

Hindsight Bias

“law of retrospectiveness, which makes all the past appear a preparation for events that occur subsequently”
- *Leo Tolstoy in War and Peace*

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What is Hindsight Bias?

- Hindsight bias is the tendency to associate the happening of events with more probability after they have occurred than before they had occurred.
- Also known as knew-it-all-along effect or creeping determinism, it is a multifaceted phenomenon that can effect different stages of designs, processes, contexts, and situations

Qualitative v/s Quantitative

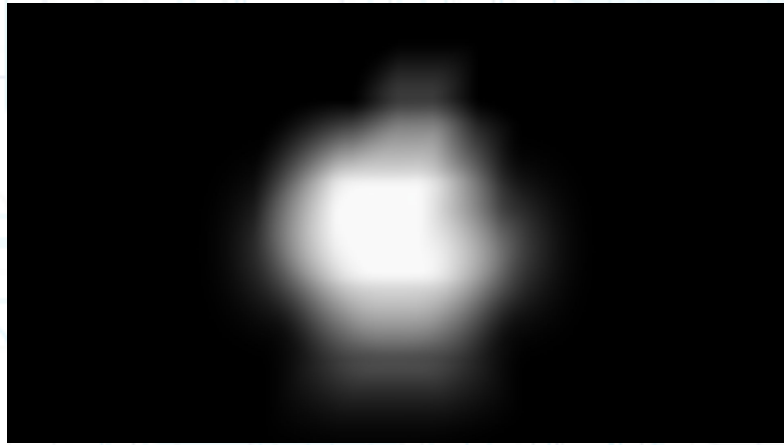
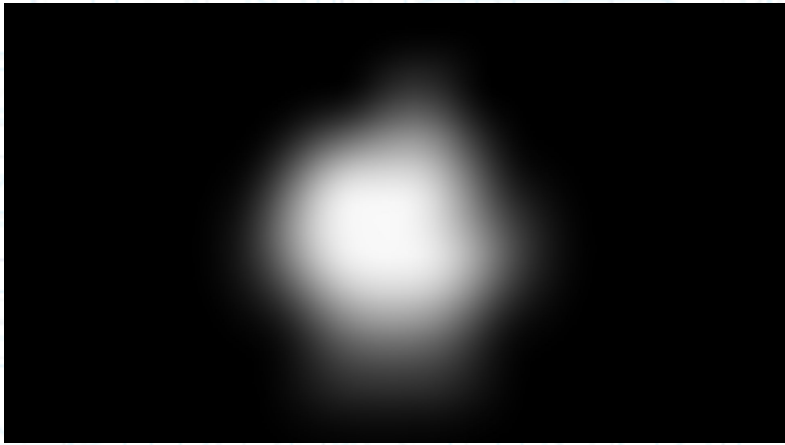
- **Qualitative errors:** are those that result when the subject substitutes the correct answer for their original answer in their recall.
- **Quantitative errors:** on the other hand, result from them forgetting their original answer and recalling an answer closer to, but not equal to, the correct answer

Experiment

- **Verbal Hindsight Bias:** Participants are asked general knowledge questions and their answers recorded at T_1 and later they are asked to recollect their answers at time T_2 .
- **Questions like:**
How many teeth does a mosquito have?
How many countries are there in Europe?

Experiment

- **Visual Hindsight Bias:** Participants tried to identify objects (which were deliberately blurred) and the objects gradually clarified with time.
- In the hindsight judgment condition, participants were told the same objects identities at the start of the process, and were asked to try and estimate when a same-age naive peer would identify the objects



Thank You!

References

1. Bernstein et al (2011) Hindsight Bias across 3 to 95 years of age
2. Ulrich Hoffrage, Ralph Hertwig, and Gerd Gigerenzer (2000): Hindsight Bias: A By-Product of Knowledge Updating?

List of Questions (and Correct Answers) Used in the Verbal Hindsight Task

1. How many inches across is the eye of a giant squid? (15)
2. How many neck bones does a giraffe have? (7)
3. How many seats are there on a school bus? (24)
4. How many minutes does it take light from the sun to reach Earth? (8)
5. How many legs does a lobster have? (10)
6. How many provinces does Canada have? (10)
7. How many days can a cockroach live without a head? (9)
8. How many years can a parakeet live? (15)
9. How many teeth does an alligator have? (76)
10. How many miles per hour can a hippo run? (20)
11. How many countries are in South America? (13)
12. How many muscles does it take to frown? (43)
13. How many teeth does a mosquito have? (47)
14. How many pounds is a sperm whale's brain? (20)
15. How many hours does a lion sleep in a day? (20)
16. How many countries are in Europe? (45)
17. How many moons does the planet Saturn have? (46)
18. How many weeks are female dogs pregnant? (9)
19. How many countries are there in Africa? (53)
20. How many feet can a kangaroo jump in one leap? (30)