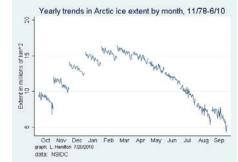
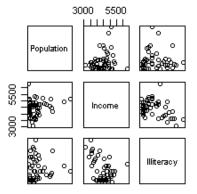
## **Beyond the basics**

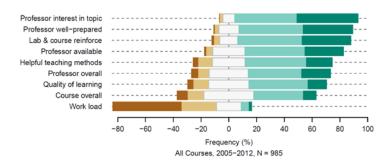
#### Time series

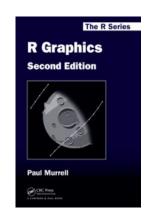




**Multivariate data** 

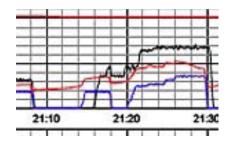
**Categorical data** 





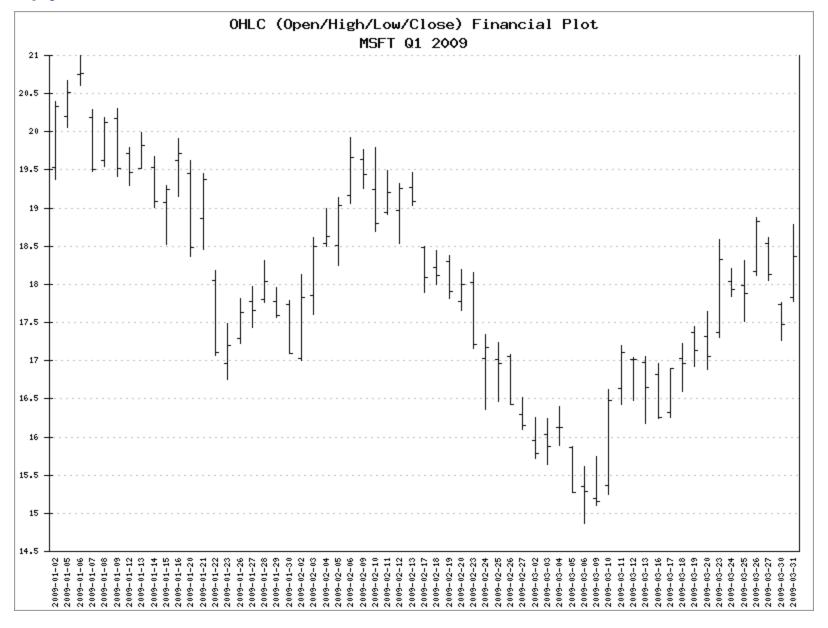
Steal from the best

Be alert to poor design

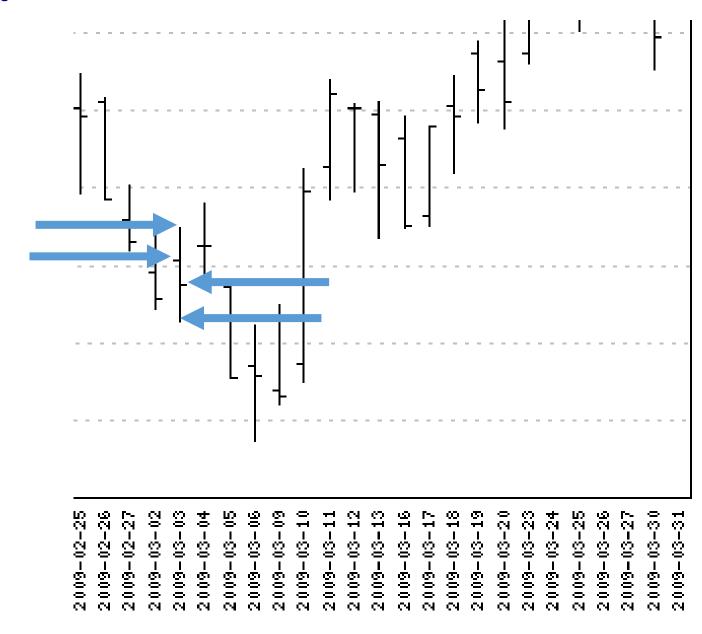


Interesting forms of time series (bivariate data).

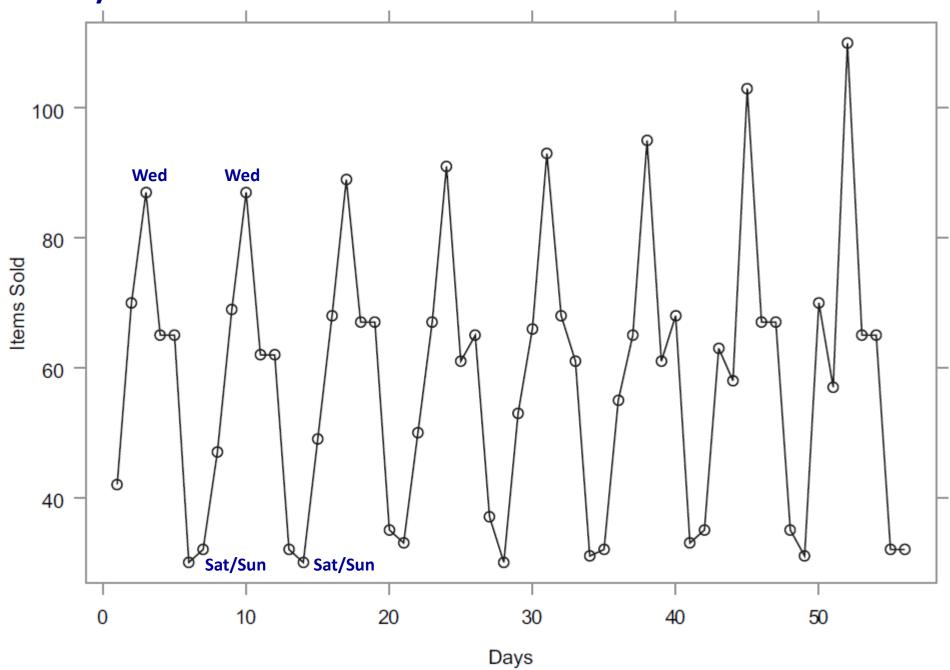
## Financial (O-H-L-C) plot



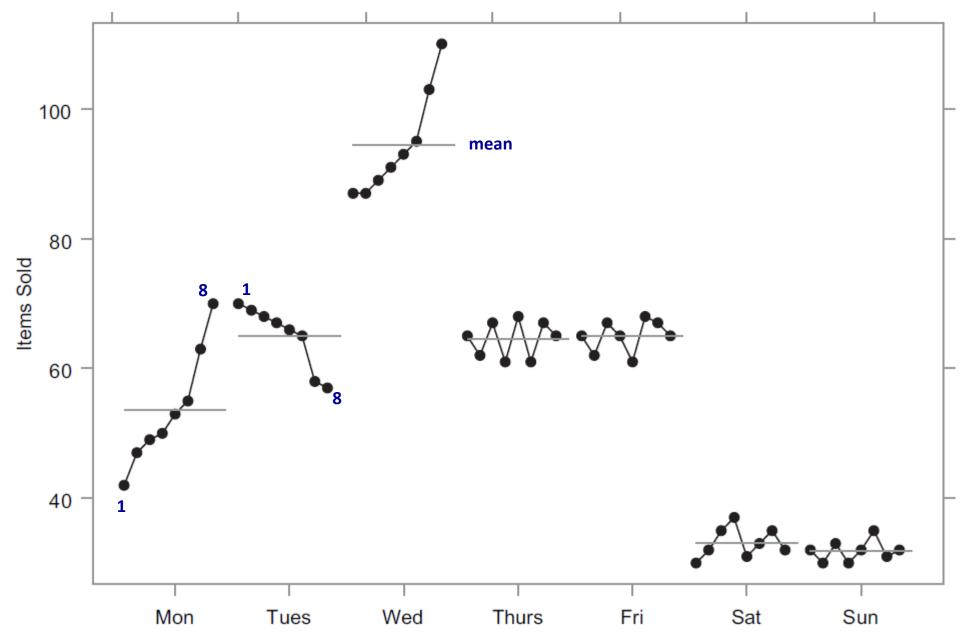
## Financial (O-H-L-C) plot



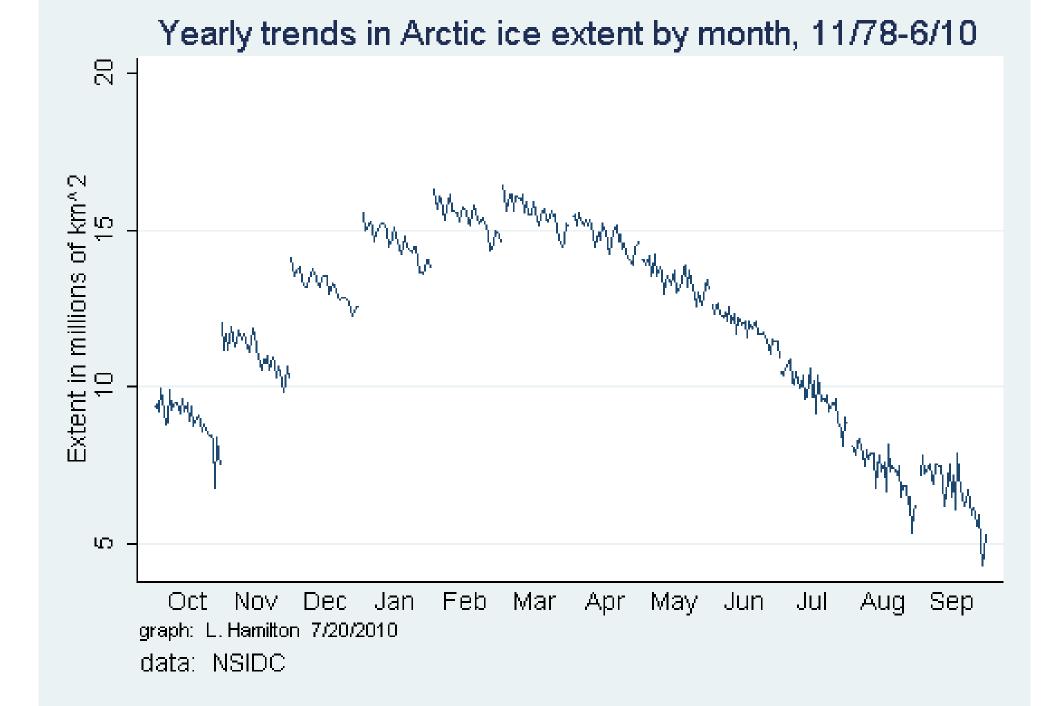
## When you see a cycle in a time series...



