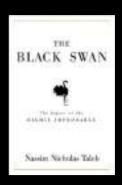


The Black Swan

Chapter 12 (Human can't predict) and Chapter 13 (Go to parties!)



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Bio – Melanie Swan

- Educational background:
 - BA French & Economics, Georgetown University
 - MBA Finance & Accounting, Wharton, Univ. of Pennsylvania
 - Current course work in Physics & Computer Science
- Professional experience
 - Futurist: speaker, researcher, business advisor
 - Hedge Fund Manager: Wall Street, proprietary
- Current projects
 - OpenBasicResearch.org
 - del.icio.us for people
 - Issues in running Historical Simulations
- Interests: science fiction, travel



Ch 12 Summary: Humans can't predict

- Continued theme of inability to predict, inability to comprehend uncertainty
- The Past has a Past: problems with the past
 - We do not learn from the past
- Future blindness and future autism
- Epistemic arrogance



Ch 12: The Past has a Past: problems with the past

- History is not facts, but ex-post narrative
- The past is very difficult to predict
 - Ice cube melting
 - "Butterfly in India" paradigm
 - The Iliad: Helenus



- Do not learn from the past
- Cannot understand a future mixed with chance
- Black Swan asymmetry allows confidence in what is wrong
- "Our problem is not just that we don't know the future, we don't know much of the past either..."



Ch 12: Future blindness

- Humans are not natural skeptics
 - Disbelief requires more energy
- No cognitive science research on future blindness
- Happiness research: overestimation of both pleasant and unpleasant events
- Epistemocracy, epistemic arrogance, epistemic humility
 - Advice: skeptical-empiricism like Monsieur de Montaigne



Michel de Montaigne

Ch 12: Why humans can't predict

- Epistemic arrogance and corresponding future blindness
- Fooled by reductions
 - Especially told by people wearing neckties
- Flawed tools of inference, especially from Black Swan-free Mediocristan
 - E.g.; perception that the exceptional is inconsequential
- Confirmation bias
- Casnova / survivor bias



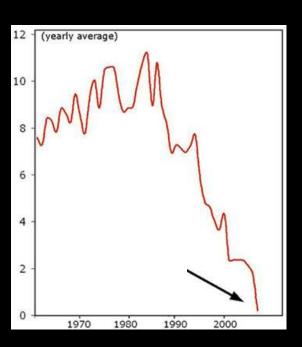
Ch 13 Summary: Go to parties!

- Phenomenon: low volatility = high risk
- Action in the face of the Black Swan
 - Be fooled in small matters not large
 - Benefit from unpredictability
 - Embrace trial and <u>error</u>
 - Manage exposure to Black Swans
 - Be prepared and seize opportunity
- Central theme: Asymmetric outcomes
 - Uncertainty: prepare for possible consequences (knowable) vs. the probability of occurrence (unknowable)



Ch 13: Phenomenon: low volatility = high risk

- People engage in strategies that produce low volatility but have the risk of large loss
 - Long-time corporate employee vs. consultant
 - Seemingly stable dictatorship (Saudi Arabia) vs. democracy
 - Bankers, lenders
- Achilles heel of capitalism: the fittest looking company is the most exposed for a negative Black Swan
 - Enron, IBM, telecoms, etc.



Ch 13: Manage your Black Swan exposure

- Distinguish between positive and negative contingencies
- Act against errors in prediction and risk perception
 - Lopsided barbell: increase exposure to positive Black Swans, decrease exposure to negative Black Swans
 - Financial investments: 85-90% in T-bills (safest), 10-15% in as many as possible options/private equity (riskiest)

| Positive Black Swan Industries | Negative Black Swan Industries | |
|---|---|--|
| Scientific Research | Military | |
| Biotech | Catastrophe insurance | |
| Movies | Homeland security | |
| Publishing | Banking, lending | |
| Venture Capital | | |

Ch 13: Be prepared and seize opportunity

- Don't look for the precise and the local
 - Pasteur "Chance favors the prepared"
- Seize opportunity
 - Collect non-lottery tickets (openended payoffs)
 - Gain exposure to the envelope of serendipity: go to parties
- Beware of forecasters
 - Public and private sector equally bad at forecasting - "paid forecasters are institutionalized fraud"



Ch 12-13 Summary: Don't predict, go to parties

- Why humans can't predict
 - Epistemic arrogance
 - Fooled by reductions
 - Flawed tools of inference from Mediocristan

| | Mediocristan | Extremistan | |
|---|--------------------------------|-------------|------------------------------------|
| • | Gaussian | • | Black Swans |
| • | Linear (easier to predict) | • | Non-linear (impossible to predict) |
| • | Experts | • | No experts |
| • | Exceptional is inconsequential | • | Exception matters |

- Central theme of the book: Asymmetric outcomes
 - Uncertainty: focus on the consequences (knowable) vs. the probability of occurrence (unknowable)
- Use preparedness and serendipity to manage Black Swan exposure



Thank you

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