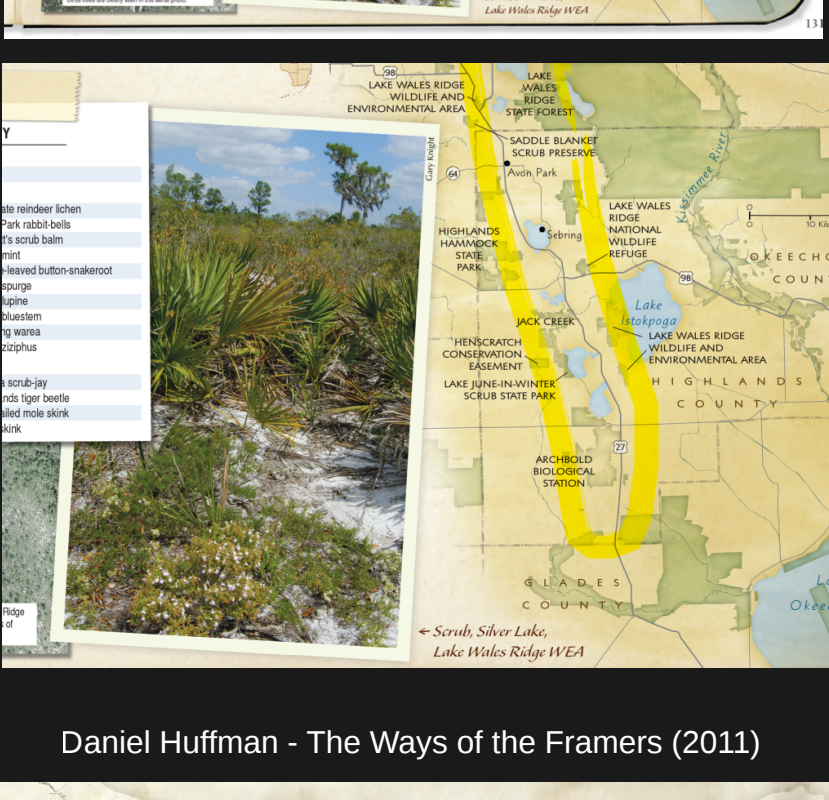
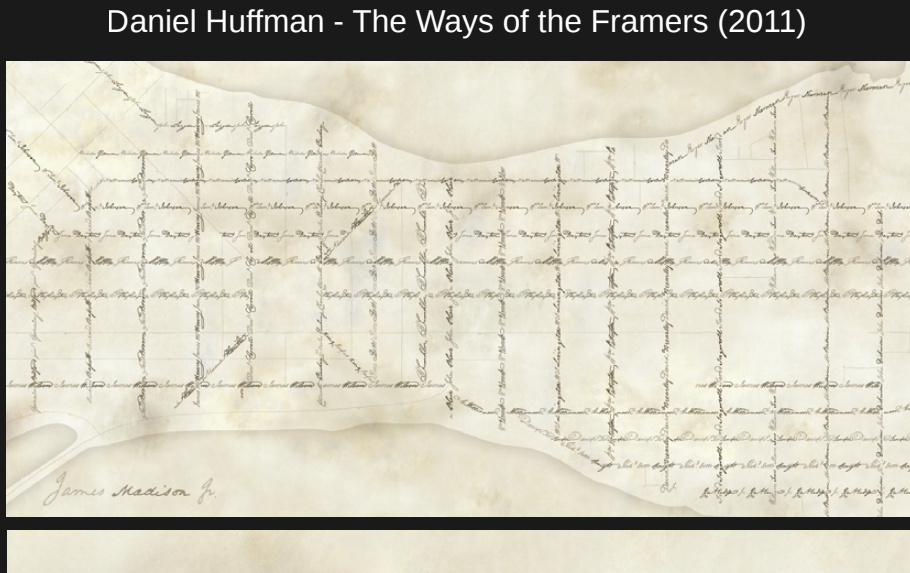
Case Studies!

