EFFECTIVE PLOTTING

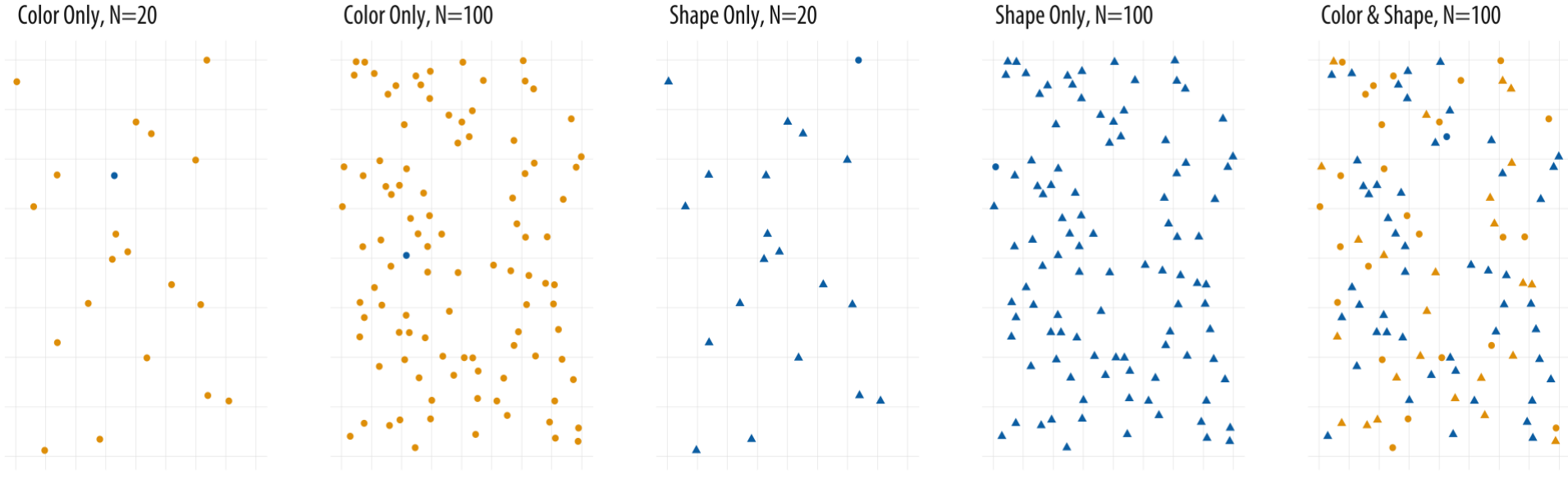
SCATTER AND LINE PLOTS

Brett Andrews

10.30.2018

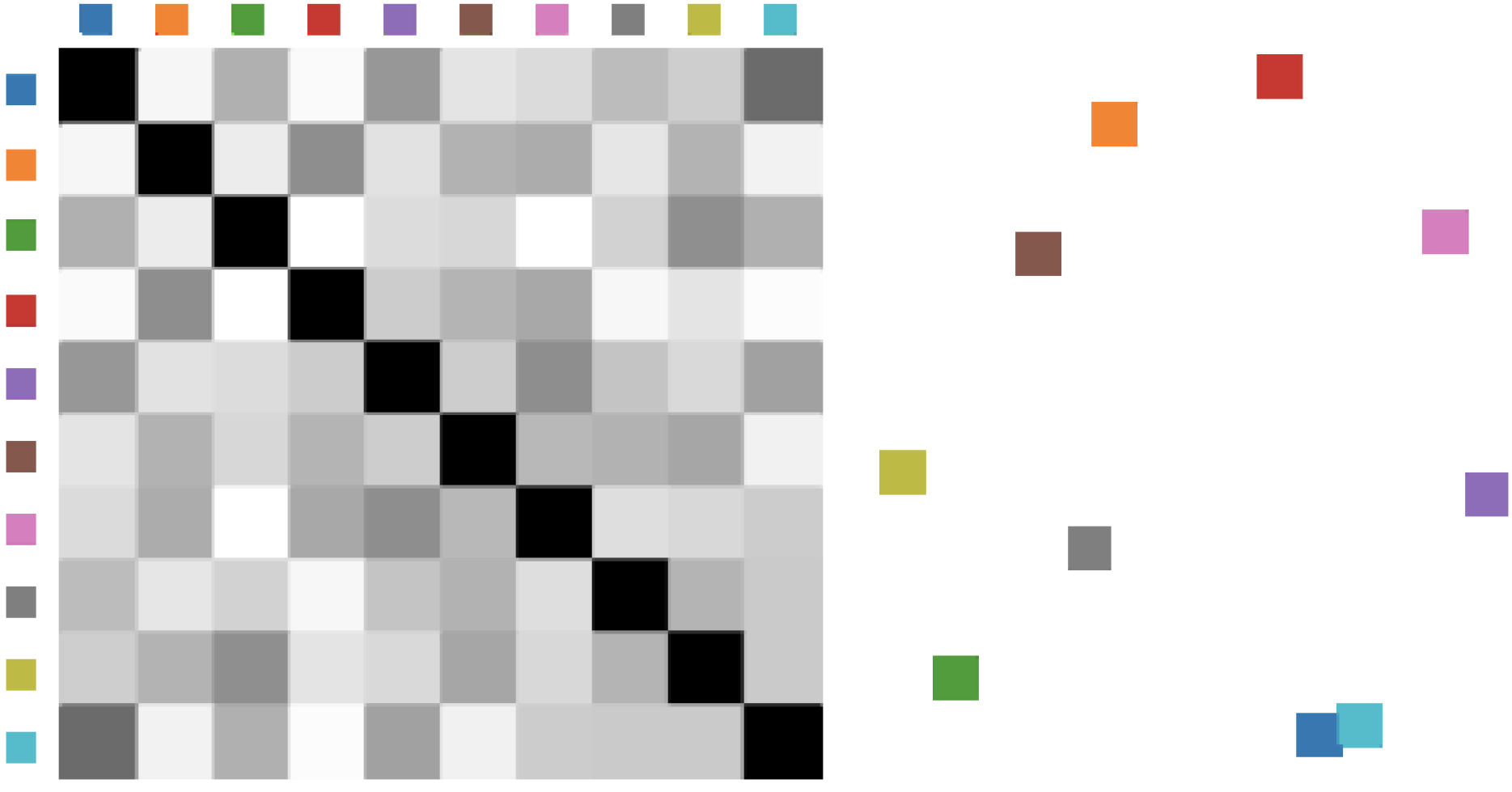
DON'T MAKE ME THINK!

Take advantage of human perception.



