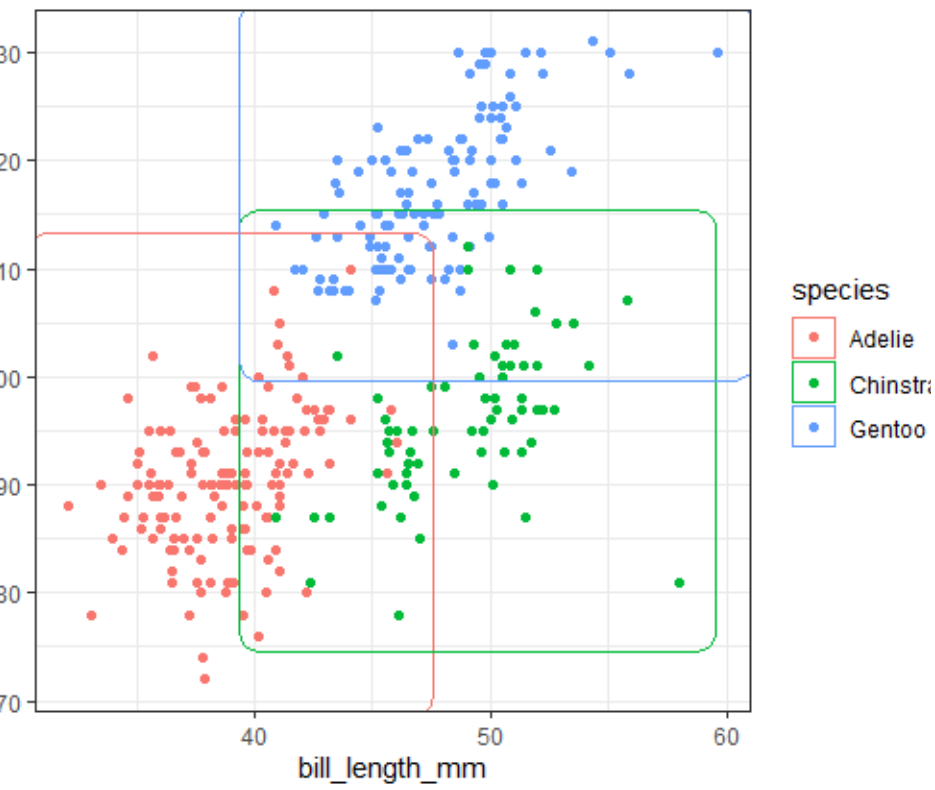
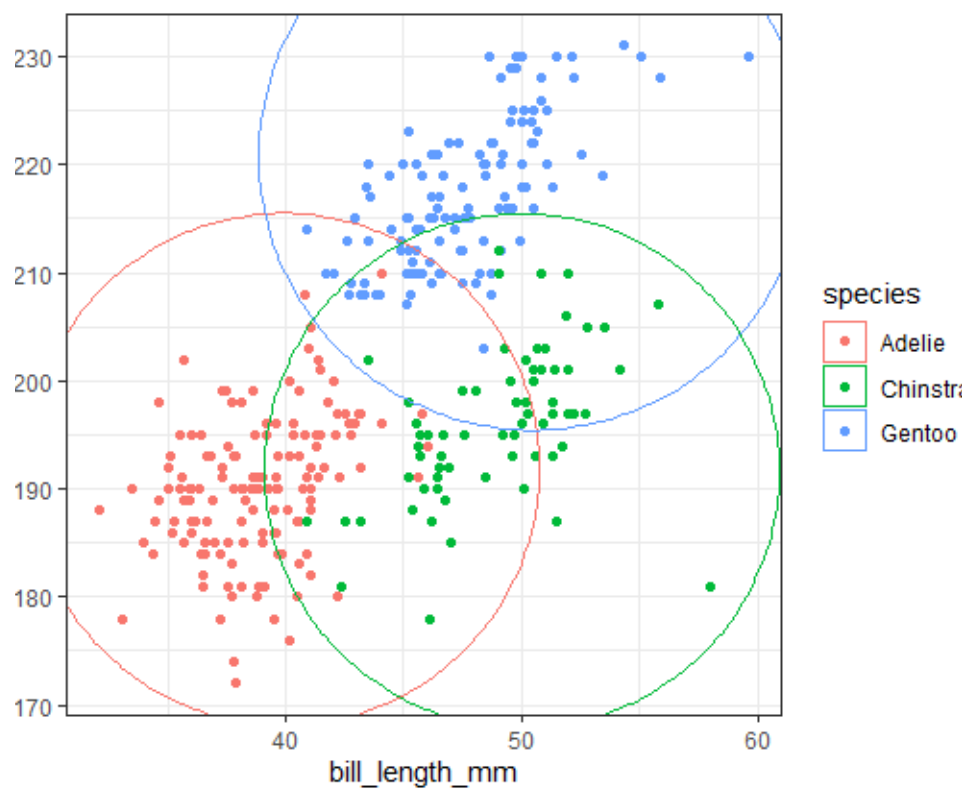