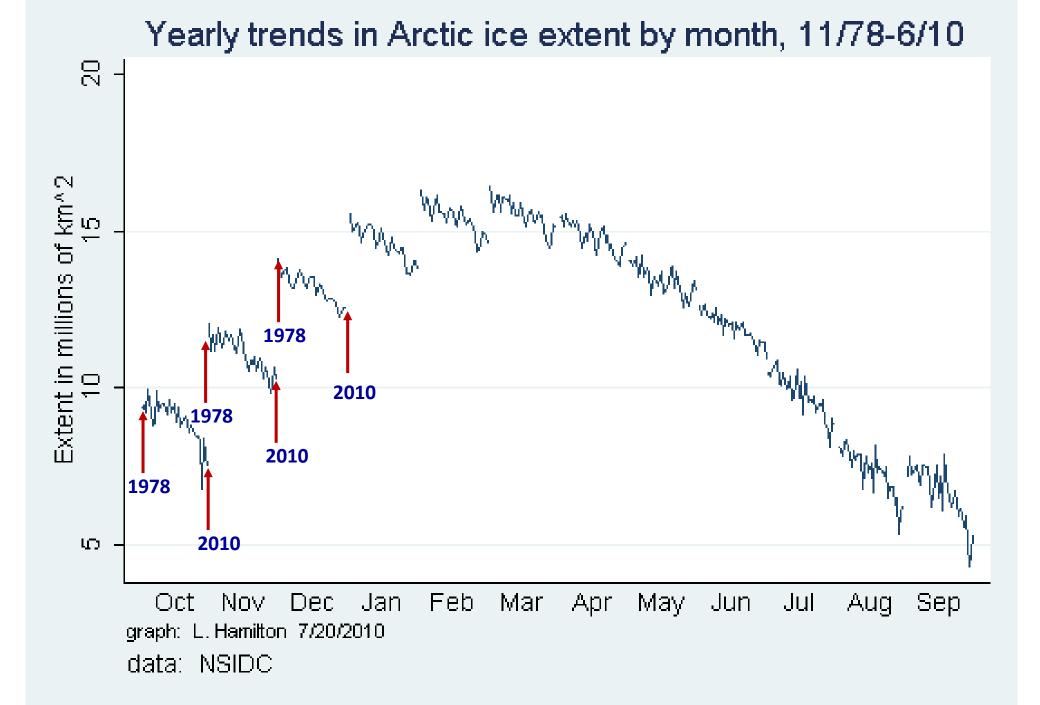
## **Cycle plot**

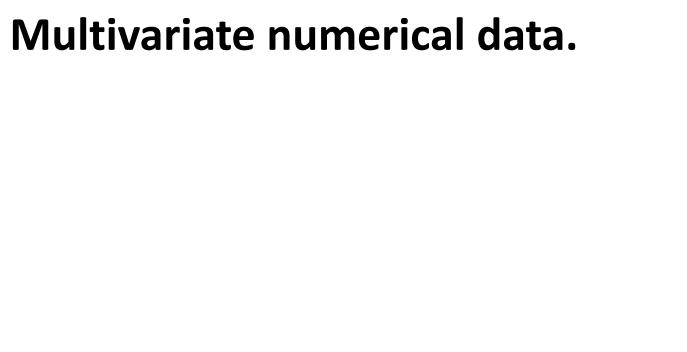


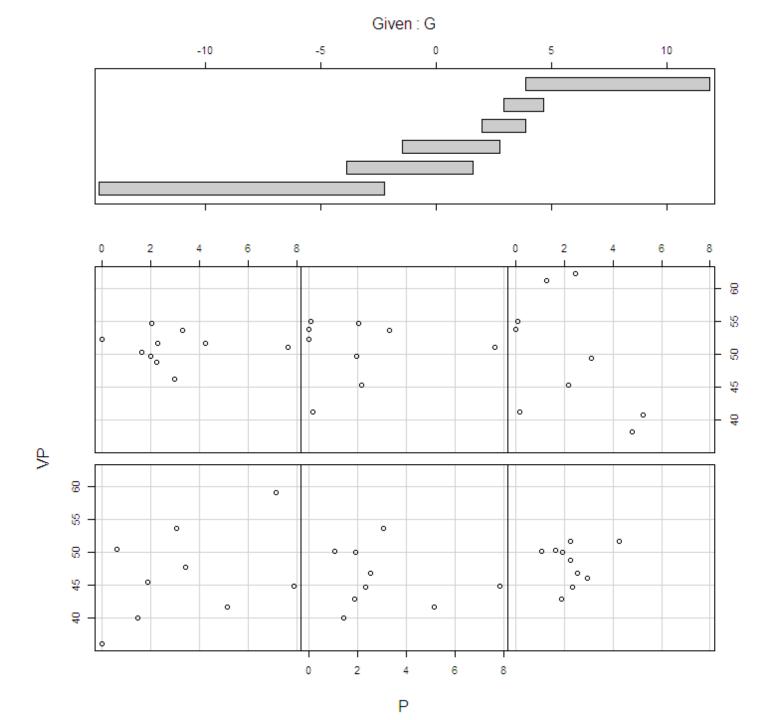
**Cycle plot** 

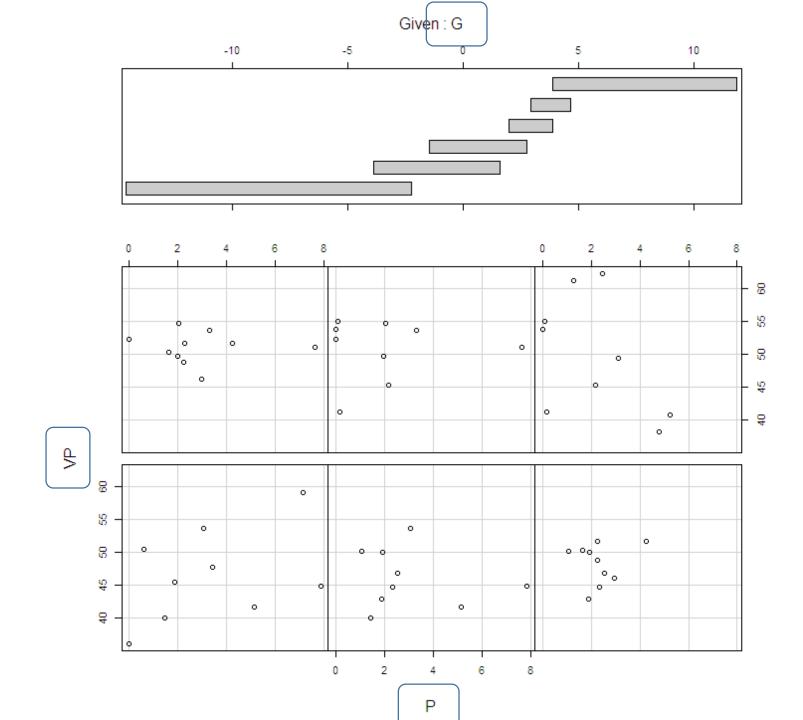


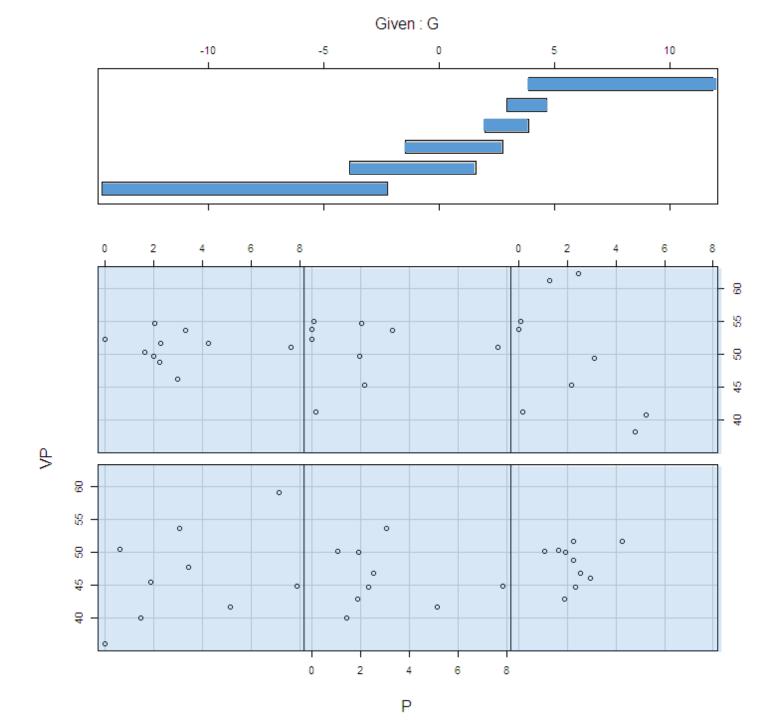
Cycle plot or month plot

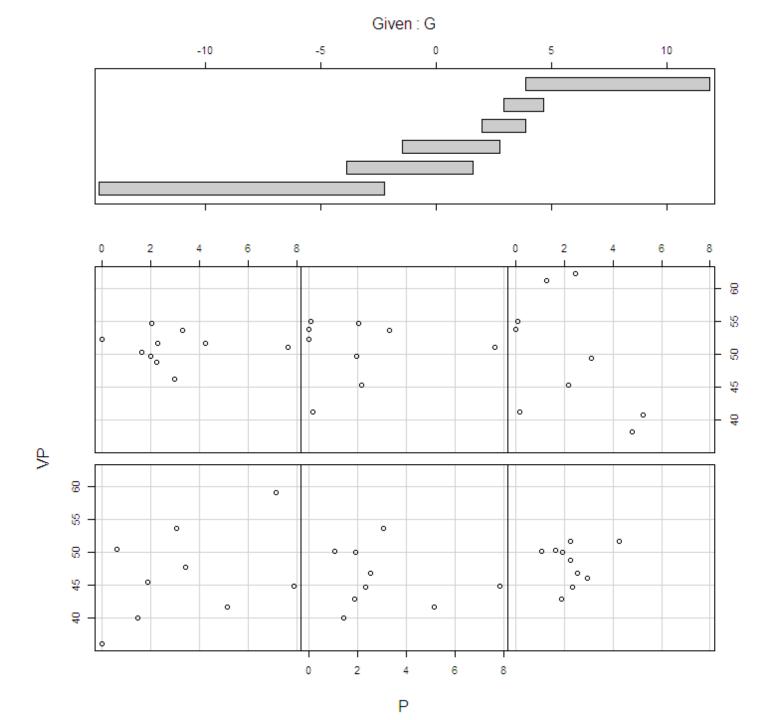