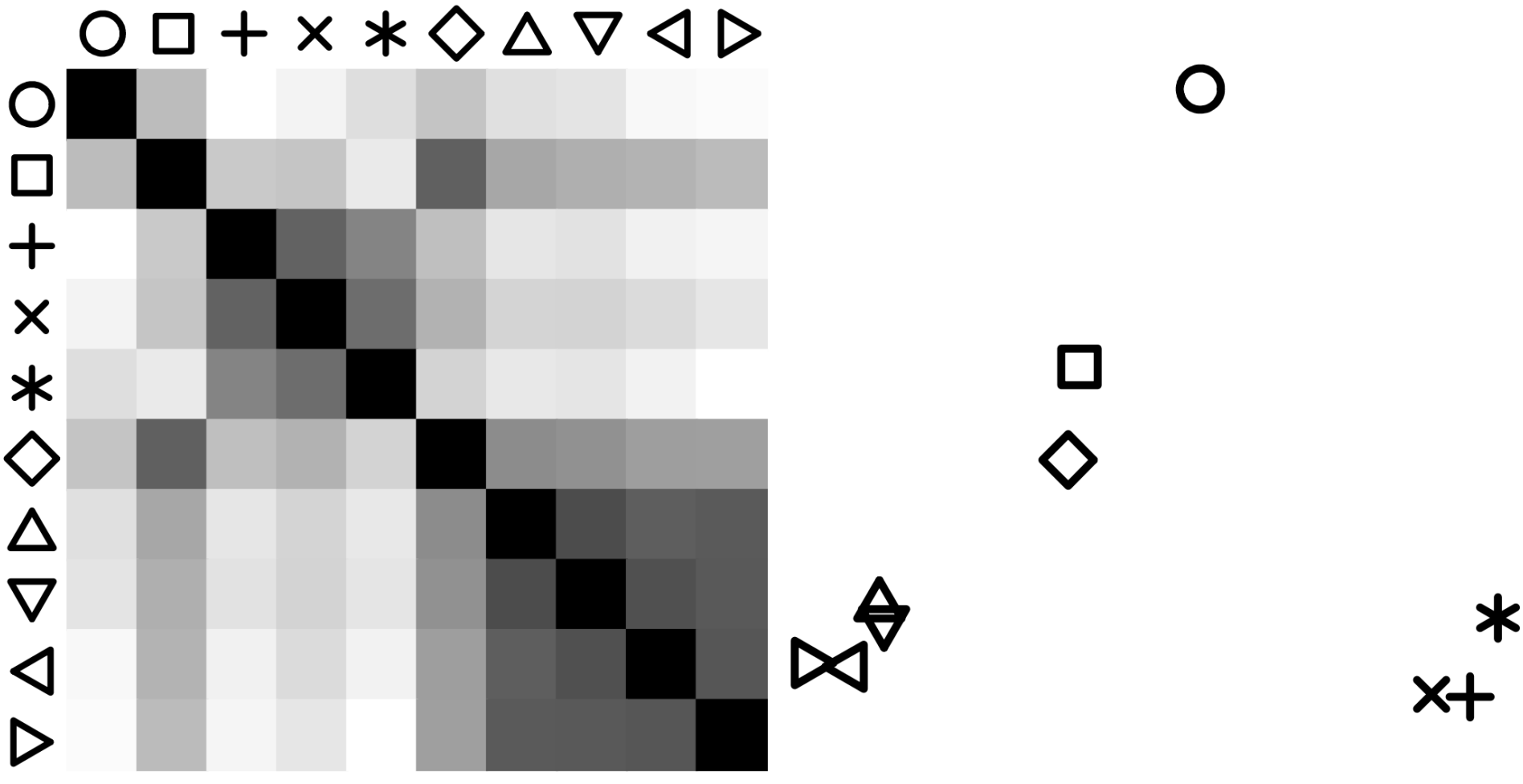
Color better than shape.

Kieran Healy, "Data Vizualization: a Practical Introduction."



Which colors play nicely together?

Demiralp et al. (2014), "Learning Perceptual Kernels for Vizualization Design."



Which shapes play nicely together?

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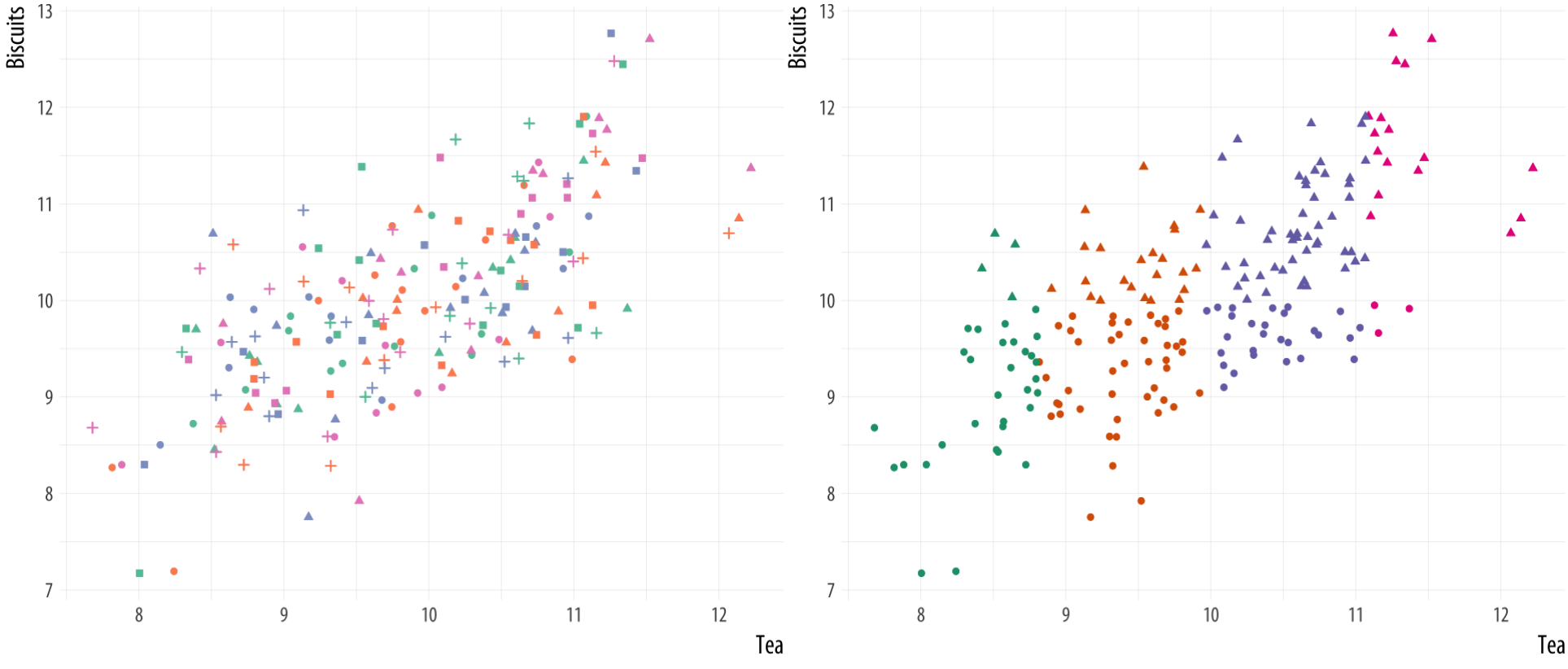
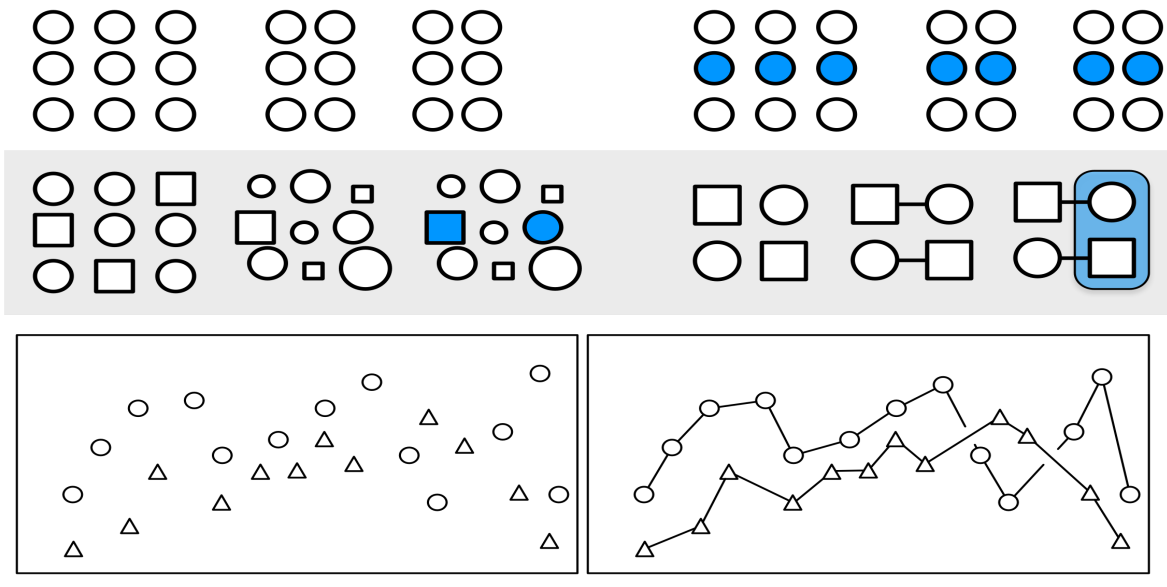


Distinguishability falls off a cliff unless data is highly structured.

Kieran Healy, "Data Vizualization: a Practical Introduction."