ggforce: : Cheat Sheet

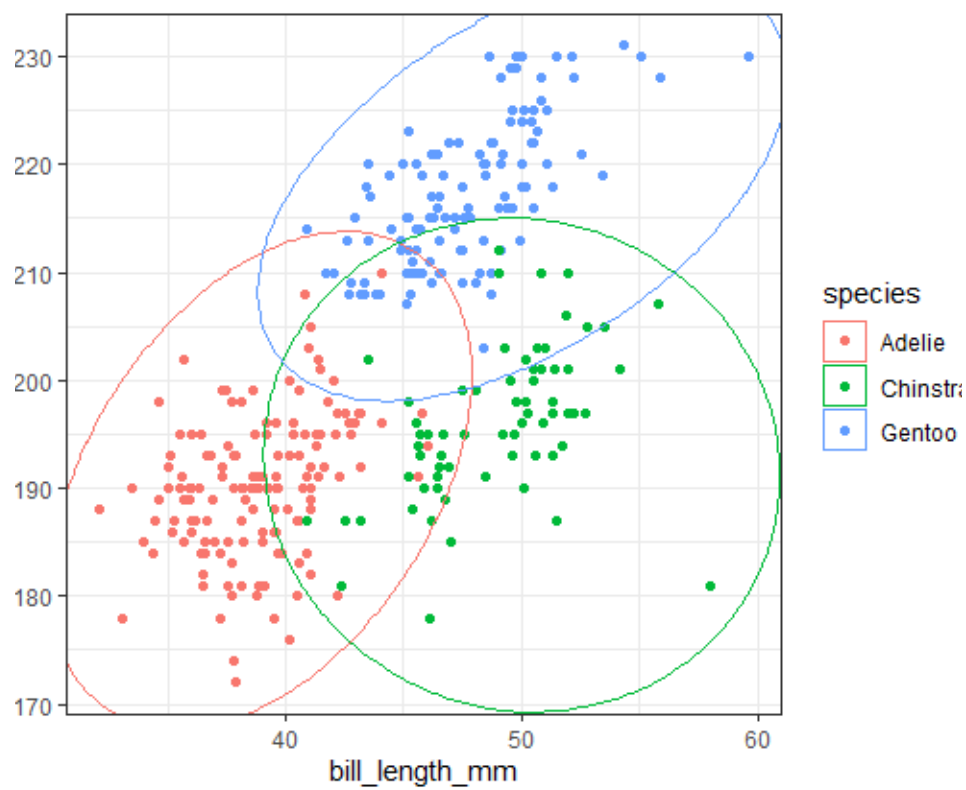
A ‘ggplot2’ extension that aims to aid in data visualization.