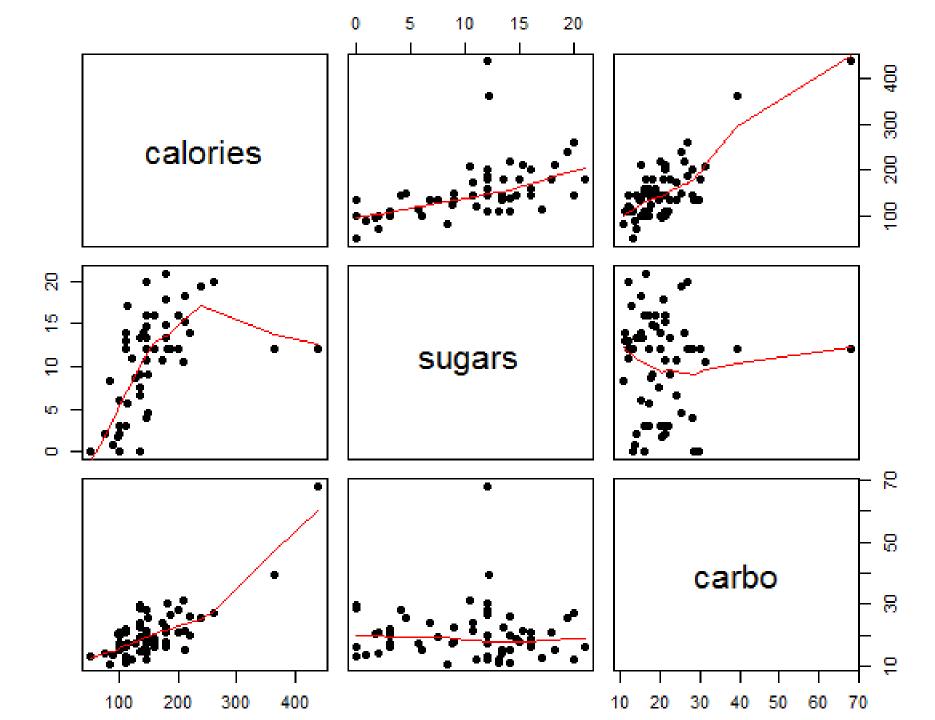




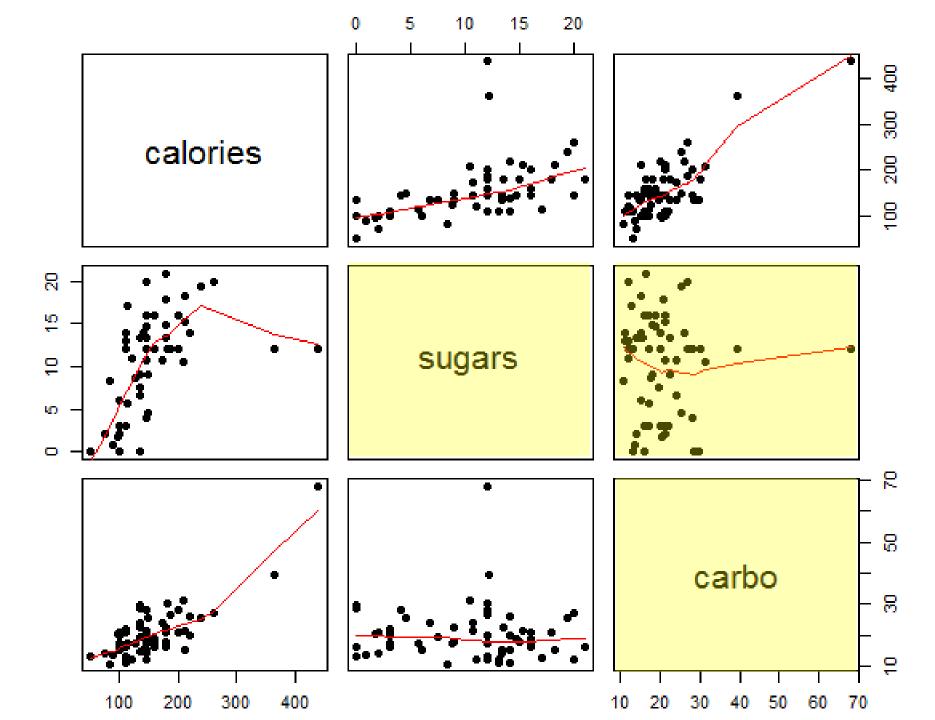




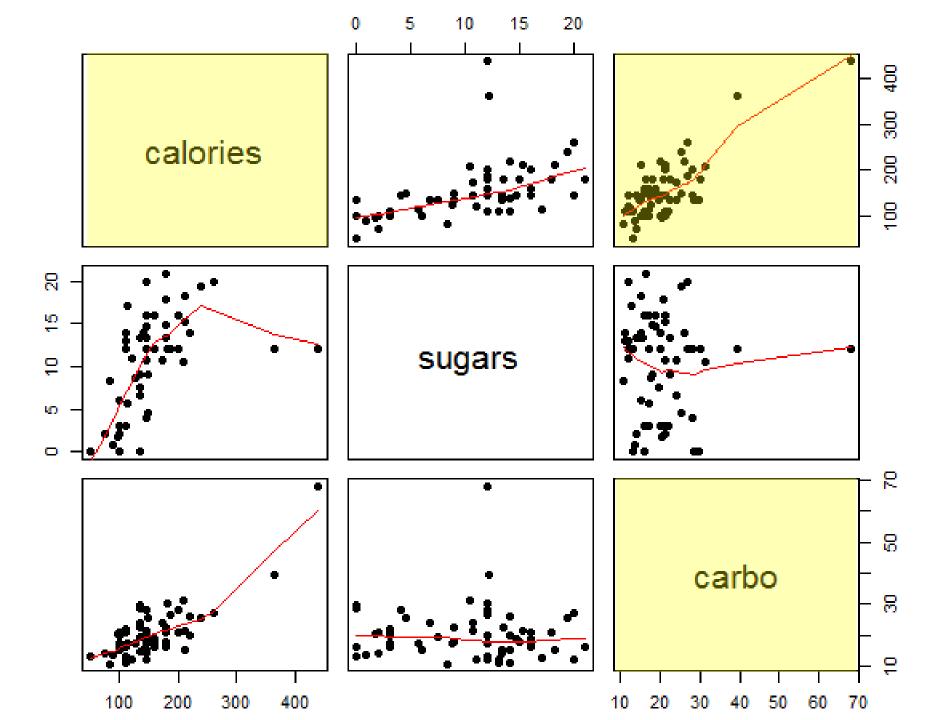
Scatterplot matrix



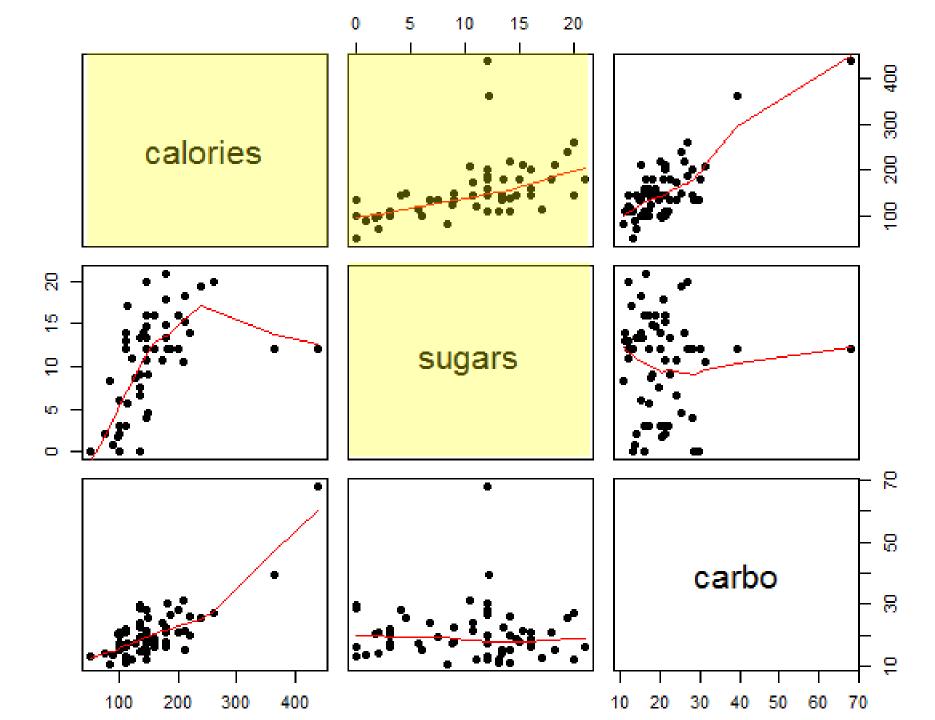
Scatterplot matrix

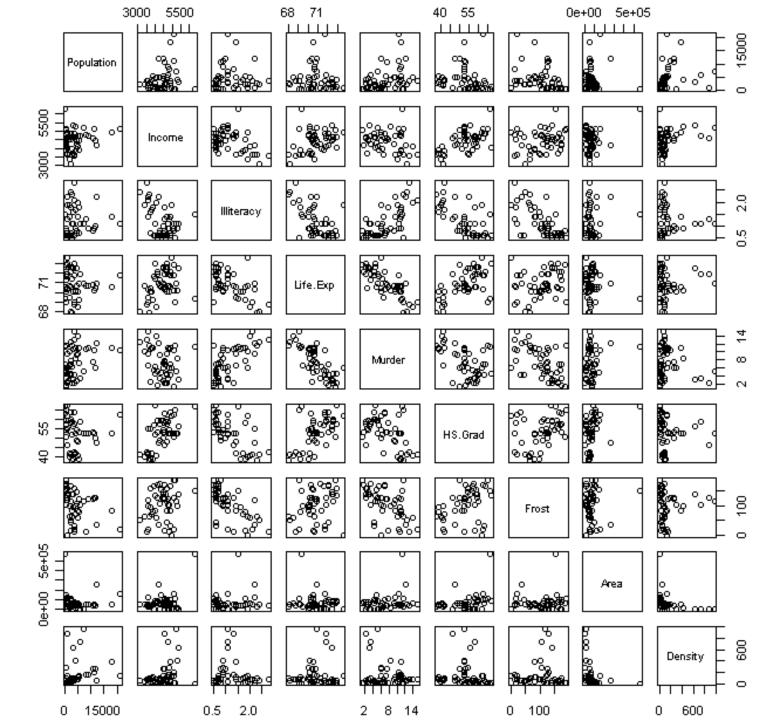


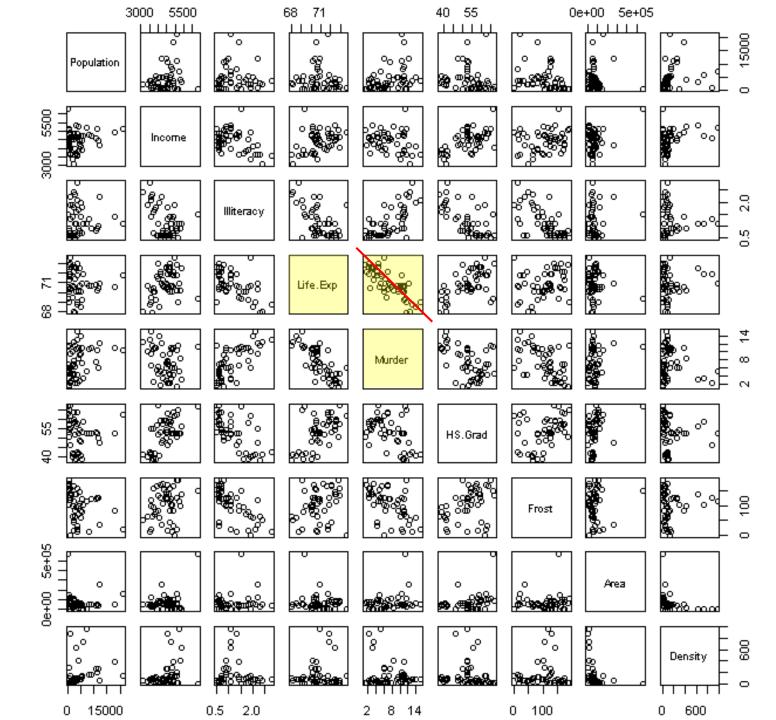
