

Paradigm	Timeframe	Key problem/tasks	Person
Early maps and diagrams	- 1600	Organizing information in space	Ptolemy, Oresme, Nicolas of Cusa
Measurement and theory	1600 - 1699	Measuring new ideas if	Descartes, Brahe, Graunt, Petty , Florent, Huygens,
New graphical form	1700 - 1799	Drawing new ideas	Halley, Buache, Priestley, Playfair
Beginning of modern graphics	1800 - 1850	“moral” statistics, economics, state planning, health	Playfair ,Smith, Minard, Snow, Guerry, Dupin, Quetelet
Golden age	1850 - 1900	Displaying multidimensionality in social sciences	Perozzo, Minard, Nightingale, Vautheir, Galton, d’Ocagne, Lallemant, Cheysson, Walker
Modern dark ages	1900 - 1950	Application and popularization of graphics	Bowley, Haskell, Costelloe, Maunder
Rebirth	1950 - 1975	autonomy from mathematical statistics	Tukey, Bertin, Benzecri, Andrews, Chernoff, Gabriel
Hi-D Vis	1975 –	Interacting with high dimensional big data	Cleveland, Young, Tukey

Table 2.1 Friendly’s milestones (2006)

Paradigm	Timeframe	Key problem	Person
Least-squares	1750-1810	Fitting model to data	Laplace, Legendre, Gauss
Normality	Early 1800s	Geometry and algebra of distributions	Gauss
Regression & Correlation	1850-1900	Measure relationship b/w variables	Mill, Galton, Pearson
Hypothesis Testing	1910-1950	Test statistics under normality	Fisher, Snedecor, Sheffe
Data analysis	1900-	Show data structures	Spearman, Thurstone, Kruskal
EDA	1950 -	fit models, examine structure and residual	Tukey, Mosteller, Hoaglin

Table 2.2 Rodgers’ paradigms in statistics (unpublished)

Timeframe	Key problem	Person
1600s and 1700s	spatial organization for data analysis	Descartes, Halley, Wren, Buxton
Late 1700s – early 1800s	discrete quantitative comparison	Priestley, Playfair
1800s	continuous distribution	Fourie, Guerry, Pearson, Quetelet, Walker
Late 1800s and early 1900s	multivariate distribution and correlation	Brache, Vauthier

Table 2.3 Beniger and Robyn (1978) periodization of statistical graphing

