

# Workshop on R

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UC3M

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# What is R? Why use R?

## What is R?

- ▶ R is a programming language that was first developed during the 1990s.
- ▶ Particularly suitable for data analysis and creating graphics.

## Why use R?

- ▶ Available for free!
- ▶ Incredibly flexible.
- ▶ Great for creating graphics.

## Drawbacks?

- ▶ No point-and-click!
- ▶ Sometimes hard to figure out, what best way of doing something is.

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## Why use R?

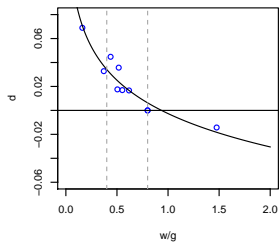
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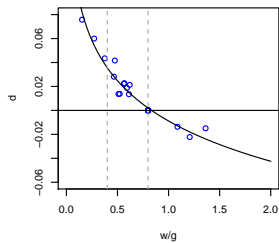
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# Some examples...

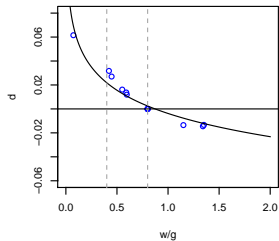
**Belgien**



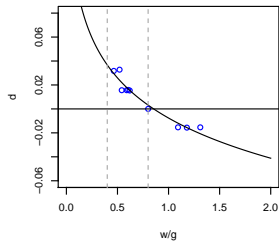
**Österreich**



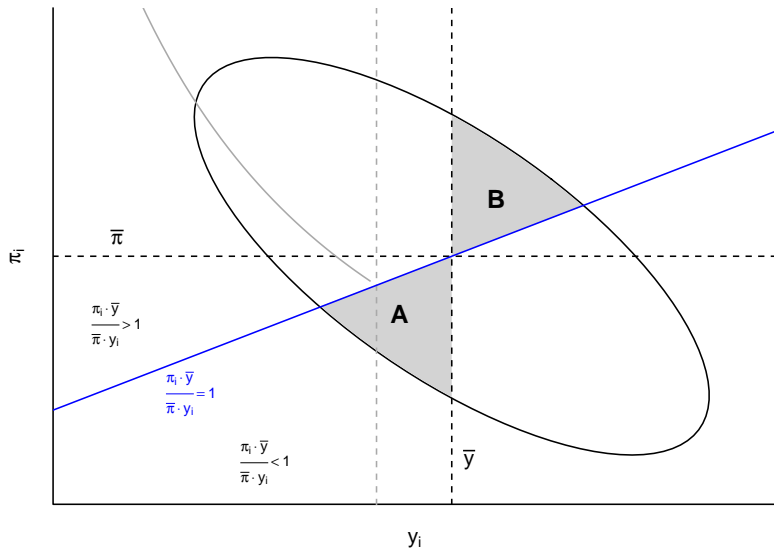
**Frankreich**



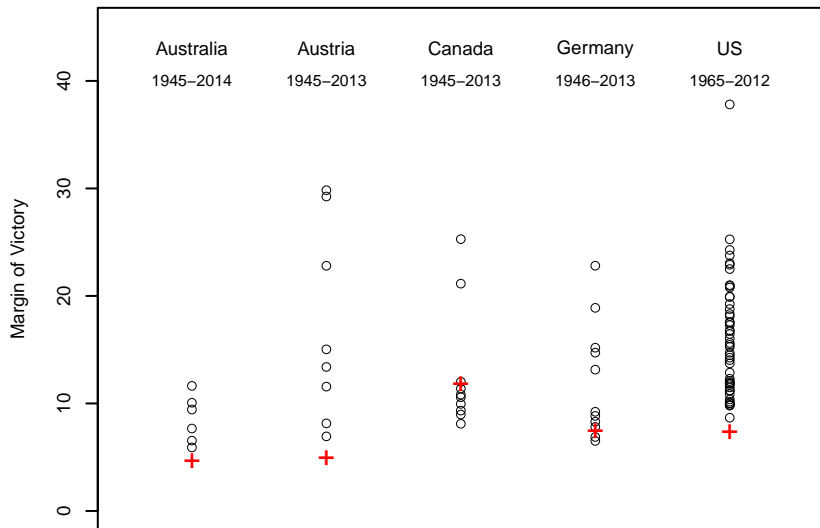
**Deutschland**



## Some examples...

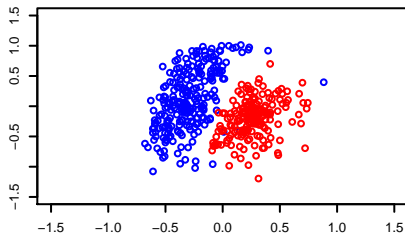


## Some examples...

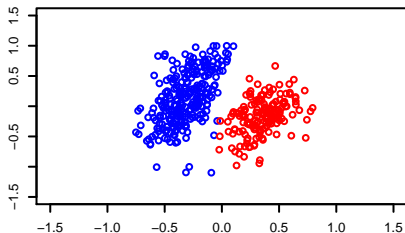


## Some examples...

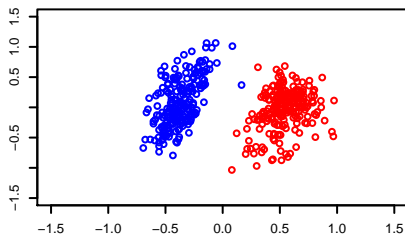
97th Congress (1980)



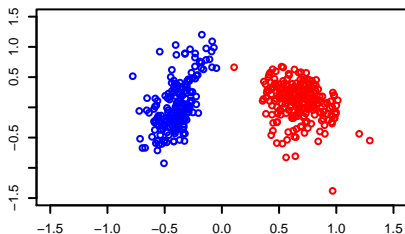
102th Congress (1990)



107th Congress (2000)

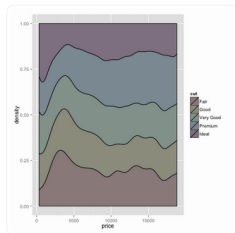


112th Congress (2010)

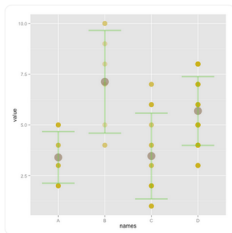




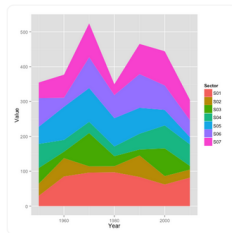
# Some examples...



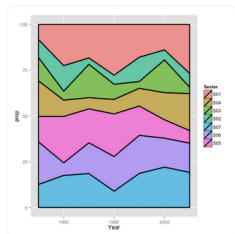
#135 Stacked density plot



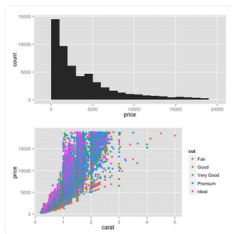
#47 groups comparison with ggplot2



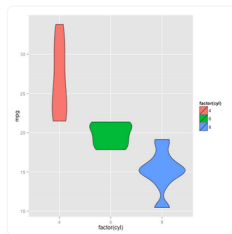
#136 Stacked Area Graph



#136 Stacked Area Graph



#117 Multiple ggplot2 on one page



#95 Violin plot with ggplot2

Source: <http://www.r-graph-gallery.com/portfolio/ggplot2-package/>

## Some drawbacks