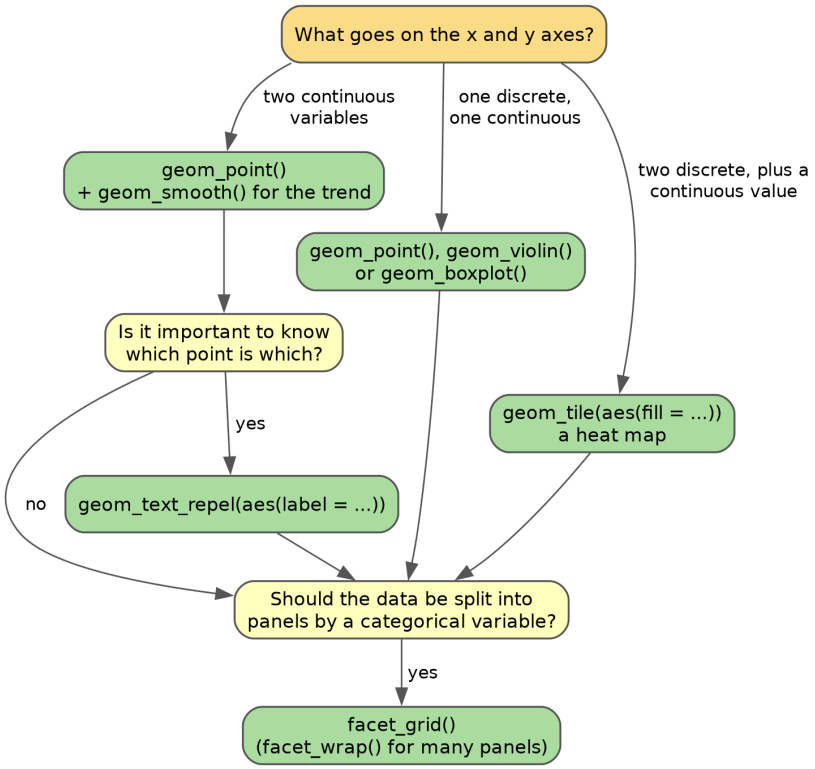
data visualization II: summary

Integrated Bioanalytical Chemistry · thebustalab.github.io/integrated_bioanalytics



The kind of data being plotted can help you choose which geom to use: `geom_smooth()` with `geom_point()` for two continuous variables, and `geom_tile()` (a heat map) for two discrete variables and one continuous variable. When labeling which point is which matters, `geom_text_repel()` labels them without overlap. Facets split a plot into small multiples, one panel per level of a categorical variable. Every aesthetic mapping creates a scale that a `scale_*` command adjusts, themes control the non-data ink, and `plot_grid()` combines finished plots into one figure.

Function	What it is for	What we vary
`geom_smooth()`	a trend line through two continuous variables	`color`
`geom_tile()`	a heat map: two discrete variables and one continuous	`aes(fill = ...)`, border `color`, `linewidth`
`geom_text()`, `geom_text_repel()`	text at each point (the repel version nudges labels apart)	`aes(label = ...)`
`facet_grid()`	small multiples in a row, a column, or both	`. ~ var`, `var ~ .`, `var1 ~ var2`
`facet_wrap()`	small multiples when there are many panels	`var ~ .`
`scale_fill_gradient()`	the color gradient of a continuous fill	`low`, `high`
`scale_fill_brewer()`	RColorBrewer colors for a discrete fill	`palette`
`scale_x_continuous()`, `scale_y_continuous()`	axis title, tick marks and range	`name`, `breaks`, `limits`
`theme_classic()`, `theme_bw()`, `theme_dark()`, `theme_void()`	complete themes for the non-data ink	which one
`theme()`	individual non-data components	`text = element_text(size = ..., color = ...)`, `axis.text`
`plot_grid()`	arranges finished plot objects into one figure	the plot objects, `ncol`