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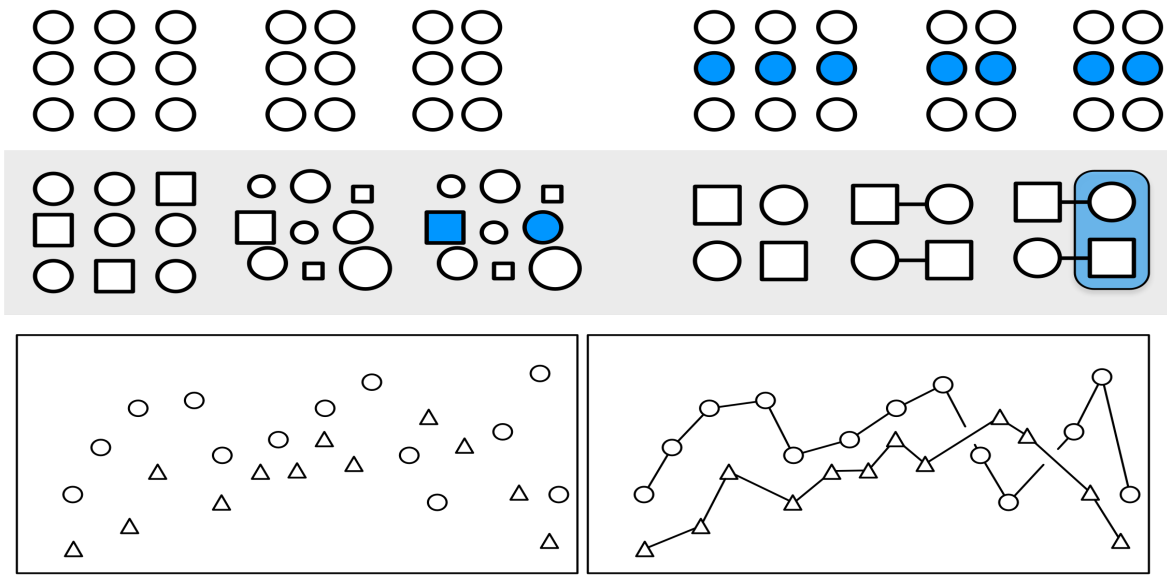

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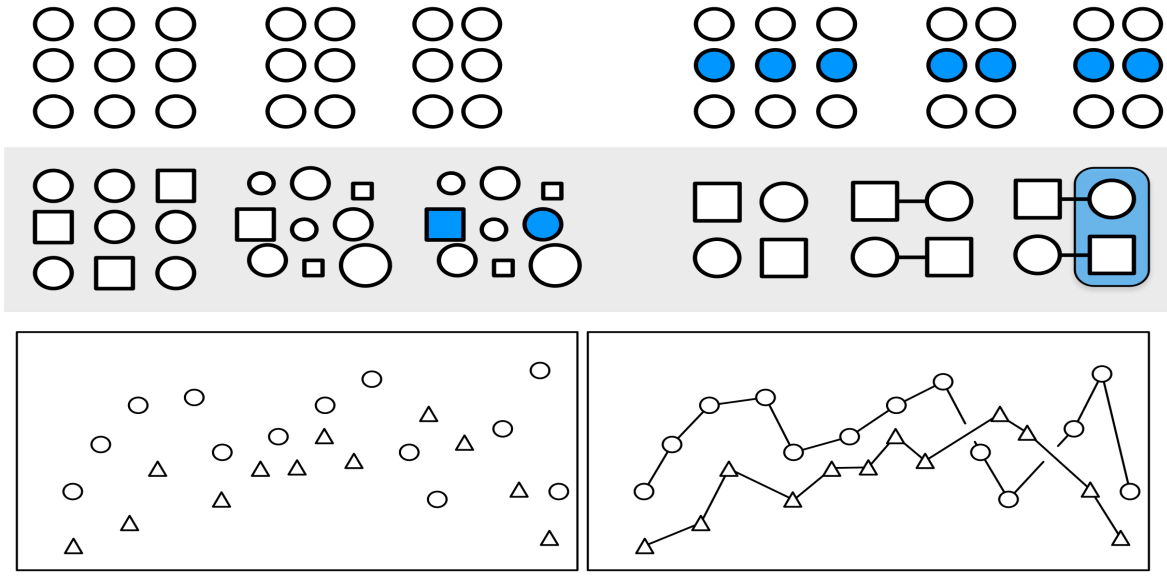
Kieran Healy, "Data Vizualization: a Practical Introduction."



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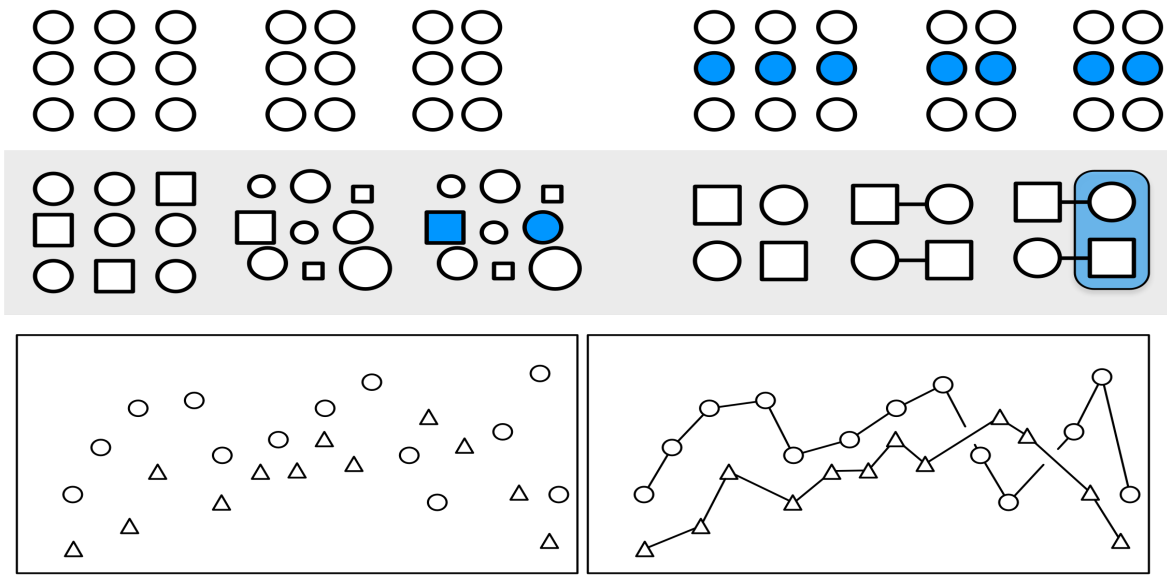

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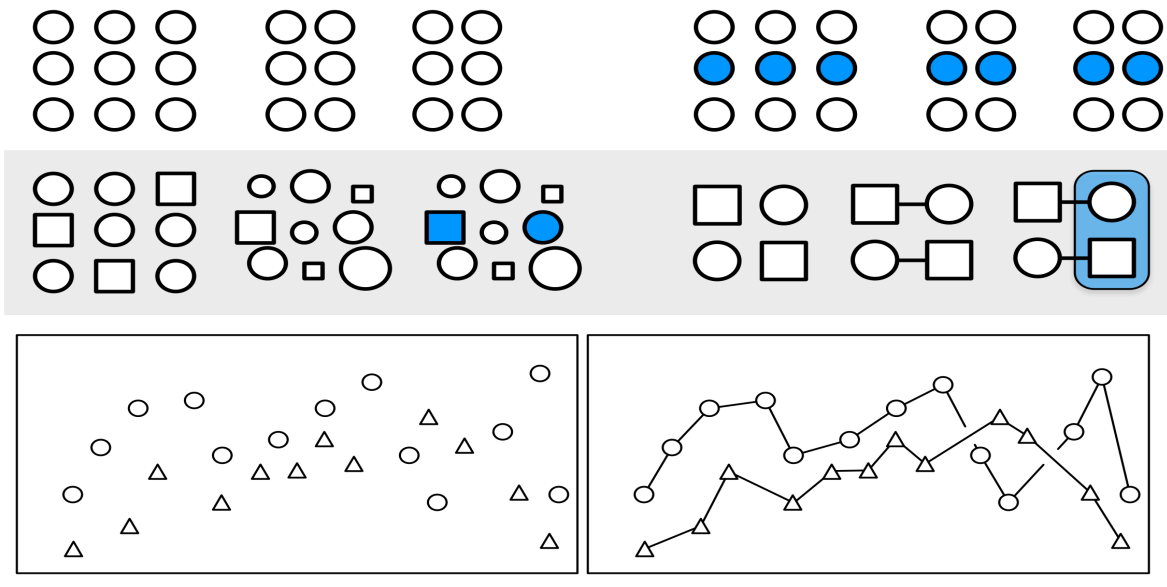

