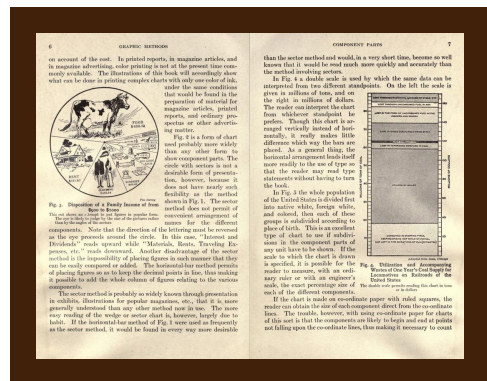


# A Brief History of Data Visualization

(and the role of libraries and librarians)

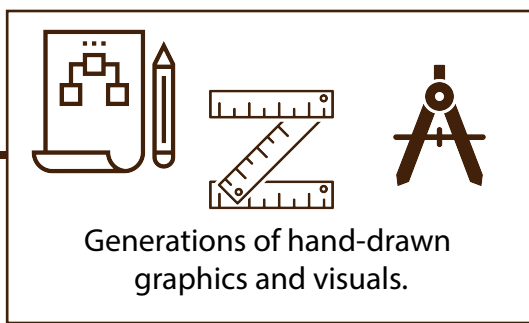


**1914**

Graphic Methods for Presenting Facts  
by Willard C. Brinton

The principles for a grammar of graphic presentation are so simple that a remarkably small number of rules would be sufficient to give a universal language.

Willard C. Brinton

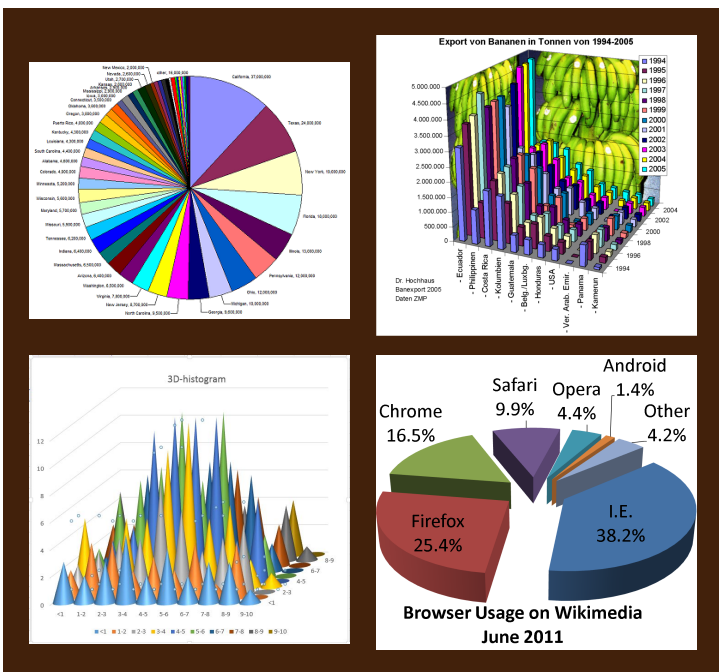


**1977**



The personal computer arrives.

**1990 and beyond**

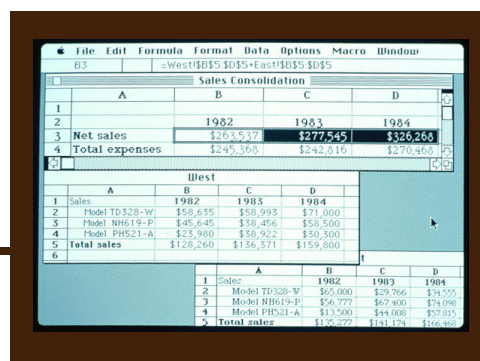


The explosion of "CHARTJUNK."

Having the means to create graphs with a computer doesn't guarantee that we'll do it effectively any more than having word processing software makes us great writers.

