

Working with a `ggstream` plot

JR Ferrer-Paris (<https://github.com/jrfep>)

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We want to test the package `ggstream` and work with the function `geom_stream_labels`.

Check this post: <https://r-charts.com/evolution/ggstream/>

Package documentation: https://rdrr.io/github/davidsjoberg/ggstream/man/geom_stream.html

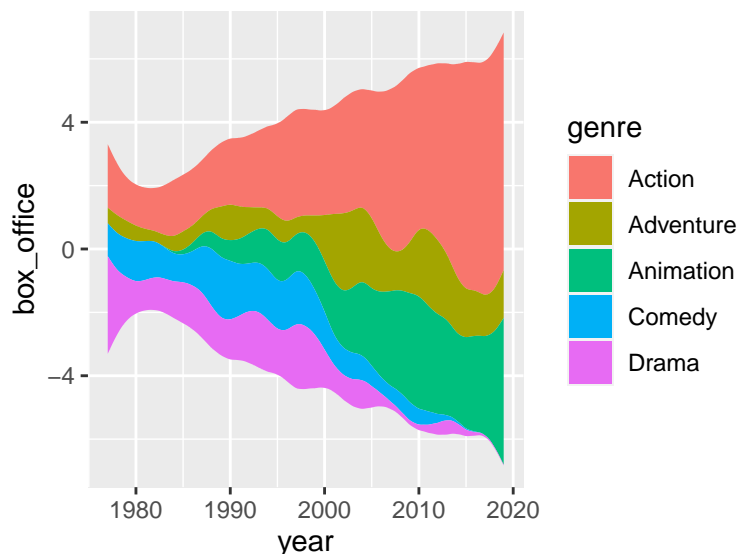
Required packages

```
# install.packages("remotes")
# remotes::install_github("davidsjoberg/ggstream")
library(ggstream)
# install.packages("ggplot2")
library(ggplot2)
```

Reproducible data

Run example with a default dataset:

```
ggplot(blockbusters, aes(x = year, y = box_office, fill = genre)) +
  geom_stream()
```

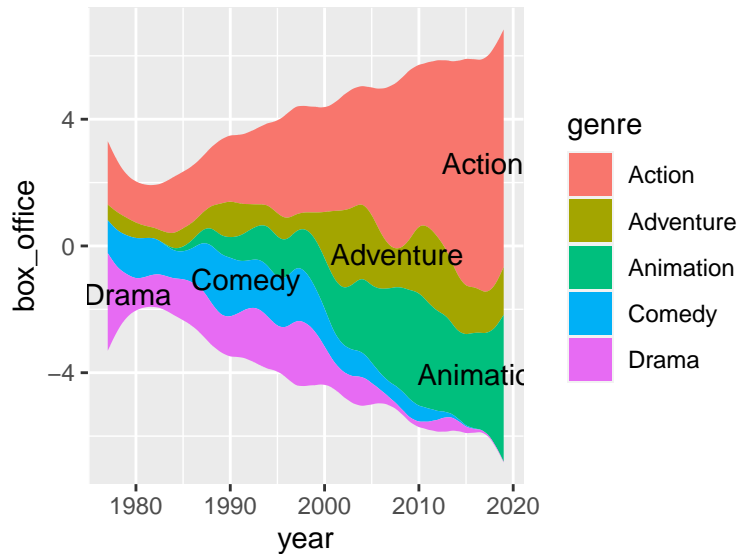


Solution

We can save the plot to an object and then add/change elements, for example:

Add labels

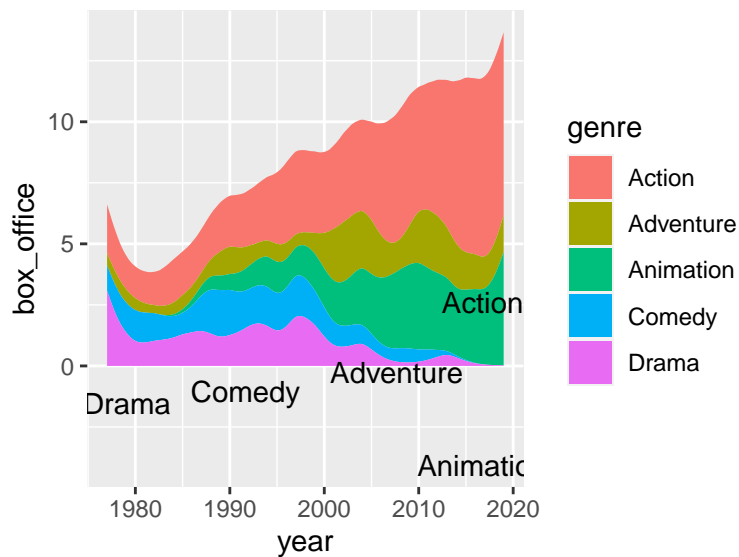
```
my.plot <- ggplot(blockbusters, aes(x = year, y = box_office, fill = genre)) +  
  geom_stream()  
  
my.plot + geom_stream_label(aes(label = genre))
```



