

Course Description

The goal of this course is to discover the expressive qualities of information. A powerful communication tool, information visualization is essentially a rhetorical device. Increasingly, we rely on interpretation to process the growing amount of information available to us, and by visualizing information, we are interpreting it. The Internet is becoming a rich source of information with the potential to impact our lives, on topics such as global and domestic politics, health, the economy, and the environment. This workshop explores the interpretive use of information visualization to create engagement and inspire action, by bringing these information sources to a mainstream audience.

Students will work on two information visualization projects, including a project using the collection database of the Museum of Arts and Design, and a project based an information source of their choice. Basic programming or action-script skills are required.

The class will be conducted as a design studio with bi-monthly critiques. It will include some seminar discussions and guest visits by experts in the design profession.

All aspects of visual communication will be addressed, with an emphasis on typography, layout, color, and motion. Students need not have any formal design training, but should come with a particular interest in and commitment to honing their design skills.

Collection Project

The Museum of Arts and Design has a unique and diverse collection of objects in ceramic, glass, fiber, metal and wood. The goal of this four-week workshop will be to create an interpretation from a cross-section of the collection by expressing it in such a way that the result remains integral to the collection itself, yet is also reflective of a distinctly personal point of view.

Independent Project

Increased information accessibility online has helped popularize information visualization, which recently has generated a wealth of examples. Often, their appeal lies in their claim to offer an objective, even scientific viewpoint. Yet, as Denis Wood has said, by appearing to be objective, maps conceal what Roland Barthes has called myth. Data visualization is no different—every decision made in the process of converting data into image is a choice, reflecting a unique perspective or interpretation. The claim of objectivity disregards the impact of the image on the interpretation of an information source.

In this workshop, students will explore the role of identity in information visualization. The best visual identities work at multiple levels: They are recognizable, and iconic; they

convey the essence of the subject they represent; and they are adaptive, meaning they can exist in a variety of contexts. Visual identities are graphic systems, which are created through the controlled use of typography, imagery, color, behavior, and motion.

Representing data in terms of conveying its identity means creating an interpretive response highly 'tailored' to the data source itself. A successful visualization as an outcome of this project should not be replicable for any other source than the one it originated from.

Ultimately, identity is a form of interpretation. Visualization is about connecting ideas—it is the quality of the connections and their implications that matter most. Any visualization's primary purpose should be to engage and inspire action—as George Siemens states, visualization is an introduction to information; it is the beginning of further research, not the end. It should encourage learning and offer entry points into further exploration of the subject matter.

Each student will develop an interpretive approach in regard to the identity and visualization of a chosen information source. Whether the visualization contradicts, supports or supplements the data it is based on, the goal will be to clearly articulate the interpretive message, allowing the recipient to understand how the information impacts their lives.

This semester, each student will select a source of information to work with that he or she cares about. Students will develop a dynamic representation of their information source that focuses on engaging the audience. Special consideration will be given to the form and siting (or location) of this representation. Possibilities for form are open. It can be anything from an interactive screen-based application to a haptic device or lighting installation.

Assignments

Assignment 1 – Due by Week 2

Precedents

The class will collect examples of information visualizations that inspire and enlighten, both in what they accomplish and lack. An online resource will be created from contributions from each student. The group will critique the work during class.

Assignment 2 – Due by Week 3

Collection Project: Research & Data Gathering

Working with the collection of the Museum of Arts and Design, you will select a group of objects to focus on, establish interpretive categories for these objects, research supplementary information sources that contextualize your selection, and design a framework for displaying this information.

Assignment 3 – Due by Week 4

Collection Project: Data Mapping & Expression

You will design a dynamic field on which to situate your collection. Think about the meaningful ways in which objects can be related to each-other, and the message that you are conveying to the viewer.

Assignment 4 – Due by Week 6

Collection Project: Project Presentation

In preparation for the final review, you will create a working prototype of the experience. Create a screen-based presentation of your project, and be prepared to demonstrate the prototype in front of the class and visiting critics from the museum.

Assignment 5 – Due by Week 8

Independent Project Proposal

Create an initial project proposal in form of a visual presentation to communicate your idea to the class in no more than 5 minutes. This should include a description of a desired direction for an information experience as well as some initial research about what sources exist online or elsewhere.

Class Schedule

Week 1 (Sept 4)

Introductions

Course overview

Presentation: Survey of Information Visualization

Week 2 (Sept 11)

Introduction to the Collection Project, with the Museum of Arts and Design curators

Group review of information visualization examples

Week 3 (Sept 18)

Class review of Week 2 assignment

Week 4 (Sept 25)

Class review of Week 3 assignment

Week 5 (Oct 2)

Individual meetings

Week 6 (Oct 9)

Collection Project project presentations and final review, with visiting critics from the Museum of Arts and Design

Week 7 (Oct 16)

Design workshop with Takaaki Okada

Class 8 (Oct 23)

Class review of Independent Project proposals

Week 9 (Oct 30)

Individual meetings

Week 10 (Nov 6)

Class review

Expressing Information
Interactive Telecommunications Program
NYU Tisch School of the Arts, Fall 2007
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www.christianmarcschmidt.com/NYU07

Course Syllabus
September 4, 2007

Class 11 (Nov 13)
Individual meetings

Class 12 (Nov 20)
Class review

Class 13 (Nov 27)
Class review

Class 14 (Dec 4)
Final Review with guest critics

Recommended Reading

George Lakoff and Mark Johnson
Metaphors We Live By

Denis Wood
The Power of Maps

Roland Barthes
Mythologies

Janet Abrams & Peter Hall
Else/Where: Mapping — New Cartographies of Networks and Territories

Colin Ware
Information Visualization

Edward R. Tufte
Visual Explanations
Envisioning Information
The Visual Display of Quantitative Information
Beautiful Evidence

Robert Harris
Information Graphics: A Comprehensive Illustrated Reference Illustrated Reference

(for additional texts refer to the course website:
<http://www.christianmarcschmidt.com/NYU07>)