Project 1. **Small Multiples / Multiple Media: Exploring Illustration and Information Visualization**

Overview

One of the greatest challenges for the new student of graphic design or visual art is the ability to see abstractly. What does this mean and why is it so important? Seeing a picture abstractly means seeing it in terms of the shapes, lines, spaces, and colors that are used to create it. The quality and character of these elements (Are the lines thick or thin? Straight or wavy?) is just as important as their arrangement in space (Are the lines clustered together or spread apart? At what angle are they arranged?) The ability to see, recognize, and describe these characteristics makes us better designers, allowing us to understand why our eye moves through a composition in a particular way, and therefore why a particular design seems to convey a specific mood or message. Likewise, this recognition gives us more power over our designs, allowing us to rearrange and edit until we're sending the mood or message we intend.

For *Project One: Small Multiples / Multiple Media*, you will create a series of visual sequences to illustrate the following basic 2D design elements: *Point, Line, Plane, Volume/Space*, and *Texture*. Imagine your illustrated sequences will explain these elements to a beginning graphic design student. Your sequence should give a visual definition of each element in relation to the other elements. For example, in what context does a drawing of a circle function as a point? How can you change the context so the circle is perceived as a plane? Can you change it once again to make a line? To suggest volume? And so on. You do *not* have to use the exact same subject matter (the previously mentioned circle) for each frame of your sequence, though you may wish to attempt this strategy.

You will also demonstrate that these elements can manifest themselves in a variety of ways by making multiple sequences using a variety of media. Over the course of the first few weeks of the semester, we will systematically explore possibilities for explaining these elements using photography, vector-based drawing, collage materials, and typography.

Our purpose is threefold: 1) Explain the concepts as fully as possible by providing multiple examples for comparison; 2) Explore the different illustration opportunities offered by various media; 3) Create material for a final, grid-based visualization that will showcase the comparisons between each sequence. The project will also provide an opportunity to review core technical skills that are necessary for success in this course, such as the ability to manipulate raster-based files and vector-based graphics.

Materials & Specifications

Initially, each horizontal sequence should consist of 2.5 x 2.5-inch frames with ½-inch spaces between them. As new sequences are created, arrange them top to bottom on an 11x17-inch artboard (horizontal) in Illustrator. Sequences should be on the same page so they can viewed together. See diagram below. You should not yet label the sequences using type. In the final

phase of the project you will have the creative freedom to label and rearrange most aspects of your format and presentation to create an optimal viewing experience.
For now, arrange your sequences like this:
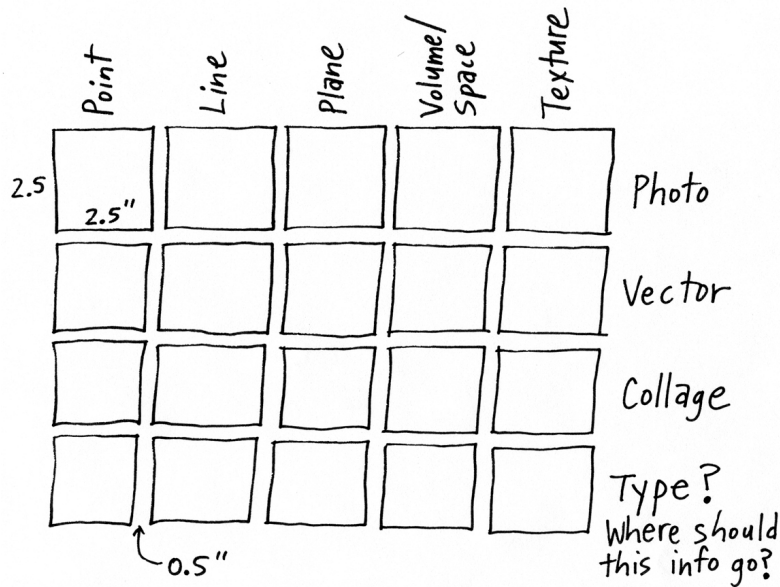
In addition to computers, software, and scanners available in the AML, you will need access to a camera (Photo Sequence) and objects/clippings/paper for flatbed scanning (Collage Sequence).