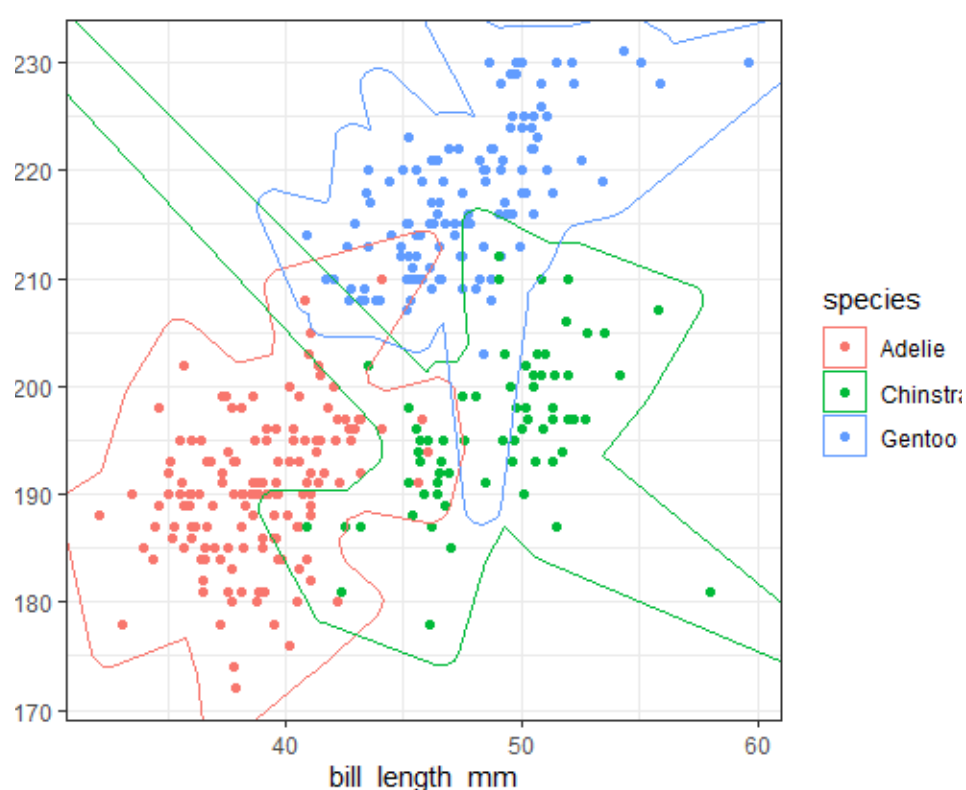
a + geom_mark_rect()
x,y,filter,label,description,color,fill,group,size,linetype,alpha



a + geom_mark_circle()
x,y,filter,label,description,color,fill,group,size,linetype,alpha



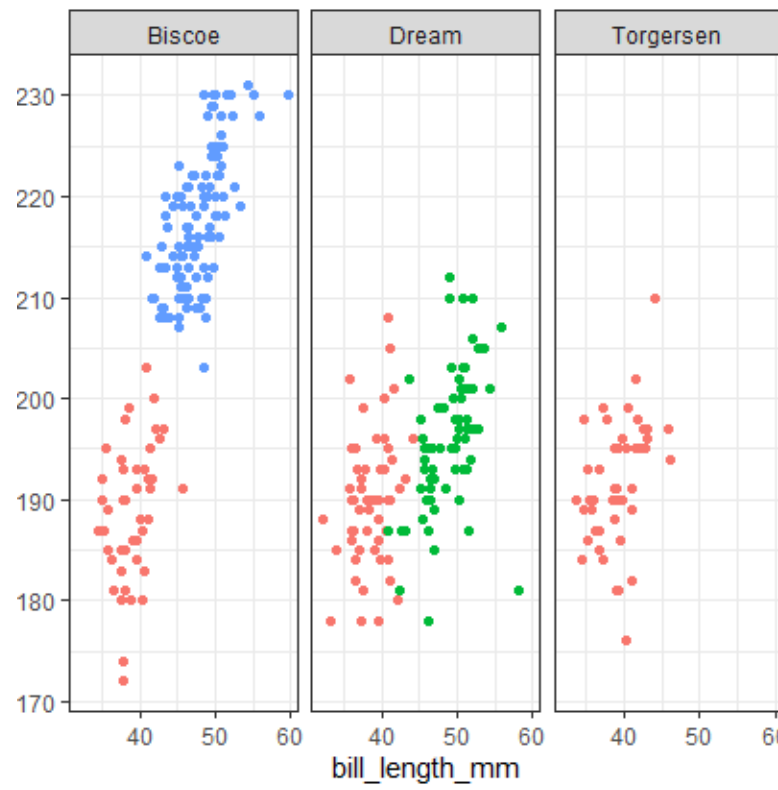
a + geom_mark_ellipse()
x,y,filter,label,description,color,fill,group,size,linetype,alpha