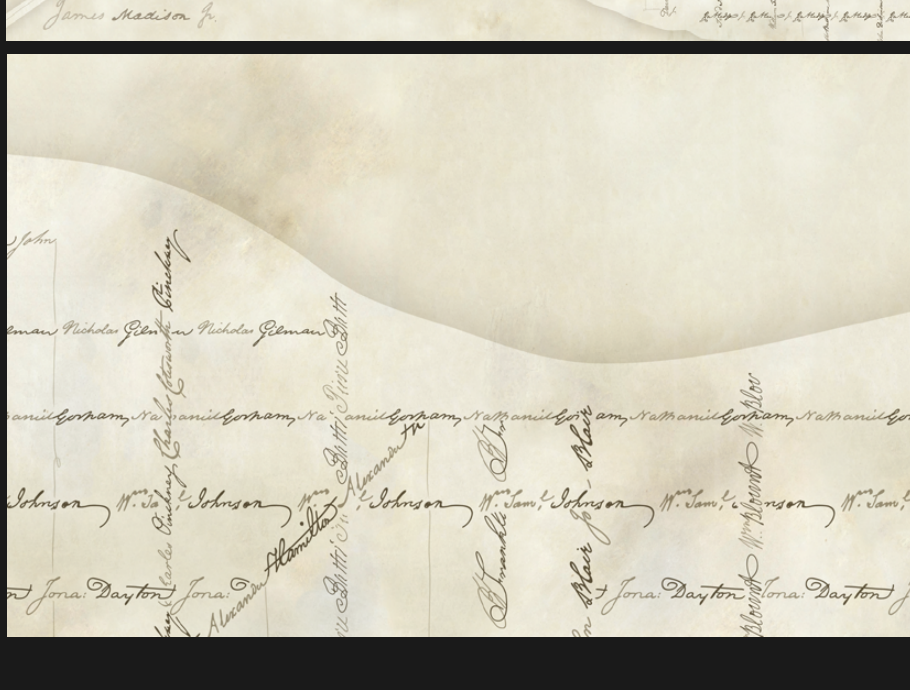
Tanya Buckingham / Lou Cross -
Atlas of Florida's Natural Heritage (2011)