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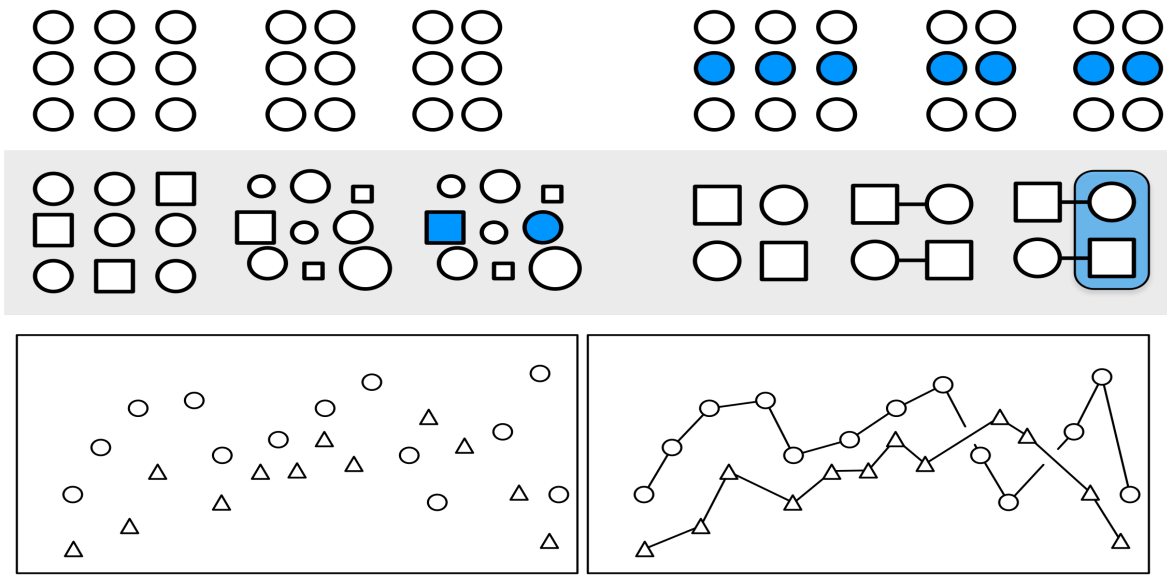

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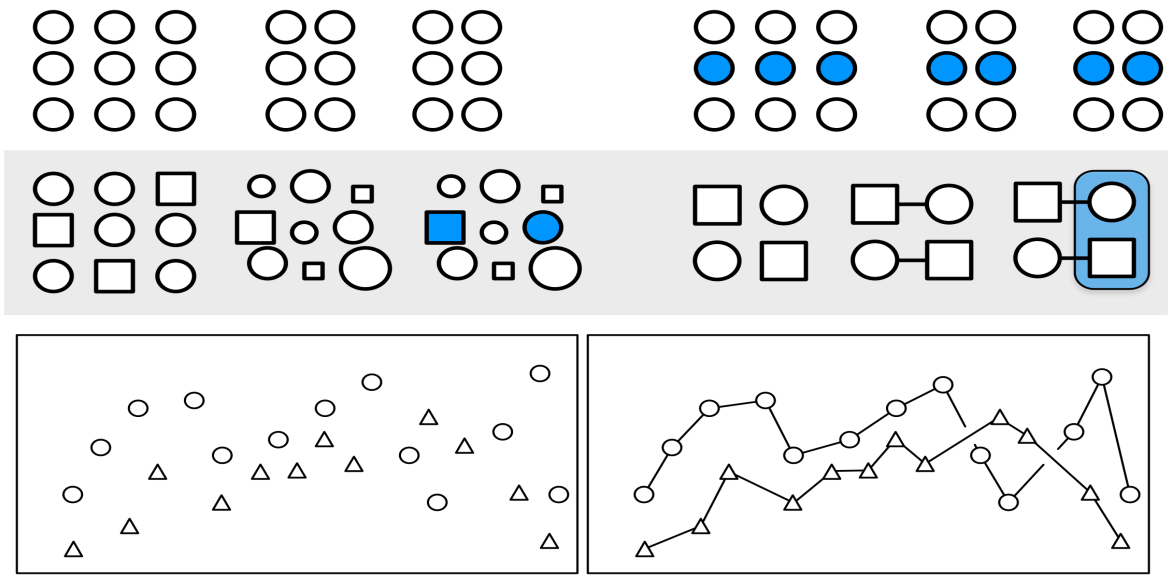

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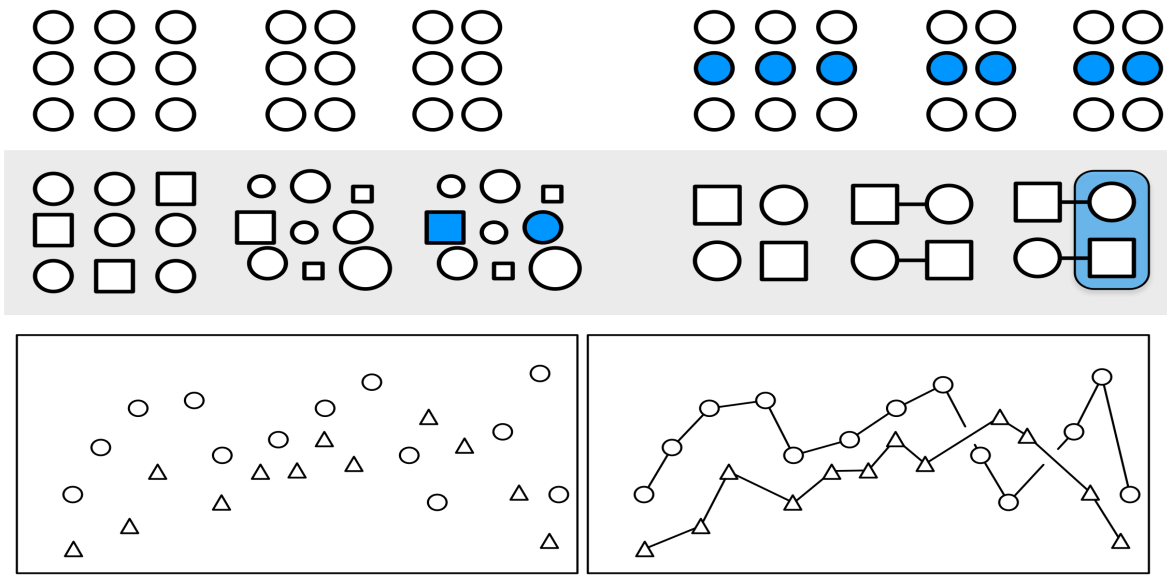

