

# GESIS-Workshop

## "Datenanalyse mit R"

### Erste Schritte

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Montag, 15. Februar, 2016



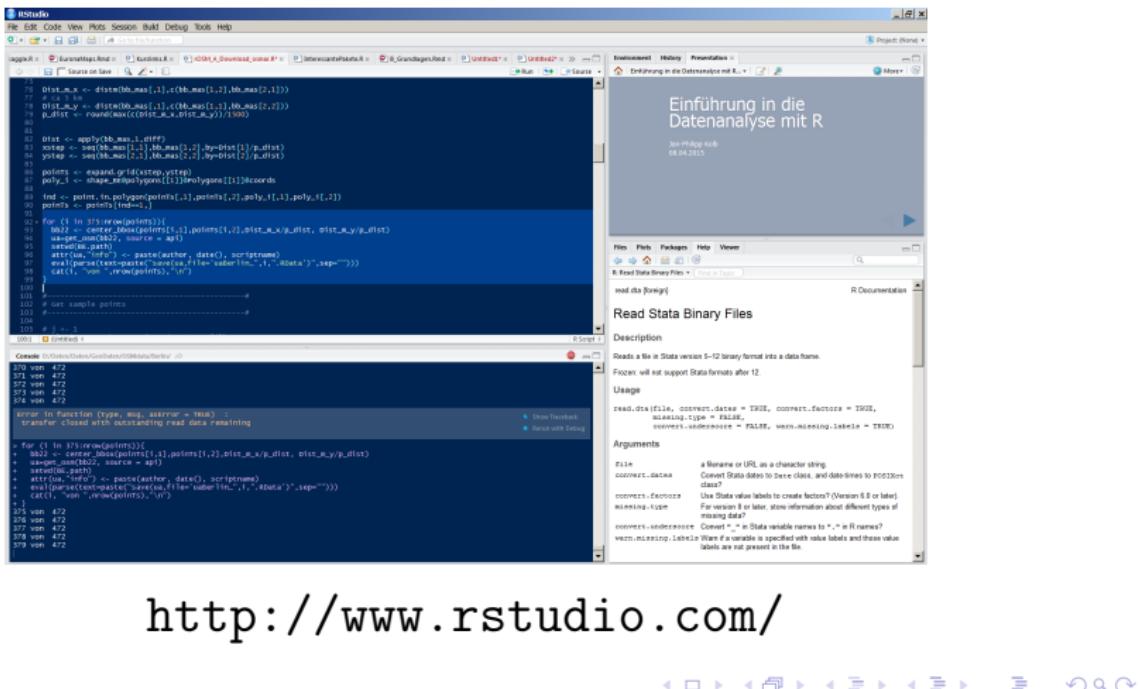
Aber die meisten Menschen nutzen einen Editor oder ein *graphical user interface (GUI)*

Aus den folgenden Gründen:

- ▶ Syntax highlighting
- ▶ Auto-Vervollständigung
- ▶ Bessere Übersicht über Graphiken, Bibliotheken

- ▶ Gedit mit R-spezifischen Add-ons für Linux  
<https://projects.gnome.org/gedit/>
- ▶ Emacs  
<http://www.gnu.org/software/emacs/>
- ▶ TinnR  
<http://www.sciviews.org/Tinn-R/>
- ▶ ...

## Ich nutze Rstudio!

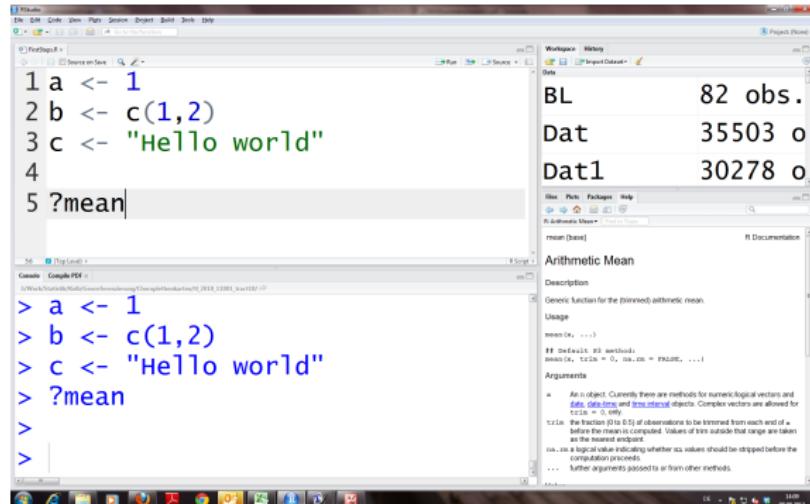


# Download der Unterlagen

[github.com/Japhilko/IntroR/](https://github.com/Japhilko/IntroR/)

