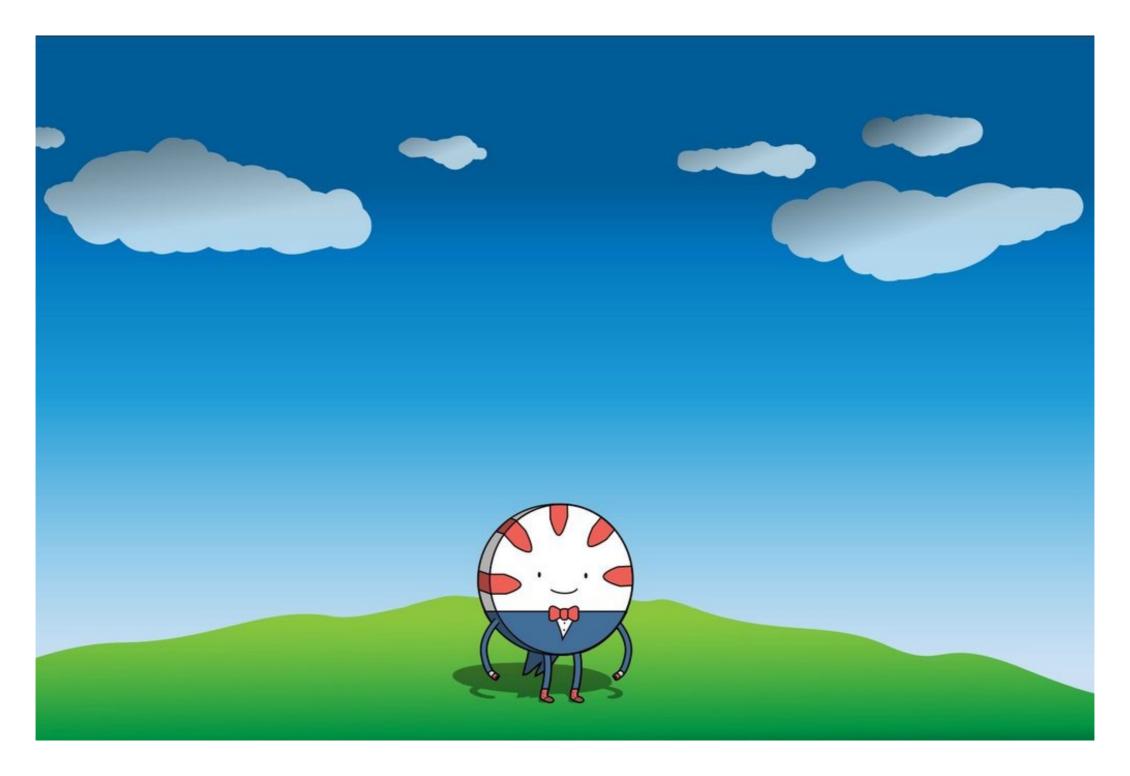
contemporary data viz in R

@cjlortie

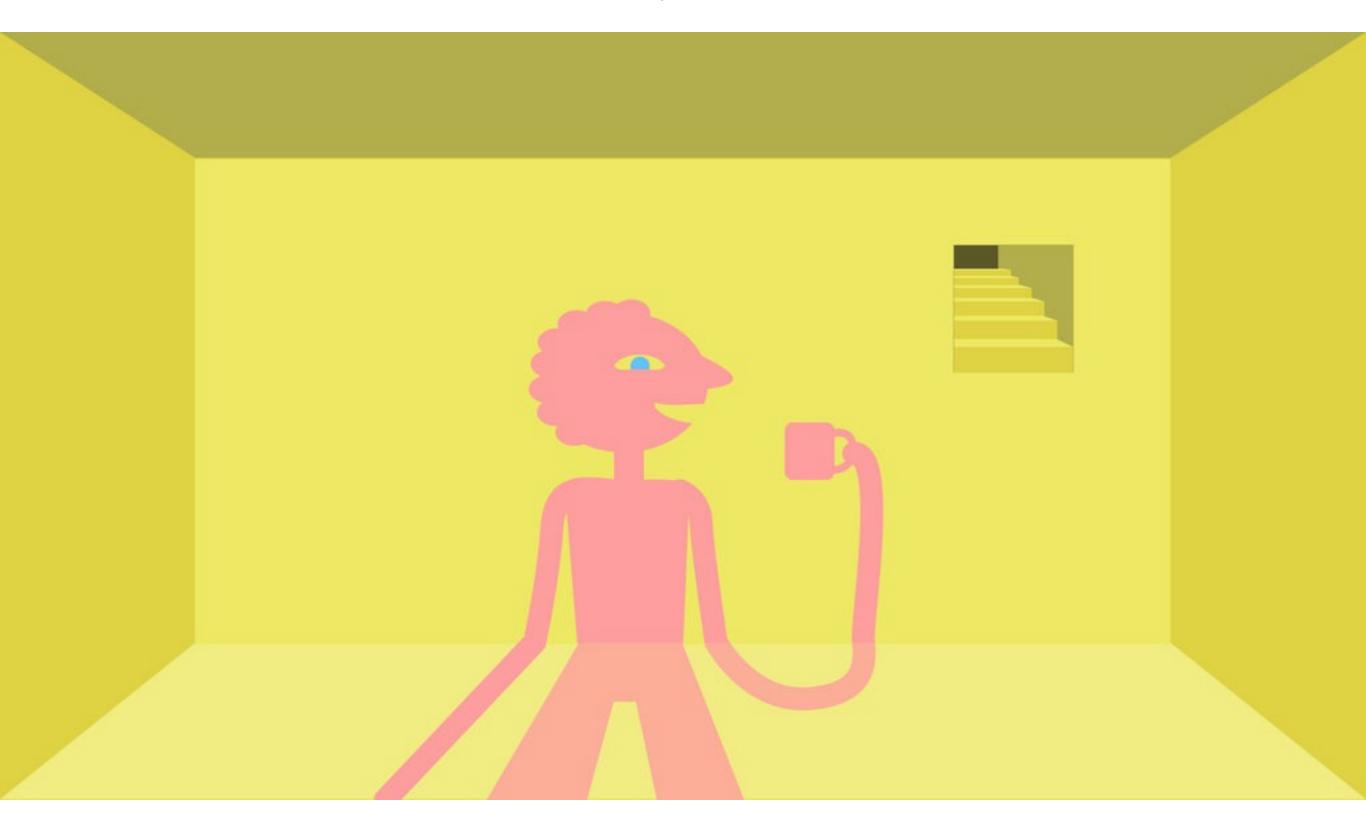
## philosophy of graphics



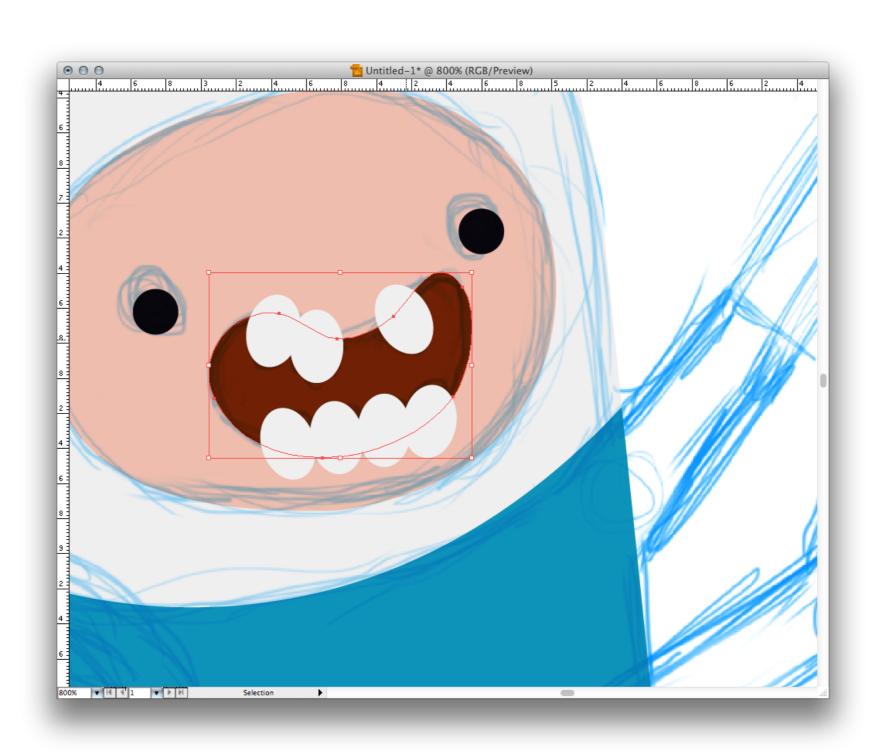
clean and simple

grammar of graphics

# layers



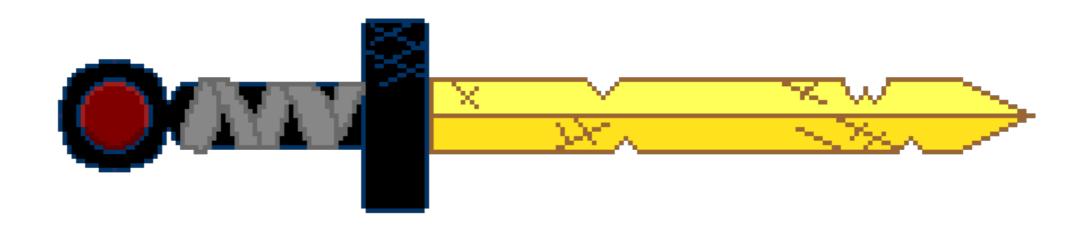
#### primacy of layers (simple first, then complex)



#### data are mapped to aesthetic attributes and objects



#### data are always mapped



but explicit control is more powerful

