



Thoughts from Linda:

The Black Swan
*The Impact of the
HIGHLY IMPROBABLE*

Nassim Nicholas Taleb
2007/2010

Reading this book was a 'mind-blowing' experience for me. Nassim Nicholas Taleb writes in a personal style that feels like we're sitting in a room together and talking about these topics. It is deep, personal, rich in content, and aimed to de-bunk much conventional wisdom about many things.

He has been praised as "The hottest thinker in the world" by *The Sunday Times* of London. They called this book one of the 12 most influential books written since WWII. The book has been called "...an eye-opening book, one that teases our intelligence..." (Roger Lowenstein, *Portfolio*) and as providing "...erudite advice...a richly enjoyable read with an important message" (*Business Week*). Chris Anderson, author of *The Long Tail*, called it "a masterpiece."

I first learned of it from Dr. Philippe Van der Auwera, who at the time was the Global Head of Safety Risk Management for Roche Pharmaceuticals in Basel, Switzerland. I had the pleasure of working with him and his drug safety team as they reinvented themselves in 2007-2008 when this book had just been released. He not only found it an interesting and irreverent read (also Philippe's style) but also quite informative for a drug manufacturing organization that had to calculate risks and anticipate a volatile and uncertain global future. As explained in this book, he subscribed to many of the theories of Nassim Nicholas Taleb about improbable events.

The title refers to the metaphor that describes an unexpected event of large magnitude and impact and is then inappropriately rationalized after the fact with the benefit of hindsight. The black swan theory takes its origins from the idea that ancients 'knew' that there were only white swans and firmly 'knew' that no such thing as a black swan did exist, only to have this 'certainty' completely disproved once black swans were

discovered in Australia. The expression derives from a Latin expression by the second-century Roman poet Juvenal, when he described a rare occurrence as "*rara avis in terris nigroque simillima cyano*." The Latin translation is "a rare bird in the lands and very much like a black swan."

Talib uses the metaphor to refer to the fragility of any system of thought, as conclusions can be disproved once any fundamental underlying assumptions are proven false. The Latin quotation was common in 16th-century London, referring to something that was clearly impossible. Once the Dutch explorers first saw black swans in 1697 in Australia, this term changed to indicate that something currently perceived as impossible could still be disproven.

In the book, he offers a robust description of the 'black swan.' He offers examples of many scientific discoveries and other black swan events, such as the rise of the internet, the advent of the personal computer, WWI, the break-up of the USSR, and many Wall Street phenomena.

He introduces the description early in the book, noting the three characteristics they possess. First, a black swan event is an outlier far beyond regular expectations because nothing in the past can strongly indicate it is even possible. Second, it has an extreme impact. Third, a black swan triggers our human nature so that it causes us to make up explanations for its existence after the fact, making it seem to be explainable and predictable.

His thesis is that "a small number of Black Swans explain almost everything in our world, from the success of ideas and religions to the dynamics of historical events, to elements of our own personal lives." He gives numerous examples and spends considerable time on the theoretical underpinnings of his thinking. The book is organized into nine chapters, with cleverly named sub-topics. His sense of humor and skepticism are key aspects of the book and give it a quirky but oh-so-interesting feel.

The sequence of the book follows what he deems to be a simple logic saying, "It flows from what can be labeled purely literary to what can be deemed entirely scientific (in subject though not in treatment)." Listen to his words as he describes the organization of the book, and you'll get a sense of his style: "Part One, *Umberto Eco's AntilibRARY*, is mostly about how we perceive historical and current events and what distortions are present in such perception. Part Two: *We Just Can't Predict* is about our errors in dealing with the future and the unadvertised limitations of some 'sciences'—and what to do about these limitations. Part Three, *Those Gray Swans of Extremistan*, goes

deeper into the topic of extreme events, explains how the bell curve (that great intellectual fraud) is generated, and reviews the ideas in the natural and social sciences loosely lumped under the label 'complexity.' Part Four, *The End*, will be very short." Chapters and sub-topics have interesting names such as *Life is Very Unusual*; *Plato and the Nerd*; *Too Dull to Write About*; *History Does Not Crawl, It Jumps*; *The Best (Worst) Advice*; *How to Learn from a Turkey*; *A Little More Dopamine*; *The Madman's Narrative*; *How to Become a Millionaire in 10 Steps*; *How to Look for Bird Poop*, and *The Ten Principles for a Black-Swan Robust Society*.

