

Statistics without the agonizing pain

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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?

Example inspired by [the Berkeley data science course](#), with thanks.

- ▶ 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>

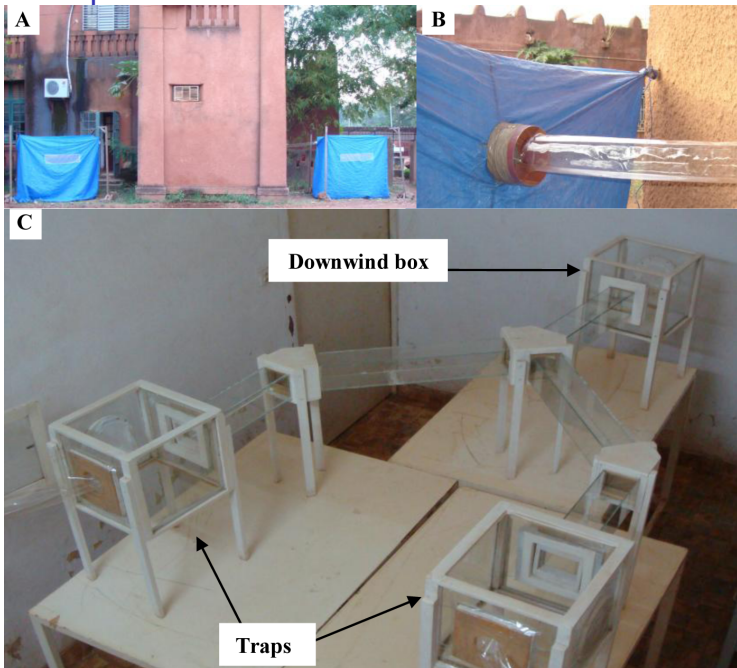
Problem 2 - do mosquitoes like beer?

Beer Consumption Increases Human Attractiveness to Malaria Mosquitoes

Thierry Lefèvre , 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



Beer and water numbers

Mosquito numbers for beer drinkers:

27	20	21	26	27	31	24	21	20
19	23	24	28	19	24	29	18	20
17	31	20	25	28	21	27		

Mosquito numbers for water drinkers:

21	22	15	12	21	16	19	15	22
24	19	23	13	22	20	24	18	20

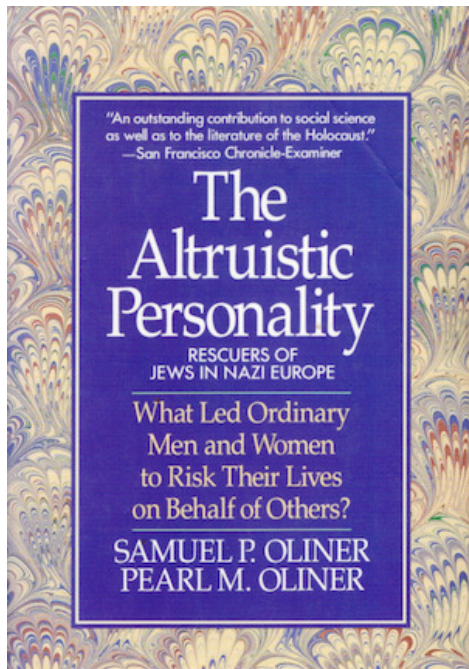
Problem 2

What do you think?

Problem 2 - with a computer

<http://bit.ly/less-agony>

Problem 3 - were rescuers democratic?



"An outstanding contribution to social science
as well as to the literature of the Holocaust."
—San Francisco Chronicle-Examiner

The Altruistic Personality

RESCUERS OF
JEWS IN NAZI EUROPE

What Led Ordinary
Men and Women
to Risk Their Lives
on Behalf of Others?

SAMUEL P. OLINER
PEARL M. OLINER

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>