Abbreviated List of Factual and Logical Mistakes in Gregg Easterbrook's Review of The Black Swan in The New York Times

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August 4 2007 Update: We now have evidence of Easterbrook's lack of dependability and ethics —evidence that he did not really read TBS before his review, that he just skimmed the book. The NYT called Random House to ask about the identity of Yevgenia Krasnova, complaining that the reviewer could not find her on Google.

Easterbrook's review makes the book attractive enough to sell a lot of copies, but I am listing (some of) the mistakes to avoid the spreading of a distorted version of my message. Luckily Niall Ferguson also wrote a review of my book so I can borrow from him. A good idea is to put them side by side.

Easterbrook writes: "Why (...) customers keep demanding Wall Street forecasts if such projections are really worthless is a question Taleb does not answer." I don't know which book he read, but in *The Black Swan* that I wrote, no less than half the book *is* in fact the answer, as it describes the psychological research that shows how and why people desire to be fooled by certainties—why we all can be suckers for those who discuss the future, and why we pay people to provide us with numerical "anchors" for anxiety relief.

I also let Dr. David Shaywitz answer him in the (professional) WSJ review: "I suspect that part of the explanation for this inconsistency may be found in a study of stock analysts that Mr. Taleb cites. Their predictions, while badly inaccurate, were not random but rather highly correlated with each other. The lesson, evidently, is that it's better to be wrong than alone."

Also, perhaps he does not look at pictures (so he might have barely skimmed the book!). From Chapter 10:



Caravaggio's The Fortune-Teller. We have always been suckers for those who tell us about the future. In this picture the fortune-teller is stealing the victim's ring.

"Much of *The Black Swan* boils down to denouncing others for failing to see the future". The statement is false: I never denounce anyone for their predictive failures. Rather, I criticize many so-called experts for not knowing that they are full of balloney --epistemic arrogance -- and their lack of realistic awareness of their own error rate. And I get angry when it is a matter of ethics and when other people rely on your bogus predictions: "driving a schoolbus blindfolded".

"When TBS tries to expand into...history, it falters further owing to lack of evidence." He then makes the reader believe that I limit my historiographical evidence to the Lebanese war and the Iranian and Cuban revolutions. For one thing, these events were not proposed as "evidence" of anything but were part of my intellectual autobiography —as a scientist, I would never rely on anecdotes as "evidence" but as illustrations. The evidence that I do provide in regard to historiographical errors is, like most hard science, dry and technical; evidently it was overlooked or not understood by Easterbrook.

I gave a cohort-style exhaustive account of the four highest impact events in the history of the last two thousand years--the two great wars, and the rise of Christianity and Islam --and showed that they were unexpected based on contemporaneous accounts. If, as Niall Ferguson showed, war bonds did not forecast the great war, it was a Black Swan. Further, the later sections in the book provides a more formal discussion using mathematical arguments for the unpredictability of the results of wars (duration and impact), starting with Lewis Fry Richardson's results and adding my problem with the fitting of tail exponents when $\alpha \!<\! 2$ that Easterbrook appears to have overlooked or not understood.

Easterbrook claims that I overgeneralize about the fall of the Soviet Union by saying that "no social scientist saw it coming". Then Easterbrook provides a counter-example. He did not understand the discussion. The "social scientists" I discuss are those specifically involved in the (extremely rigorous) Tetlock cohort study, for one thing, but, more important, with a welter of social scientists predicting all kinds of events all the time, if anyone happens to get something right, it has to be shown to be more statistically significant than random.

Easterbrook writes that I do not mention Catastrophe, or Expert Speak except in the bibliography. In fact, Catastrophe is discussed Pages 240 and 353, and Expert Speak on Page 349 (only because I borrowed an anecdote). Further, he complains of the absence in The Black Swan of a discussion of James Gleick's description of the statistical theories of Benoit Mandelbrot. As a scientific collaborator of Mandelbrot, it is my obligation is to use primary sources to back up my ideas, not journalistic storytelling —and I do in fact discuss Mandelbrot's early works. (Furthermore, there are more than a thousand citations of primary material in the book and an entire technical section that Easterbrook seems to have ignored).

Even more misleadingly, he writes of my theme, "Others have been there before" and then lists books on matters either totally unrelated to my central theses or in conflict with them. (My inspirations have been Menodotus of Nicomedia, Al-Ghazali, Karl Popper, G.L.S. Shackle, and Friedrich Hayek—people who dealt with practical decision-making under ignorance --certainly not James Gleick, Victor Navasky, or Richard Posner.) And in the end we all are footnotes on Socrates' statement.

My example of a Black Swan bestselling author, Yevgenia Krasnova, is not as fictional as Mr. Easterbrook portrays her (but I can say no more). And I did not "invent" her to discuss history but to illustratenot prove-the dynamics of randomness in bookpublishing success. The *evidence* that I used for this phenomenon came from the works of Robert K. Merton, Art De Vany, and Duncan Watts (among others) and was ignored by Easterbrook.

Mr. Easterbrook portrays my Black Swan as solely a **catastrophic event**, while much of the book is about beneficial hits that people *can do something about* by gaining exposure to the "envelope of serendipity".

"Experts , Taleb argues, are charlatans who believe in the bell curve, while the truth is, anything can happen". This is wrong: I insist that many experts are not charlatans —and make the Shanteau distinction. I wrote that we should believe in the bell curve in some domains (Mediocristan), and that there are domains and disciplines free of the "expert problem".

Alas, the greatest flaw in Mr. Easterbrook's review is its failure to understand The Black Swan's main ideas that is, 1) the narratives we are programmed to tell ourselves about past major events — causing the confusion between prospective and retrospective predictability; and 2) the confirmation bias. We all have a severe psychological bias toward retroactive and prospective "explanatory" narratives; this bias proceeds from the way our brains are built. After the fact, you are always tempted to find a predictor who got the event right; simply because there are plenty of predictors, the correct method is to look for the number of accurate predictions that are better than random. Most ironically, Mr. Easterbrook himself falls for this temptation headlong by drawing from anecdotal counterexamples—the very bias and lack of inferential rigor that *The Black Swan* is trying to correct.

Conclusion: First I would suggest that Mr. Easterbrook reads the book. And It's very hard to overcome the "Black Swan blindness"--those cognitive biases that limit our understanding of the role of chance in life and history. I wish that Mr. Easterbrook's review weren't such a perfect model of this difficulty.

ADDENDUM (thanks to letters from readers)

"In his 2001 book "Fooled by Randomness," Taleb drew on his experience as an options trader to argue that stock-market projections are worthless because no one has any idea where prices are headed" Wrong book. FBR is about luck in life and the markets, the difference between chance and skills, and stoicism (I explain it several times in TBS).

Taleb offers his ideas about unpredictability and luck as breakthrough concepts. This statement is incompatible with my citing >1000 papers. What I offer is a general framework for **decision making** under ignorance. Read the book again.

Philosophical tales: Note that it is typical for philistines to criticize my inclusion of philosophical tales into my books... They prefer journalistic pseudonarratives. But as an empiricist I know what survives ...

Moral: If you want to skim (or sub-skim) a book then make a quick \$500 reviewing it, don't trash it too randomly; try to get the facts right or elect to review a novel or a book written my a journalist.