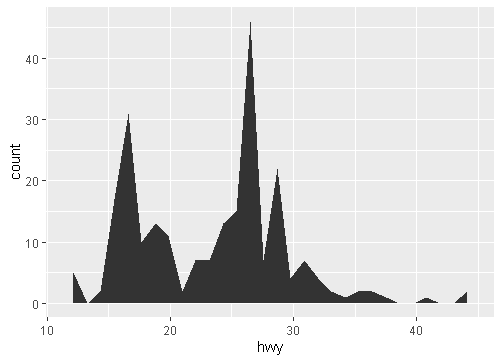
**Data Visualizations using ‘ggplot2’**

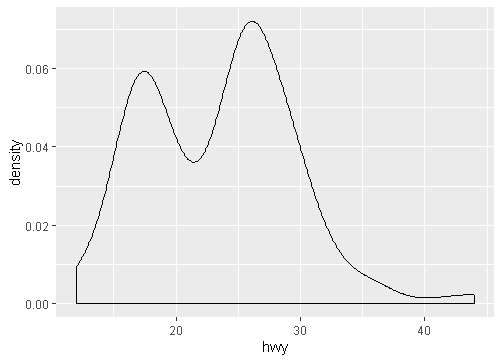
One variable

Continuous

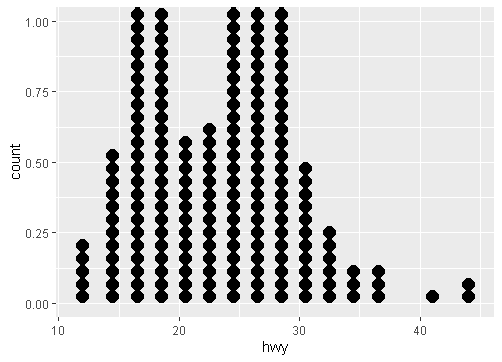
1. geom\_area



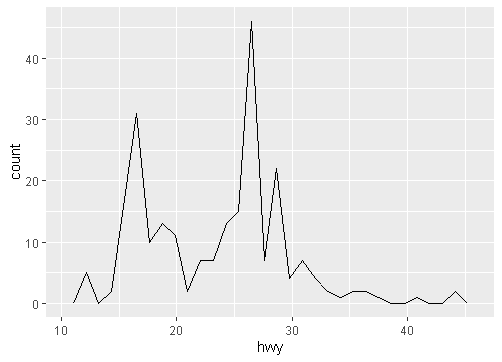
1. geom\_density



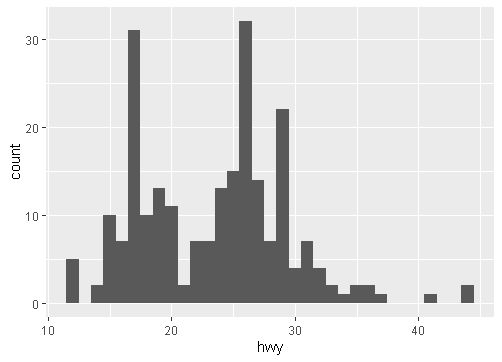
1. geom\_dotplot



1. geom\_freqpoly

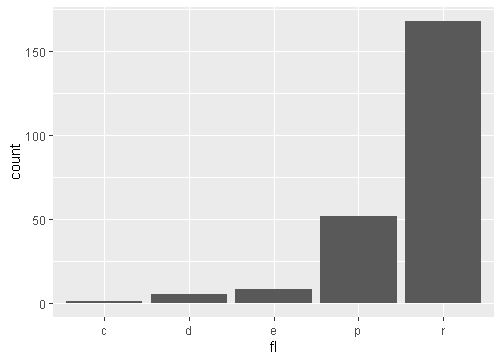


1. geom\_histogram



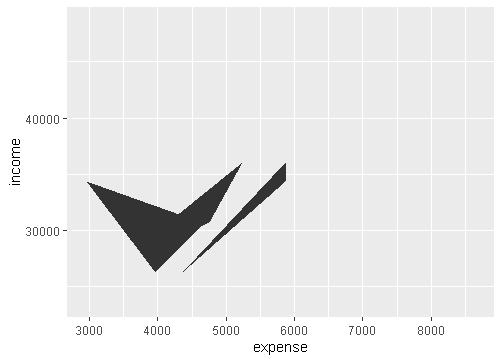
Discrete

1. geom\_bar

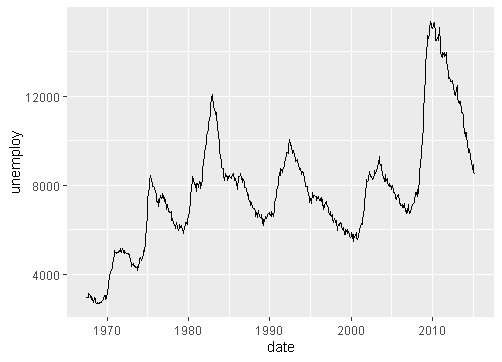


Graphical Primitives

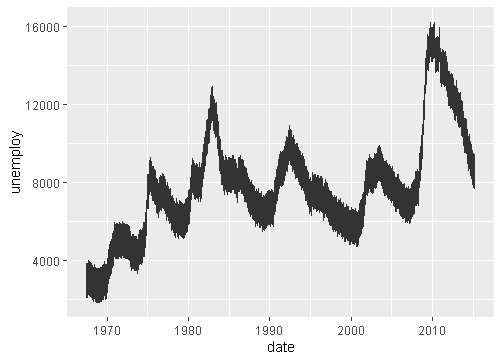
1. geom\_polygon



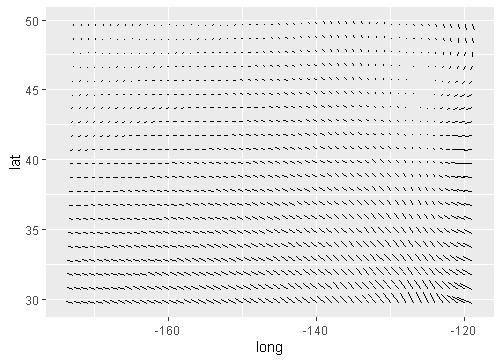