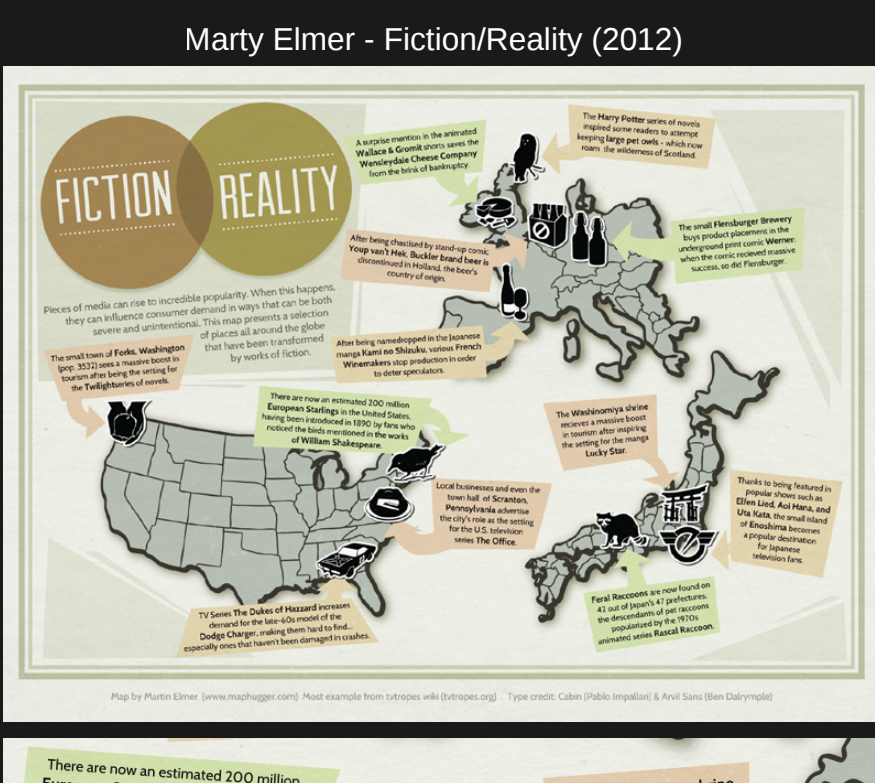

LAKE WALES RIDGE WILDLIFE AND ENVIRONMENTAL AREA
LAKE WALES RIDGE STATE FOREST
SADDLE BLANKET SCRUB PRESERVE
Avon Park
HIGHLANDS HAMMOCK STATE PARK
Sebring
LAKE WALES RIDGE NATIONAL WILDLIFE REFUGE
JACK CREEK
HENSCRATCH CONSERVATION EASEMENT
LAKE JUNE-IN-WINTER SCRUB STATE PARK
Lake Istokpoga
ARCHBOLD BIOLOGICAL STATION
HIGHLANDS COUNTY
GLADES COUNTY
Scrub, Silver Lake, Lake Wales Ridge WEA

Daniel Huffman - The Ways of the Framers (2011)

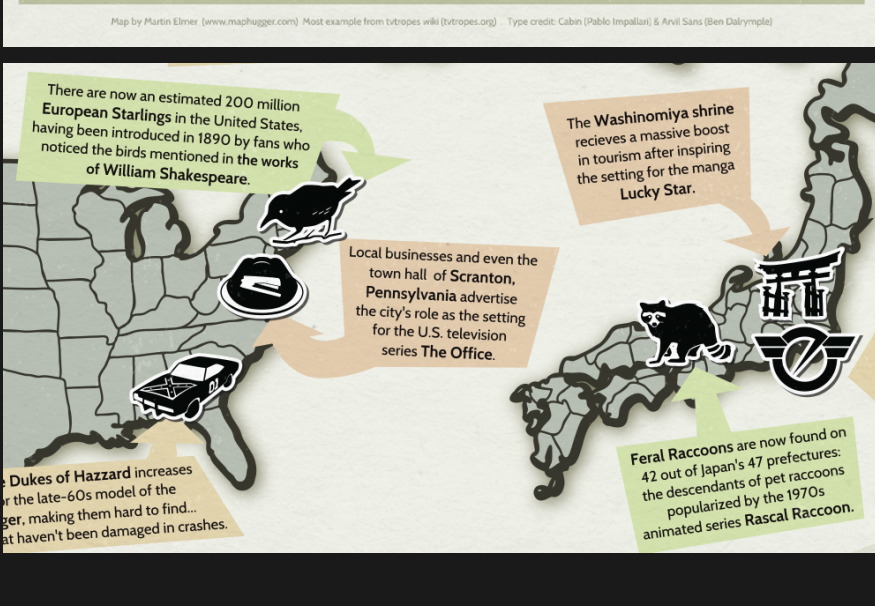




Marty Elmer - Fiction/Reality (2012)



Pieces of media can rise to incredible popularity. When this happens, they can influence consumer demand in ways that can be both severe and unintentional. This map presents a selection of places all around the globe that have been transformed by works of fiction.



There are now an estimated 200 million European Starlings in the United States, having been introduced in 1890 by fans who noticed the birds mentioned in the works of William Shakespeare.

Local businesses and even the town hall of Scranton, Pennsylvania advertise the city's role as the setting for the U.S. television series The Office.

The Washinomiya shrine recieves a massive boost in tourism after inspiring the setting for the manga Lucky Star.

Feral Raccoons are now found on 42 out of Japan's 47 prefectures: the descendants of pet raccoons popularized by the 1970s animated series Rascal Raccoon.