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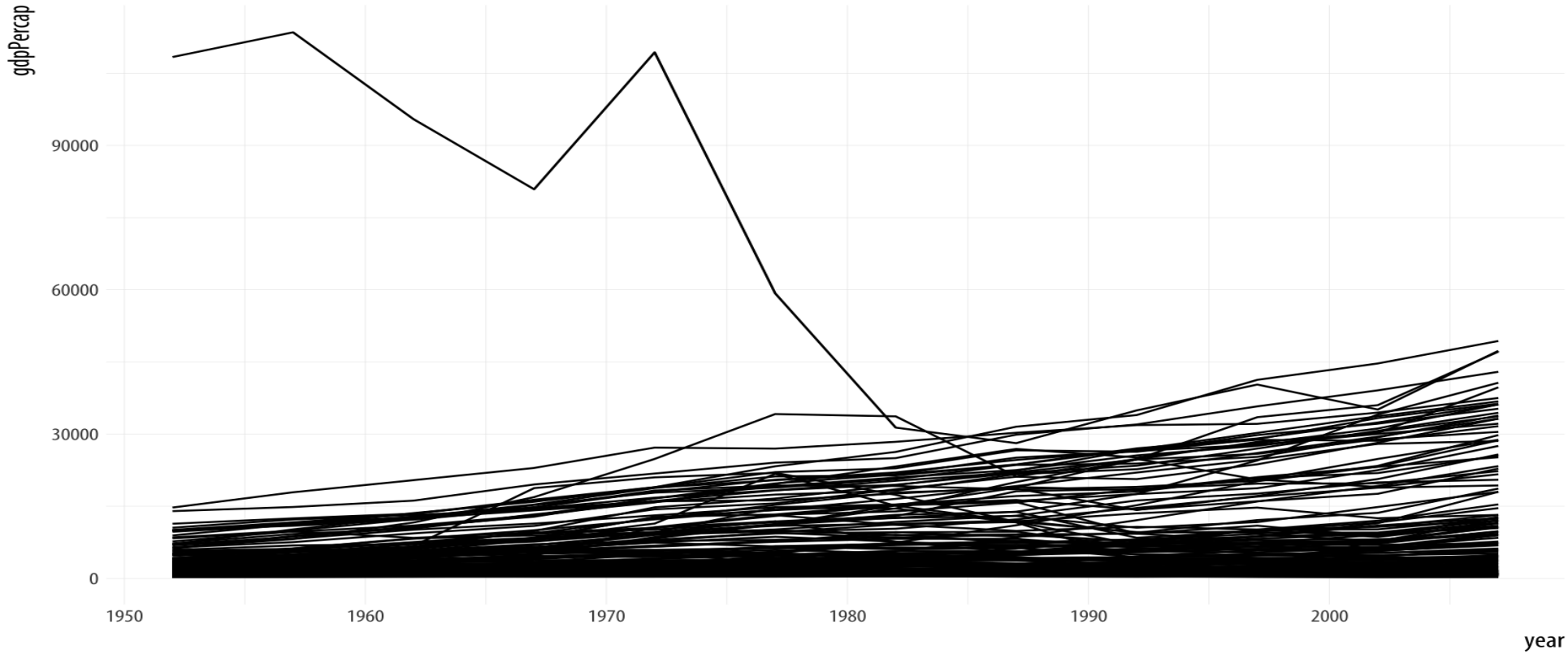
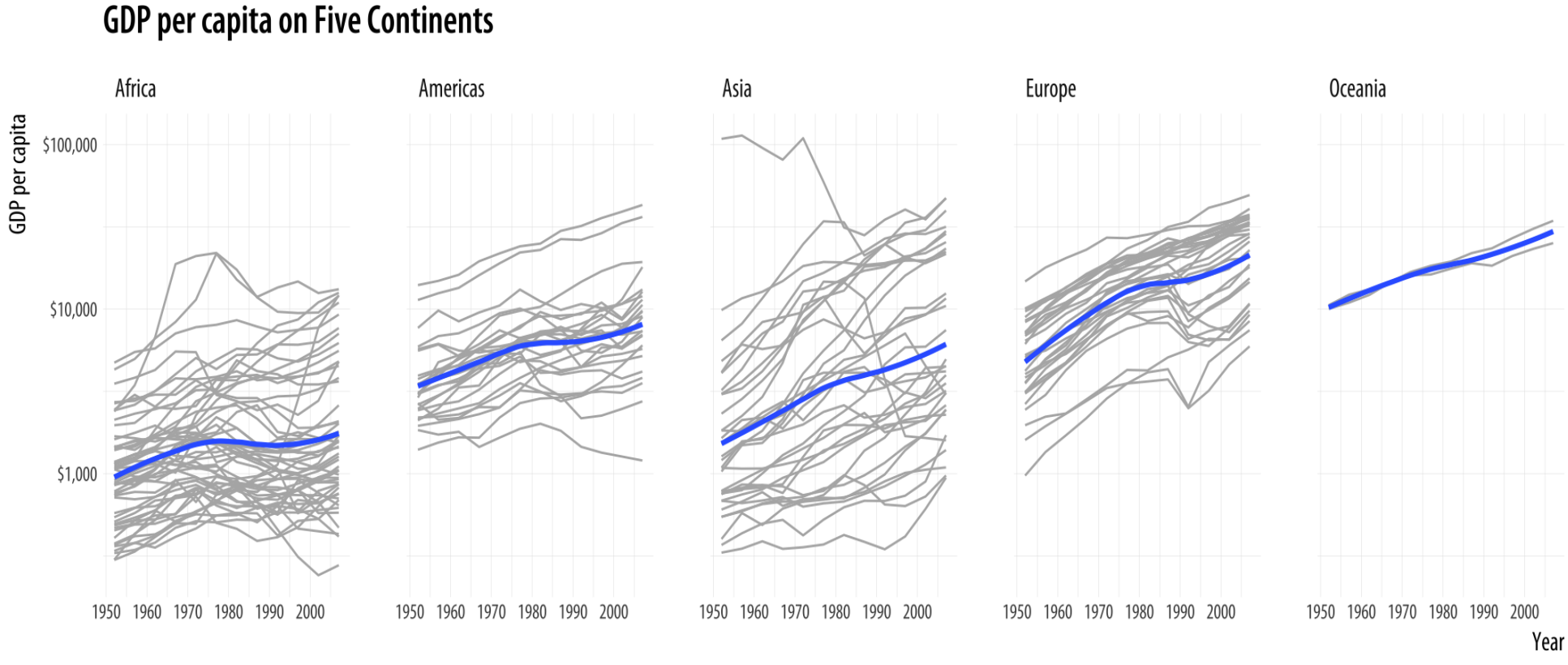
7. **Common Fate**: Elements sharing a direction of movement are perceived as a unit.

Kieran Healy, "Data Vizualization: a Practical Introduction."



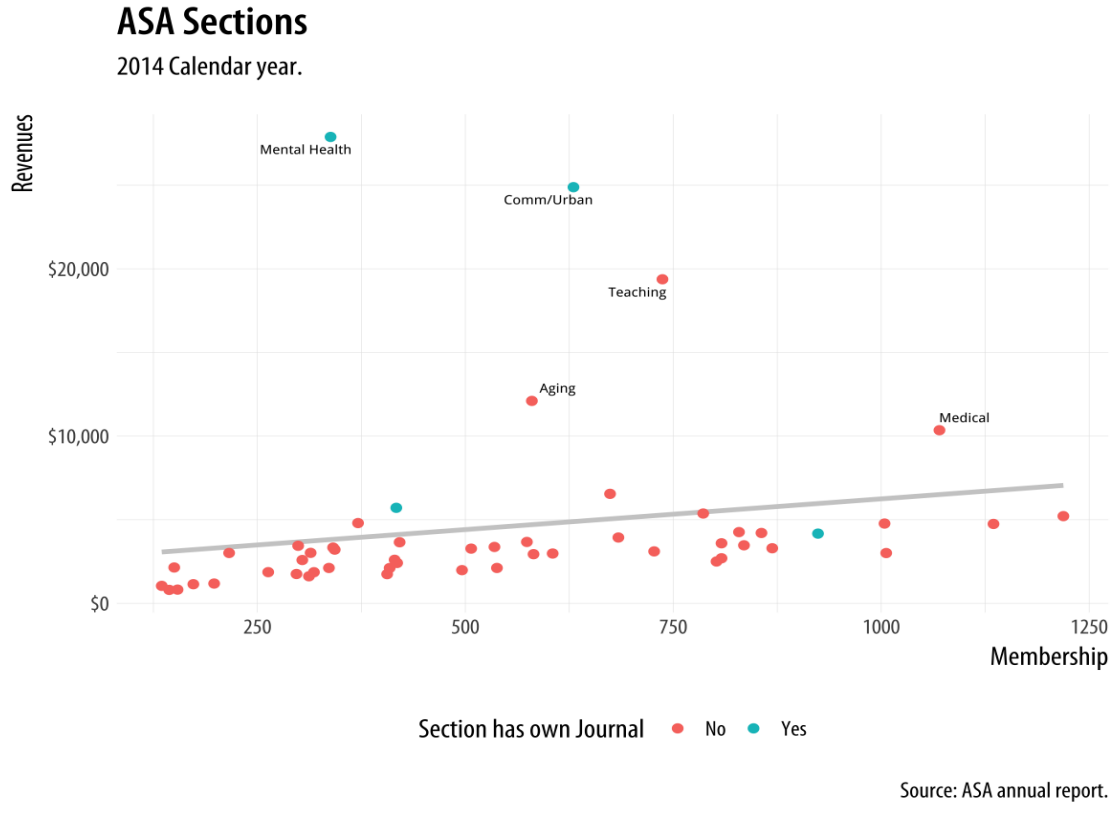
Don't need to show all data in one panel.