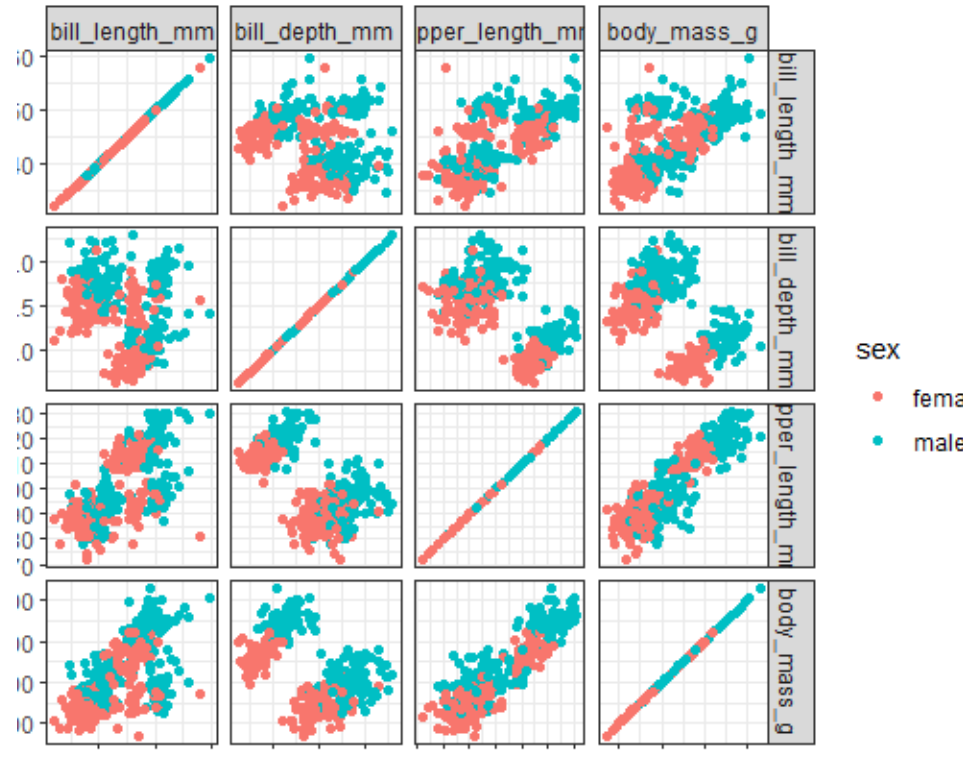
a + geom_mark_hull()
x,y,filter,label,description,color,fill,group,size,linetype,alpha

```
data(penguins)
penguins <- penguins %>%
  drop_na()
a <-
ggplot(penguins,aes(bill_length_mm,flipper_length_
mm,color=species)) + geom_point()
```

