iris_data_set_vm3 vx.y

Han Oostdijk (www.hanoostdijk.nl)

14 December, 2015

Contents

Libraries used

```r
library(ggplot2)
library(ggthemes)
```

Table 1: first 10 observations of iris data set

Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
5.1	3.5	1.4	0.2	setosa
4.9	3.0	1.4	0.2	setosa
4.7	3.2	1.3	0.2	setosa
4.6	3.1	1.5	0.2	setosa
5.0	3.6	1.4	0.2	setosa
5.4	3.9	1.7	0.4	setosa
4.6	3.4	1.4	0.3	setosa
5.0	3.4	1.5	0.2	setosa
4.4	2.9	1.4	0.2	setosa
4.9	3.1	1.5	0.1	setosa

Load data and create plot object

Before plotting the iris data set (in Figure 1 on page 4) we list the first 10 (because we set variable *numlist* to 10 in a chunck we do not present to the reader) observations in the data set in Table 1 on page 2.

As an example of a reference we use [author1] with another reference in a footnote[1]. NB. we now have to use the LaTeX **\cite** and **\footnote** commands explicitly.

```
data(iris)
kable(iris[1:numlist,],row.names=F, caption=def_tab('lbltab1',tabcap1),
  format='latex', longtable=F)
```

```
cat(paste(' #produced',ref_tab('lbltab1',T)))
```

#produced in Table 1 on page 2

---

[1]see [author2]

```
p <- ggplot(iris, aes(Sepal.Length, Sepal.Width, colour = Species))+
  geom_point()
```

Plot iris data with alternative themes

We plot the iris data with package *ggplot2* in Figure 1 on page 4.
Because parameter *altplot* was set to TRUE (in a chunck we do not present to the reader) two plots with a different theme are also printed.
The themes are the stata color theme (*s2color*) and a theme often used in the magazine *The Economist*. These can be found in Figure 2a and
Figure 2b on page 5 .

```
p +
  labs(title = 'default theme')
cat(paste(' #produced',ref_tab('r1a','F')))
```

#produced in Figure 1 on page 4

```
p + theme_stata(scheme = "s2color", base_size = 12, base_family = fam) +
  labs(title = sprintf('theme_stata scheme = "s2color", base_size = 12, base_family = "%s"',fam))
cat(paste(' #produced',ref_tab('r1b1','F')))
```

#produced in Figure 2a on page 5

```
p + theme_economist(base_size = 10, base_family = fam) +
  labs(title = sprintf('theme_economist base_size = 10, base_family = "%s"',fam))
# this is a comment
cat(paste(' #produced',ref_tab('r1b2','F')))
```

