How to choose

datascience@berkeley

Python tools span taxonomy from Jeffrey Heer (2017)

Chart Typologies

Excel, Many Eyes, Google Charts

Visual Analysis Grammars

VizQL, ggplot2

Visualization Grammars

Protovis, D3.js

Component Architectures

Prefuse, Flare, Improvise, VTK

Graphics APIs

Processing, OpenGL, Java2D

Expressiveness

Chart Typologies

Plotly, Seaborn, Bokeh, MPL PyPlot

Visual Analysis Grammars

MPL API, Ipython Vega

Visualization Grammars

D3+Jupyter

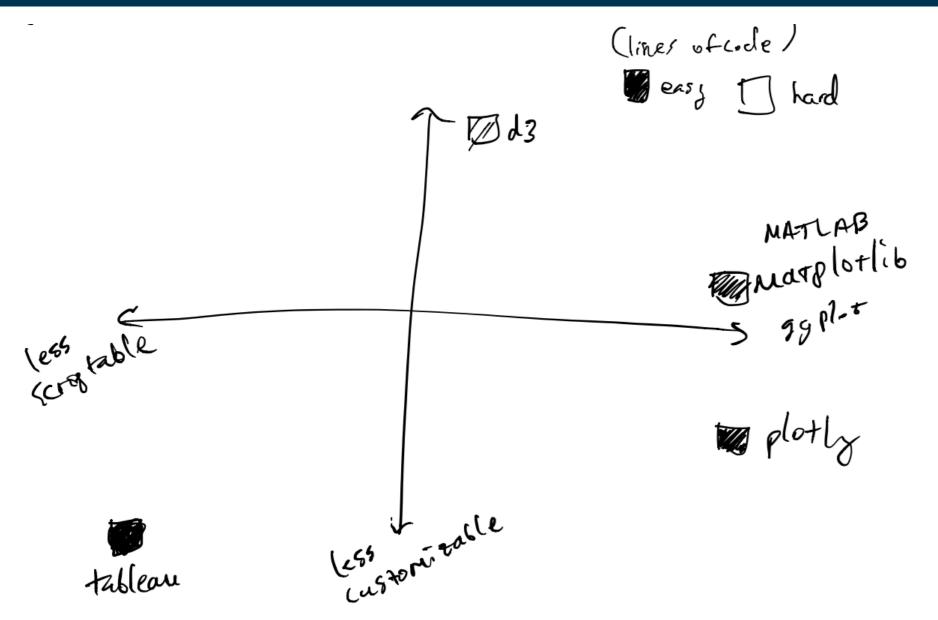
Component Architectures

MPL Artists

Graphics APIs

MPL Backend

Software	Language	Scriptable	GUI	Custom Interaction	Custom Graph Types	Dashboards	Export
Matplotlib (MPL)	Python (various backends)	Υ	Ν	Ν	М	Ν	Υ
Seaborn	Python/MPL	Υ	N	Υ	N	Υ	Υ
Bokeh	Python API	Υ	N	Υ	N	Υ	Υ
Plotly	Python API	Υ	Υ	Y	N	Υ	N
Vega-Lite	Python API	Υ	М	Υ	N	М	?



other Important dimensions!

- O lines of code
- D customizable
- D interactivity
- O scriptable
- D produce PDF/PN6/veb graphic

Berkeley school of information