Statistics without the agonizing pain

Matthew Brett

Without the pain

With thanks to John Rauser: Statistics Without the Agonizing Pain

What we need

- Imagination.
- Add, subtract, divide.
- Some ping pong balls.
- A pen.
- A bucket.

Problem 1 - a biased jury?

- Around 1962: Robert Swain a black man sentenced to death by an all-white Jury in Talladega County, Alabama.
- Of the eligible jurors in the county, 26% were black.
- Swain appealed eventually to the Supreme Court on the basis that the jury selection was biased.
- What do you think?

Problem 1 - with a computer

http://bit.ly/less-agony

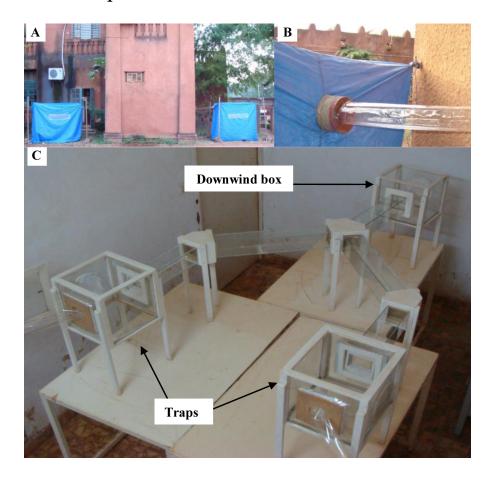
Problem 2 - do mosquitoes like beer?

Beer Consumption Increases Human Attractiveness to Malaria Mosquitoes

Thierry Lefèvre o, Louis-Clément Gouagna, Kounbobr Roch Dabiré, Eric Elguero, Didier Fontenille, François Renaud, Carlo Costantini, Frédéric Thomas

Published: March 4, 2010 • https://doi.org/10.1371/journal.pone.0009546

The setup



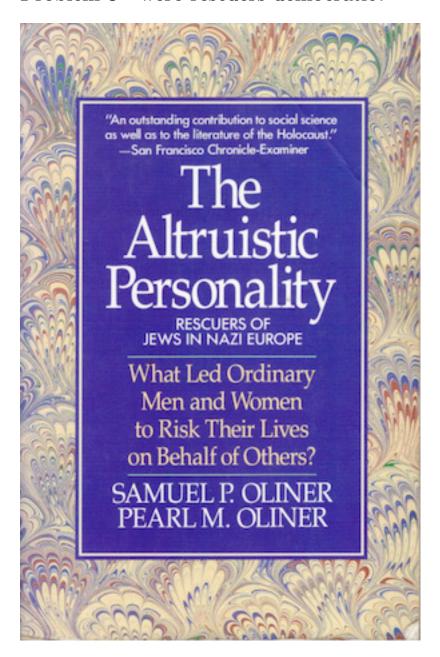
Problem 2

What do you think?

Problem 2 - with a computer

http://bit.ly/less-agony

Problem 3 - were rescuers democratic?



The numbers

	Democratic	Other	Total
Bystander	1	6	7
Rescuer	32	8	40
Total	33	14	47

Some percentages.

Problem 3

What do you think?

Problem 3 - with a computer

http://bit.ly/less-agony