

BAMBERG GRADUATE SCHOOL OF SOCIAL SCIENCES



FURTHER EDUCATION | WORKSHOP

Data Visualization with R

Instructor:	Ákos Máté, Research Fellow, Center for Social Sciences, Budapest
Date & Time:	Wednesday, April 21, 2021, 09:00 a.m. to 12:00 p.m. (s.t.)
	Thursday, April 22, 2021, 09:00 a.m. to 12:00 p.m. (s.t.)
Place:	Virtual Workshop via Zoom
	(details to be announced to course participants in due time)
Registration:	To register, please send an email to <u>weiterbildung@lifbi.de</u> by April 12, 2021.
	Registration is mandatory.

Short Outline

The aim of the workshop is to provide an accessible introduction into the use of R for data visualization. R's ggplot2 package and its extensions provide a flexible framework for data visualization and they are widely used both in academia and in industry.

TOPICS COVERED

- Data visualization basics (very briefly)
- Introduction to the most common plot types (barcharts, scatterplots, etc.)
- Introduction to some not-so-common plot types (maps, networks)
- How to visualize results of different research outputs
- Creating unique themes
- Programming with ggplot2

The workshop is practice-oriented, which means that we will have some smaller and bigger coding challenges to start growing the ggplot muscle memory early on. If you have your own dataset and want some ideas on possible ways of representing it, let me know and we can take a collective look at it.

PREREQUISITES

- You should have a **working R (version 4.0.0 +) and RStudio (version 1.4.+)** installed.
- Basic familiarity with R is expected.
- Some statistical knowledge is also assumed (but not necessary), but if you have seen an OLS regression then you are good to go.

Association



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The workshop mainly aims at doctoral members of LIfBi and BAGSS. In case of any vacant places, it is open to anyone interested.

Consultation Meetings

Ákos Máté will offer consultation meetings for a limited number of course participants with specific question on the implementation of the course content on their datasets. If you wish to attend a consultation meeting, please state it upon registration.

Preparation

To refresh or solidify your skills in R, you can also cover the following introductory material provided by Ákos Máté:

- <u>R Basics An intro course for everything R</u>
- The free and online book <u>**R** for Data Science</u>, chapters 9 12

About the Trainer

<u>Ákos Máté</u> is a research fellow at the Centre for Social Sciences. His key research area is the political economy of the European Union and its members' fiscal governance.

He uses a wide variety of methods in his research, particularly automated text analysis (and attached various machine learning approaches), network analysis and more traditional econometric techniques.

