

VizCom - Curated Collection of Data  
Visualization from the #Rstat Community

Kadek Adit Wiryadana & Rstat Community

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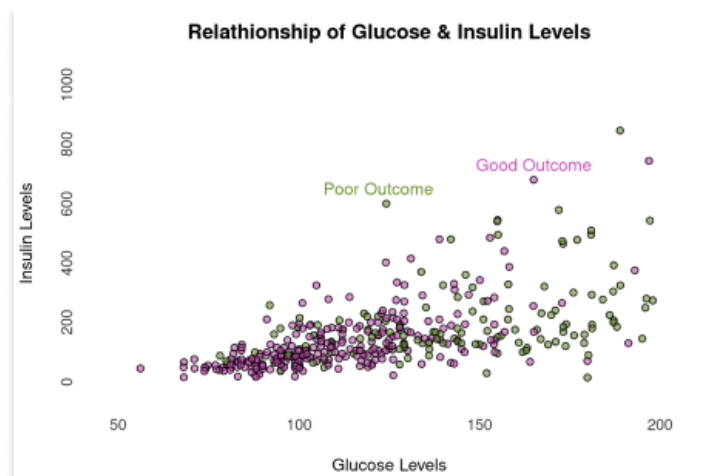
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Capturing the journey of plot making



## VizCom: Curated Collection of Data Visualization from the #Rstat Community

Kadek Adit Wiryadana

## Welcome

I always dreamed to be a book writer since I was kid. Thanks to the opportunity given by the boom of open source software, finally I am able to compose my first book while being a self sufficient publisher at once. I was trained as a medical doctor. During my training, I was exposed to epidemiology and statistics. Statistics turned out to be one of my favorite subject. When first taught, we were told to use a proprietary software. It was a point of click software, relatively straight forward and all works well for the kind of analysis we usually need. Only after I need to learn to do a more complex analysis and a better looking graph, the software could not provide the necessary feature. Fast forwards, I learn that there are a programming language, called R, that was free and customizable but has a steep learning curve. I tried. Still, for almost three years, I'm still cheating from stack overflow and others for the works that I do with R.

There are various books about the science and conceptual framework of data visualization to the technical detail of R code to the manual book of each function. What lacking is a curation of community made plot. There are numerous individual sharing their creativity with R in the Twitter and blog. I believe for noobs like me, studying their plot is a good way to learn plot making with R. Community made plot were full of creativity, while tutorial available in books were rather basic. In the end, this books is basically my personal notes on learning plot making with R and all others packages.

I hope somebody will read this books someday. This books should be available for free in digital format, both the web and pdf version. his book were made with R v4.1.2 through RStudio Server running on top of Ubuntu Server (v21.04).<sup>1</sup> The book were possible only because somebody skillful and clever invented bookdown, rmarkdown, knitr and tidyverse.<sup>2</sup> For the sake of accesibility, I provided the qrcode which code for the URL of the books for the readers to scan.<sup>3</sup> If you have suggestions, feel free to contact me at ka.wiryadana@gmail.com or wiryadana@wiryadana.org. This book were written during my free time after I had to have surgery for a non-united fracture of right arm. This is a one effort to avoid over thinking and a way to recover from my sadness. Please do not expect a perfection.

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<sup>1</sup>R Core Team, *R: A Language and Environment for Statistical Computing* (Vienna, Austria: R Foundation for Statistical Computing, 2021), <https://www.R-project.org/>; Rstudio, "RStudio: Integrated Development for R" (Boston: Rstudio PBC, 2021), <http://www.rstudio.com/>; Canonical, "Ubuntu Server" (London, 2021), [https://wiki.ubuntu.com/FocalFossa/ReleaseNotes?\\_ga=2.202901329.1166669392.1642903327-1244252401.1642903327](https://wiki.ubuntu.com/FocalFossa/ReleaseNotes?_ga=2.202901329.1166669392.1642903327-1244252401.1642903327).

<sup>2</sup>Yihui Xie, *Bookdown: Authoring Books and Technical Documents with r Markdown*, 2021, <https://CRAN.R-project.org/package=bookdown>; JJ Allaire et al., *Rmarkdown: Dynamic Documents for r*, 2021, <https://CRAN.R-project.org/package=rmarkdown>; Yihui Xie, *Knitr: A General-Purpose Package for Dynamic Report Generation in r*, 2021, <https://yihui.org/knitr/>; Hadley Wickham, *Tidyverse: Easily Install and Load the Tidyverse*, 2021, <https://CRAN.R-project.org/package=tidyverse>.

<sup>3</sup>Victor Teh and Thierry Onkelinx, *Qrcode: Generate QRcodes with r. Version 0.1.4*, 2021, <https://doi.org/10.5281/zenodo.5040088>.

Eventhough I work alone, the content were inspired and cited from various #Rstat Community, thus a big thanks for them. Also, I would like to thank my mother who always take care of me, my father and big brother who always supportive, and my little brother who forces me for a play when I hit a block. The last for someone who I love, a perfect woman who I don't expect to meet, I hope the best for you even though you do not felt the same.





**(PART) Base R**



## Chapter 1

# Basic Data Visualization with Base R

hi



## Chapter 2

# Advanced Data Visualization with Base R

hi



## Chapter 3

# Special (Mention) Data Visualization with Base R

hi





## (PART) Lattice Package



## Chapter 4

# Basic Data Visualization with Lattice Package

hellow



## Chapter 5

# Advanced Data Visualization with Lattice Package

hi



## Chapter 6

# Special (Mention) Data Visualization with Base R

hi





## (PART) ggplot2 Package



## Chapter 7

# Basic Data Visualization with ggplot2 Package

hellow



## Chapter 8

# Special (Mention) Data Visualization with ggplot2 Package

hi



## Chapter 9

# Advanced Data Visualization with ggplot2 Package

hi





## (PART) Interactive Plot



## Chapter 10

# Making Interactive Data Visualization with Plotly Package

hellow



## Chapter 11

# Making Interactive Heatmap

hellow



## Chapter 12

# Making Interactive Streamgraph

hellow





## Chapter 13

# Making Interactive Map with Leaflet Package

hellow



## Chapter 14

# Making Interactive Time Series Plot

hellow



## Chapter 15

# Interactive 3D Plot

hellow



## Chapter 16

# Miscellaneous Interactive Plot

hellow





# **(PART) Network Visualization**



## Chapter 17

# igraph Package

hellow



## (PART) Diagram Visualization



## Chapter 18

# DiagrammeR Package

hellow





# **(PART) Complex Graphing Library**



## Chapter 19

# Highcharter Package

hellow



# **(PART) Special Graphing Library**



## Chapter 20

# Speciality Plot

### 20.1 Metanalysis Related Plot

#### 20.1.1 Forest Plot

#### 20.1.2 PRISMA Plot

#### 20.1.3 Risk of Bias Visualization

#### 20.1.4 Funnel Plot





## (PART) Creating Table in R



## Chapter 21

# Basic Table Visualization



## Chapter 22

# GT

hi



## Chapter 23

# DT

hi





## Chapter 24

# Kable & Kable Extra

hi



## Chapter 25

# Formattable

hi



## Chapter 26

# Reactable

hi



## Chapter 27

# Flextable

hi





# **(PART) Creating Animation R**



## Chapter 28

### gganimate



## (PART) Content Delivery



## Chapter 29

# Content Delivery

### 29.1 Poster Creation

### 29.2 Plot Combining

### 29.3 Shiny

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———. *Knitr: A General-Purpose Package for Dynamic Report Generation in r*, 2021. <https://yihui.org/knitr/>.