Leverhulme Social Norms Workshop
Book Review

THE SIGNAL AND THE NOISE
why so many predictions fail - but some don't
by Nate Silver

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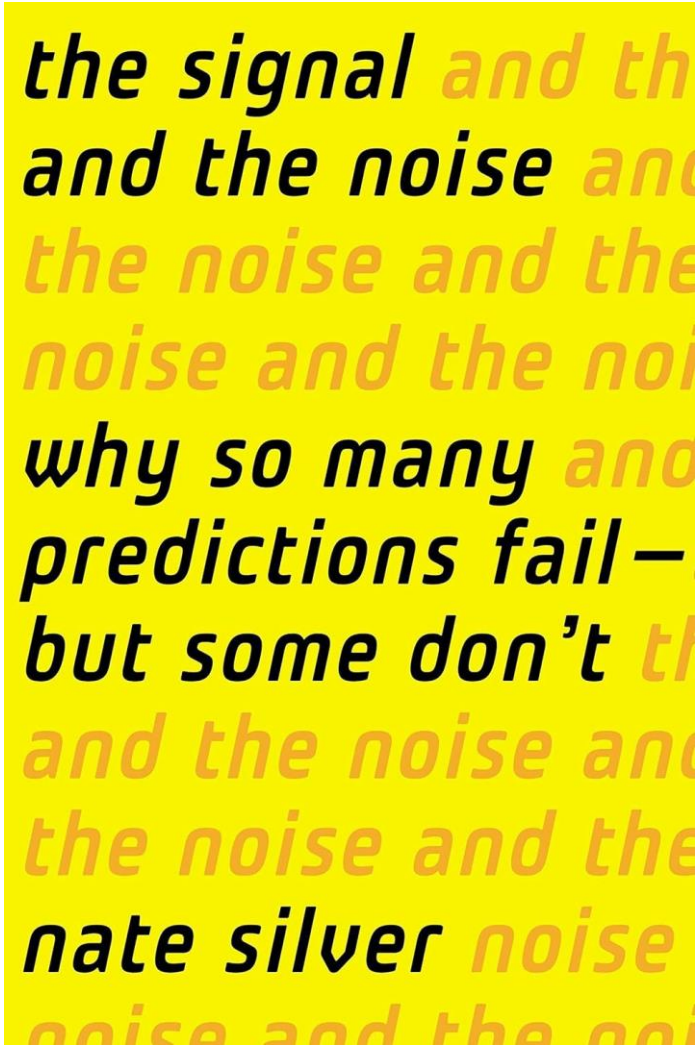
Outline

1. General Information
2. Chapter Synopses
3. Key Overarching Ideas
4. Conclusion



General Information

Author: **Nate Silver** (BA economics, economic consultant, baseball analyst, poker player, political analyst, NY columnist, editor, *Claim to fame*: Predicting 49 of 50 states correctly in the 2008 US elections and 50 of 50 in 2012, fivethirtyeight.com , PETCOTA)

Year: 2012 (Updated 2020)

Pages: 518 (576)

General Information

Signal	***Noise***
• Useful information (TRUTH™)	• Random distractions
• Causal relationships	• Spurious correlations
• Predictive power	• Makes predictions worse

How to make better predictions?

A CATASTROPHIC FAILURE OF PREDICTION

or: *How and why the financial crisis unfolded*

Chapter Synopses

ARE YOU SMARTER THAN A TELEVISION PUNDIT?