1. geom\_path



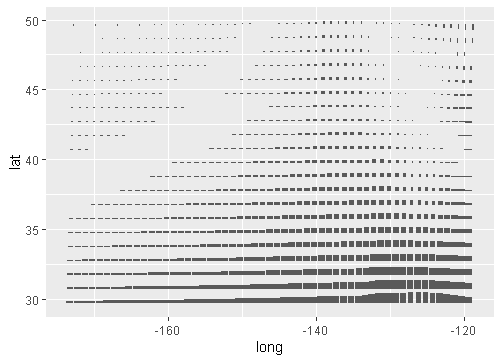
1. geom\_ribbon



1. geom\_segment



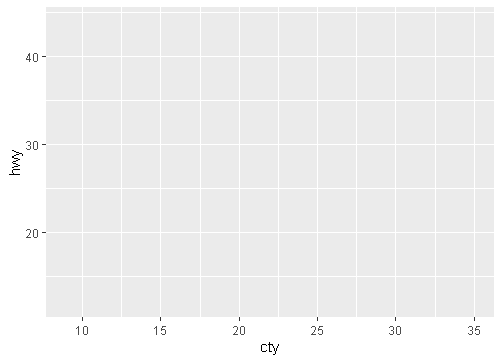
1. geom\_rect



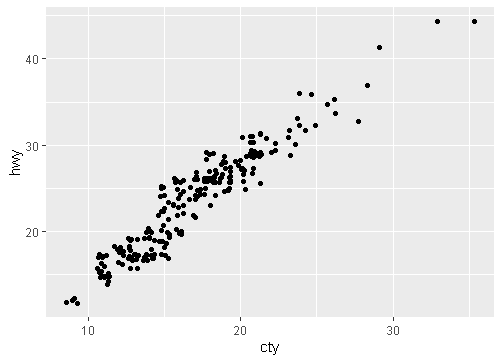
Two Variables

Continuous X, Continuous Y

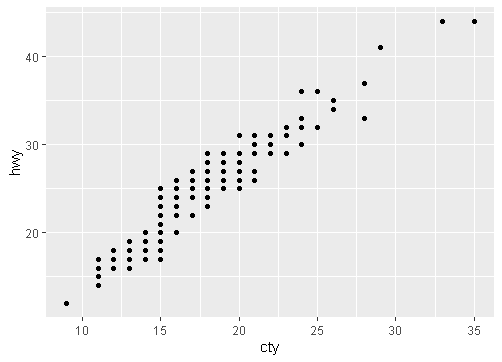
1. geom\_blank



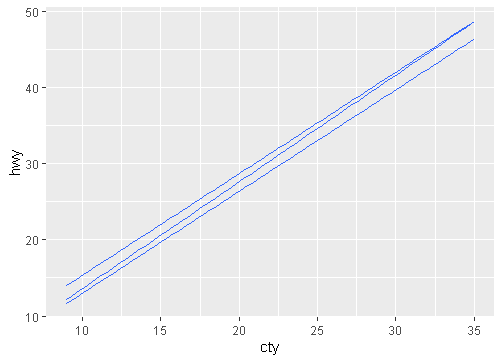
1. geom\_jitter



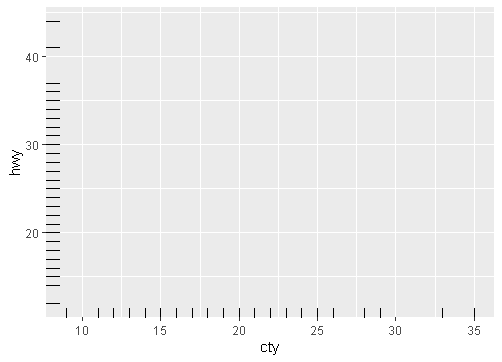
1. geom\_point



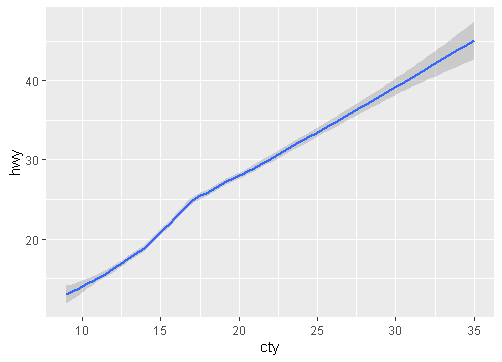
1. geom\_quantile



1. geom\_rug



1. geom\_smooth

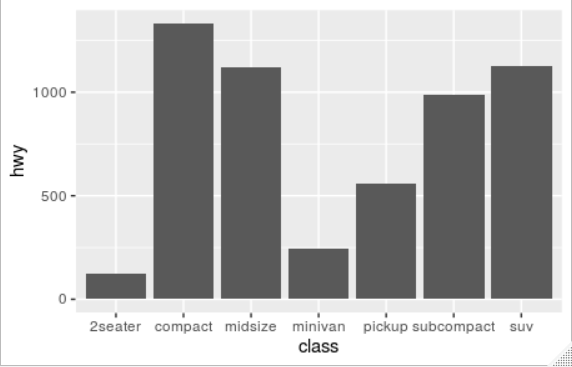


1. geom\_text

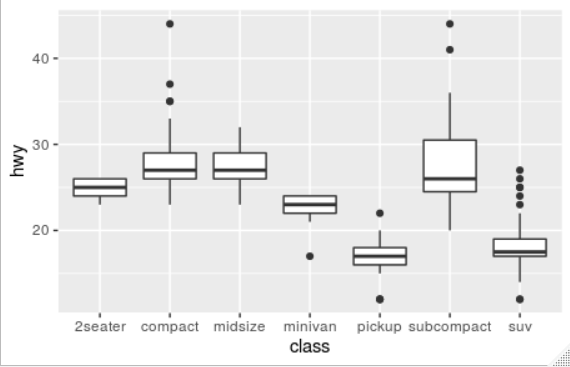


Discrete X, Continuous Y

