Geographical Analysis

Introduction to Choropleth Maps and Color Schemes

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Objectives

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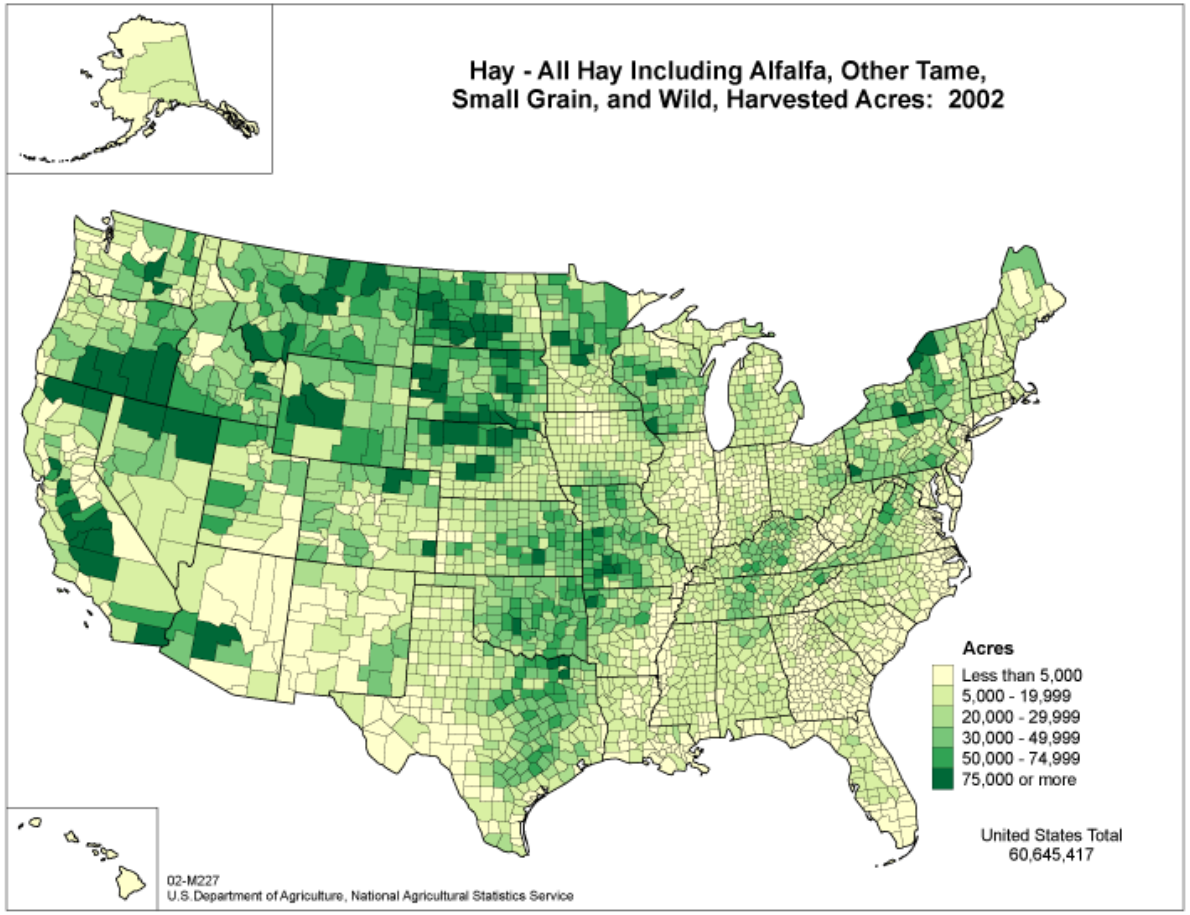
Differentiate types of geographic visualizations

Introduction to Choropleth Maps

- Earliest known choropleth map was created in 1826 by Baron Pierre Charles Dupin
- Term choropleth map was coined in 1938 by John Kirtland Wright
- Choropleth maps are based on statistical data aggregated over defined geographical regions