#produced in Figure 2b on page 5

External parameters used

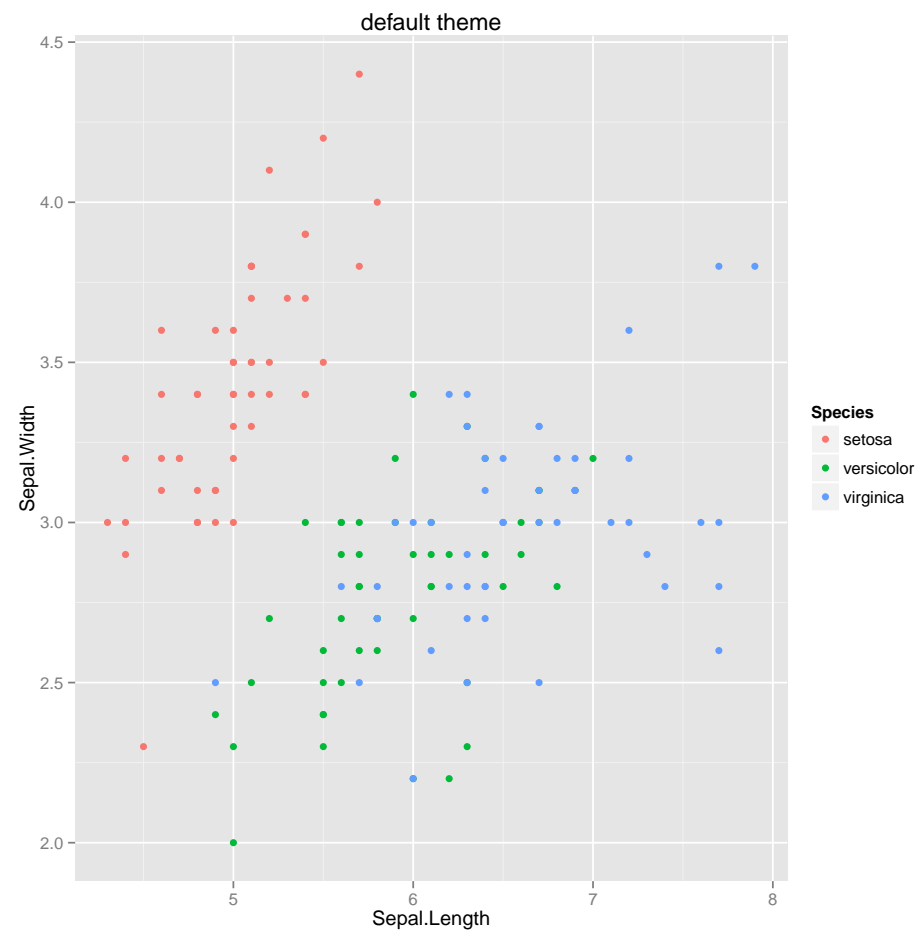The external parameters used can be found in in Table 2 on page 5 .
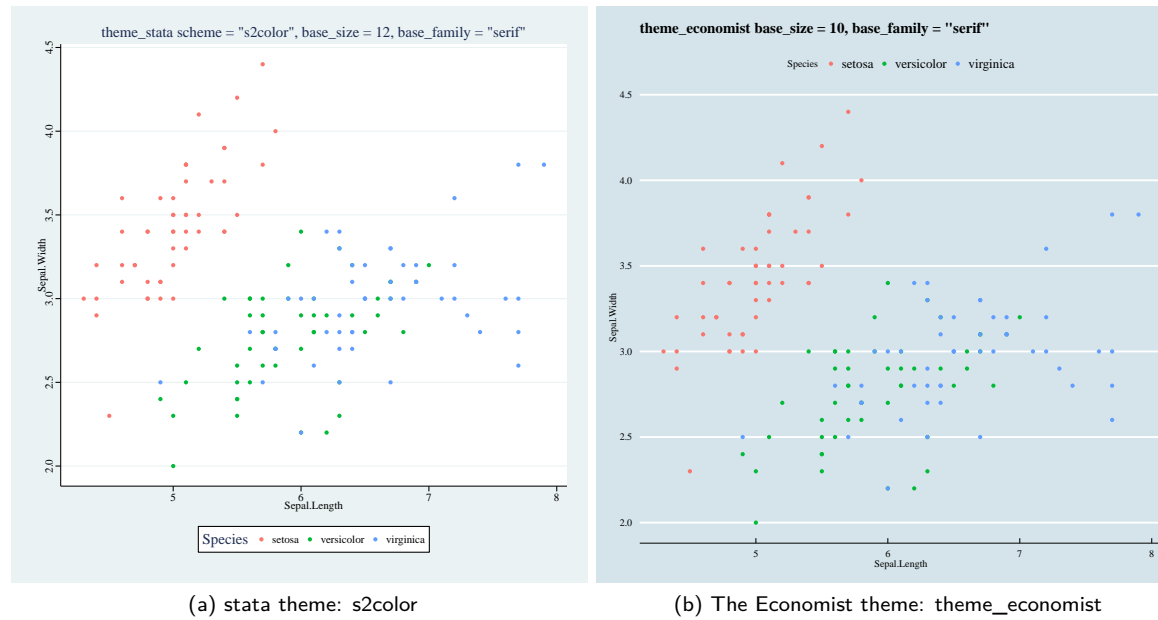
Figure 1: default theme

(a) stata theme: s2color (b) The Economist theme: theme_economist

Figure 2: examples of non-default themes

Table 2: External parameters used

parameter	value
doc_version	x.y
altplot	TRUE

Session Info

```
sessionInfo()
```

```
## R version 3.2.0 (2015-04-16)
## Platform: x86_64-w64-mingw32/x64 (64-bit)
## Running under: Windows 8 x64 (build 9200)
##
## locale:
## [1] LC_COLLATE=English_United States.1252  LC_CTYPE=English_United States.1252
## [3] LC_MONETARY=English_United States.1252 LC_NUMERIC=C
## [5] LC_TIME=English_United States.1252
##
## attached base packages:
## [1] stats     graphics  grDevices utils     datasets  methods   base
##
## other attached packages:
## [1] ggthemes_2.2.1 ggplot2_1.0.1  knitr_1.11.18
##
## loaded via a namespace (and not attached):
##  [1] Rcpp_0.11.6     digest_0.6.8     MASS_7.3-45     grid_3.2.0      plyr_1.8.3
##  [6] gtable_0.1.2    formatR_1.2.1    magrittr_1.5    scales_0.2.5    evaluate_0.8
## [11] stringi_1.0-1   reshape2_1.4.1   rmarkdown_0.8.1 labeling_0.3    proto_0.3-10
## [16] tools_3.2.0     stringr_1.0.0    munsell_0.4.2   yaml_2.1.13     colorspace_1.2-6
## [21] htmltools_0.2.6
```

References

[author1] example of reference for author1

[author2] example of reference for author2