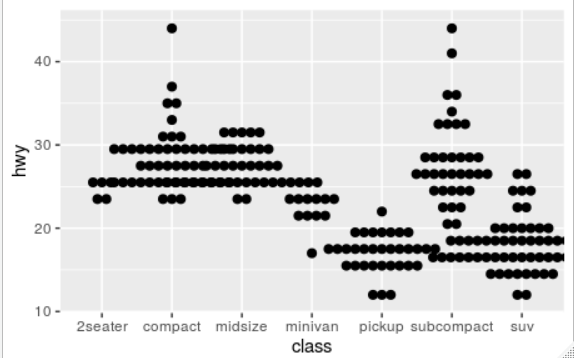
1. geom\_bar



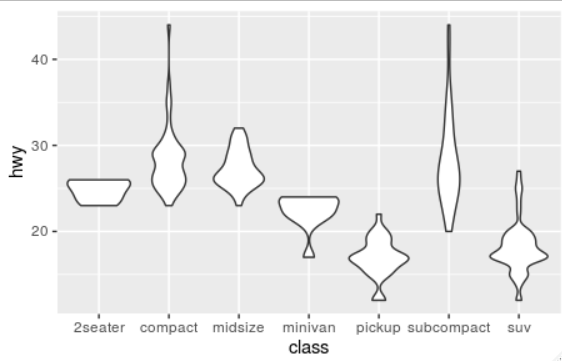
1. geom\_boxplot



1. geom\_dotplot

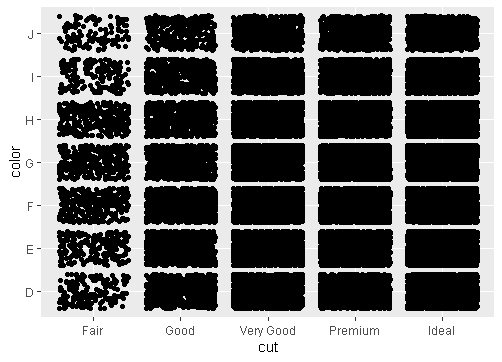


1. geom\_violin



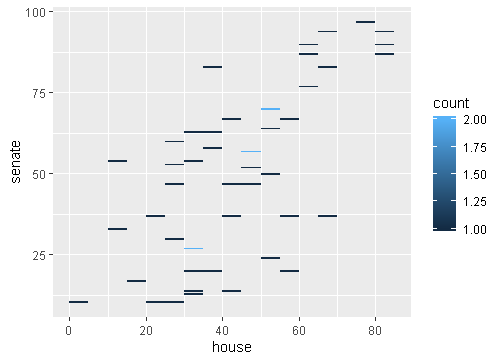
Discrete X, Discrete Y

1. geom\_jitter

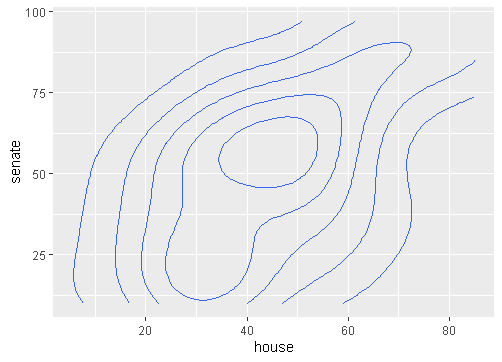


Continuous Bivariate Distribution

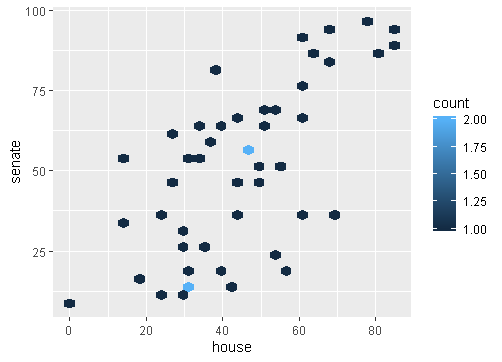
1. geom\_bin2d



1. geom\_density2d

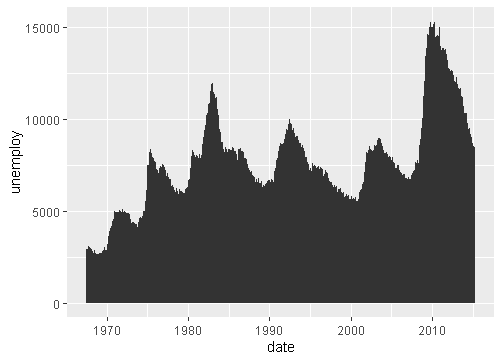


1. geom\_hex

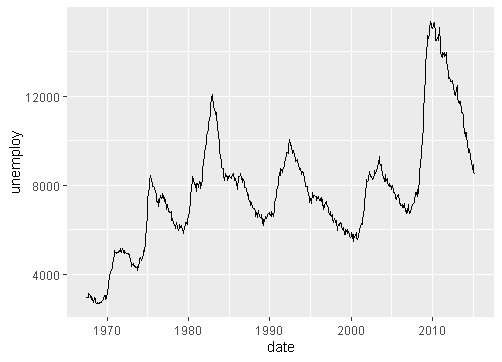


Continuous Function

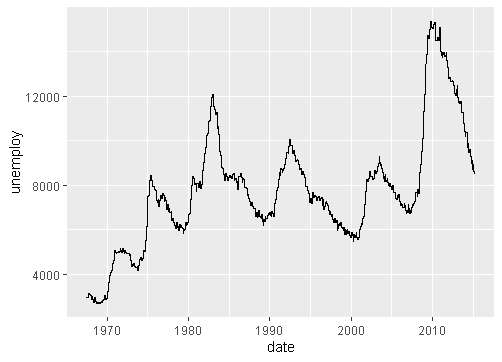
1. geom\_area



1. geom\_line

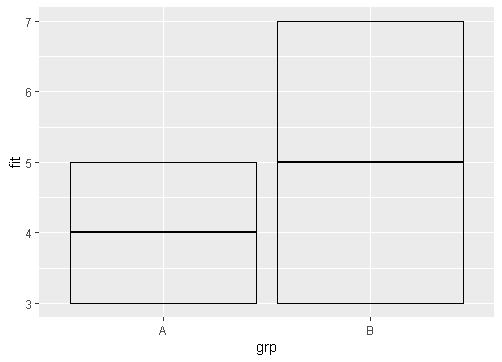


