



FOM Hochschule für Oekonomie und Management

DAS IST DER TITEL
Das ist der Untertitel

SEBASTIAN SAUER

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Master of Science (M. Sc.)

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LISTINGS

ACRONYMS

DRY Don't Repeat Yourself

API Application Programming Interface

UML Unified Modeling Language

INTRODUCTION

```
## -- Attaching packages ----- tidyverse 1.2.

## v ggplot2 3.1.1      v purrr   0.3.2
## v tibble  2.1.1      v dplyr   0.8.0.1
## v tidyr   0.8.3      v stringr 1.4.0
## v readr   1.3.1      v forcats 0.4.0

## -- Conflicts ----- tidyverse_conflicts()
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()

##
## Attaching package: 'kableExtra'

## The following object is masked from 'package:dplyr':
##
##      group_rows
```

The R package `bookdownplus` [2] is an extension of `bookdown` [1]. It is a collection of multiple templates on the basis of LaTeX, which are tailored so that I can work happily under the umbrella of `bookdown`. `bookdownplus` helps you write academic journal articles, guitar books, chemical equations, mails, calendars, and diaries.

*You can put some
additional
information here*

FEATURES

bookdownplus extends the features of bookdown, and simplifies the procedure. Users only have to choose a template, clarify the book title and author name, and then focus on writing the text. No need to struggle in YAML and LaTeX.

With bookdownplus users can

- record guitar chords,
- write a mail in an elegant layout,
- write a laboratory journal, or a personal diary,
- draw a monthly or weekly or conference calendar,
- and, of course, write academic articles in your favourite way,
- with chemical molecular formulae and equations,
- even in Chinese,
- and more wonders will come soon.

Full documentation can be found in the book [R bookdownplus Textbook](#). The webpage looks so-so, while the [pdf file](#) might give you a little surprise.

Abbildung 1 zeigt eine APA-konforme Abbildung.

```
data(mtcars)
```

```
mtcars %>%
  ggplot() +
  aes(x = factor(cyl), y = hp) +
  geom_boxplot() +
  theme_ap()
```

Tabelle ?? zeigt eine APA-konforme Tabelle.

```
mtcars %>%
  head() %>%
  select(1:4) %>%
  knitr::kable(booktabs = TRUE, caption = "APA-konforme Tabelle")
```

Und diese hier auch (s. Tabelle @ref(tab: mtcars2)).

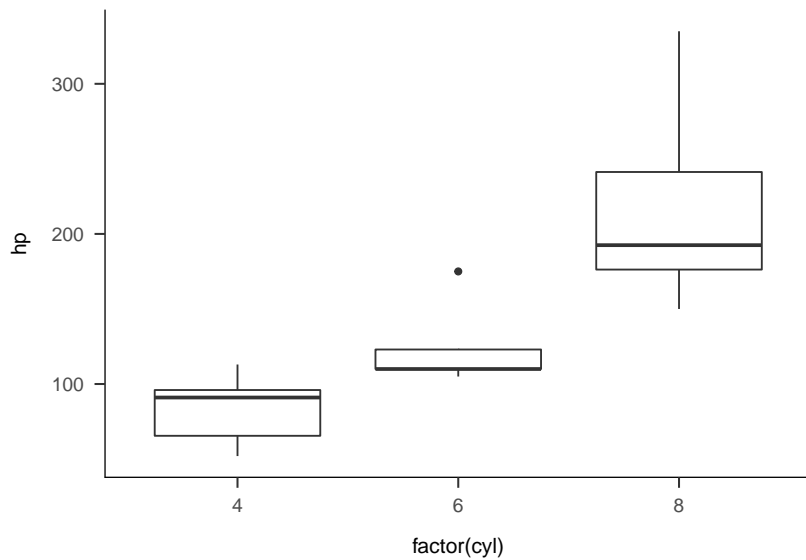


Abbildung 1: APA-konform

Tabelle 1: APA-konforme Tabelle

	mpg	cyl	disp	hp
Mazda RX4	21.0	6	160	110
Mazda RX4 Wag	21.0	6	160	110
Datsun 710	22.8	4	108	93
Hornet 4 Drive	21.4	6	258	110
Hornet Sportabout	18.7	8	360	175
Valiant	18.1	6	225	105

```
my_table <- t(apply(cars, 2, function(x) # Create data
  round(c(Mean = mean(x), SD = sd(x), Min = min(x), Max = max(x)), 2)
))

apa_table(
  my_table
  , align = c("l", rep("r", 3))
  , caption = "A summary table of the cars dataset."
)
```

Tabelle 2: A summary table of the cars dataset.