Change type of stream plot

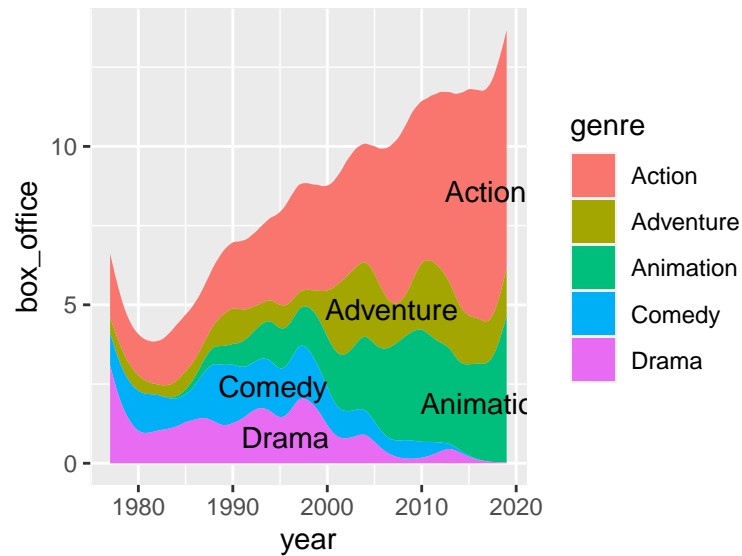
This will not work with a different type of plot

```
my.plot <- ggplot(blockbusters, aes(x = year, y = box_office, fill = genre))  
my.plot + geom_stream(type='ridge') + geom_stream_label(aes(label = genre))
```



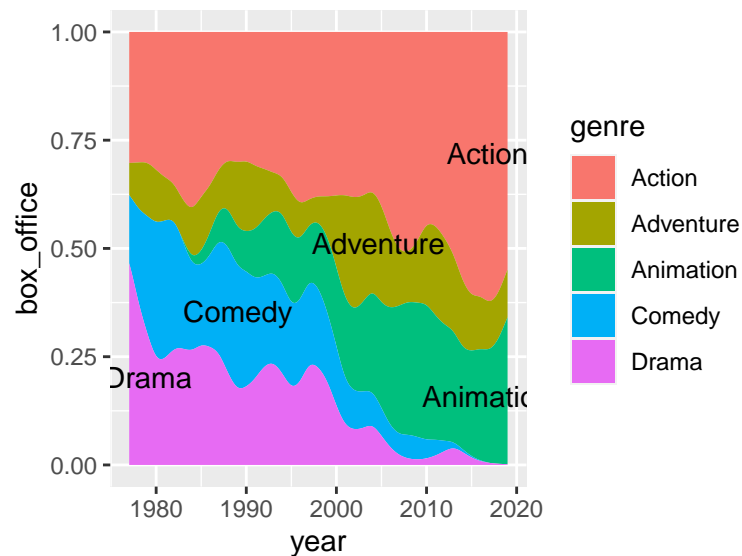
unless...

```
my.plot + geom_stream(type='ridge') + geom_stream_label(aes(label = genre), type='ridge')
```



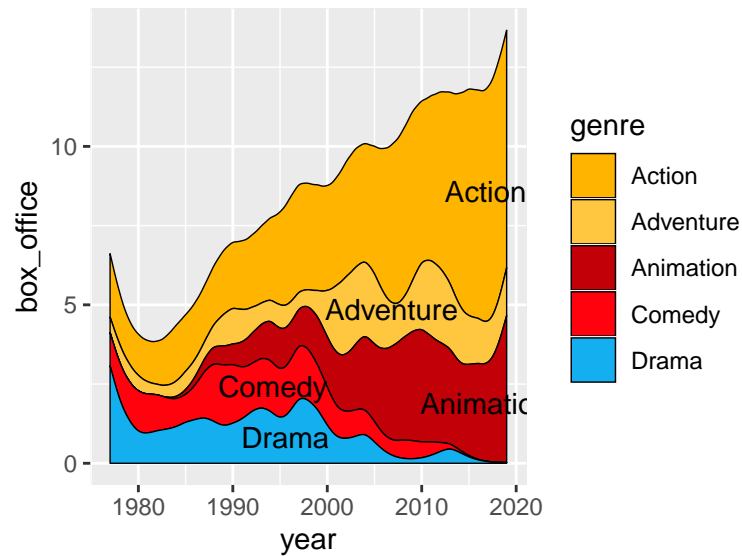
Check another type

```
my.plot + geom_stream(type='proportional') + geom_stream_label(aes(label = genre), type='proportional')
```