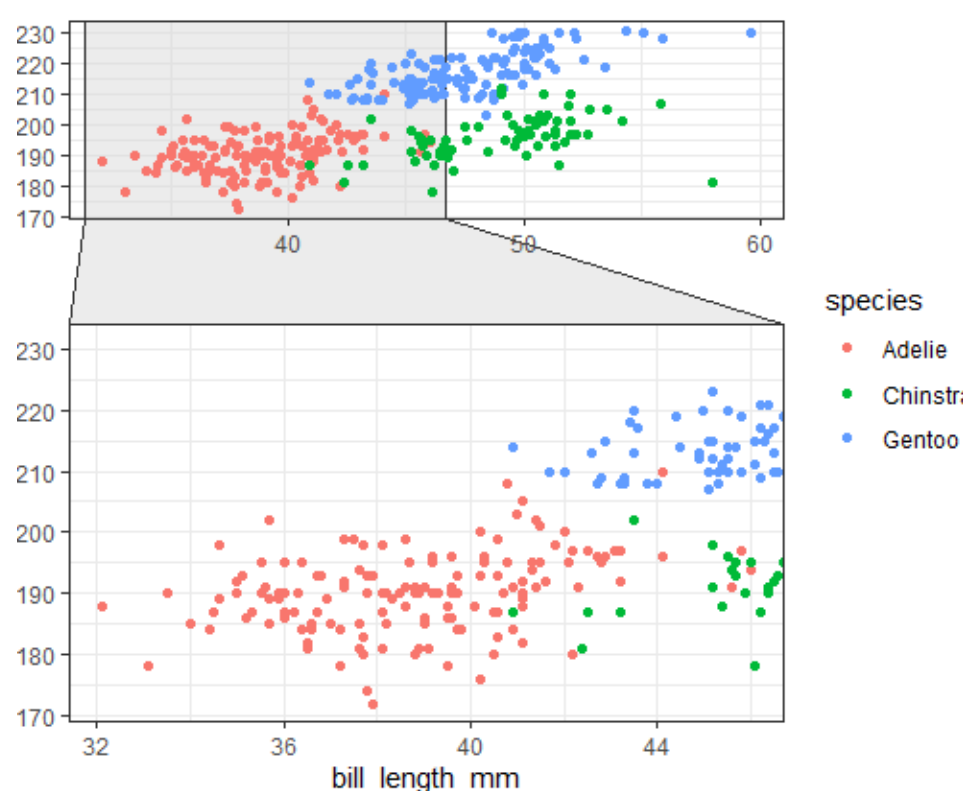
Facets



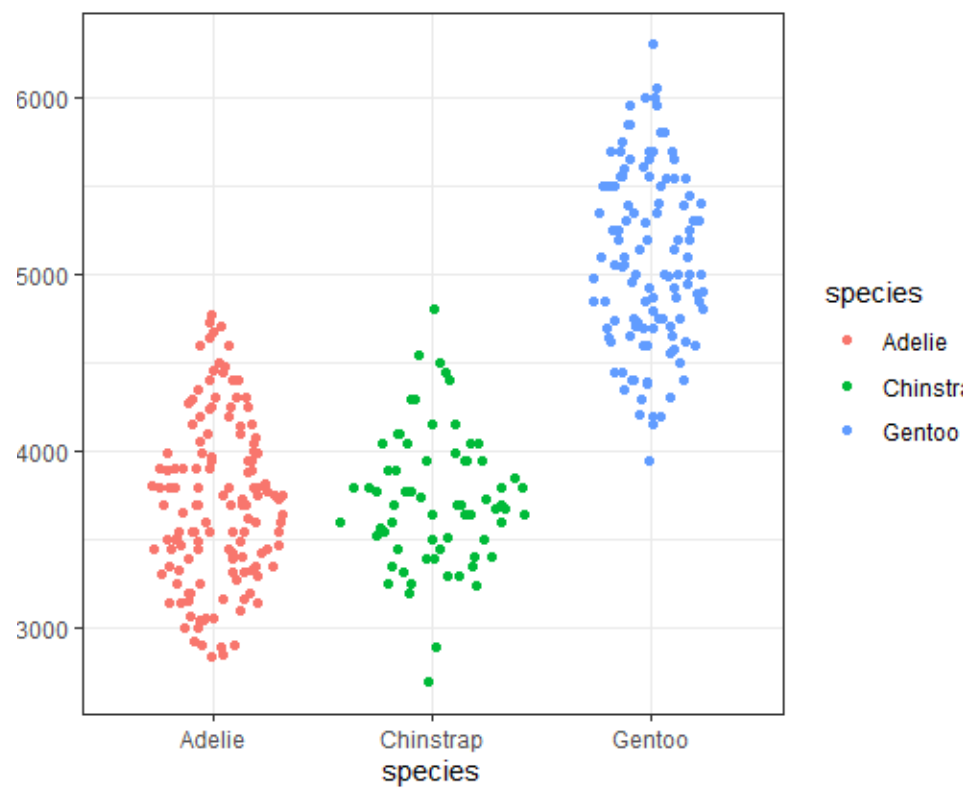
a + facet_row(~island) a + facet_col(~island)
One-dimensional versions of ggplot2::facet_wrap()
Arranging the panels in one single row or column.