Scatterplot matrix

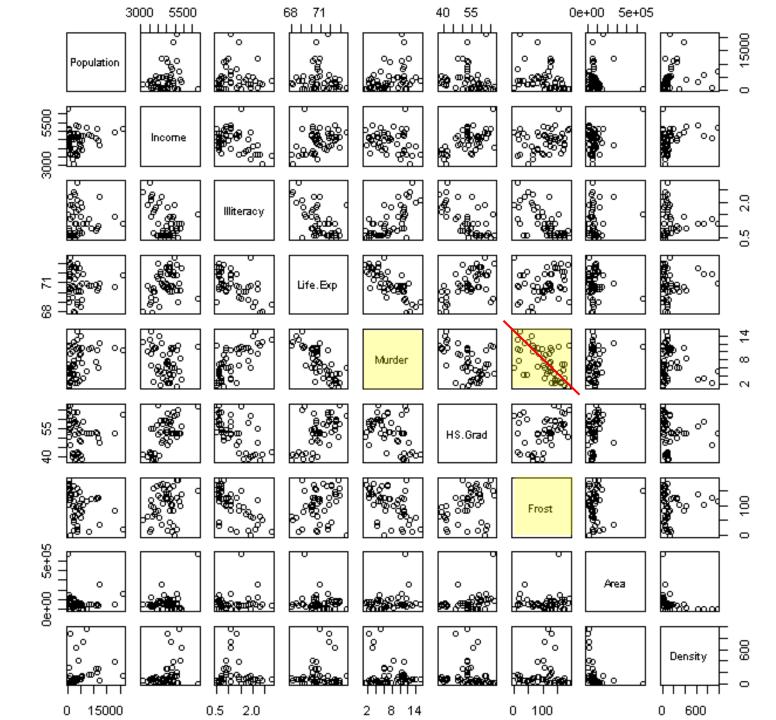


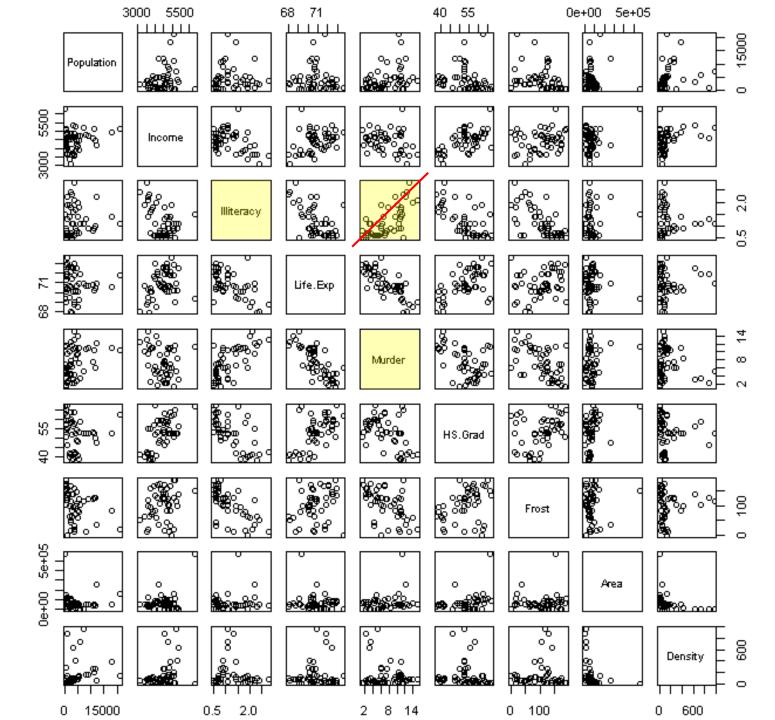
Scatterplot matrix



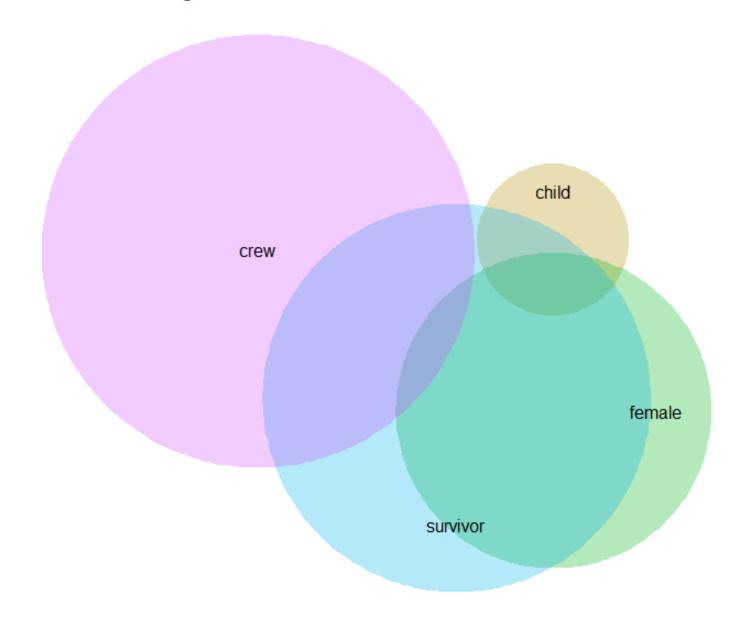




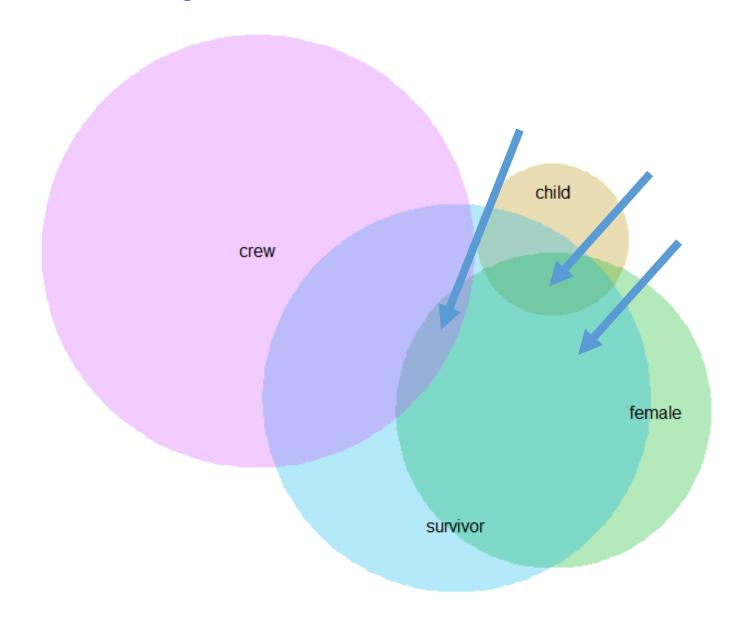


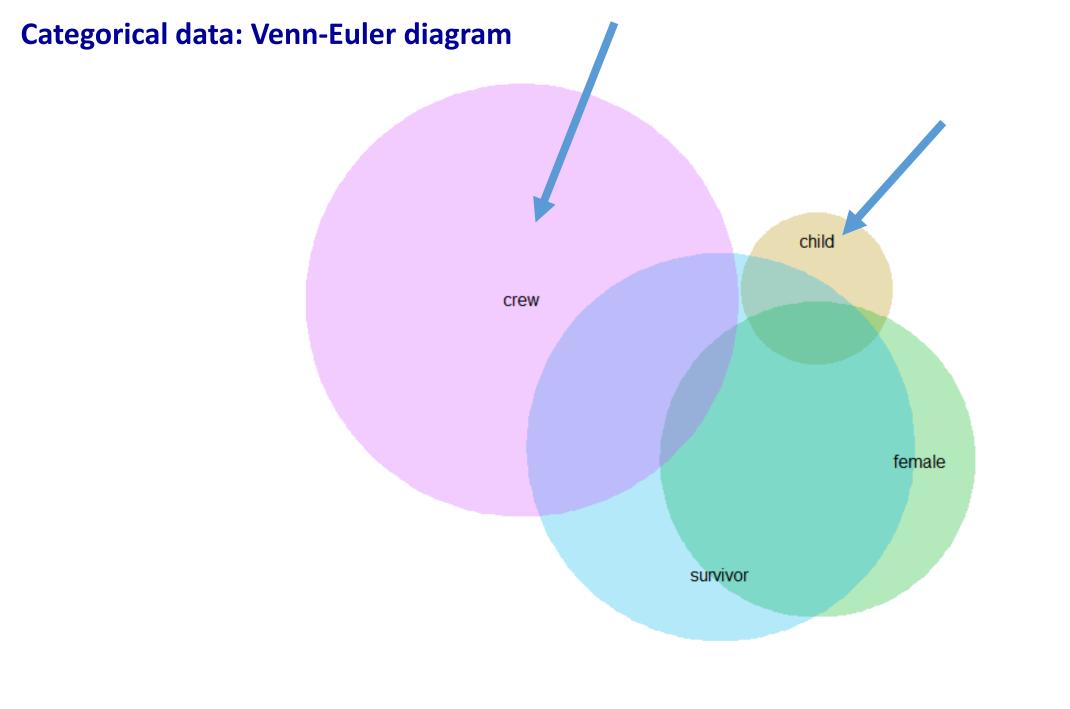


## **Categorical data: Venn-Euler diagram**

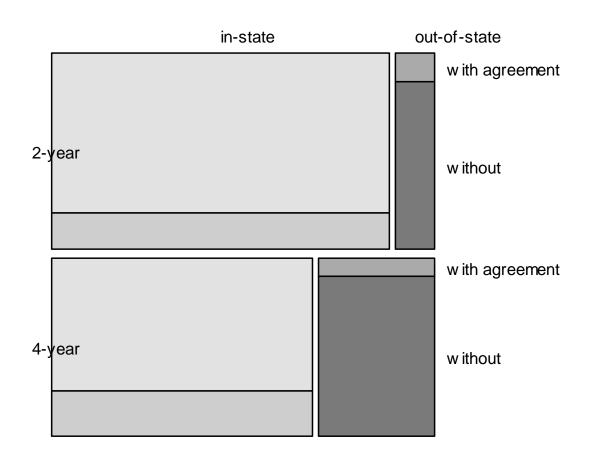


## **Categorical data: Venn-Euler diagram**

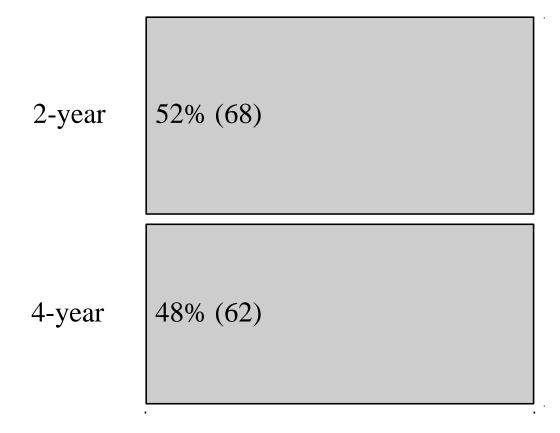


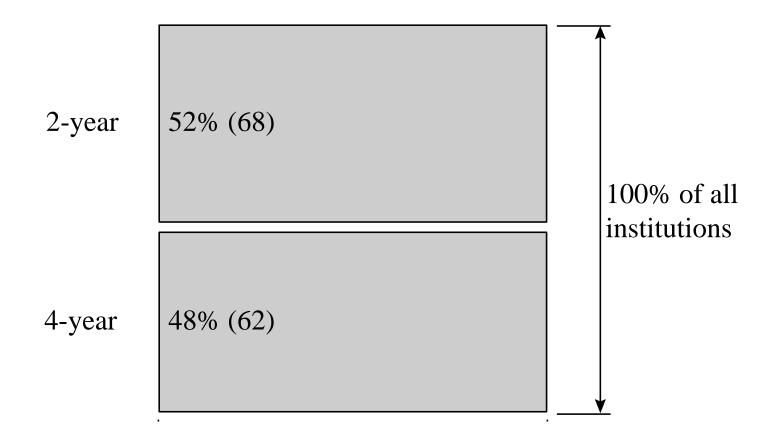


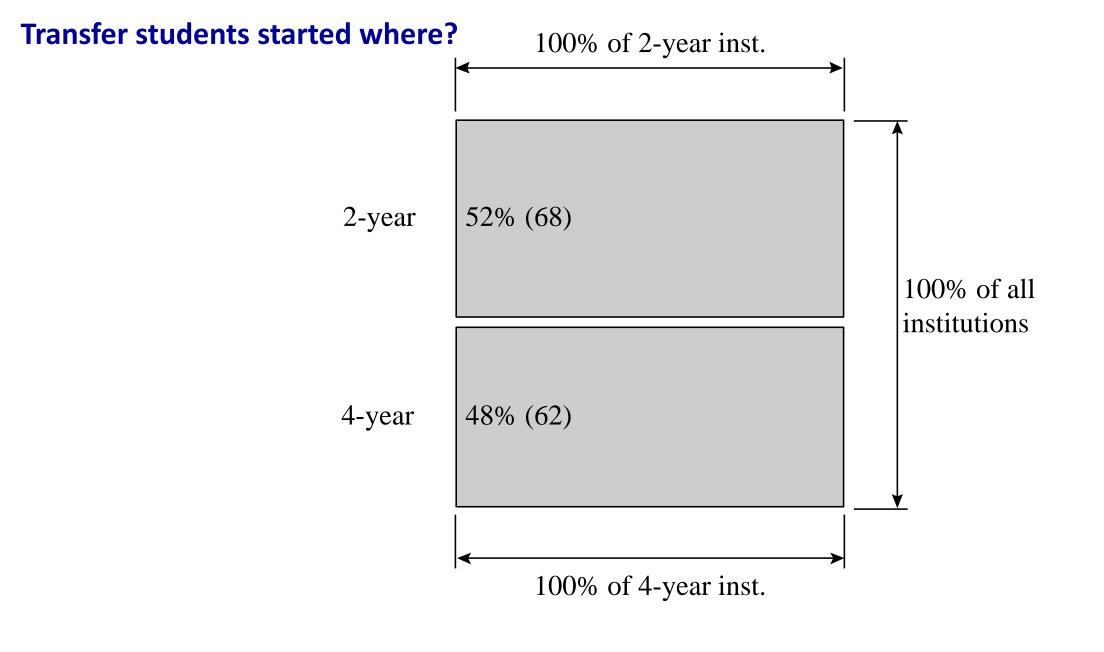
## **Mosaic plot**

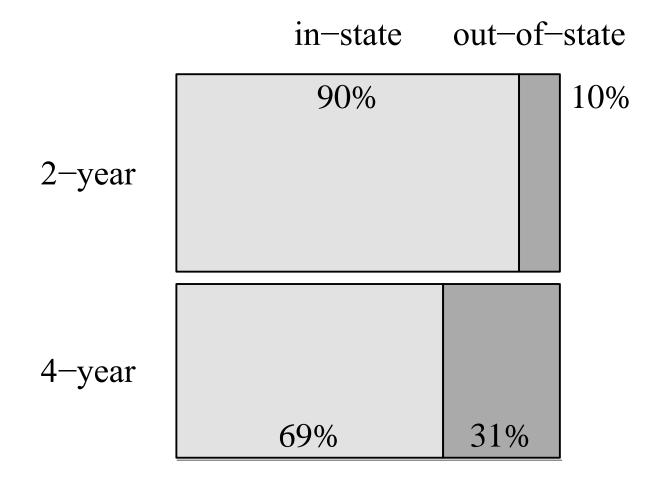


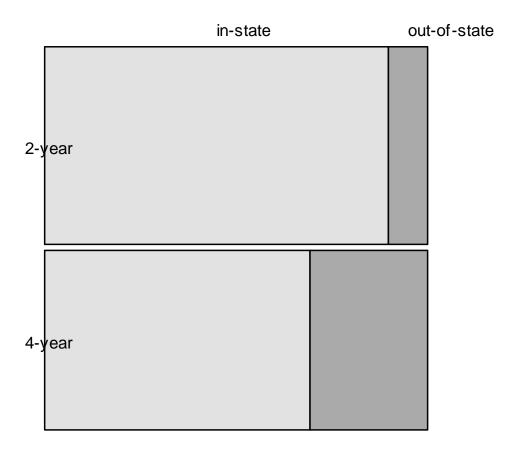


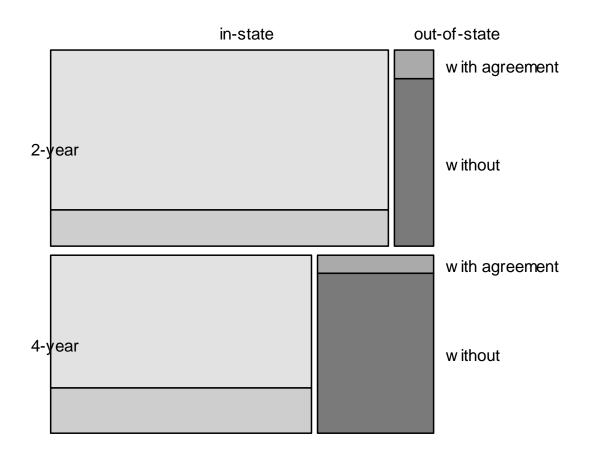


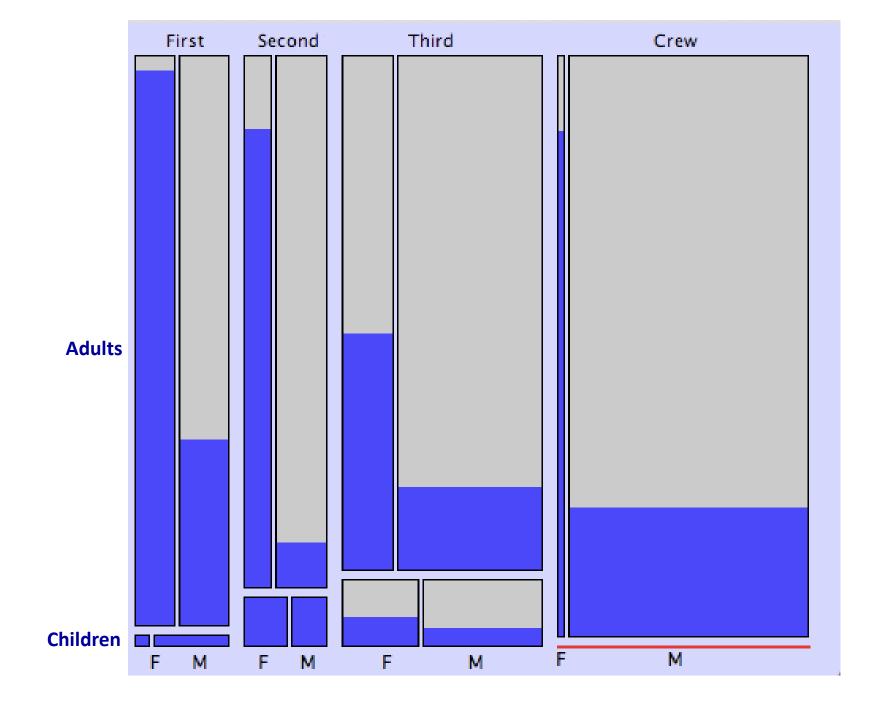








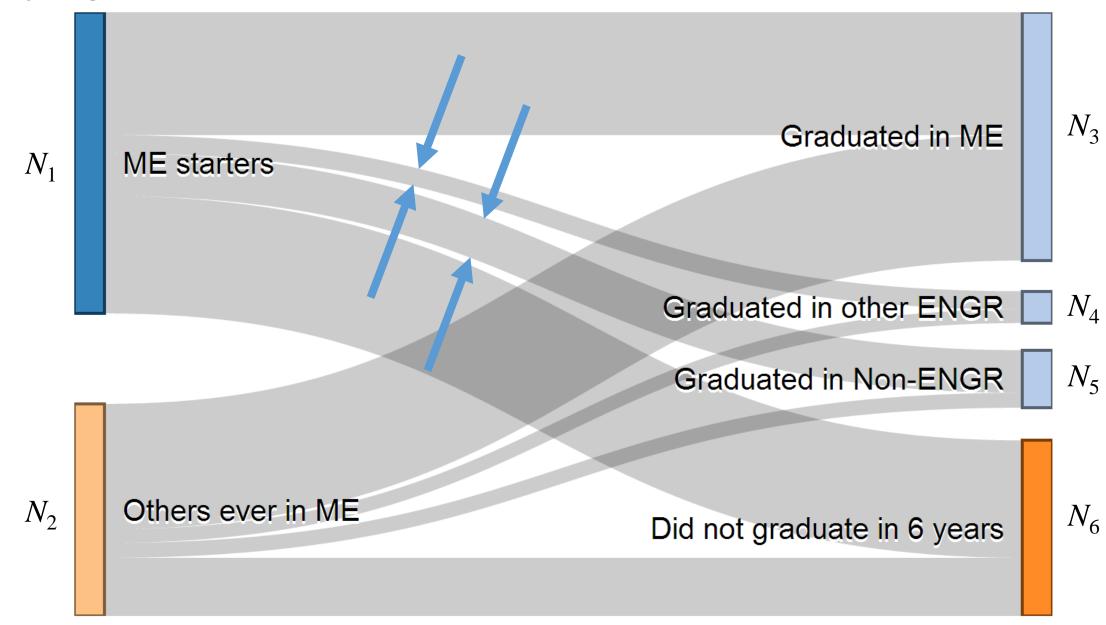




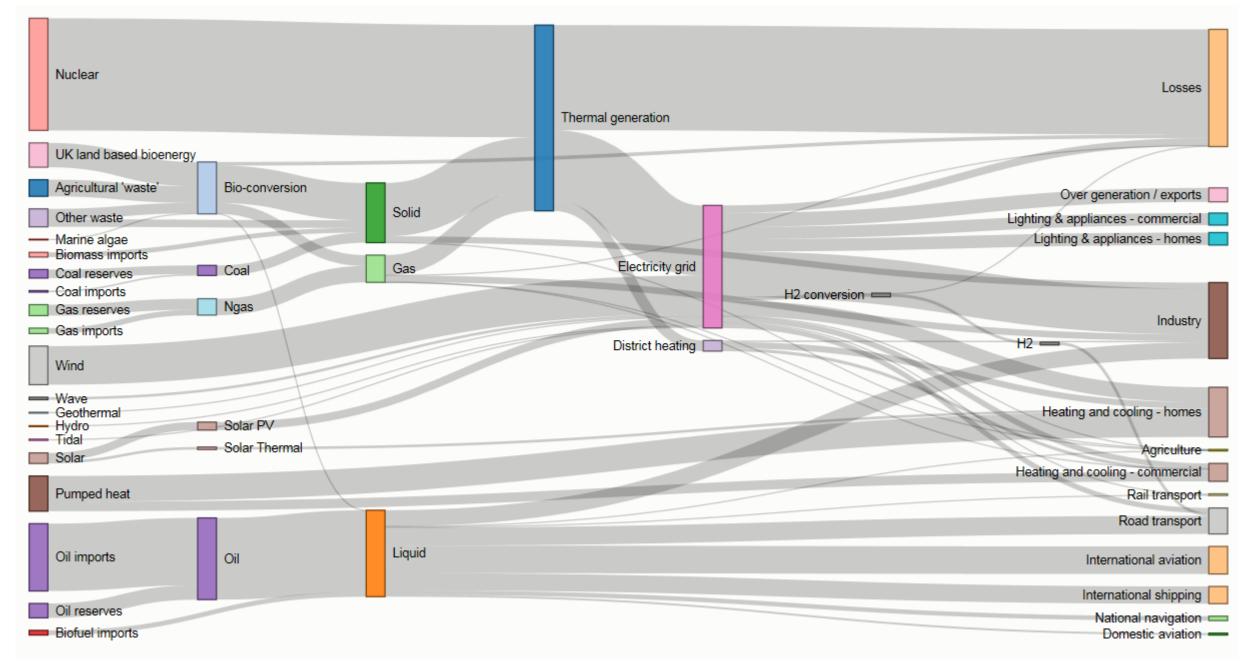
### Sankey diagram

Graduated in ME ME starters Graduated in other ENGR Graduated in Non-ENGR Others ever in ME Did not graduate in 6 years

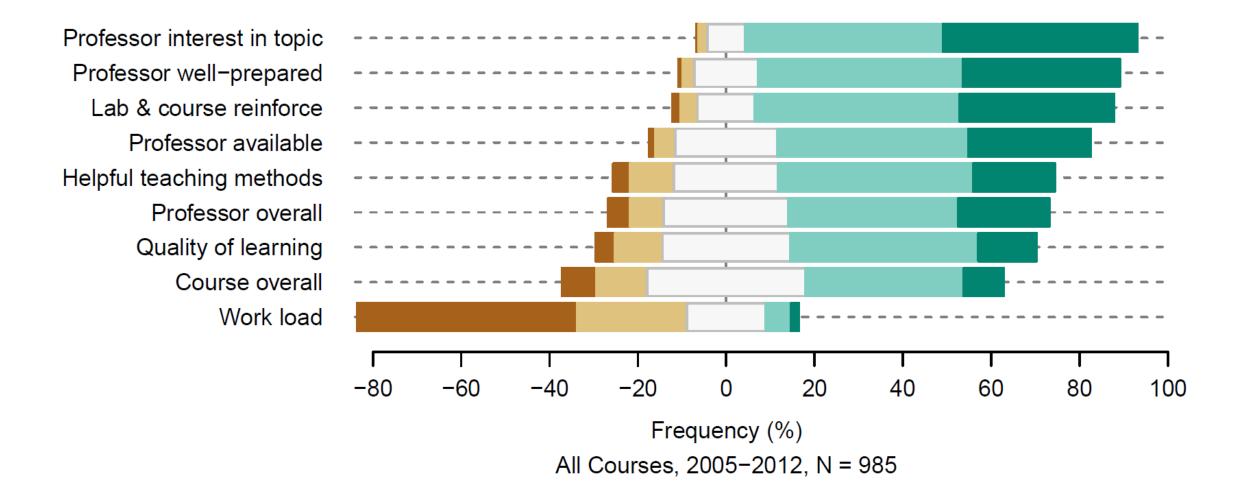
### Sankey diagram



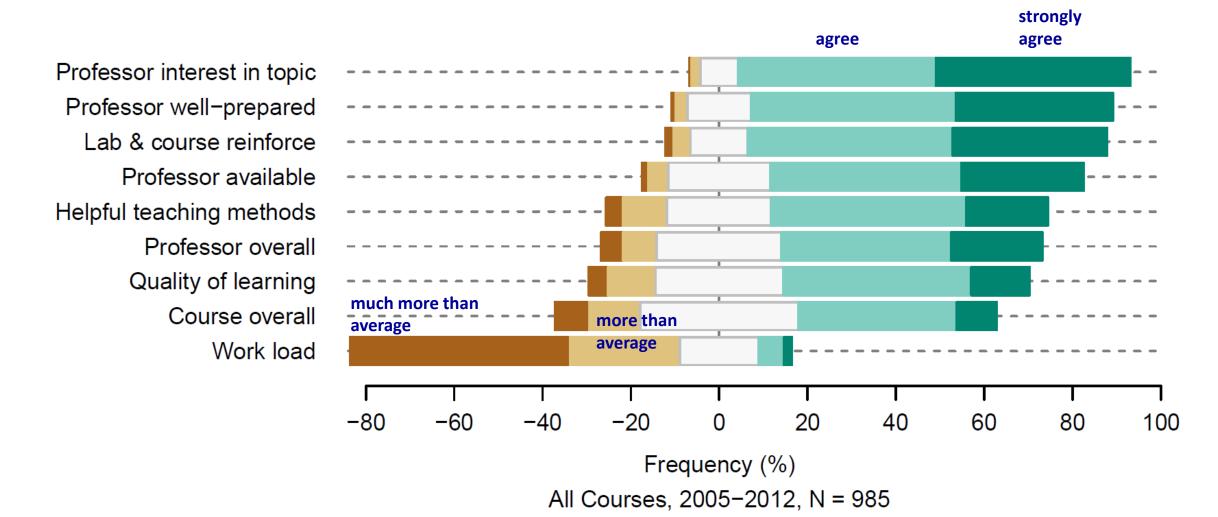
### Sankey diagram



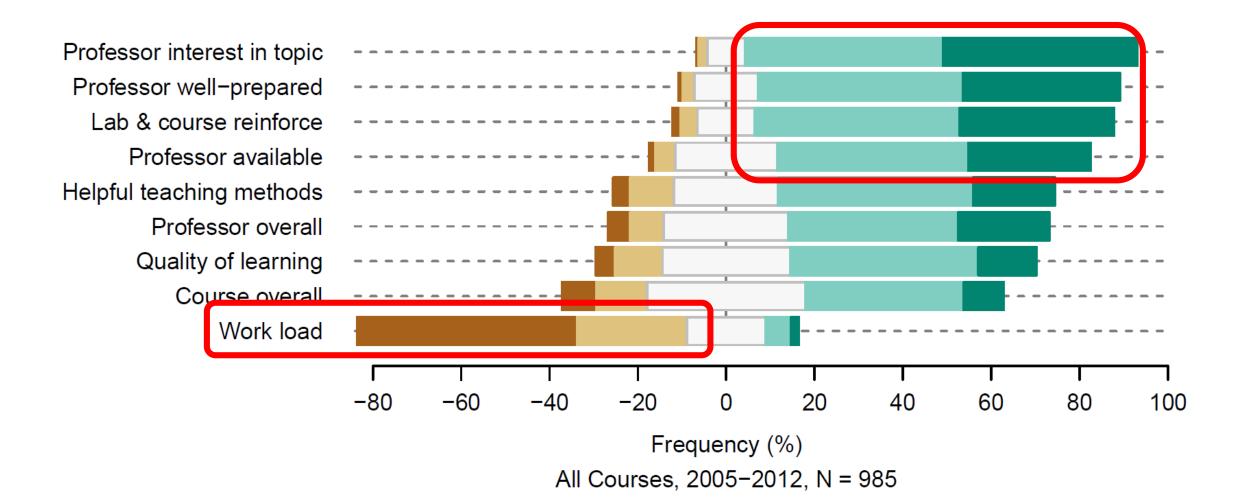
### **Staggered stacked-bar chart**



### **Staggered stacked-bar chart**



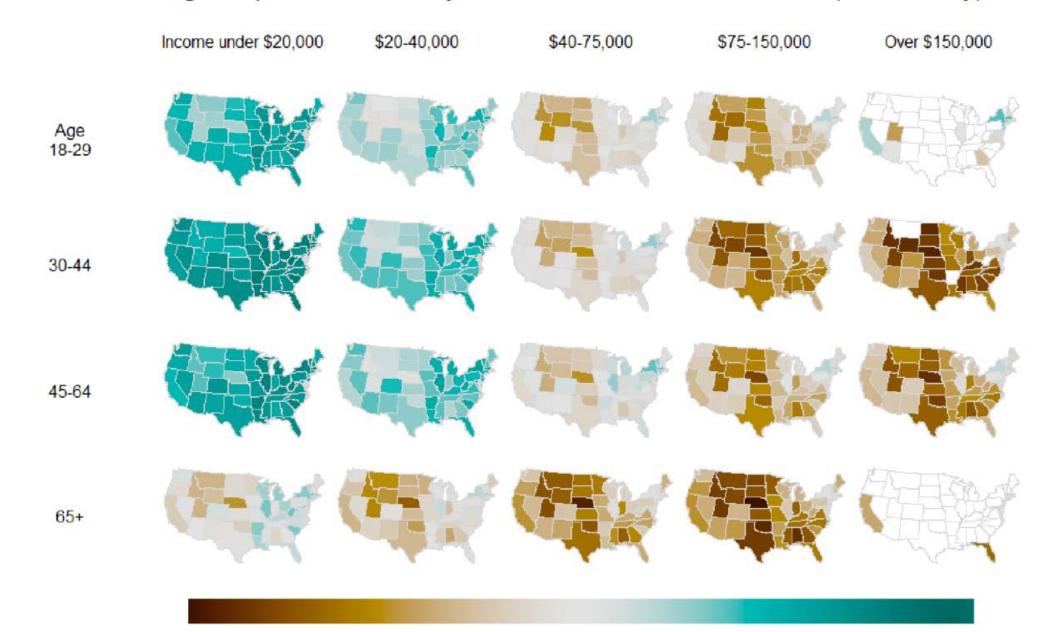
### **Staggered stacked-bar chart**



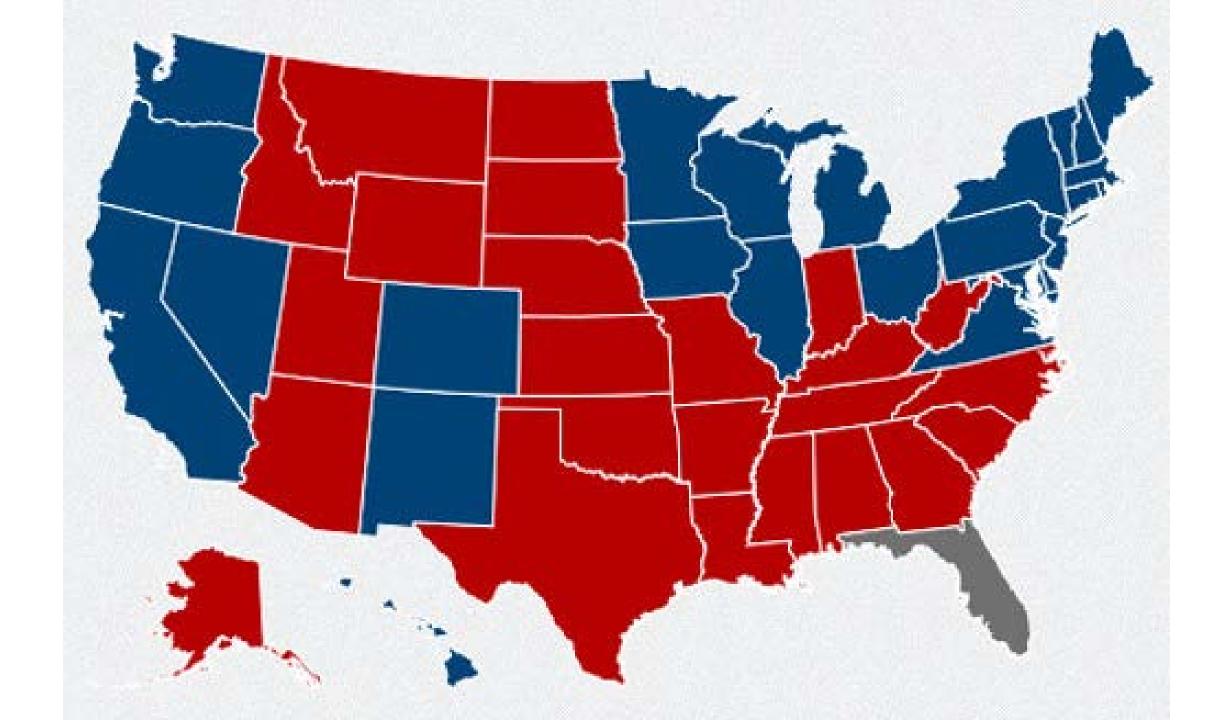
**Staggered stacked-bar chart** All Survey Responses Private consultant/self-employed Employment sector Academic (nonstudent) Business and industry Federal, state, and local government Other (including retired, students, not employed, etc.) Asian White Race Other Black or African American Master's and Above Education Associate's and Bachelor's Male Gender Female Attitude toward Professional Recognition Important Not Important -20 20 40 60 80 100 100 200 300 400 500 Freq Counts

### **Micro-maps**

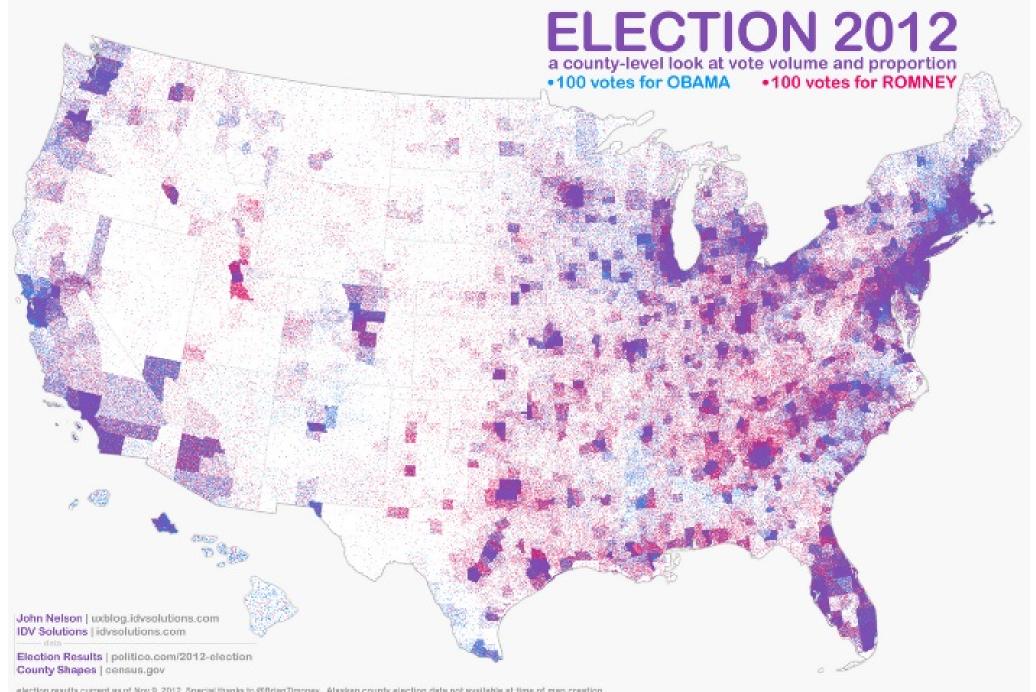
### Should federal gov't spend more money on health care for the uninsured (2004 survey)?