Kieran Healy, "Data Vizualization: a Practical Introduction."



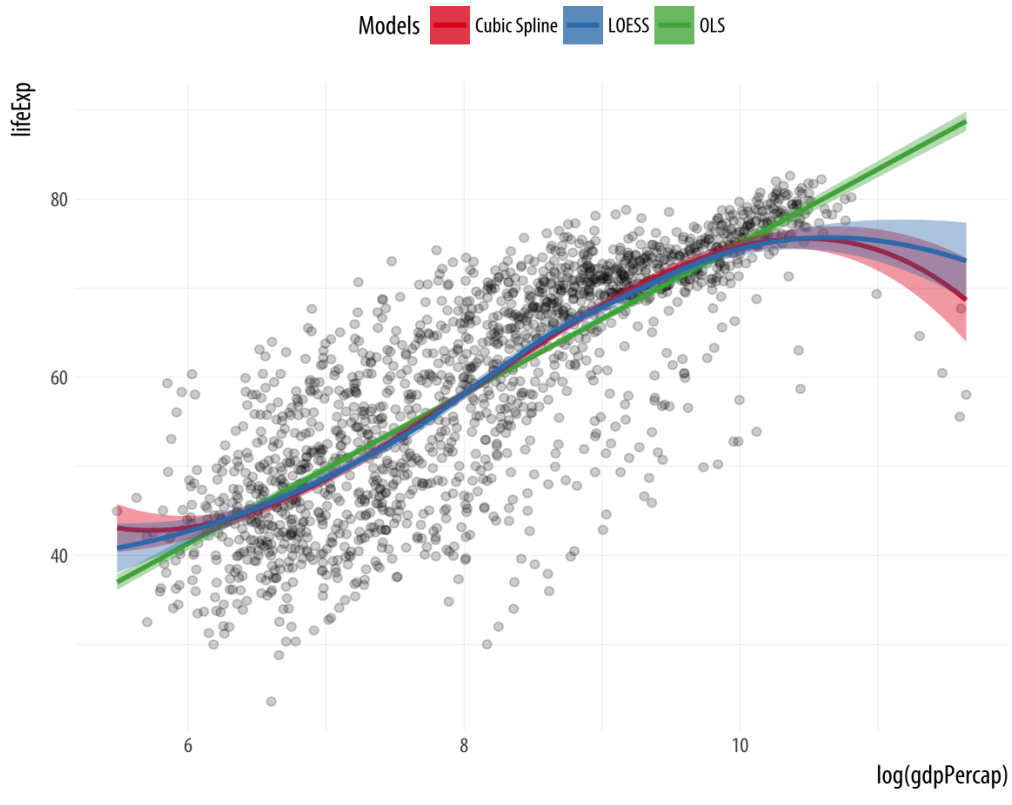
Multiple panels add structure.

Kieran Healy, "Data Vizualization: a Practical Introduction."



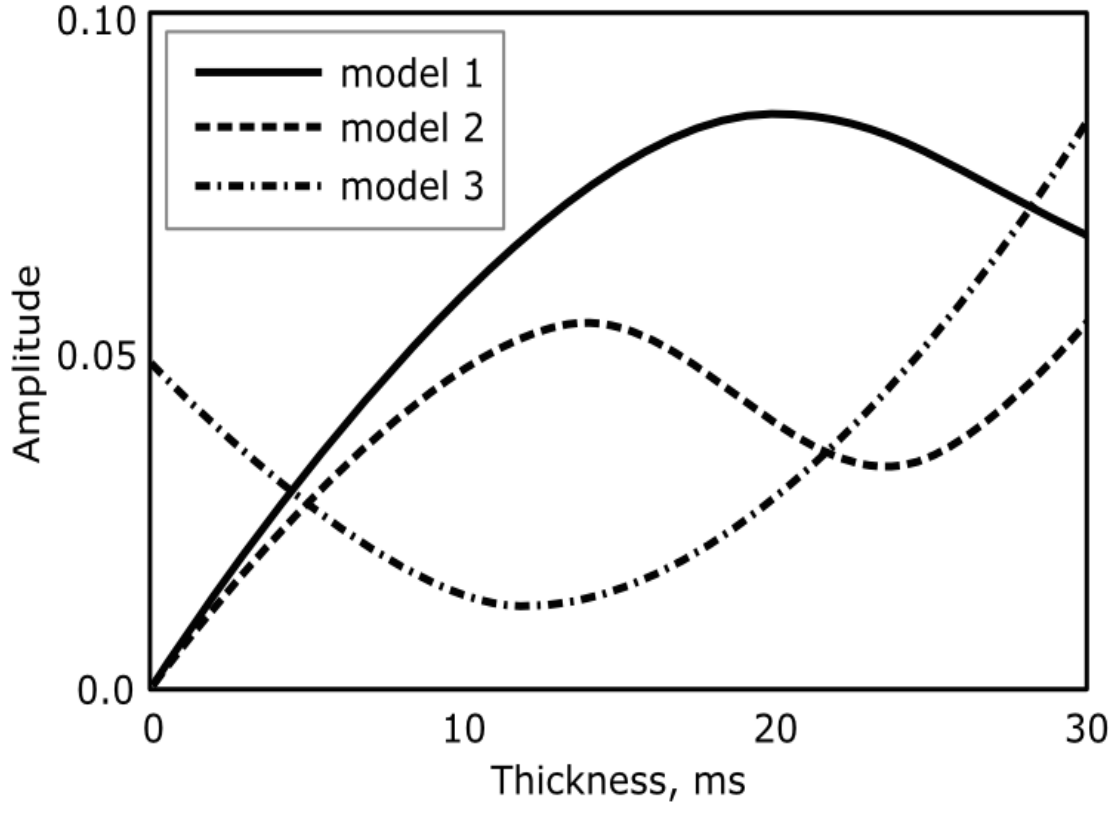
Annotate outliers.

Kieran Healy, "Data Vizualization: a Practical Introduction."



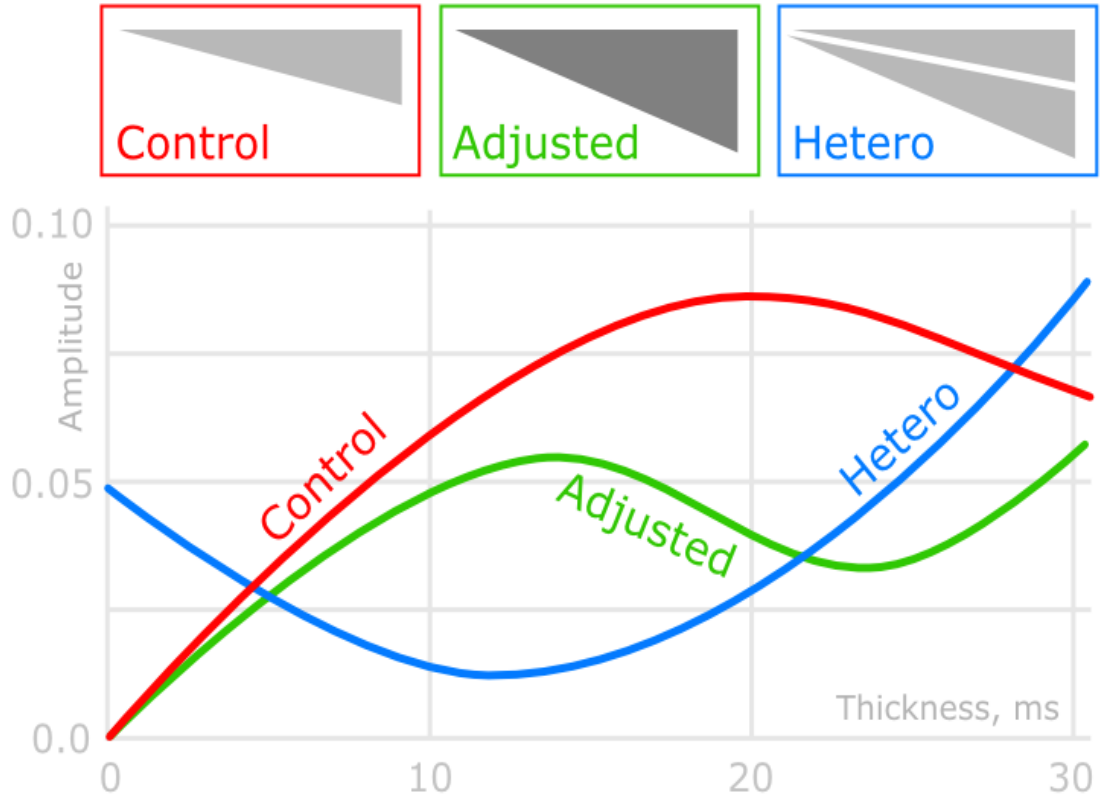
Alpha for overlapping points.