a + facet_matrix(rows = vars(bill_length_mm:body_ mass_g))
Creating a matrix of panels defined by different data columns and rows.



a + facet_zoom(x=species=="Adelie")
Zooming in the desired subsample.



b <-
ggplot(penguins,aes(species,body_mass_g,color=specie s))

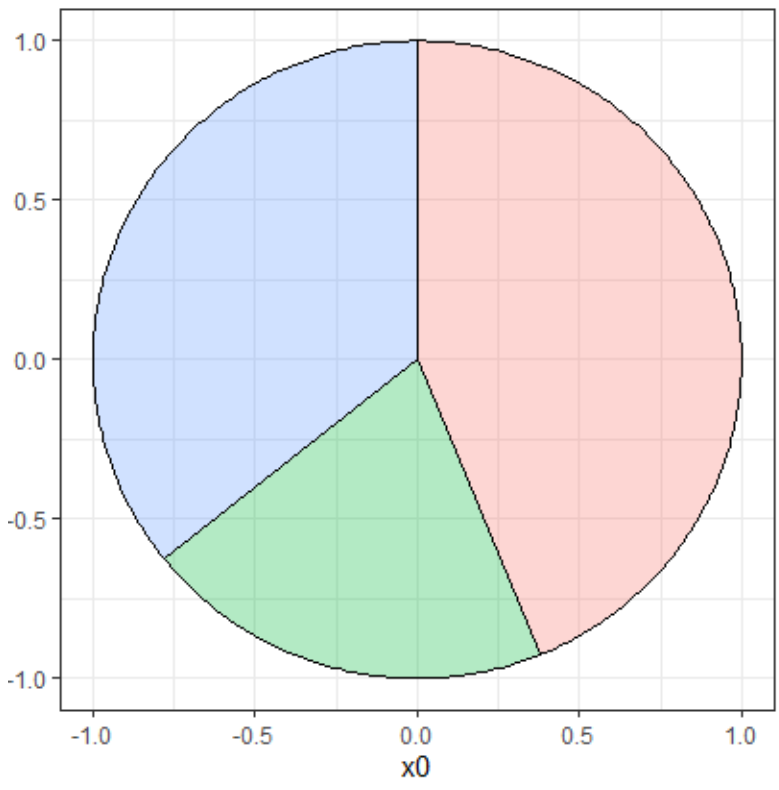
Installation

CRAN version:
Install.packages("ggforce")
Development version:
devtools::install_github("thomasp85/ggforce")

