Information Design and Visualization: Connecting Data and Aesthetics

Mass Observation was a project by volunteer writers in Britain in the 1930s to study the everyday lives of ordinary people. For more than twenty years hundreds of observers compiled hand-written notes on the shouts and gestures of motorists, bathroom behavior, and endless other aspects of daily life with the intent of creating 'weather-maps of public feeling' with the collected data.

At the time this was an extraordinary and ambitious project, but today we take it for granted that our every action is being measured, counted, and analyzed. From the gathering of personal health and medical data, shopping habits, security data to the sequencing of the human genome we live in a culture of massive data collection and analysis. The difference today, however, is in the sophisticated digital means by which raw data is collected, interpreted, and transformed into useful information.

Information Design and Visualization (FNAR337) is a collaboration of the Digital Media Design and Fine Arts programs. The course explores the symbiotic relationship between visual design and the field of information visualization and connects graphic design with statistics and technology. Students from engineering and science rub shoulders with others from the arts and humanities to make a fertile mix of programmers and artists. Projects range from simple info-biographies and how-to diagrams to more complex designs for spatial mapping and interactive and animated narratives The focus of the projects is on developing an analytic and critical design process, demonstrating how design can affect and improve the understanding of information. Work must achieve a high degree of visual excellence while enabling patterns and trends in the data to be revealed through the design.

Projects in the course have included a visualization of one student's complete academic transcript, an interactive visualization of a student's top 100 mutual friends on Facebook, a diagram of the ingredients of an oatmeal cookie, a map of Kobe Bryant's 81-point basketball game, a graphical display of a student's iTunes playlist, a complete chart of French cheeses, a visualization of Hogwarts, and a flow diagram showing alternatives to corn derived ethanol.

Information visualization has traditionally been seen as a tool to explore and develop theories – an analytical tool to make sense of raw data. Although function and usefulness are still at the core of information design, a new more artistic activity is emerging. Today, with more and more data available and with sophisticated visualization tools, artists and designers are broadening this once narrow field. In collaborations with programmers they are developing a new field where data is the fuel for artistic creation.

Like the leaders of Mass Observation, students today are creating their own 'weather-maps' with the data they find and collect. These new creations, however, are more than simple reflections of culture. They are original aesthetic constructions and an index of this growing and dynamic field of scientific and artistic collaboration.

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