1. geom\_step

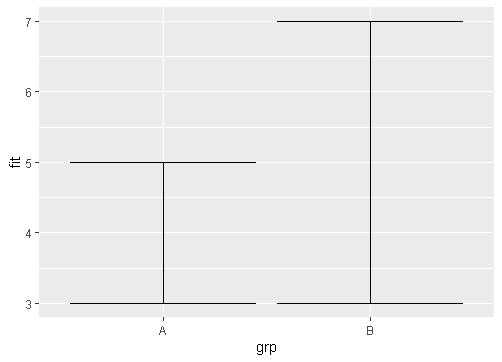


Visualizing error

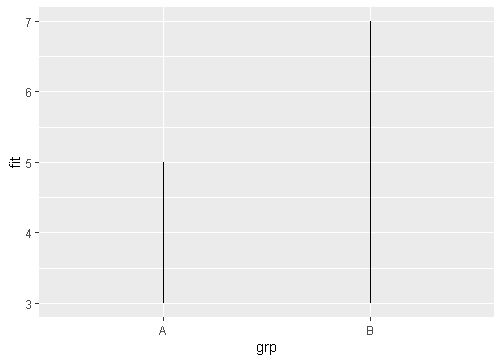
1. geom\_crossbar



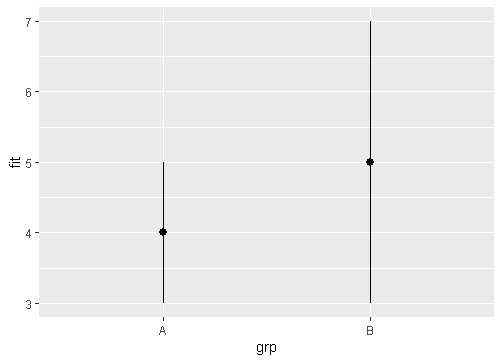
1. geom\_errorbar



1. geom\_linerange

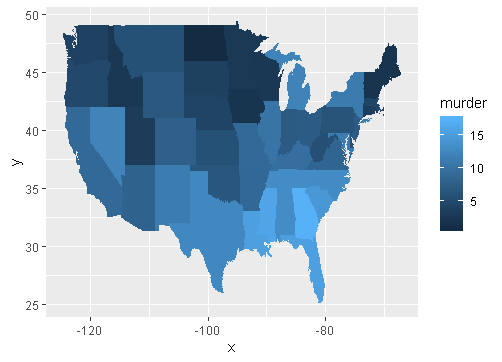


1. geom\_pointrange



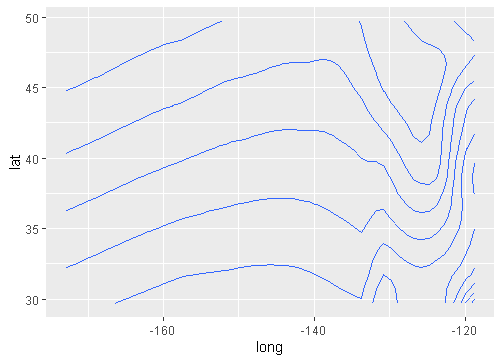
Maps

1. geom\_map

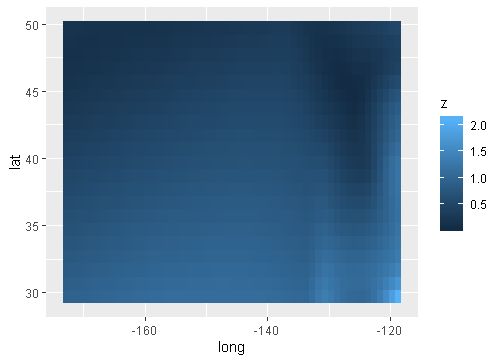


Three Variables

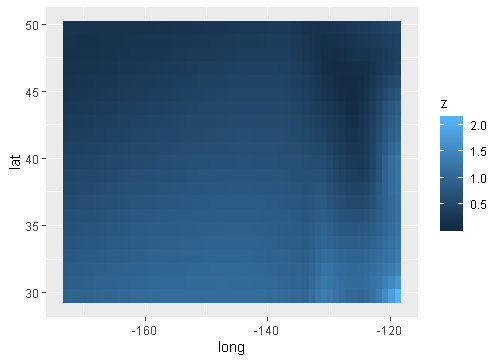
1. geom\_contour



1. geom\_raster



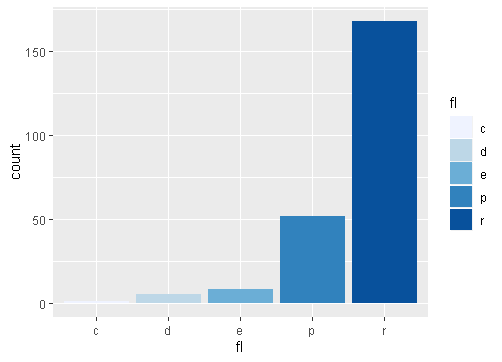
1. geom\_tile



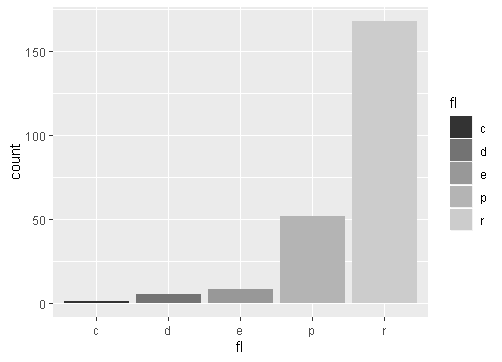
Scales

Discrete

1. scale\_fill\_brewer

