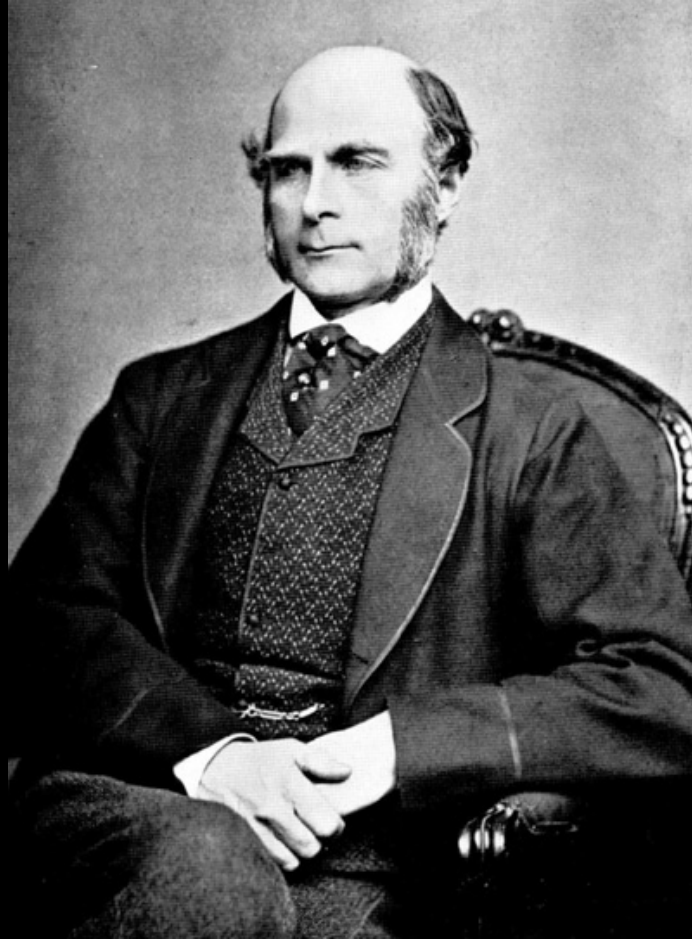


# Exploring the Wisdom of Crowds

Sharad Goel  
Stanford University

February 13, 2015

# Francis Galton



# 1906 Plymouth County Fair

What is the weight of the ox?



# 1906 Plymouth County Fair

What is the weight of the ox?

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.

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? (km<sup>2</sup>)

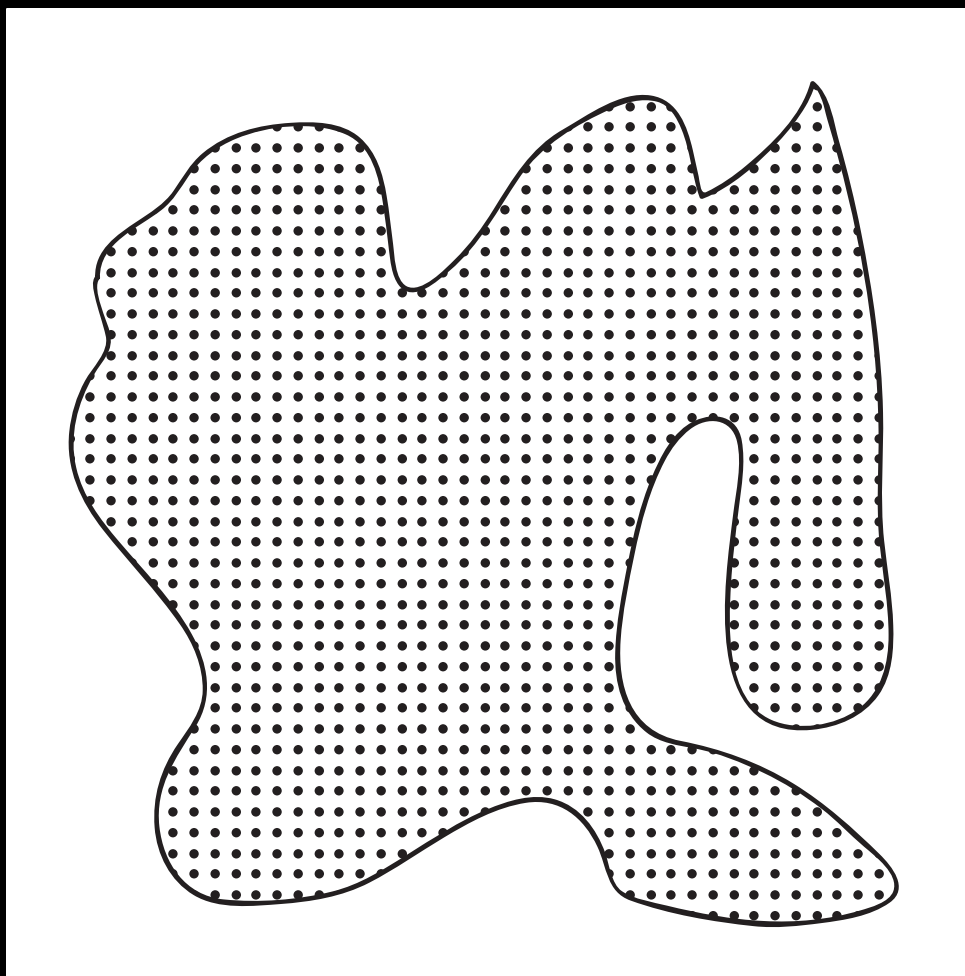


In what year was this painting made?





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

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