data first then statistics

#### you define purpose not the data visualization



basic graphics grid graphics lattice and lattice extra ggplot2



base <- edit only on top

grids <- provide structure

lattice <- trellis graphics (details/conditions)

ggplot2 <- grid/trellis but model approach



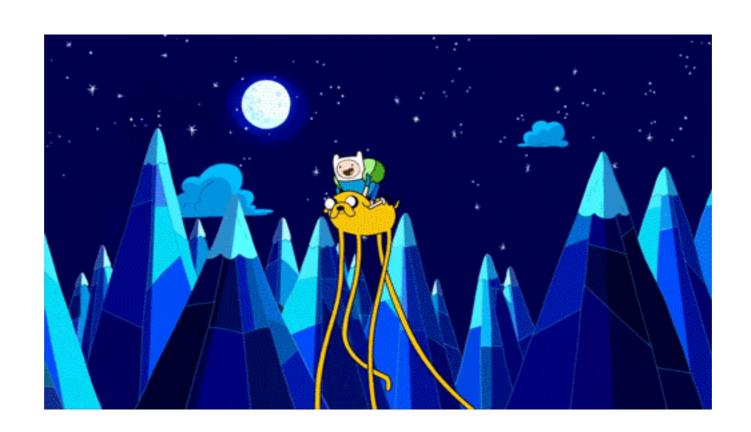
#### implications for workflow

model suggests structures

aesthetics always important

building takes forethought

# plot versus aplot



qplot automatically maps data attributes

#### geoms are the types of objects you map data unto





# KEEP AND MAKE BACON PANCAKES

qplot takes care of the layers for you

ggplot() requires you to add a layer with +

## tip: assign ggplot to object then add



# beware overplotting



Use R!

**Hadley Wickham** 

# ggplot2

**Elegant Graphics for Data Analysis** 

Second Edition

faceting

jitter

alpha