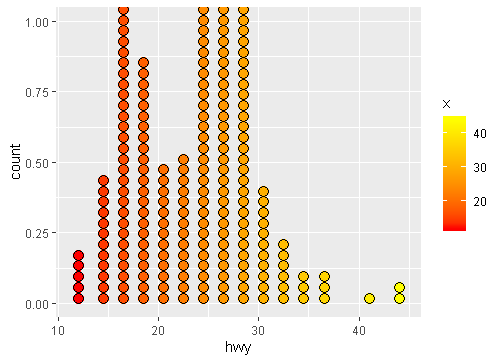


1. scale\_fill\_grey

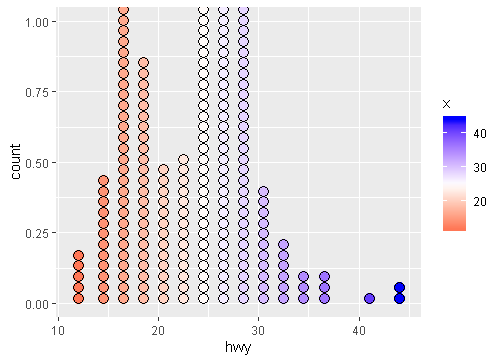


Continuous

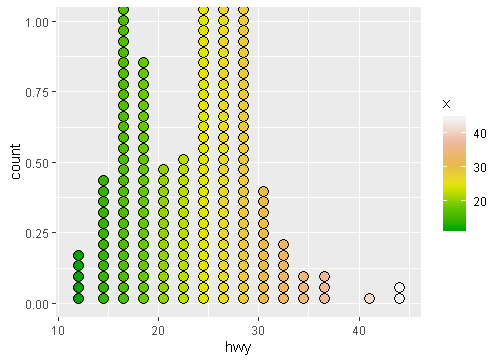
1. scale\_fill\_gradient



1. scale\_fill\_gradient2

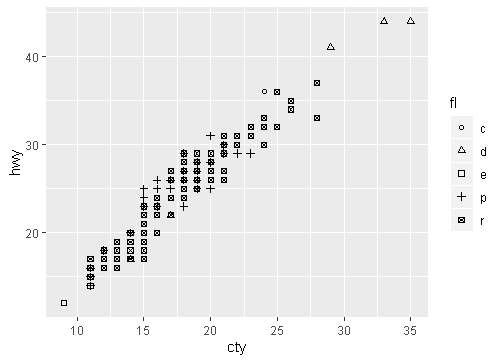


1. scale\_fill\_gradientn

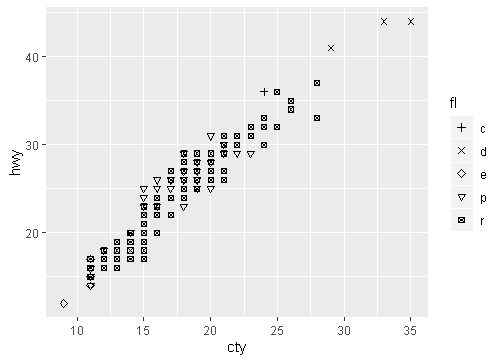


Shape scales

1. scale\_shape

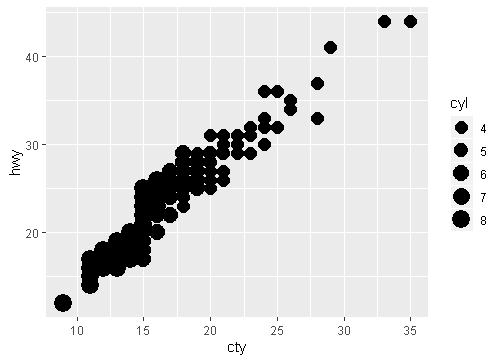


1. scale\_shape\_manual



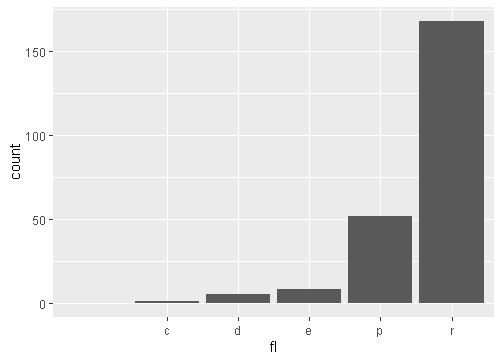
Size scales

1. scale\_size\_area

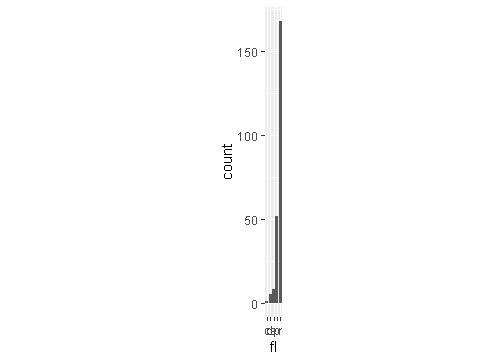


Coordinate Systems

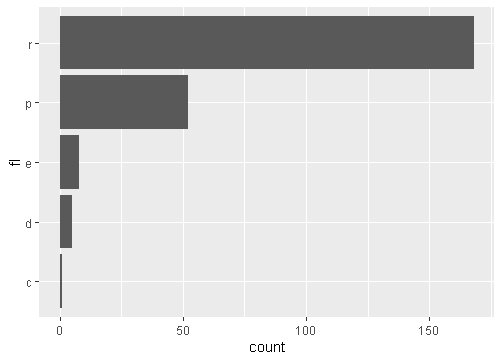
1. coord\_cartesian



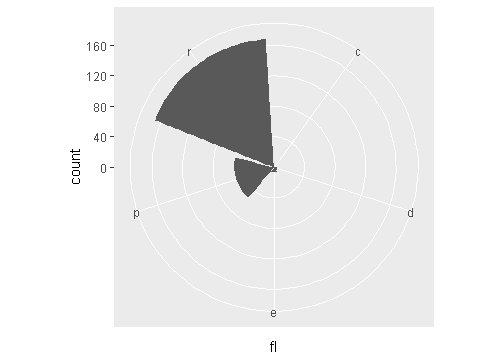
