

# Patchwork : CHEAT SHEET

Combine multiple ggplots into multipaneled figures

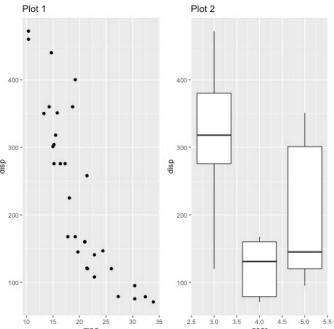
## Installation

```
install.packages('patchwork')
```

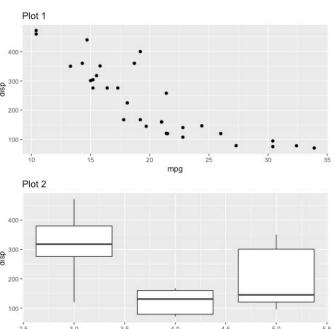
Or

```
install.packages("devtools")
devtools::install_github("thomasp85/patchwork")
```

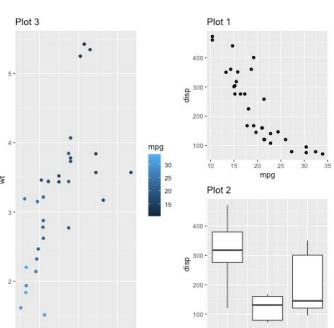
## Plot Assembly



`p1 + p2`

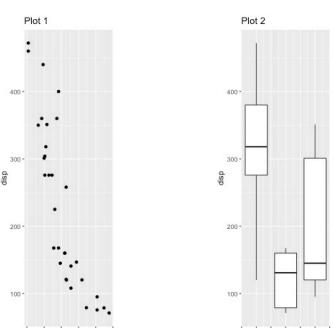


`p1 / p2`



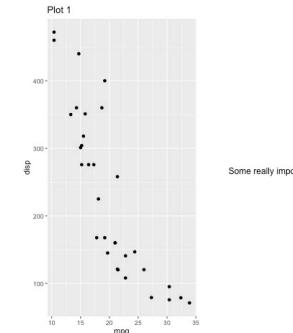
`p3 | (p1 / p2)`

## CREATE EMPTY SPACE

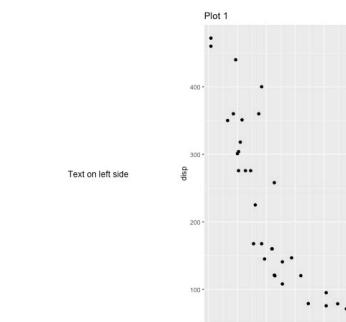


`p1 + plot_spacer() + p2`

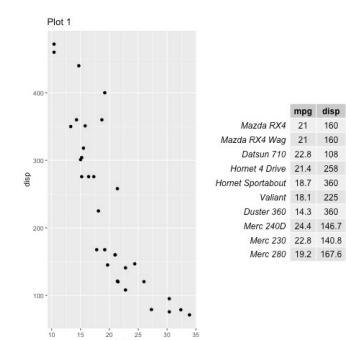
## ADDING PLOTS



`p1 +
grid::textGrob('Some
really important text')`



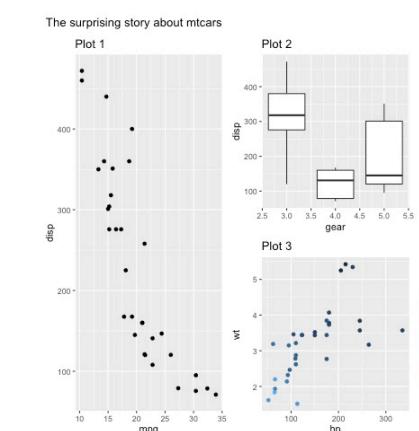
`wrap_elements(grid::textGrob('Text on left
side')) + p1`



`p1 +
gridExtra::tableGrob(
mtcars[1:10, c('mpg',
'disp')])`

## Annotation

`p + plot_annotation()`  
title, subtitle, caption tag\_levels tag\_prefix, tag\_suffix theme

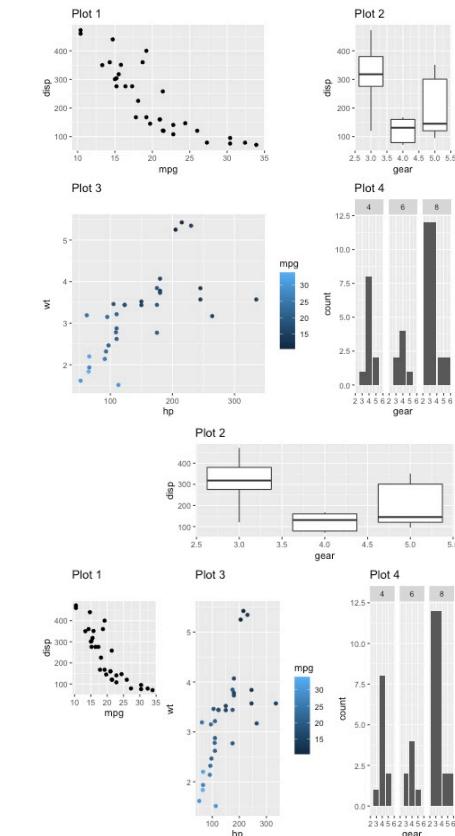


`(p1 | (p2 / p3)) +
plot_annotation(title =
'The surprising story
about mtcars')`

## Controlling Layout

### `p + plot_layout()`

ncol, nrow : The dimensions of the grid to create  
byrow : = FALSE(columns) / = TRUE(rows)  
widths, heights : The relative widths and heights of each column and row  
guides : = 'collect'(remove duplicate guides) / = 'keep' / = auto  
tag\_level : 'i' / 'l' / 'a' / 'A'  
design : Specification of the location of areas in the layout.

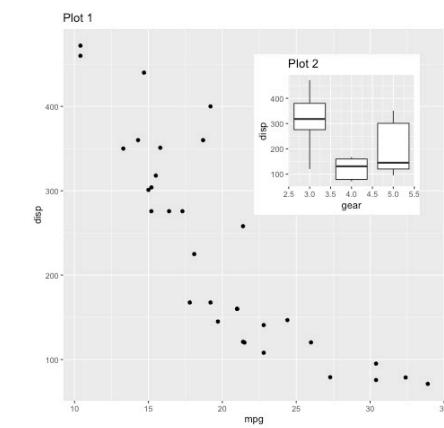


`p1 + p2 + p3 + p4 +
plot_layout(widths =
c(2, 1), heights =
unit(c(5, 1), c('cm',
'null')))`

`layout <- "
##BBBB
AACCDD
##CCDD
"`

`p1 + p2 + p3 + p4 +
plot_layout(design =
layout)`

### `p + inset_element()`



`p1 +
inset_element(
p2,
left = 0.5,
bottom = 0.5,
right = unit(1, 'npc') -
unit(1, 'cm'),
top = unit(1, 'npc') -
unit(1, 'cm')
)`