Kieran Healy, "Data Vizualization: a Practical Introduction."



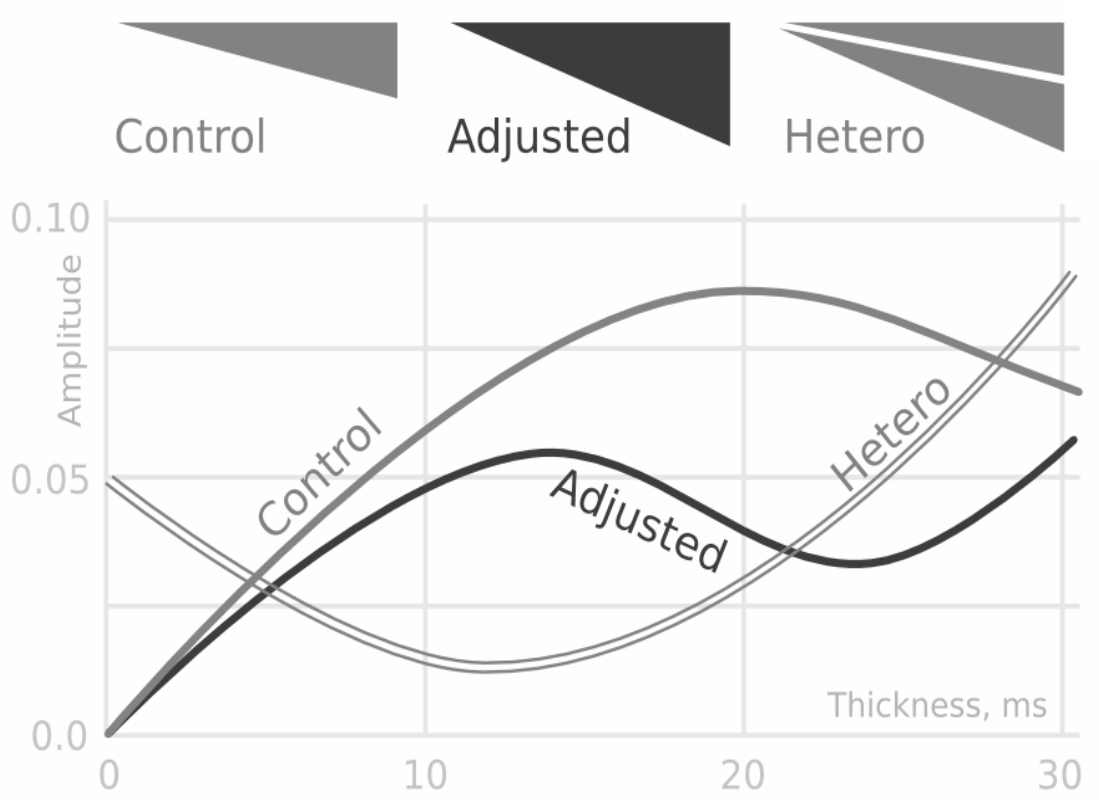
Basic Legend.

Matt Hall



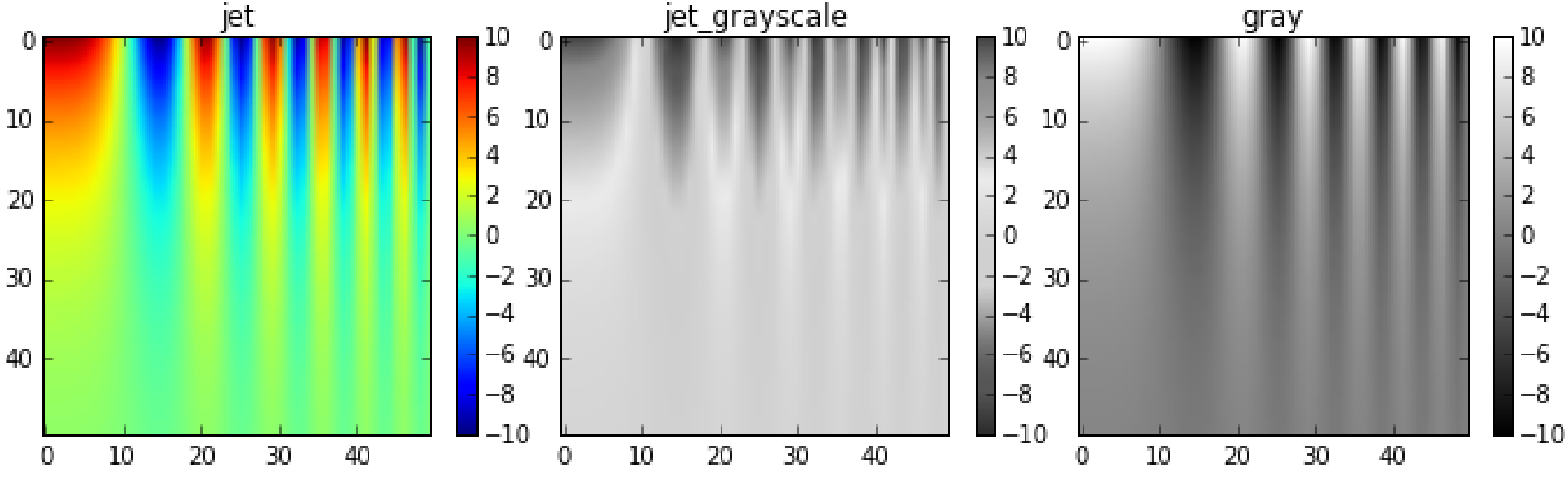
More intuitive.

Matt Hall



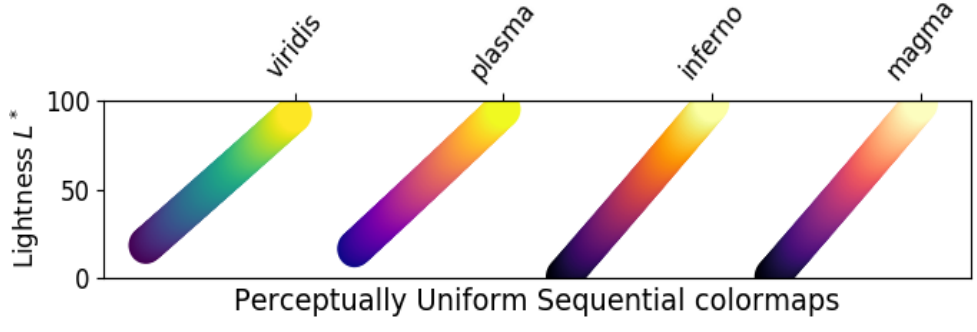
Black and white option.