	Mean	SD	Min	Max
speed	15.40	5.29	4.00	25.00
dist	42.98	25.77	2.00	120.00

QUICK START

Although this section might not be the latest version, the general idea won't change. Please see [R bookdownplus Textbook](#) to keep up with the update.

3.1 PREPARATION

Before starting, you have to install R, RStudio, bookdown package, and other software and packages (i.e. Pandoc, LaTeX, rmarkdown, rticle, knitr, etc.) which bookdown depends on. See the official [manual](#) of bookdown for details. Additionally, if you want to produce a poster, phython must be installed before using, and the path of phython might have to be added to the environmental variables for Windows users.

3.2 INSTALLATION

```
install.package("bookdownplus")  
# or  
devtools::install_github("pzhaonet/bookdownplus")
```

3.3 GENERATE DEMO FILES

Run the following codes, and you will get some files (e.g. index.Rmd, body.Rmd, bookdownplus.Rproj) and folders in your working directory.

```
getwd() # this is your working directory. run setwd() to change it.  
bookdownplus::bookdownplus()
```

3.4 BUILD A DEMO BOOK

Now open bookdownplus.Rproj with RStudio, and press `ctrl+shift+b` to compile it. You will get a book file named *.pdf in _book/folder.

3.5 WRITE YOUR OWN

Write your own text in index.Rmd and body.Rmd, and build your own lovely book.

3.6 MORE OUTPUTS

By default, the book is in a pdf file. From ‘bookdownplus’ 1.0.3, users can get more output formats, including ‘word’, ‘html’ and ‘epub’. Run:

```
bookdownplus::bookdownplus(template = 'article', more_output = c('html'
```

3.7 RECOMMENDATIONS

I have been developing some other packages, which bring more features into ‘bookdown’, such as:

- mindr [3], which can extract the outline of your book and turn it into a mind map, and
- pinyin [4], which can automatically generate ‘{#ID}’ of the chapter headers even if there are Chinese characters in them.

Both of them have been released on CRAN and can be installed via:

```
install.packages('mindr')  
install.packages('pinyin')
```

Enjoy your bookdowning!

3.8 MODELS

Eq. (1) is an equation.

$$E = mc^2 \tag{1}$$

It can be written as $E = mc^2$.

RESULTS

Fig. 2 psum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Tab. 3 psum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

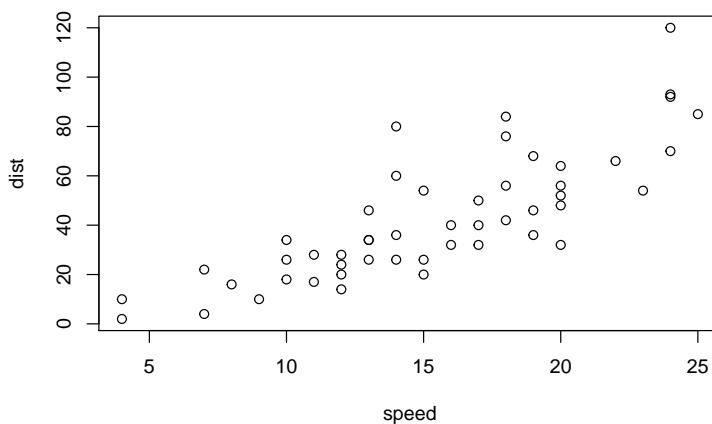


Abbildung 2: caption

Tabelle 3: Here is a nice table!

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
5.4	3.7	1.5	0.2	setosa
4.8	3.4	1.6	0.2	setosa
4.8	3.0	1.4	0.1	setosa
4.3	3.0	1.1	0.1	setosa
5.8	4.0	1.2	0.2	setosa
5.7	4.4	1.5	0.4	setosa
5.4	3.9	1.3	0.4	setosa
5.1	3.5	1.4	0.3	setosa
5.7	3.8	1.7	0.3	setosa
5.1	3.8	1.5	0.3	setosa

CONCLUSIONS

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum

LITERATURVERZEICHNIS

- [1] Yihui Xie. *bookdown: Authoring Books and Technical Documents with R Markdown*. Chapman and Hall/CRC, Boca Raton, Florida, 2016. URL <https://github.com/rstudio/bookdown>. ISBN 978-1138700109.
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