Change colors and add border

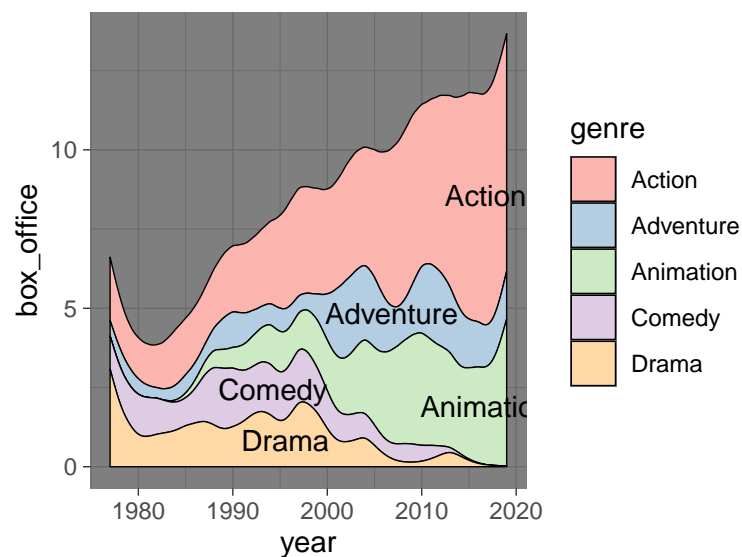
```
cols <- c("#FFB400", "#FFC740", "#C20008", "#FF020D", "#13AFEF")
my.plot <- my.plot + geom_stream(type='ridge', color=1, lwd=0.25) + geom_stream_label(aes(label = genre),
my.plot + scale_fill_manual(values = cols)
```



Change theme

Adapt the colors for a different theme:

```
## you could use RColorBrewer::brewer.pal(5, "Pastel")
cols <- c("#FBB4AE", "#B3CDE3", "#CCEBC5", "#DECBE4", "#FED9A6")
my.plot + scale_fill_manual(values = cols) + theme_dark()
```



Debugging info

Check the R session info:

```
sessionInfo()

## R version 4.1.0 (2021-05-18)
## Platform: x86_64-apple-darwin17.0 (64-bit)
## Running under: macOS Big Sur 10.16
##
```

```

## Matrix products: default
## BLAS:   /Library/Frameworks/R.framework/Versions/4.1/Resources/lib/libRblas.dylib
## LAPACK: /Library/Frameworks/R.framework/Versions/4.1/Resources/lib/libRlapack.dylib
##
## locale:
## [1] en_AU.UTF-8/en_AU.UTF-8/en_AU.UTF-8/C/en_AU.UTF-8/en_AU.UTF-8
##
## attached base packages:
## [1] stats      graphics  grDevices  utils      datasets  methods   base
##
## other attached packages:
## [1] ggplot2_3.3.5  ggstream_0.1.0
##
## loaded via a namespace (and not attached):
## [1] highr_0.9      pillar_1.6.2   compiler_4.1.0  tools_4.1.0
## [5] digest_0.6.27  evaluate_0.14   lifecycle_1.0.0  tibble_3.1.3
## [9] gtable_0.3.0   pkgconfig_2.0.3  rlang_0.4.11     DBI_1.1.1
## [13] yaml_2.2.1     xfun_0.24       withr_2.4.2      stringr_1.4.0
## [17] dplyr_1.0.7    knitr_1.33      generics_0.1.0   vctrs_0.3.8
## [21] grid_4.1.0     tidyselect_1.1.1 glue_1.4.2       R6_2.5.1
## [25] fansi_0.5.0    rmarkdown_2.9   farver_2.1.0     purrr_0.3.4
## [29] tidyr_1.1.3    magrittr_2.0.1  scales_1.1.1     ellipsis_0.3.2
## [33] htmltools_0.5.1.1 assertthat_0.2.1 colorspace_2.0-2 labeling_0.4.2
## [37] utf8_1.2.2     stringi_1.7.3   munsell_0.5.0    crayon_1.4.1

```