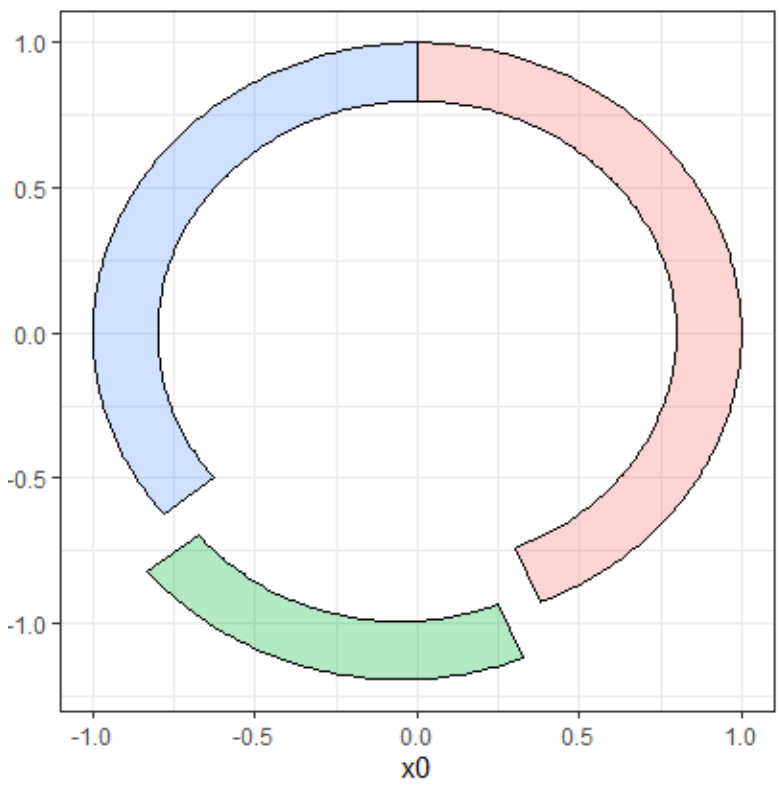
Shapes

Arcs

```
Penguins <- penguins %>%
count(species) %>%
mutate(focus=ifelse(species=="Chinstrap", 0.2, 0))
c <- ggplot(Penguins)
```



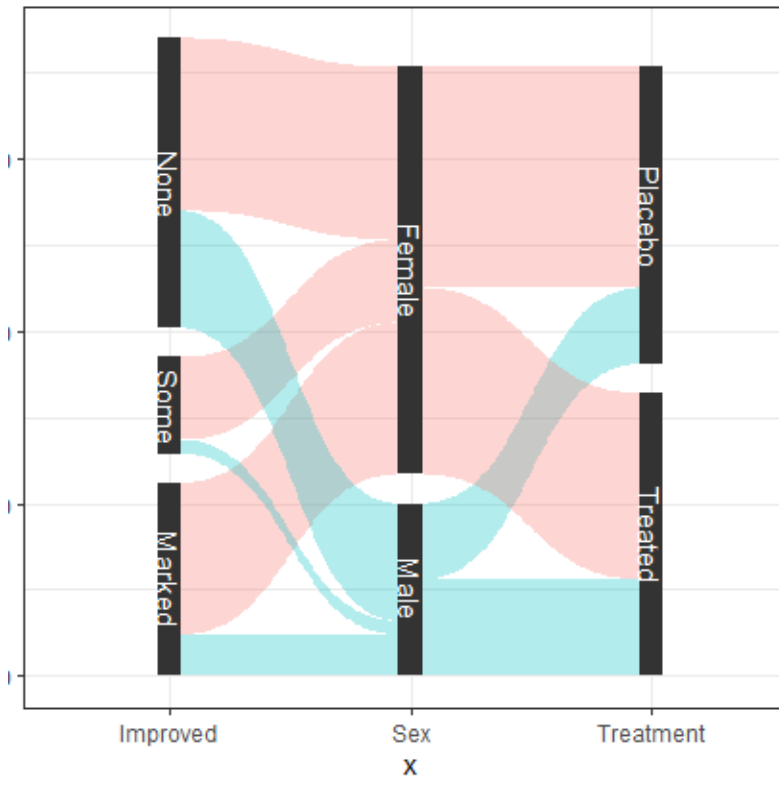
c + geom_arc_bar(aes(x0 = 0, y0 = 0, r0 = 0, r = 1, amount = n, fill = species),alpha = 0.3, stat = "pie")
x0,y0,r0,r,start,end,amunt,explode,color,fill,size,linetype,alpha