The screenshot shows the GitHub repository page for 'Japhilko / IntroR'. At the top, there's a navigation bar with links for 'Explore', 'Features', 'Enterprise', and 'Blog', along with 'Sign up' and 'Sign in' buttons. Below the navigation is a search bar and a repository summary showing 13 commits, 1 branch, 0 releases, and 1 contributor. The main area displays a list of commits in the 'master' branch, with the most recent commit being 'Rproj user/20FB1B1A/pcs' by 'Japhilko' a day ago. The commit list also includes 'RintroMA', 'data', 'figure', 'slides', and 'Rhistory'. On the right side, there are sections for 'Code' (with 'Issues' and 'Pull requests'), 'Pulse', 'Graphs', and a 'HTTPS clone URL' section. The bottom right corner features standard GitHub navigation icons.

Commit	Description	Date
Rproj user/20FB1B1A/pcs	Create own package	4 days ago
RintroMA	update presentation	4 days ago
data	Data import	a day ago
figure	Import Export	a day ago
slides	Import Export	a day ago
Rhistory	Create own package	4 days ago



## Die verschiedenen Fenster in Rstudio

The screenshot shows the RStudio interface. On the left, the 'Script Editor' window contains the following R code:

```
1 a <- 1
2 b <- c(1,2)
3 c <- "Hello world"
4
5 ?mean
```

The line `?mean` is highlighted with a red rectangle. On the right, the 'Help Viewer' window displays the documentation for the `mean` function, specifically the 'Arithmetic Mean' section. The help text describes the function as calculating the arithmetic mean of a vector or a data frame. It includes examples, arguments, and notes about methods.

## Die verschiedenen Fenster in Rstudio Das Script

The screenshot shows the RStudio interface. The top-left window displays R code:

```
1 a      1
2 b      c(1,2)
3 c      "Hello world"
4
5 ?mean
```

The bottom-left window shows the results of the code execution:

```
> a <- 1
> b <- c(1,2)
> c <- "Hello world"
> ?mean
```

The right side of the interface contains three windows: 'Environment' (listing objects like BL, Dat, and Dat1), 'Plots' (empty), and 'Help' (showing the 'mean' function documentation).

## Die verschiedenen Fenster in Rstudio

### Konsole

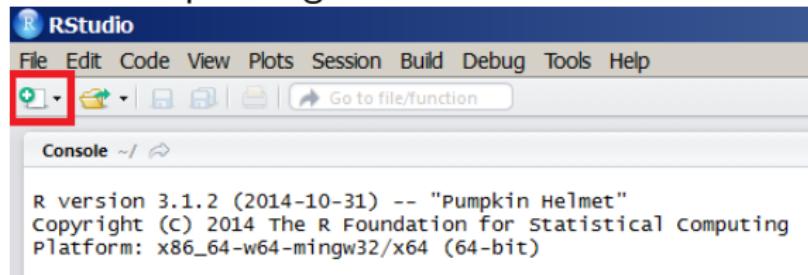


## Die verschiedenen Fenster in Rstudio

### Hilfe

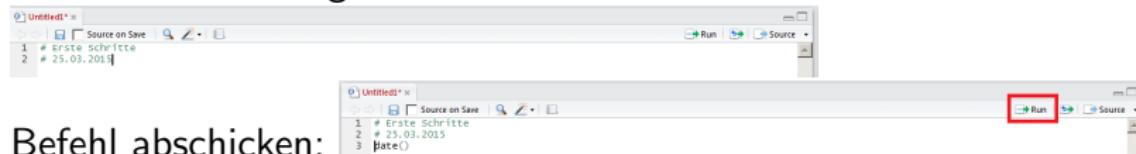
## Erste Schritte - Rstudio

Neues script anlegen:



R version 3.1.2 (2014-10-31) -- "Pumpkin Helmet"  
Copyright (c) 2014 The R Foundation for statistical computing  
Platform: x86\_64-w64-mingw32/x64 (64-bit)

Kommentare einfügen:



```
# Erste Schritte
# 25.03.2015
```

The 'Run' button in the toolbar is highlighted with a red box.

Befehl abschicken: