Interactive Graphics

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Outline

- Tools of Interactive Graphics:
 Selection, Highlighting, Identification
- Plotspecific interactions
- Mosaicplots
- Who-dunnit

Interactive Graphics

- Based on Linked Graphics
- Most important common tools:
 Selection & Highlighting, Identifying Points
- Plot-specific interactive tools

Install iplots

- For Windows: install.packages("iplots")
- For Macs: download & install JGR from <u>http://rosuda.org/JGR/down.shtml</u>
 (includes iplots and depending packages)
- Help files & documentation:
 http://www.rosuda.org/iplots/

iplots Graphics

• iplot: Scatterplot

• ihist: Histogram

• ibar: Barchart

• ibox: Boxplot

• imosaic: Mosaicplot

• ipcp: Parallel Coordinate Plot

Select & Identify

- iset.selected()gives index vector of current selection
- iset.select(indices)
 highlights specified values in current data set

Your turn

- Install the iplots package
- Load tips data from reshape package read up about data
- Explore relationship between categorical variables and tip

Mosaicplots

- Area representation of contingency table
- Interactive tools: arrows re-organize order of variables and #dimensions shown

Your turn

- Draw a mosaicplot of sex, smoker and day
- Try out different orders of the variables
- Explore relationship with tip size and total bill (link to scatterplot)

Your turn: Whodunnit

- Dataset whodunnit contains "story"
- Load data set
- Use interactive tools to figure out what happened
- Once you know (or suspect) the story behind this data, collect graphical evidence for your theory.

Work on your project ...