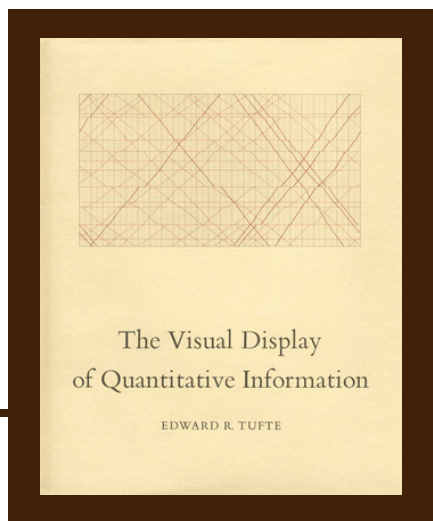
Stephen Few

**1987**



Microsoft Excel: Spreadsheet software for everyone.

**1983, 1990, 1997...**



The Visual Display of Quantitative Information

EDWARD R. TUFT

It is not how much empty space there is, but rather how it is used. It is not how much information there is, but rather how effectively it is arranged.

Edward Tufte

**2017**

A special issue of the **Journal of eScience Librarianship** is published, highlighting the future of librarians, librarianship, and data visualization.

**Visualizing the (Data) Future**  
2017 Special Issue on Data Visualization from Journal of eScience Librarianship  
Guest Editor: Jian Qin (Syracuse University) Expert Commentary: Sally Core (University of Massachusetts Lowell)

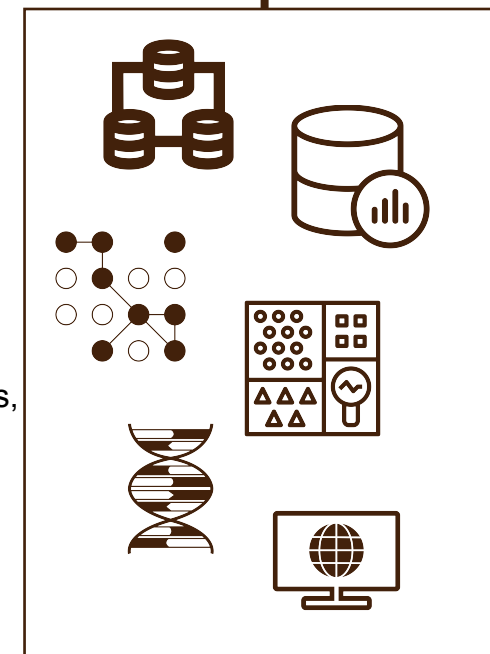
**is for Visualization**  
Case Studies: emphasizing the use of data visualization  
Evaluation: evaluation methods for assessment  
Reviews: knowledge, tools, or other resources  
Data: data visualization and research impact  
Institutional: institutional collaborations in data visualization  
Lifecycle: how data visualization fits into the research lifecycle

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open access, peer-reviewed journal advancing the theory and practice of librarianship focusing on services related to data-driven research

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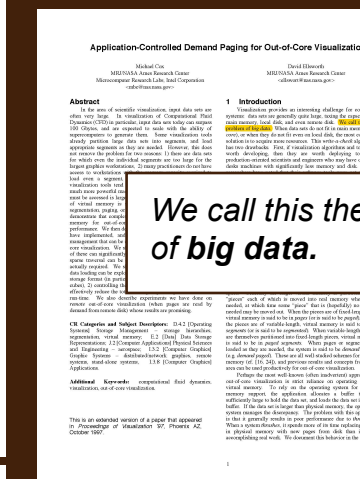
**2000 'til today**

Rapid expansion of data generating, data analysis, data sequencing, and data visualizing tools. Access, management, and preservation of data becomes a key concern and disciplines emerge to address these different aspects related to data including **libraries and librarians.**



**1997**

Application-Controlled Demand Paging for Out-of-Core Visualization  
by Michael Cox & David Ellsworth



We call this the problem of big data.