

# R Graphics: New approaches to data exploration and presentation Discussion

Antony Unwin Augsburg University

R Graphics Discussion

Antony Unwin



### Two important developments for graphics in R

lattice, an R implementation of Trellis (Deepayan Sarkar)

ggplot, an R implemenation of Grammar of Graphics (Hadley Wickham)

iplots, an R implementation of Interactive Graphics (iAugsburg)

R Graphics Discussion

**Antony Unwin** 

## lattice



- + Makes Trellis available
- + Flexible (cf. what Deepayan showed)
- Based on R graphics (unavoidable!)
- No GUI and no interaction

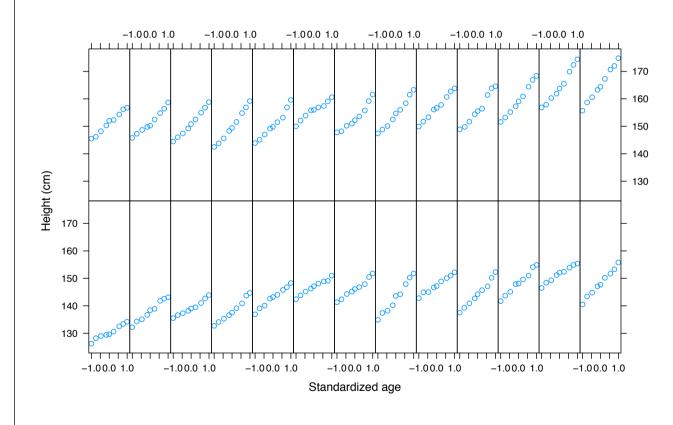
What was John Chambers' Mission for R?
"Enable effective and rapid exploration of data."

R Graphics Discussion

Antony Unwin

## Oxboys





Circles

Scales

Comparisons

Ages?

R Graphics Discussion

Antony Unwin





#### > head(Gcsemv)

NA's?	course	written	gender	student	school	
INAS:	NA	23	M	16	20920	1
	71.2	NA	F	25	20920	2
71 7 7(0)	76.8	39	F	27	20920	3
71.2, 76.8 ?	87.9	36	F	31	20920	4
	44.4	16	M	42	20920	5
	NA	36	F	62	20920	6
Course max						

R Graphics Discussion

Antony Unwin

## ggplot



- + Makes Grammar of Graphics ideas available
- + Flexible commands
- (also) Based on R graphics (unavoidable!)
- (still) No GUI and no interaction

What was John Chambers' Mission for R? "Enable effective and rapid exploration of data."

R Graphics Discussion

Antony Unwin

# Aspen trees/gypsy moths



- How do chemical concentrations depend on the other factors?
- How does insect growth depend on the factors?
- Insect growth and chemicals?

## Summary comments



 Two excellent projects and both authors deserve our congratulations and thanks

#### BUT

- Both emphasise presentation over exploration
- Neither offers interaction
- What was John Chambers' Mission again?