or: *Most experts make terrible predictions*

Chapter Synopses

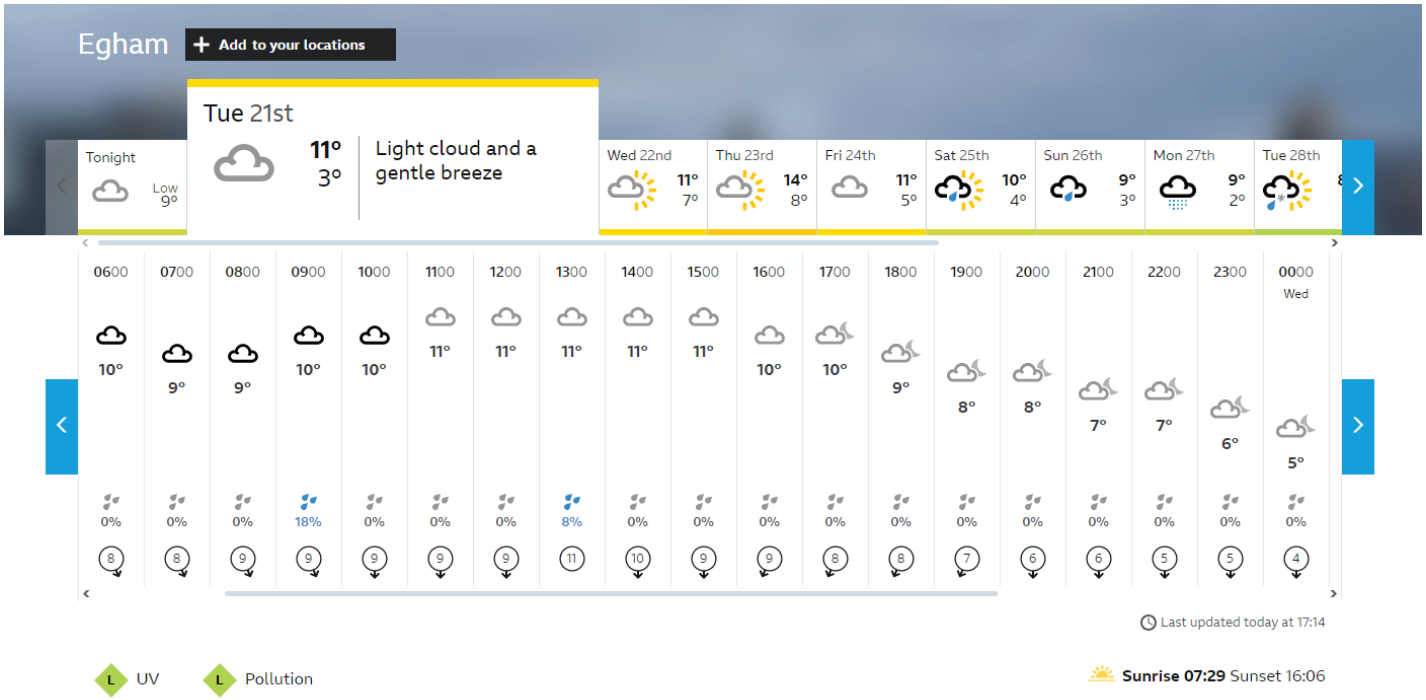
ALL I CARE ABOUT IS W'S AND L'S

or: *How the use of advanced statistics transformed baseball*

Chapter Synopses

FOR YEARS YOU'VE BEEN TELLING US THAT RAIN IS GREEN

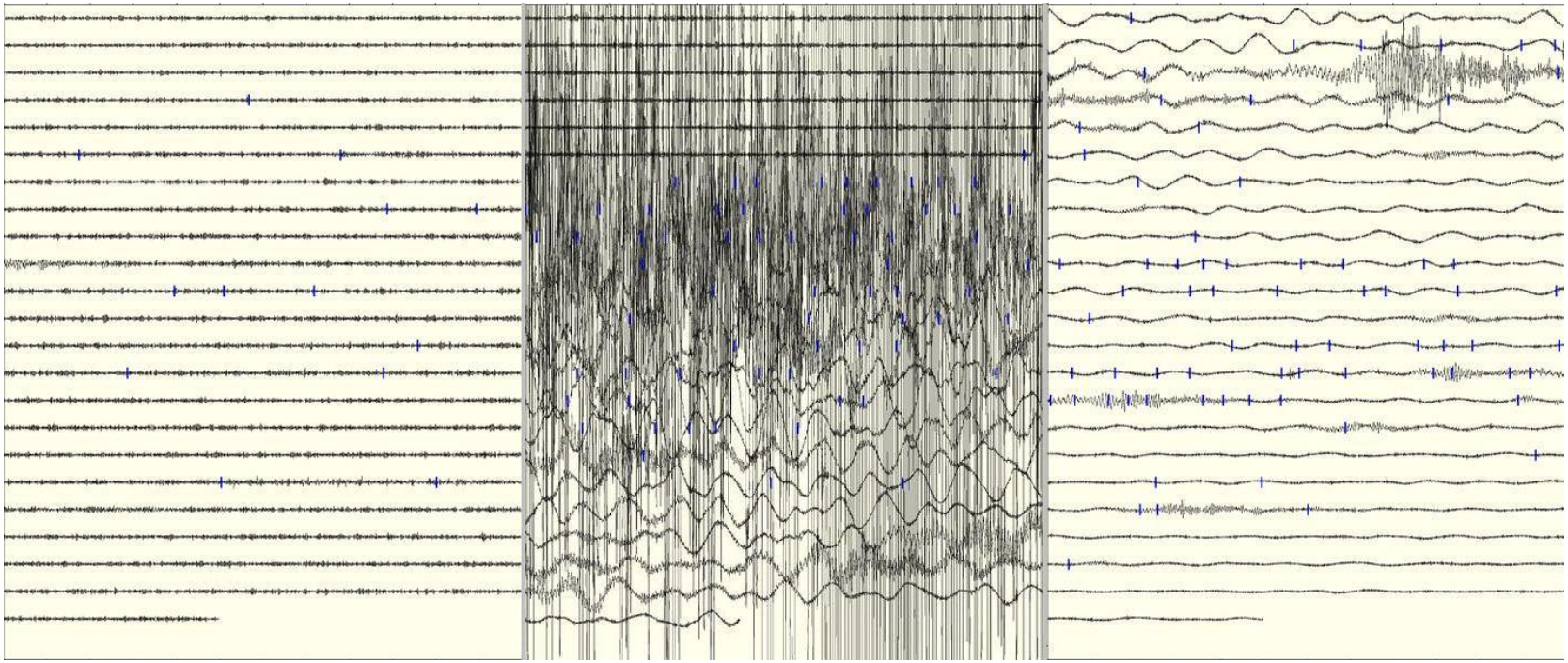
or: *Everyone likes to complain about the weather forecast, but it is actually pretty good (in the short run)*