c + geom_arc_bar(aes(x0 = 0, y0 = 0, r0 = 0.8, r = 1, amount = n, fill = species,explode = focus),alpha = 0.3, stat = "pie")
x0,y0,r0,r,start,end,amunt,explode,color,fill,size,linetype,alpha

Parallel Sets

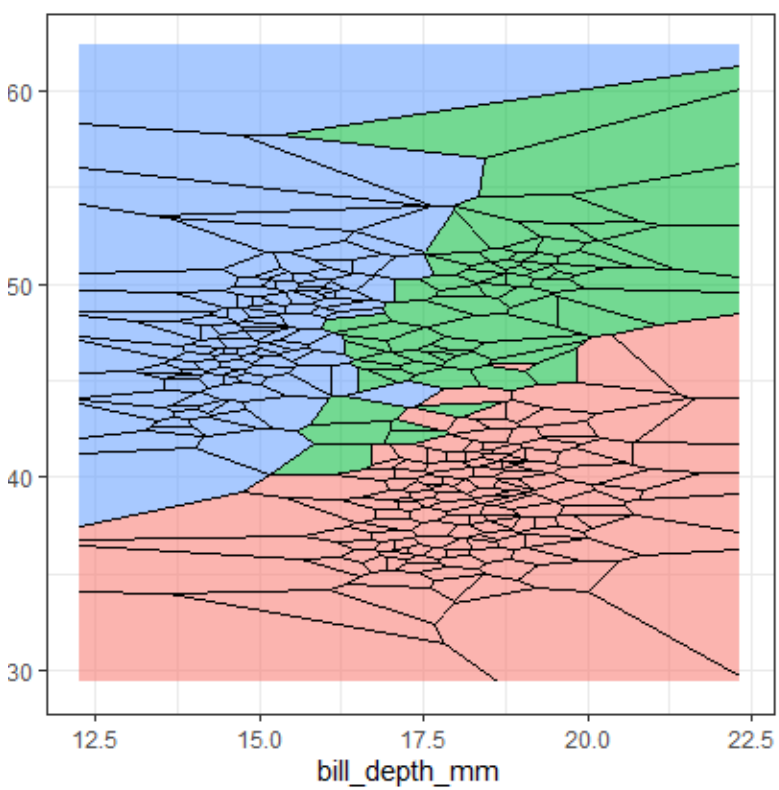
```
arthritis <- reshape2::melt(Arthritis)
arthritis <- gather_set_data(arthritis,1:3)
d <- ggplot(arthritis,aes(x, id = id, split = y, value = 1))
```



d + geom_parallel_sets(geom_parallel_sets(aes(fill = Sex), alpha = 0.3, axis.width = 0.1) + geom_parallel_sets_axes(axis.w idth = 0.1) + geom_parallel_sets_labels(co lor = 'white'))
x,id,split,value,color,fill,size,linety pe,alpha,lineend

Voronoi

```
e <-
ggplot(penguins,aes(bill_depth_mm,bill_length_mm,grou p=-1L))
```



e + geom_voronoi_tile(aes(fill=spe cies)) + geom_voronoi_segment()
x,y,alpha,color,fill,linetype,size

Annotations

Sina Plot

b + geom_sina()
x,y,color,group,size,alpha
An enhanced jitter strip chart
The width of the jitter is restricted by the normalized density of the points.