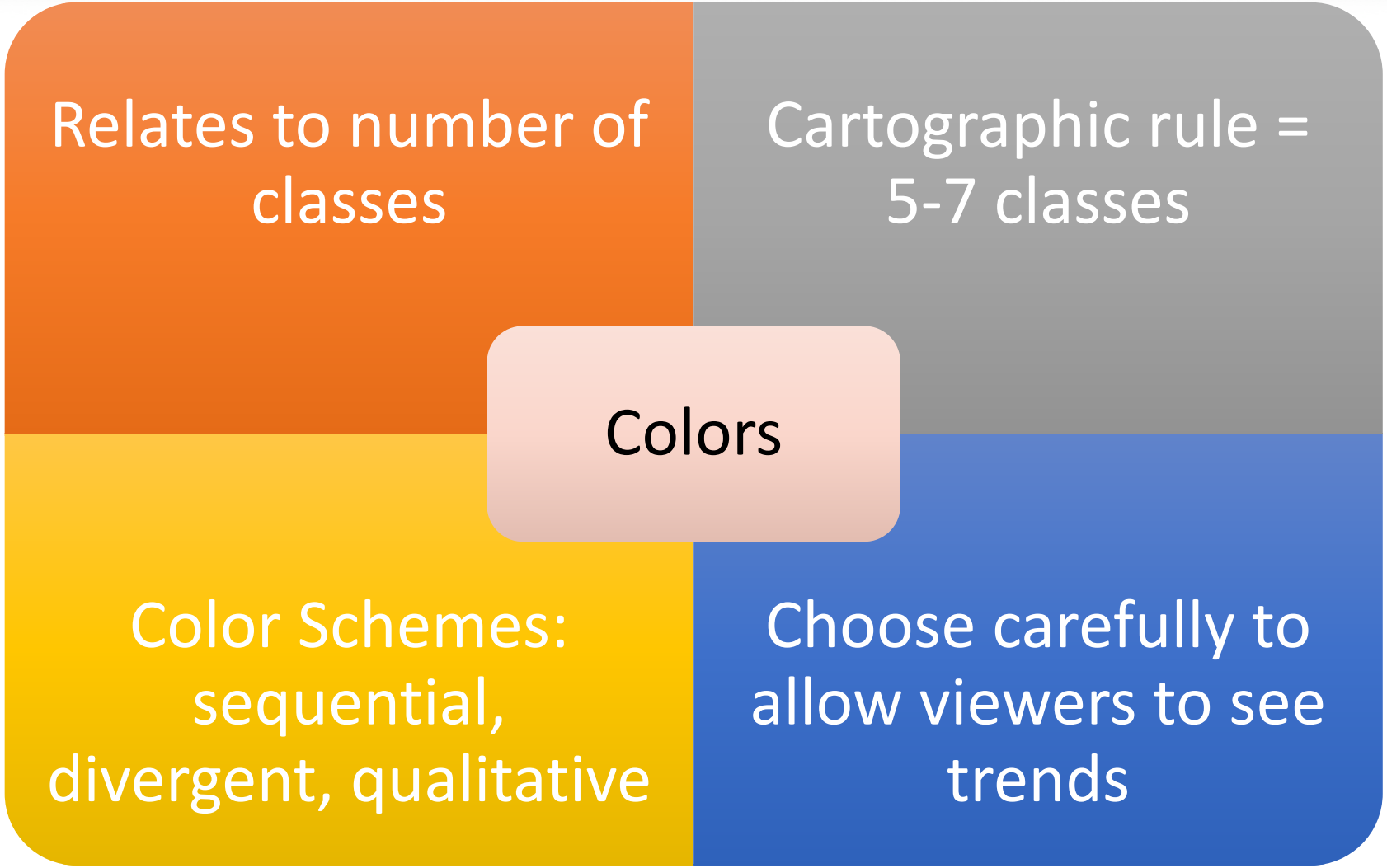
Choropleth Maps

- Areas of the map are shaded in proportion to a measured variable
- Coloring is based on a classification (histogram binning) of the distribution of the measured variable



http://www.nass.usda.gov

Coloring Choropleth Maps



Color Schemes: Sequential

- Suited for ordered data
- Lightness steps dominate the look of the scheme
- Light values are low data values, dark are high
- Good for Ordinal, interval and ratio data types

Color Schemes: Diverging

- Puts an emphasis on critical midrange values
- Color change represents deviation from a meaningful midrange critical value
- Good for ratio data types where looking at data above and below a ‘zero’ point

Color Schemes: Qualitative

- Does not imply magnitude difference
- Used to show differences between classes
- Good for Nominal data types