1. coord\_fixed



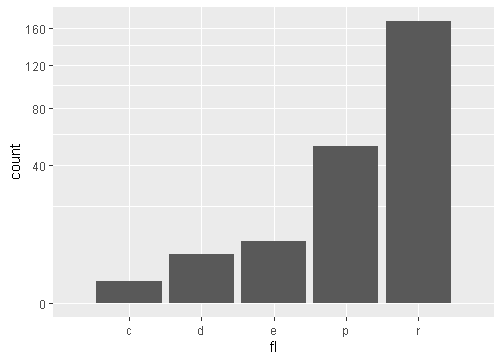
1. coord\_flip



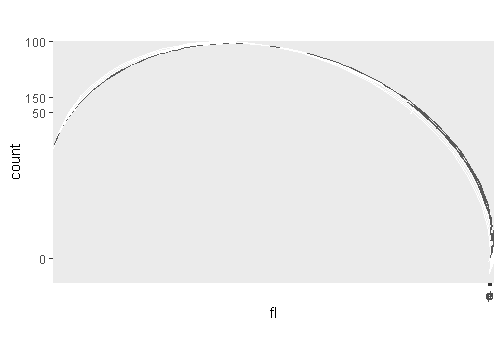
1. coord\_polar



1. coord\_trans

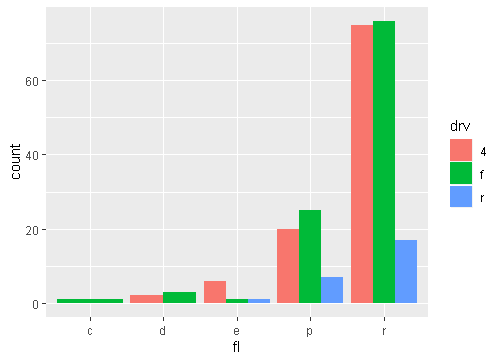


1. coord\_map

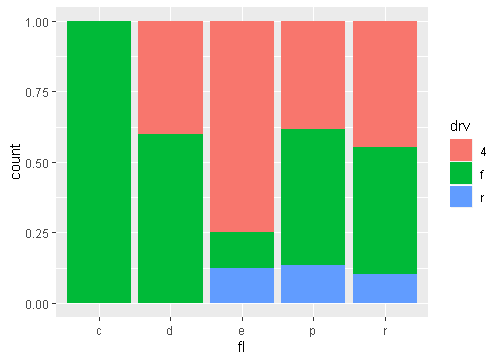


Position Adjustments

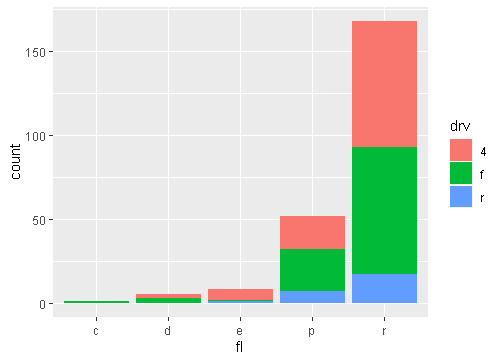
1. geom\_bar(position = "dodge")



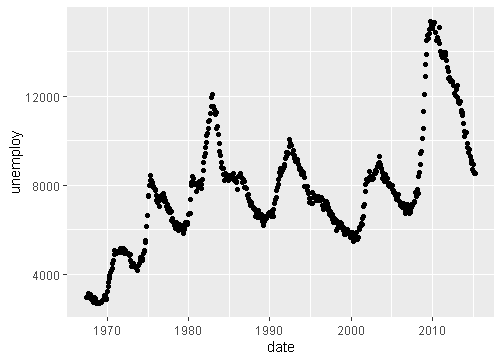
1. geom\_bar(position = "fill")



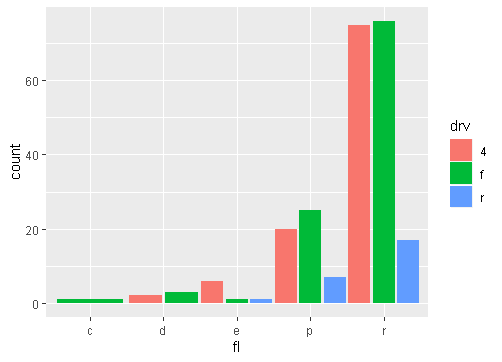
1. geom\_bar(position = "stack")



1. geom\_point(position = "jitter")

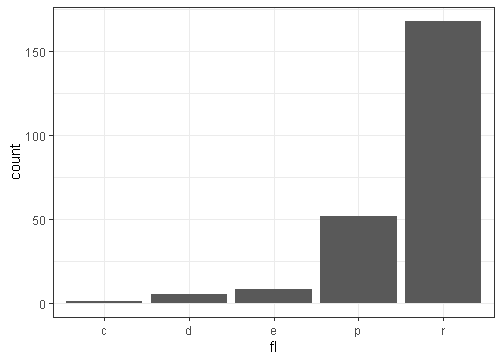


1. geom\_bar(position = position\_dodge(width = 1))