Chapter Synopses

DESPERATELY SEEKING SIGNAL

or: *Earthquake frequency can be predicted, individual earthquakes (probably) cannot, although people keep on trying*



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Chapter Synopses

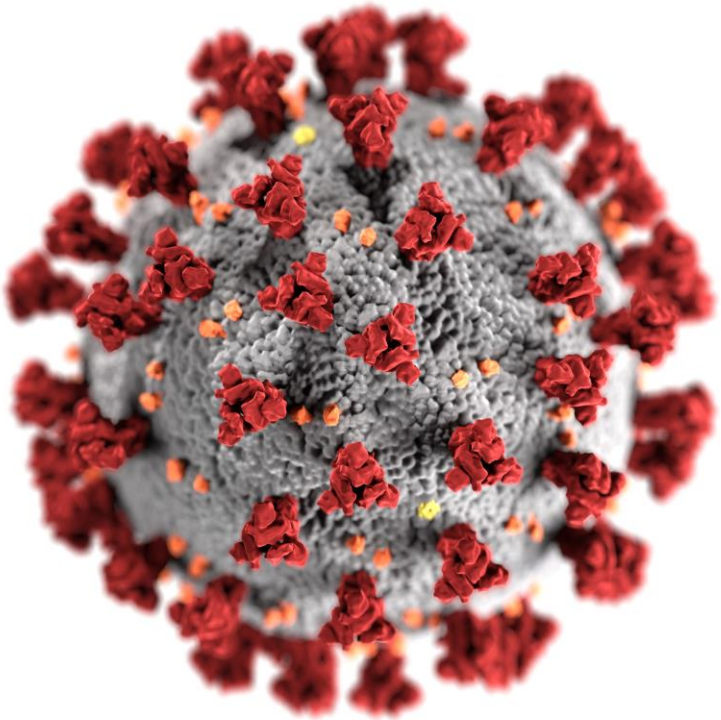
HOW TO DROWN IN THREE FEET OF WATER

or: *Why economic forecasts are rubbish*

or: *How I learned to stop worrying and love the confidence interval*

ROLE MODELS

or: *Thinking about Covid-19 before Covid-19*



LESS AND LESS AND LESS WRONG

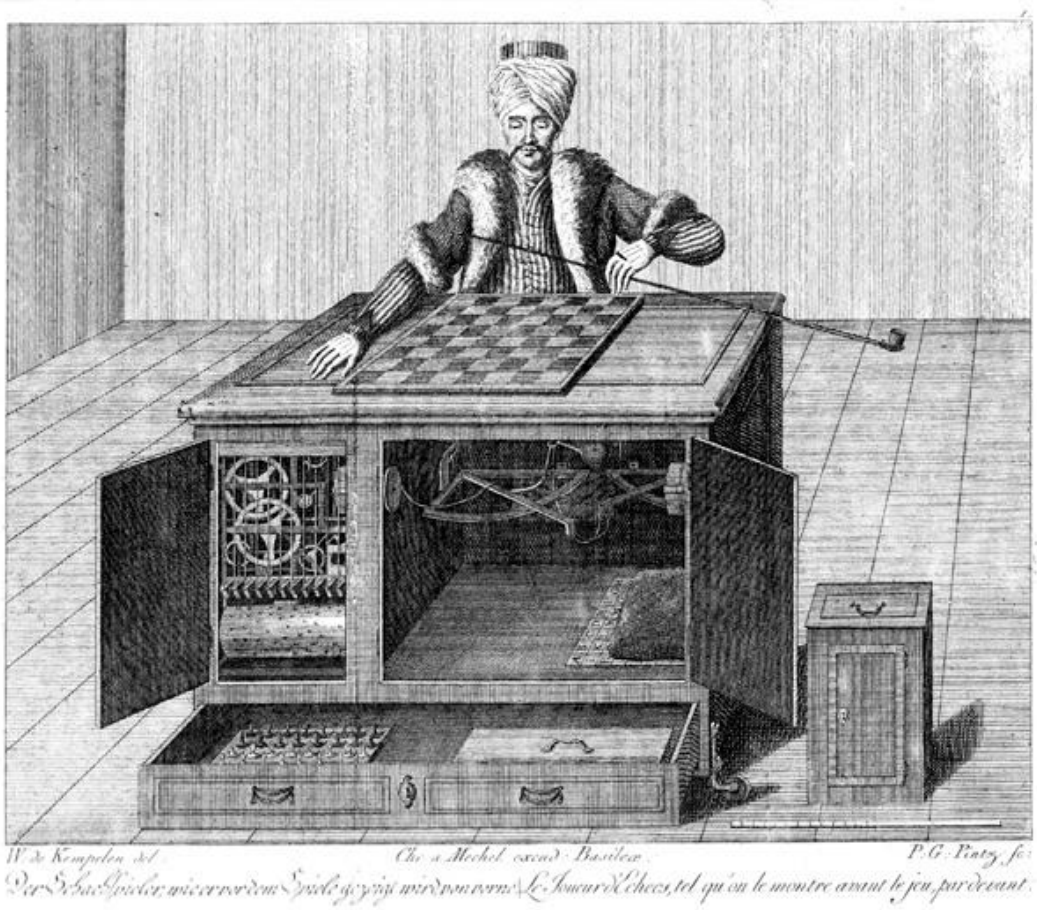
or: *Why everyone should be a Bayesian.*

Ken Mattison

Chapter Synopses

RAGE AGAINST THE MACHINES

or: *Why computer are better at chess than humans.*



THE POKER BUBBLE

or: *How to win at poker and why you probably won't (any more) – also: be more Bayesian!*

Chapter Synopses

IF YOU CAN'T BEAT'EM …

or: *Why stock trading is stupid, except sometimes.*

A CLIMATE OF HEALTHY SKEPTICISM