1. Photo Sequence

READ: *Point, Line, Plane*, and *Texture* (Lupton/Phillips, 8–27, 52–69)
        Rhythm and Balance and *Framing* (Lupton/Phillips, 28–31, 100–113)

In groups of three, explore Avery Hall and its immediate surroundings with cameras, taking photos that define the concepts of *Point, Line, Plane, Volume/Space*, and *Texture*. Keep in mind that the photos will work in combination, informing one another, and illustrating the potential flexibility of each concept. (If viewed differently, can the same subject matter be viewed as a point and then a line and then a plane and so on? Or is it more powerful to use different subject matter for each concept?) Remember, each photo will be cropped to have a square frame. Take more than one image for each category so you have a lot to work with.

Open and edit your images in Photoshop as needed, making sure to save originals and crops at high resolution (240-300dpi) as PSD, TIFF, EPS, or high quality JPEG. Decide as a group what pictures and crops make for the strongest sequence. Print and bring to next class.

Make sure everyone in your group has a copy of all the photos and digital files of your sequence. After the first version is turned in, each individual from the group becomes responsible for refining his/her photo sequence. (Keep the initial idea, but refine by re-cropping or even replacing some images.)

2. Vector Sequence

READ: *Figure/Ground* (Lupton/Phillips, 84–99)

Create a second sequence using vector graphics in Illustrator, expanding on the definitions you developed in the Photo Sequence. How can drawings/images made with vector graphics help a beginning graphic design student further understand all the ways in which something might be described as *point, line, plane, volume/space,* and *texture*? What new possibilities does working in this media offer? Print with Photo Sequence and bring to next class. Continue refining until final visualization is due.

3. Collage Sequence

READ: *Layers* (Lupton/Phillips, 126–145)

Create a third sequence using a collage strategy: Collect physical objects/clippings/textures, scan at high res on the flatbed scanner in Avery 101, and save in Photoshop. Combine multiple parts of different scans to create a collage for each frame of your sequence, expanding on the definitions you developed using photography and vector graphics. How can collaged imagery help a beginning graphic design student further understand all the ways in which something might be described as *point, line, plane, volume/space,* and *texture*? What new possibilities does working in this media offer? Print with other sequences and bring to next class. Continue refining until final visualization is due.

4. Typography & Grid Evaluation

READ ON RESERVE: Edward Tufte, <u>Envisioning Information</u>, *Small Multiples*, pgs. 63–4, 66–79
(Holland-Terrell Reserve: P93.5 .T84 1990).
Edward Tufte, <u>Beautiful Evidence</u>, *Words, Numbers, Images—Together*, pgs. 82–103 (Holland-Terrell Reserve: P93.5 .T837 2006).

Based on your understanding of these readings (and your first entry for the Design Blog), you will consider how *typography* and overall arrangement of your sequences (your *Small Multiples*) can create a stronger overall visualization to illustrate the concepts of *point, line, plane, volume/space*, and *texture*:

Typography. How can you use typography in a visual way to create another sequence for your five design elements, and to label the columns/rows of your grid? Remember, letters and words can be regarded as abstract shapes—point, line, plane—as well as verbal explanations.

Small Multiples. Is there a better way to arrange your sequences in an overall grid so your comparisons of *point, line, plane, volume/space*, and *texture* are clear? You want to highlight meaningful *continuities* as well as *contrasts* among the concepts and the various media you use for illustration. Also, be careful to consider the *space between* each frame. What does Tufte say

about *disruptive divisions* versus *silent methods*? To borrow an expression from Tufte (and Galileo), create *visual certainty* for your visualization.

Learning Objectives

• Review of and improved ability with Illustrator and Photoshop (when to use which program and how to move among them): Raster images, masks, selections, saving (Photoshop); Vector graphics, acquiring images, clipping masks (Illustrator); flatbed scanning, saving, printing, layer organization within files, and file organization overall.
• Ability to manipulate elements and principles of design for 2D surface: point, line, plane, volume/space, texture, balance, a/symmetry, framing, figure/ground (positive/negative), layers
• Skill in using variety of media for communication
• Use of typography as both verbal and visual components
• Challenge of information visualization in small multiples: Grid, divisions, sequence, labeling

Evaluations / Grades

You will receive separate points for
    • Draft of Photo Sequence
    • Draft of Vector + Photo Sequence
    • Bringing scanned materials to class
    • Draft of Collage + Vector + Photo Sequence
    • Design Blog #1
    • Draft of Typography + Grid (Re)evaluation
    • Final *Small Multiples / Multiple Media* visualization and Project 1 portfolio with exploratory work and final digital file on thumb drive

Recommended Resource

Teaching to See, http://vimeo.com/45232468 (documentary on celebrated teacher and designer Inge Druckery, value of learning to see abstractly)