

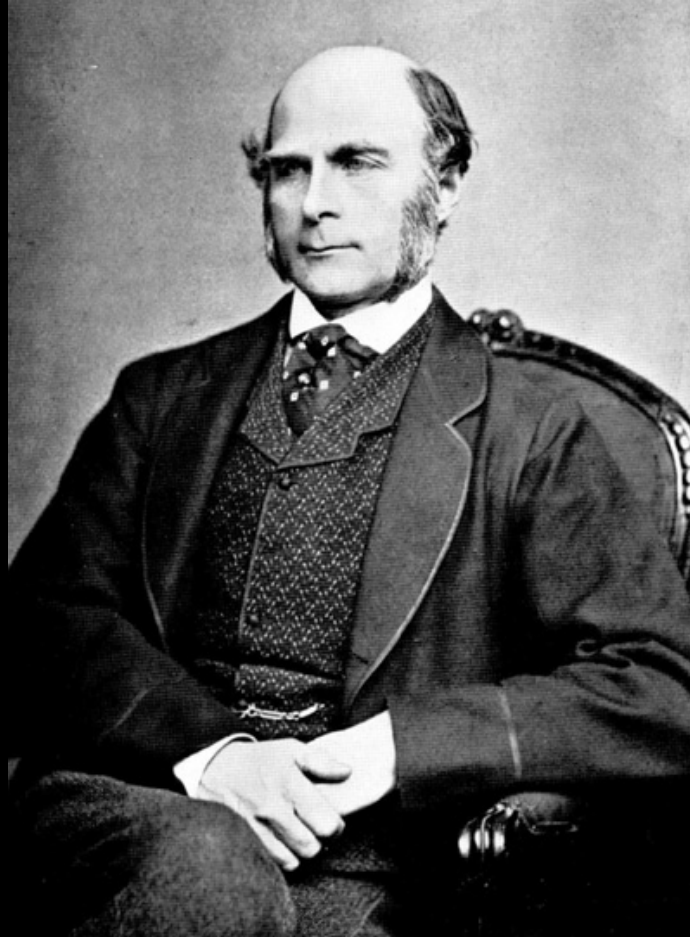
Exploring the Wisdom of Crowds

Week 2

Sharad Goel
Stanford University

February 13, 2015

Francis Galton



1906 Plymouth County Fair

What is the weight of the ox?



1906 Plymouth County Fair

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800 guesses

median guess was 1207 lbs.

1906 Plymouth County Fair

What is the weight of the ox?

800 guesses

median guess was 1207 lbs.

actual weight was 1198 lbs.

Francis Galton

Nature, 1907

“The result is, I think, more creditable to the trustworthiness of a democratic judgment than might have been expected.”

A NEW YORK TIMES BUSINESS BESTSELLER

"As entertaining and thought-provoking as *The Tipping Point* by Malcolm Gladwell. . . . *The Wisdom of Crowds* ranges far and wide."

—*The Boston Globe*

THE WISDOM OF CROWDS

JAMES
SUROWIECKI

WITH A NEW AFTERWORD BY THE AUTHOR



Wisdom of the crowd

The collective opinion of a crowd
can outperform the judgments
of any one individual

Madness of crowds

Charles Mackay

riots

economic bubbles

mass hysteria

herding

Research question

When are crowds “wise”?

Research question

How best to aggregate opinions?

How big a crowd do you need?

What is the effect of social influence?

Research question

What is the underlying mechanism?

Experimental design

1. Systematically construct thousands of tasks
2. Recruit a crowd to complete the tasks
3. Analyze the responses

Studying crowds, with crowds

A mini-experiment in “collective intelligence”

<http://goo.gl/forms/WG1kWgYjke>

Give your best guess

Do not look up the answer

Do not talk to anyone

Don't worry if you don't know the answers!

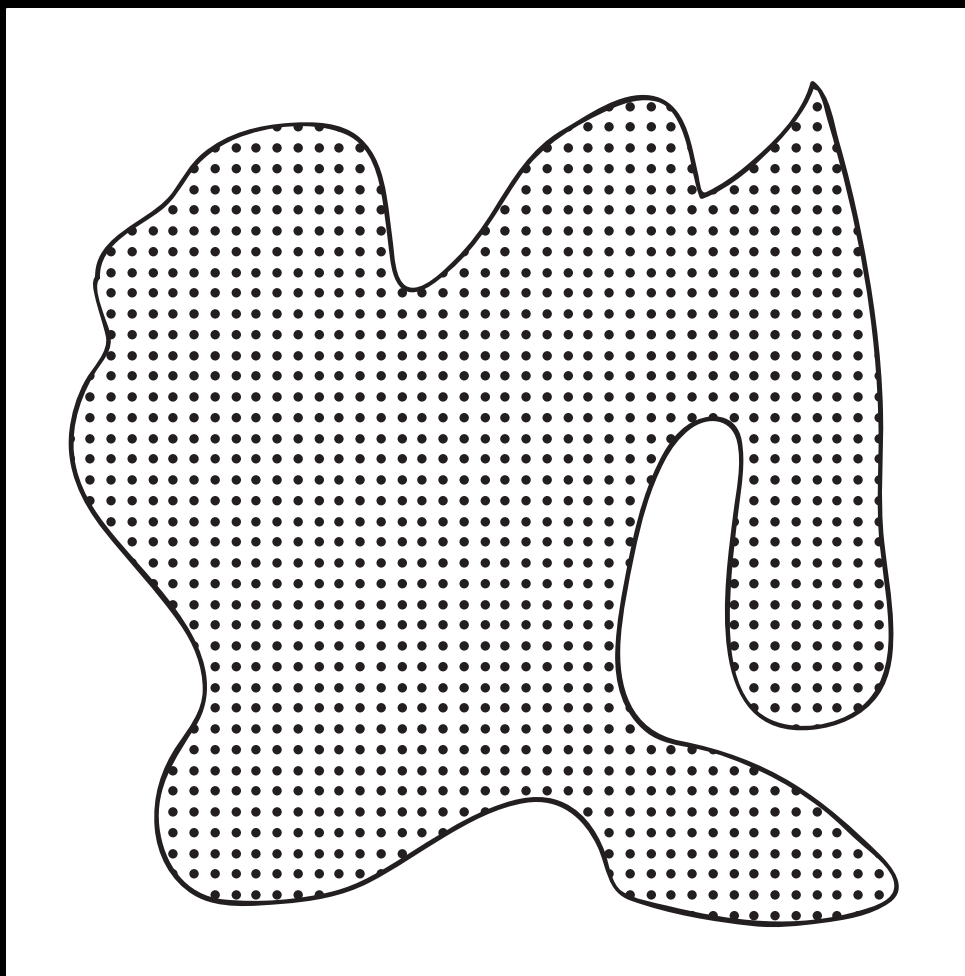
What is the total area of India? (km²)



In what year was this painting made?



How many dots are in the figure?



India vs. Pakistan

Cricket World Cup, Game 4

How many runs do you think
each team will score?

Assignment

literature review

Document past studies
on the wisdom of crowds

Assignment

brainstorm tasks

be creative, but realistic

Assignment [optional]
apply to design experiment platform

teams should have experience with
HTML, CSS, PHP, JavaScript, and MySQL

Course materials

Piazza, GitHub

Course Staff

Sharad Goel
Imanol Arrieta Ibarra
Camelia Simoiu
Rajan Vaish