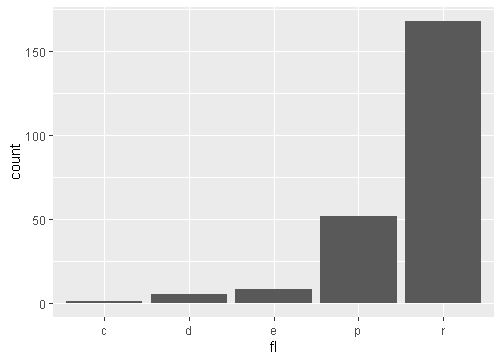


Themes

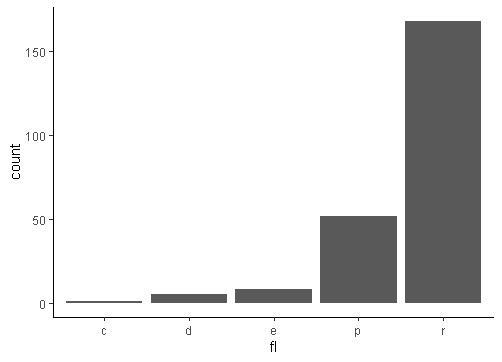
1. theme\_bw



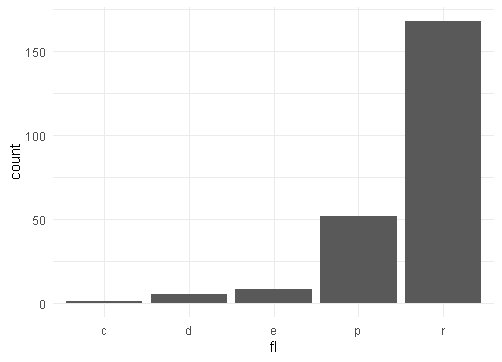
1. theme\_grey



1. theme\_classic

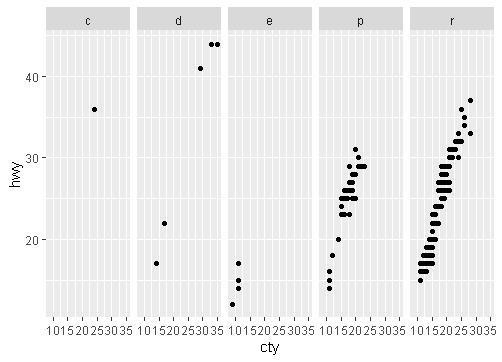


1. theme\_minimal

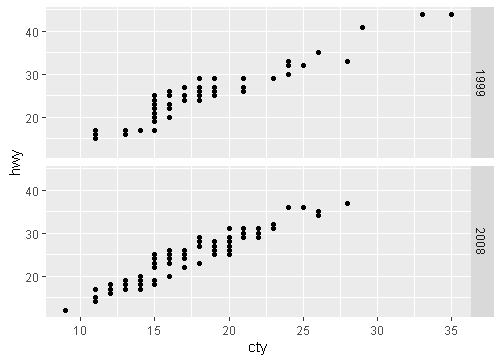


Faceting

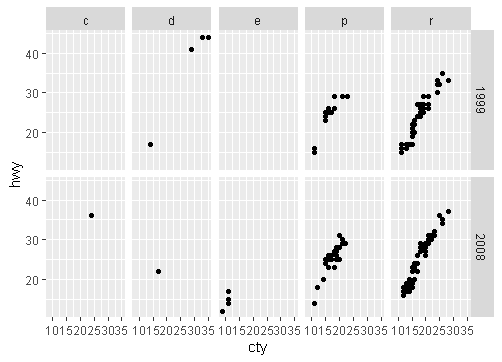
1. facet\_grid(. ~ fl)



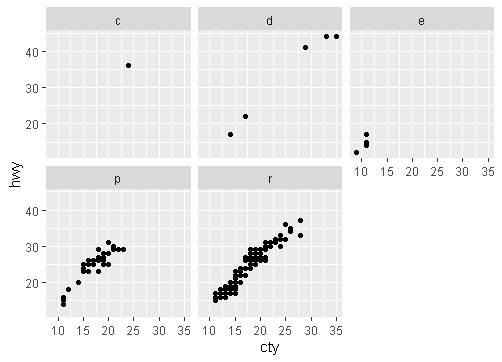
1. facet\_grid(year ~ .)



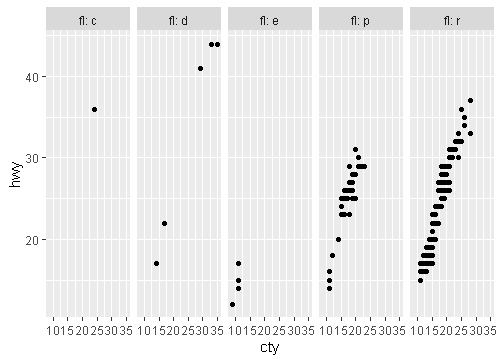
1. facet\_grid(year ~ fl)



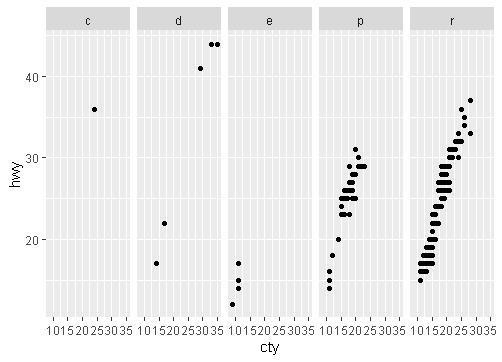
1. facet\_wrap(~ fl)



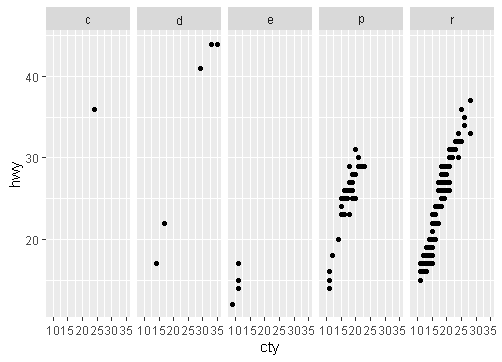
1. facet\_grid(. ~ fl, labeller = label\_both)



