

SIMPLEXITY

DATA VISUALIZATION IN THE AGE OF INFORMATION

THROUGHOUT HISTORY, HUMAN THINKING HAS ALWAYS BEEN AIDED BY VISUAL METAPHORS, FROM HIEROGLYPHICS TO THE MODERN ALPHABET. OBJECTS AND ILLUSTRATIONS HAVE BEEN USED TO SHARE MEANING BETWEEN PEOPLE, ALLOWING US TO THINK AND WORK COLLABORATIVELY AND COLLECTIVELY. Data visualization, also known as infographics, is not new; it can be argued that many cave paintings are forms of information graphics. Although another form of data visualization, maps, have a long history across time and cultures, it was not until 1644 that a Flemish astronomer, Michael Florent Van Langren, created what is considered to be the first modern visual representation of statistical data.

As our interactions with the world have become more subtle and complicated, the demands on our aids for understanding that experience have increased proportionally. Our daily exposure to a deluge of data creates one of the greatest challenges of the information age — finding patterns and making meaningful connections. Data visualization is a powerful means of achieving this end. It allows the viewer to access and understand intricate information in the form of clear and concise visual representation. Data visualization such as diagrams and charts have become the visual language used to help understand, create, and completely experience reality in this complex and abstract world.

Design is not just about making things simple though; the designer must strike a balance between the opposing concepts of simplicity and complexity [simplicity] in order to achieve the right amount of definition and focus for the information being presented. In 2003, Philippe Compain defined simplicity as "...the combination of simplicity and complexity within the context of a dynamic relationship between means and ends." The information designer makes decisions that therefore shape a view or experience of data with a specific goal in mind: clarification, obfuscation, connection, and inspiration are all legitimate aims.

Well-designed, relevant data visualization allows the viewer to achieve dataflow— defined in the foreword to the book *DataFlow* as "...the ability to transcend narrow and individual experience and elicit meaning beyond ourselves." One of the goals of this

exhibition is to instill the viewer with an appreciation of the depth and breadth of contemporary information graphics and the realization of how ubiquitous they are in our daily lives. Another goal is the realization that design and science are not mutually exclusive arenas of endeavor. In addition to graphic design, data visualization encompasses a wide variety of disciplines: analytics, statistics, visual perception, information architecture, gestalt theory, and many others. It is both intellectually and aesthetically challenging for the designer to create something that translates complex data and concepts into a readily understood form. From the mundane to the sublime, a successful information graphic makes it easier for people to understand the data presented. In addition, it may also reveal and create new insight and understanding of the topic presented. Architect and designer Richard Saul Wurman's dictum "Understanding is Power" sums up the information pyramid made up of *data*, *information*, *knowledge*, and *wisdom*. Derived from information science, it describes the hierarchical relationships between *data* (unprocessed symbols), *information* (processed data), *knowledge* (produced by information) and *wisdom* (deeper understanding produced by knowledge). Hopefully that wisdom would also produce the possibility of *acting* as a result of this understanding. This model, which serves as a point of reference for data visualization as a whole, brings to light the dynamic idea that information can motivate action. The contents of this exhibition covers a wide range of topics, from death and war to popular culture. Some pieces were chosen to stimulate serious self-reflection, others merely to amuse, but they were all chosen to inform.

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