Nassim Nicholas Taleb is an accomplished aphorist, essayist, mathematical statistician, former options trader, and risk analyst focused on randomness, probability, and uncertainty. This book is a part of his five-volume philosophical essay, *Incerto*, published over two decades (2001-2018). Other best-sellers that make up this volume include *Antifragile*, *Fooled by Randomness*, and *Skin in the Game*.

He is Lebanese American, born in the Levant, and has a rich Greco-Syrian heritage. His description of his childhood and the area we commonly refer to as "the Middle East" today is charming and revealing as he describes the peaceful co-existence of so many tribes and people of individual faiths who once navigated their lives successfully. There is much to learn just in these few pages. His parents were physicians and researchers, and his grandfather and great-grandfather were deputy prime ministers from the 1940s through the 1970s in Lebanon. Taleb attended French schools in Beirut and received his bachelor's and Master of Sciences degrees from the University of Paris. He holds an MBA from the Wharton School and a Ph.D. in management science from the University of Paris. His dissertation focused on the mathematics of derivatives pricing, and he reads in ten languages.

He has been a professor at several universities and was the Distinguished Professor of Risk Engineering at New York University's Tandon School of Engineering. He has been a co-editor of the academic journal *Risk and Decision Analysis*. He has been profiled for his intense criticism of the risk management methods used by the finance industry and warned about financial crises.

He is a unique figure in the world of finance, profiting from the crisis of the late '80s while criticizing it at a fundamental and moral level. He has been practicing mathematical finance as a hedge fund manager and derivatives trader and today serves as a scientific adviser at Universa Investments. However, he considers himself less a businessman than an epistemologist of randomness, saying he used the trading system

to gain freedom from authority and his own intellectual independence. Today he works to safeguard investors against crises.

This is a book that requires serious attention. It can be read in segments, but it would be wise to cover the first section first, prior to selecting areas at random. He describes a few fundamental theories, such as what he terms "meritocristan" and "extremistan" which are critical to understanding his train of thought. He describes them:

"Meritocristan is where we have to endure the tyranny of the collective, the routine, the obvious and the predicted; Extremistan is where we are subjected to the tyranny of the singular, the accidental, the unseen, and the unpredicted."

I specifically enjoyed his story entitled "Lunch at Lake Como," in which he tells the story of being invited to participate with a think tank at a casino in Las Vegas to discuss probabilities. He notes that "my first surprise was to discover that the military people there thought, behaved, and acted like the philosophers—far more so than the philosophers we will see splitting hairs in their weekly colloquium in Part Three (of this book). They thought out of the box, like traders, except much better and without fear of introspection." He goes on to ultimately describe the famous quote of Donald Rumsfeld about "unknown unknowns" and the wisdom shown in the conference. He manages to provoke, as is his style, the approach of risk management used by many casinos, and his telling of the experience is entertaining and insightful.

The book is filled with stories like these. He has much to say. And as he promises, the last chapter, entitled *Amor Fati: How to Become Indestructible* is indeed short. In it, he reflects on his own life as he is writing it from his old home in the village of Amioun, the home of his ancestors.

I think this concluding segment gives us a good feel for the depth of this man and the unique personality of Nassim Nicholas Taleb. Here is a section of it where he reflects on the idea of the Black Swan and is in the cemetery of his own ancestors, as he says, "wanting to prepare myself for where I will go next."

He goes on, "I am carrying Seneca on all my travels, in the original as I relearned Latin—reading him in English, that language desecrated by economists and the bureaucrats of the Federal Reserve Bank of the United States, did not feel right. Not on this occasion. It would be equivalent to reading Yeats in Swahili."

As he continues, "Seneca was the great teacher and practitioner of Stoicism, who transformed Greek-Phoenician Stoicism from the metaphysical and theoretical

discourse into a practical and moral program of living, a way to reach the *summum bonum*, and untranslatable expression depicting a life of supreme moral qualities, as perceived by the Romans."

He notes the message of Seneca just before Seneca's death as he said, "Seneca's readiness to lose everything extended to his own life...the man had reached the Stoic self-sufficiency, the robustness to adverse events, called *apatheia* in Stoic jargon. In other words, nothing that might be taken from him did he consider to be a good." Taleb uses the lessons of the Stoics to illustrate his own freedom from material possessions and how he has learned to overcome his loss aversion, giving us a peek into his inner psyche.

As he wishes us goodbye, he ends this story as Seneca did by using the word, *vale*, often incorrectly translated as 'farewell.' The root of the word is the same as 'value' and 'valor' and means both "be strong" (i.e., robust) and "be worthy."

Appropriately, his final wish for his reader is "*Vale*."