Matt Hall



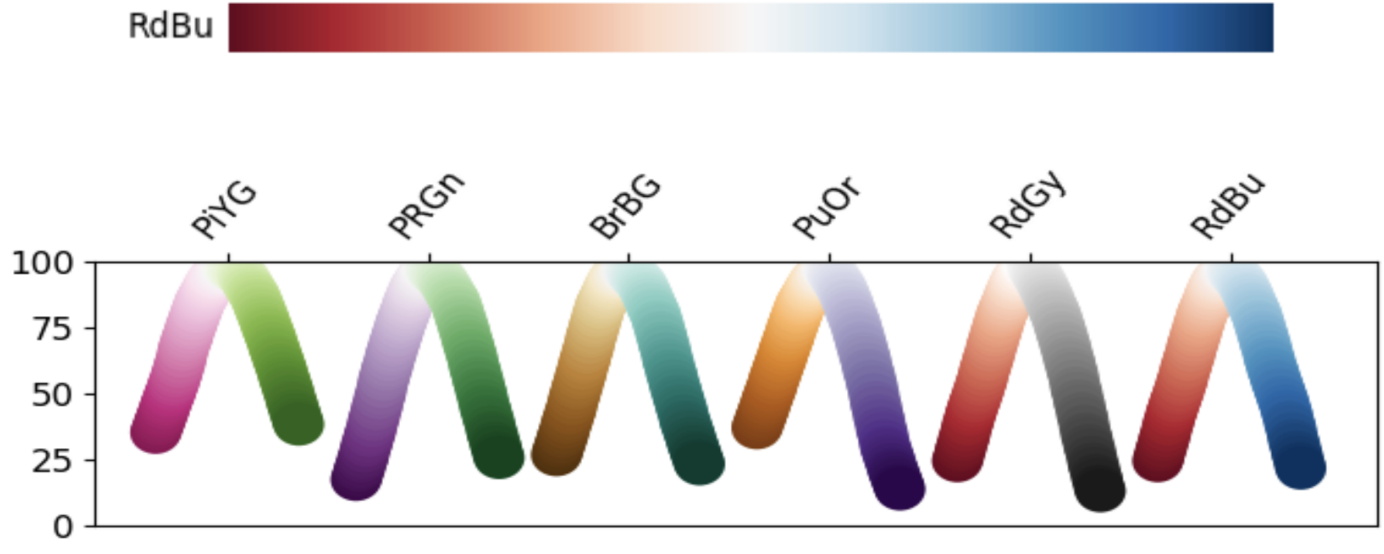
Don't use jet.

Jake VanderPlas



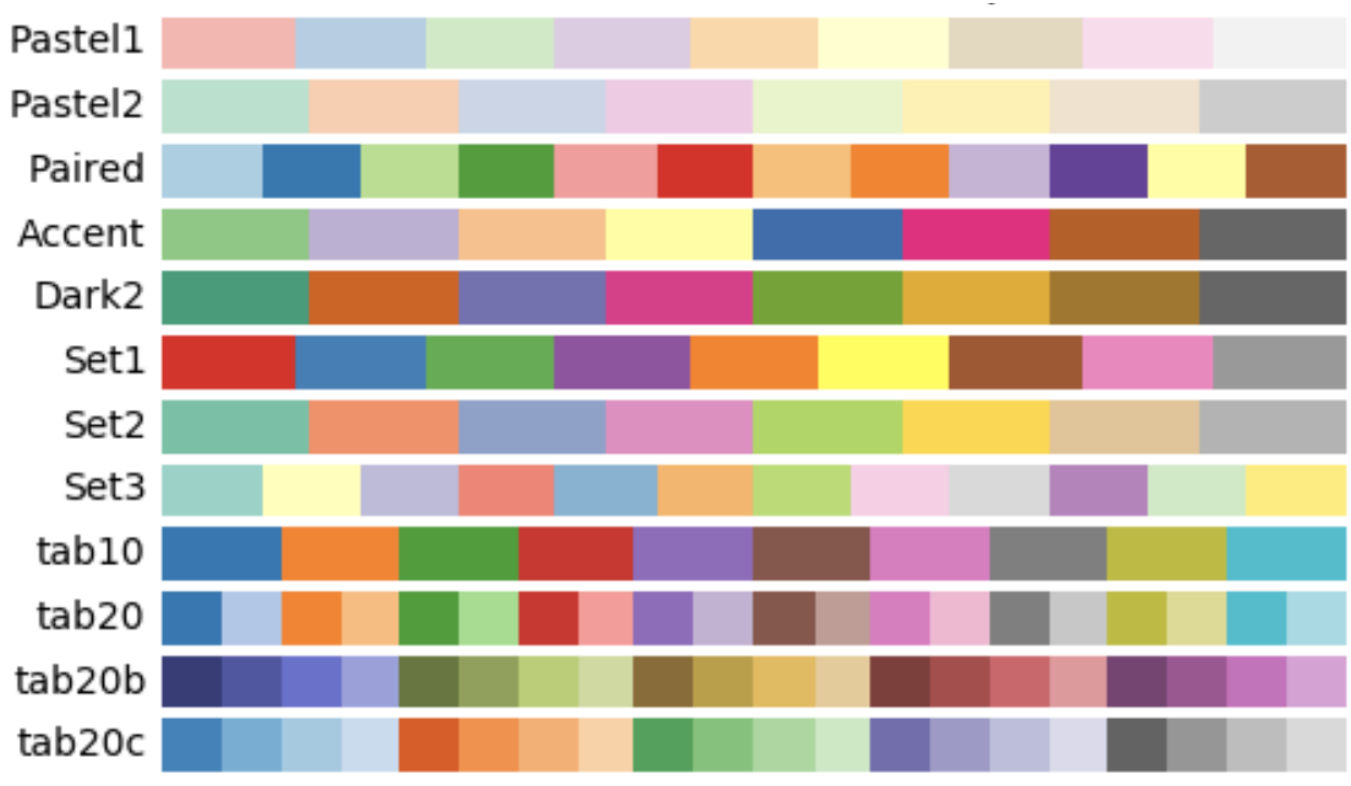
Sequential Colormaps

Matplotlib docs



Diverging Colormaps

Matplotlib docs

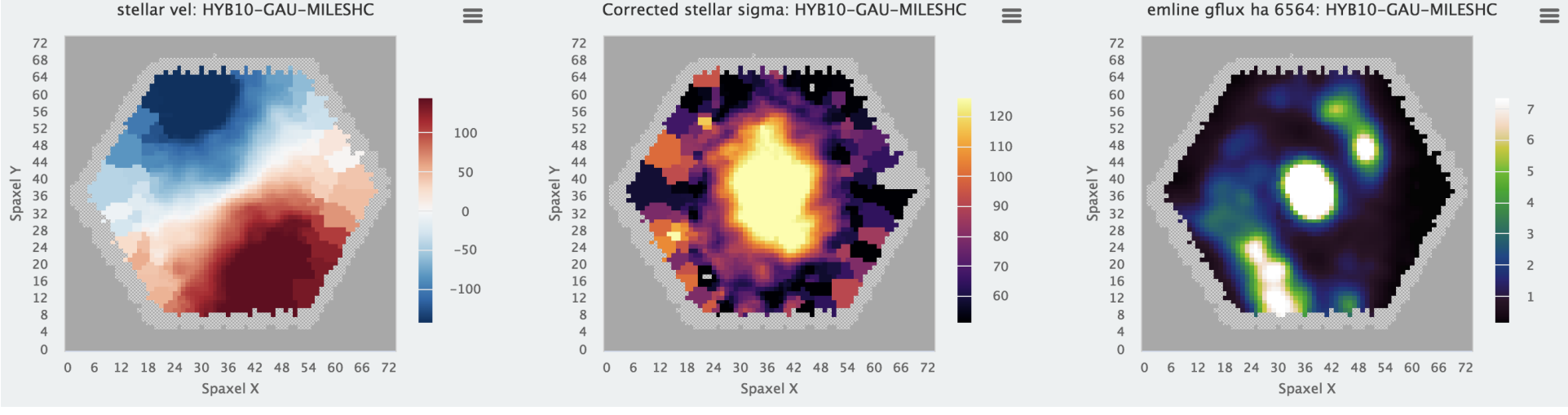


Qualitative Colormaps

Matplotlib docs

Cyclic Colormaps

New in Matplotlib 3!



Colormaps in the wild.

Marvin

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