1. facet\_grid(. ~ fl, labeller = label\_bquote(alpha ^ .(x)))

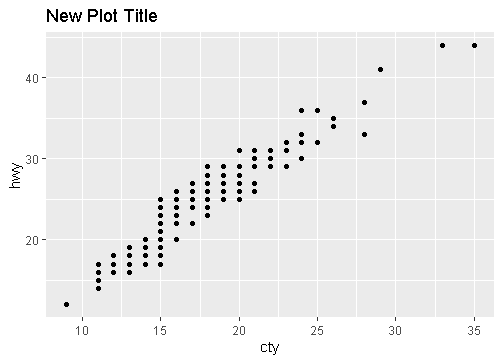


1. facet\_grid(. ~ fl, labeller = label\_parsed) facet\_grid

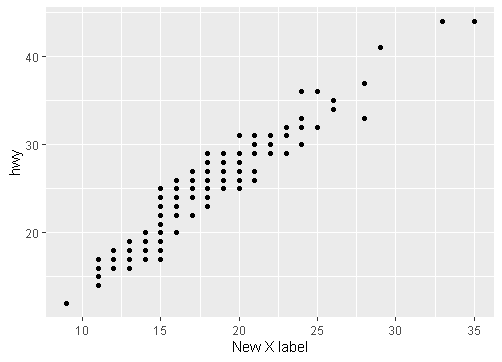


Labels

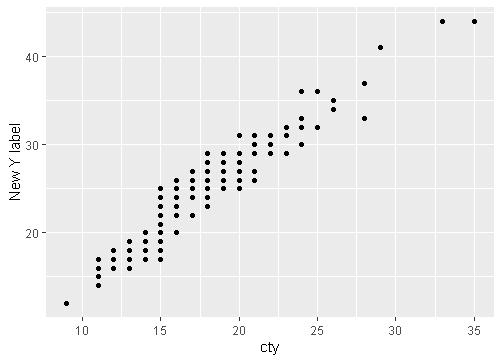
1. ggtitle



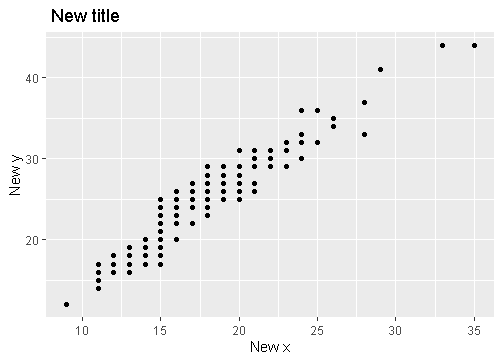
1. xlab



1. ylab

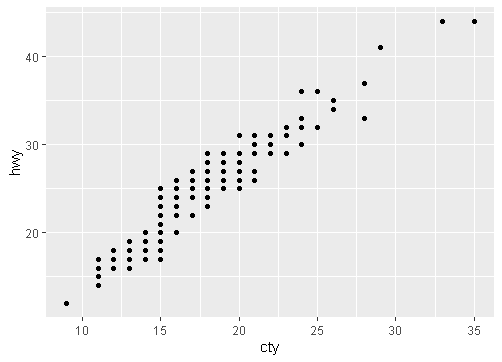


1. labs

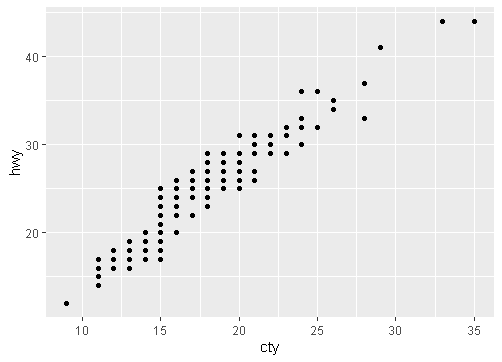


Legends

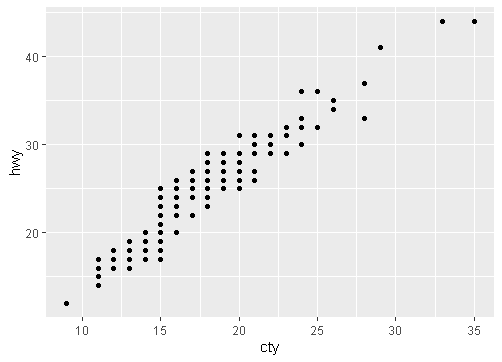
1. theme



1. guides

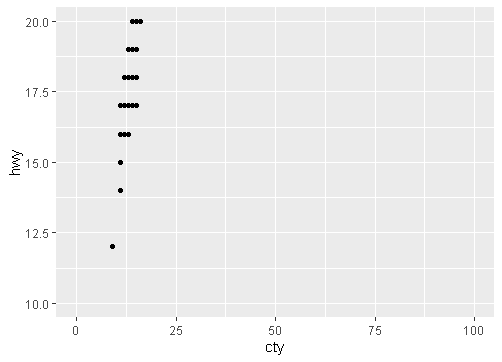


1. scale\_fill\_discrete

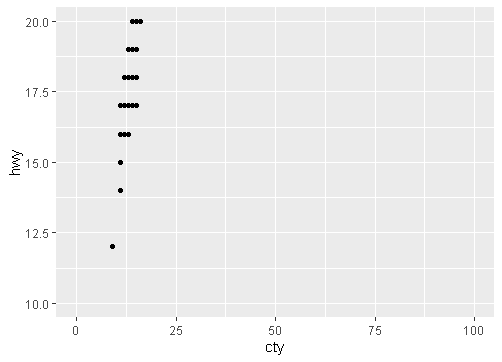


Zooming

1. coord\_cartesian



1. xlim



1. scale\_x\_continuous

