This panel presents the project ‘Historical Resource for Information Design’ conceived and developed in 2004 – 2005 with the Instructional Development Fund, Provost Grant Program, Northeastern University. The result is a prototype of a learning tool for the discipline of Information Design targeted at undergraduate students from different disciplines who are involved in the visualization of information. The project’s educational objectives are both to serve as a repository of exemplary historical visualizations and to encourage creative and critical thinking.

Visualization of information has a long history. It has been extensively used for solving problems and for communicating solutions by a large number of disciplines: from the sciences to engineering, from music to design. In most cases, the visualization of information is domain specific with specific methods and conventions for data encoding. Visual representations could roughly be organized by data type (e.g. physical data, abstract data, statistical data); medium (e.g., dynamic information visualizations, information design, data exploratory devices); and function (e.g., communication, reasoning). Independent of data type, medium and function, all visualizations involve the translation of a system into a spatial representation. The graphic elements (and properties) and the graphic structure in a representation stand for elements and relations in another domain.

Information Design depends upon cognitive processes and visual perception for both its creation (encoding) and its use (decoding). Understanding the constraints and capabilities of cognition and visual perception can enhance the way we organize and encode information.