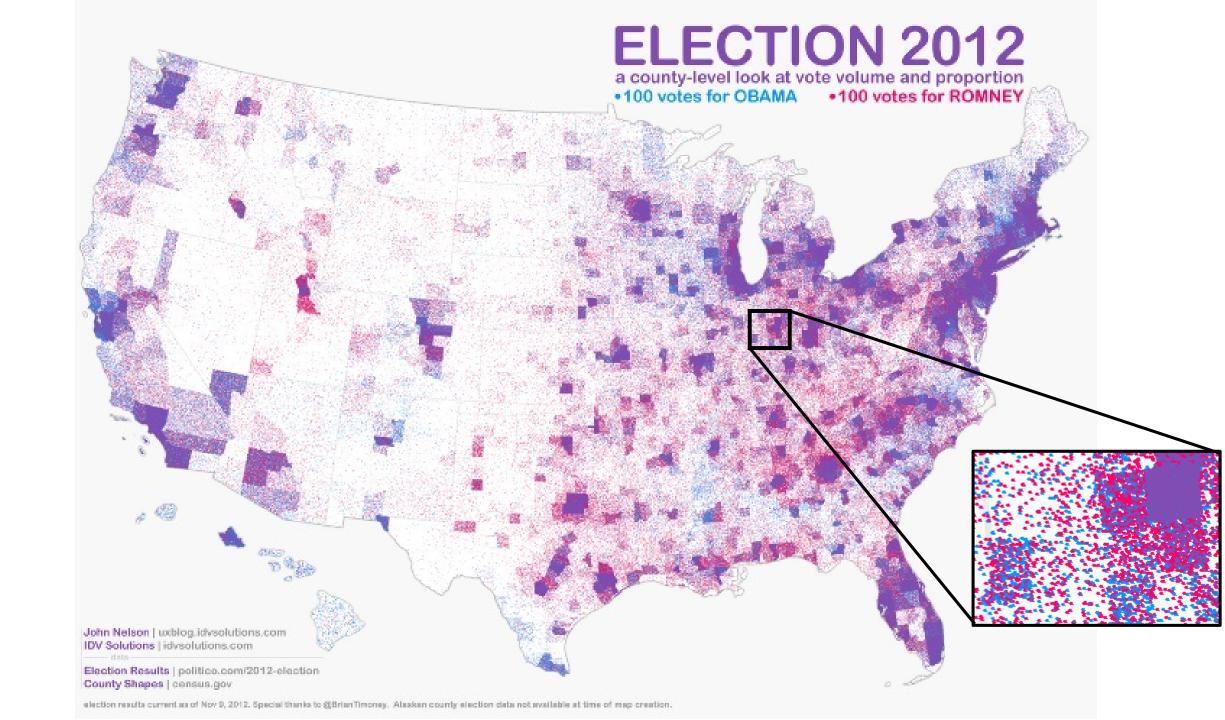


U.S. avg. - 25% U.S. avg. U.S. avg. + 25%

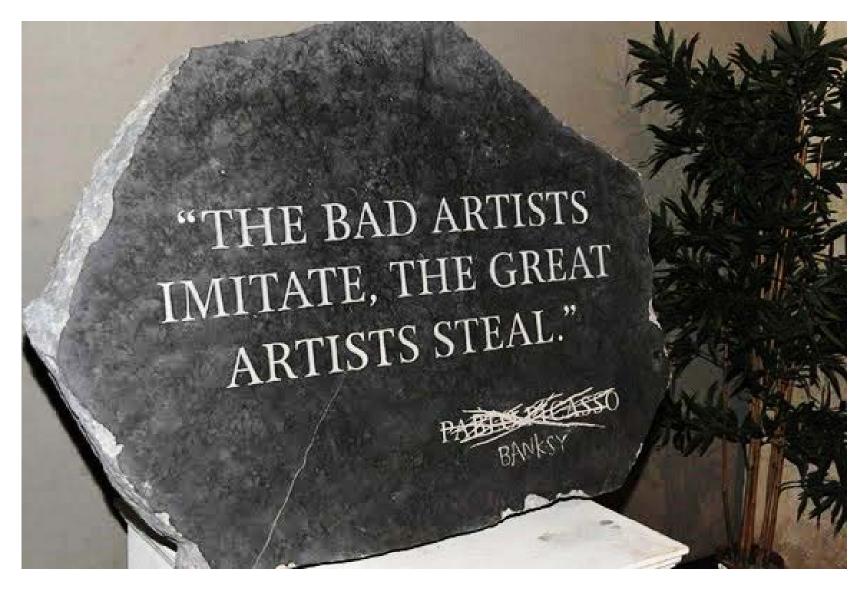




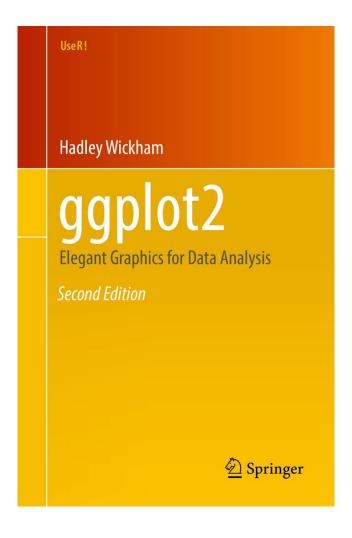




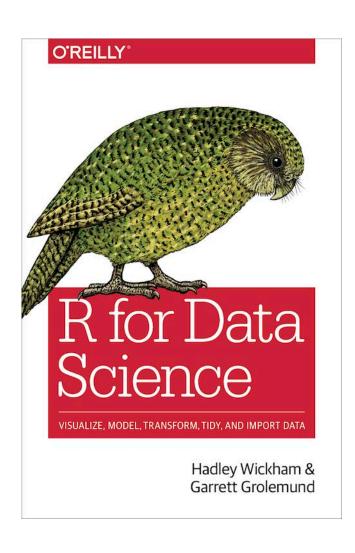
### To advance, steal.



Alexandre Dumas Robert Schumann Oscar Wilde Pablo Picasso T.S. Eliot



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	4.2	Creating a plot	$4^{\circ}$
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1 Introduction

I Explore

2 Introduction

3 Data visualisation

4 Workflow: basics

5 Data transformation

6 Workflow: scripts

7 Exploratory Data Analysis

8 Workflow: projects

II Wrangle

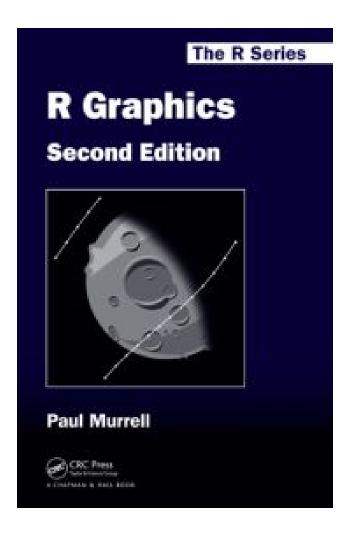
9 Introduction

10 Tibbles

11 Data import

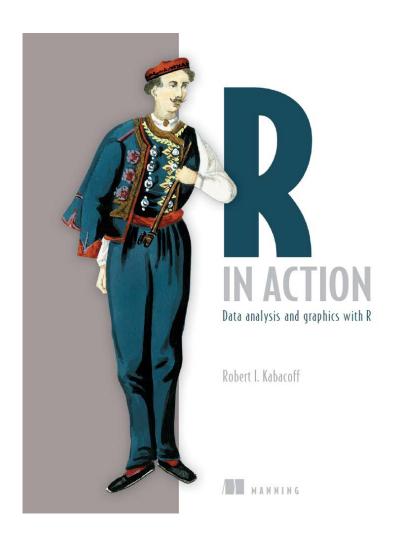
12 Tidy data

13 Relational data



### R code for figures:

- Chapter 1: An Introduction to R Graphics
- Chapter 2: Simple Usage of Traditional Graphics
- Chapter 3: Customising Traditional Graphics
- Chapter 4: Trellis Graphics: The lattice Package
- Chapter 5: The Grammar of Graphics: The ggplot2 Package
- Chapter 6: The Grid Graphics Model
- Chapter 7: The Grid Graphics Object Model
- Chapter 8: Developing New Graphics Functions and Objects
- Chapter 9: Graphics Formats
- Chapter 10: Graphical Parameters
- Chapter 11: Graphics Extensions
- Chapter 12: Plot Extensions
- Chapter 13: Graphics for Categorical Data
- Chapter 14: Maps
- Chapter 15: Node-and-Edge Graphs
- Chapter 16: 3D Graphics
- Chapter 17: Dynamic and Interactive Graphics
- Chapter 18: Importing Graphics
- Chapter 19: Combining Graphics Systems



### Downloads

- Source code (28 KB)
- Sample chapter 1
- Sample chapter 11

### Search blogs for tips.

## R-bloggers R news and tutorials contributed by (452) R bloggers

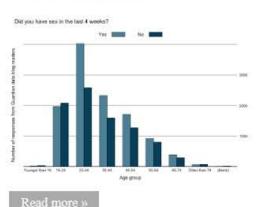
Home About add your blog! Contact us RSS R jobs



# Does sexual activity change with age?

February 4, 2014

By Markus Gesmann



Recently the Guardian's Data Blog reported about the results from the third National Survey of Sexual Attitudes and Lifestyles in the UK. One of the questions asked in the survey was if the participants had sex in the last four weeks. The results - a ...

### TOP 3 POSTS FROM THE PAST 2 DAYS

R is 15th of top programming languages in latest RedMonk ranking An idiot learns Bayesian analysis: Part 2 Installing R packages

Search & Hit Enter

#### TOP 9 ARTICLES OF THE WEEK

- 1. Free books on statistical learning
- 2. Installing R packages
- 3. Using apply, sapply, lapply in R

## The top 10 packages out of 10,000 (January 2017)

<u>Hmisc</u>: This was one of the first R packages to be used at eoda on a regular basis. Today we barely use Hmisc anymore but nonetheless it had to be part of our top 10 simply for nostalgic reasons.

**data.table**: R as an in-memory database with data.table? Who said R was slow?

**TraceR**: Excellent profiling package. Will find every bottleneck.

dplyr: Not only fast when it comes to evaluation but also easy to master.

Intuitive data management with R has a name – dplyR.

ggplot2: A guarantee for easily creating descriptive graphics.

magrittr: %>%. The pipe operater %>% turns complicated nested function calls into readable chains.

**shiny**: Interactive web application where programming in HTML and JavaScript can be done with little effort.

tidyr: Very good functionality for restructuring data. Particularly remarkable: the functions gather and spread for converting data from long to wide format or from wide to long format.

caret: This package unifies the data mining algorithms in one interface.

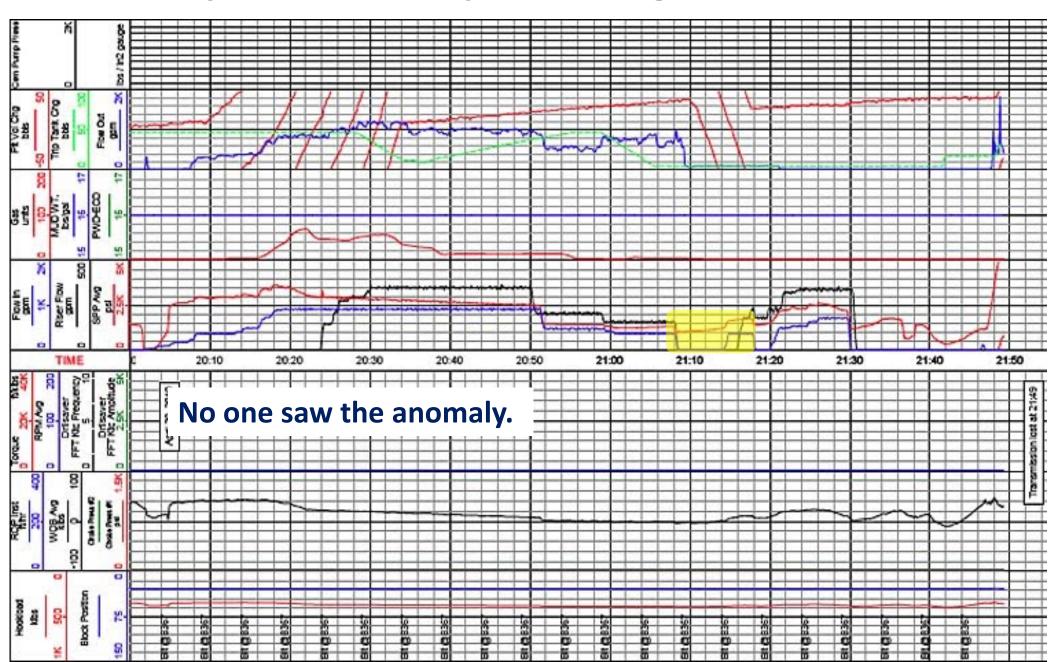
**Rcpp**: A package that we don't use extensively ourselves but is nevertheless indispensable in our top 10 list because it is an important component of many other great R packages.

## And finally, be alert to poor design.



# And finally, be alert to poor design. **1250** psi 1350 psi The pump is shut down 6 min 21:10 21:40

## And finally, be alert to poor design.



## And finally, be alert to poor design.



No one saw the anomaly.

### Dedication

This report is dedicated to the 11 men who lost their lives on the *Deepwater Horizon* rig on April 20, 2010 and to their families, in hope that this report will help minimize the chance of another such disaster ever happening again.

Jason Anderson

Aaron Dale Burkeen

Donald Clark

Stephen Curtis

Gordon Jones

Roy Wyatt Kemp

Karl Dale Kleppinger, Jr.

Blair Manuel

Dewey Revette

Shane Roshto

Adam Weise

## Someone designed this data display. Badly.