or: *Climate models are a mess and climate politics are even messier (but the greenhouse effect is real).*

Chapter Synopses

WHAT YOU DON'T KNOW CAN HURT YOU

or: *Predicting the inconceivable is hard.*

Key Overarching Ideas

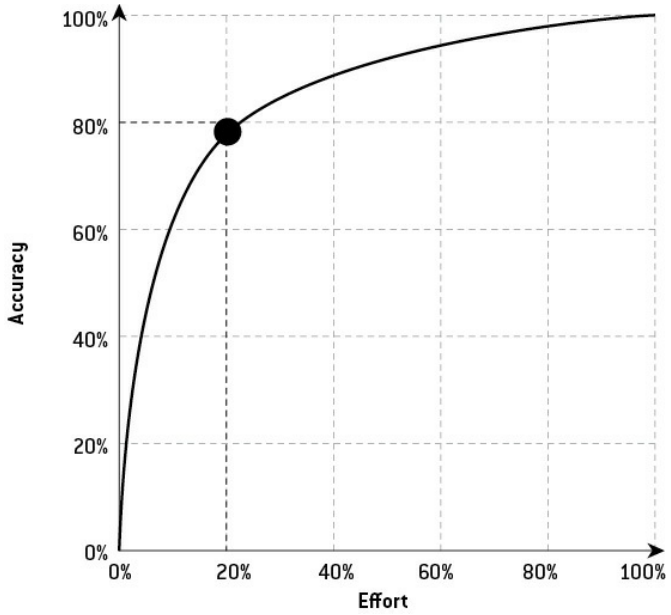
More data does not (automatically) mean more knowledge

- True predictors are the same as before.
- Hyperactive pattern recognition.
- Theory!

Key Overarching Ideas

Think like a Bayesian

- Forecasts should change with the evidence.
- Know where you are coming from.
- Predict a lot!



Key Overarching Ideas

Be a fox, not a hedgehog

Key Overarching Ideas

Good predictions are probabilistic

- Be honest, be humble.
- Communication.

Conclusion

Strengths

- Entertaining, accessible.
- Wide-ranging, yet connected.
- Footnotes include academic articles.
- Foxy.

Weaknesses

- Long.
- Depth (both ways).
- Conclusions are for laypeople, yet statistically literate people.
- No solutions to incentive and perception problems.