

On the “Black Swan” Inspired Attitudes toward Future

Roman Galar
Wroclaw University of Technology
roman.galar@pwr.wroc.pl

Introduction

Attempts to discuss future seriously used to be burdened by the necessity to challenge a number of the commonly accepted clichés of doubtful value. These clichés, concerned mostly with the degree in which future might be predicted, analyzed, influenced and programmed, are rooted mostly in the proud illusions of the Enlightenment. This “men controlling their destiny” and “computing the future of universe knowing position and momentum of all particles” stuff got discredited by the progress of science quite a while ago. Yet, in the meantime, the illusory logic of these clichés has turned to be irresistible for general public.

This is especially so with social scientists and politicians, as the self-imposed task of programming future inflates their importance. In response to repetitive failures of grand projects, based on the delusion of predictability, vast and complex explanations are being produced. These are either plot theories, implying the vicious involvement of hidden enemies, or inadequacy theories, pointing to the need of models still more complicated and fed with still more data.

Without explicit dissociation from these illusions, the ideas of the adaptive approach toward future developments in general and progress in particular are hardly graspable. Attempts to dissociate had to be lengthy (while, not sufficiently long), secondary to the main topic, negative, and detrimental to the author’s credibility. It is so much easier to debate from inside of an acknowledged paradigm than to argument, while challenging the paradigm itself. After publication of the “Black Swan”¹, the situation should become more comfortable. Recognized by Amazon as the best not fiction book of the year 2007, it has spent 17 weeks on the New York Times Bestseller list and was translated into 27 languages. With such an impact it might be expected that the “Black Swan” will provide a well recognized point of reference in the matters concerning practical approach to future challenges.

In this short contribution I try to give my personal view on the content of the book, relate some of its principal concepts, share my understanding of its messages and remark on its importance for the ongoing discussion about the future of regions.

¹ N.N. Taleb, *The Black Swan. The Impact of the Highly Improbable*, Random House, 2007.

The “Black Swan” content

The author of the book is a rare bird. After making enough money as a Wall Street risk analyzer at the end of 1980s, he has got disgusted with the profession. He left and used thus gained affluent independence in a private quest for the honest understanding of the corporate mindset. I find the effect very rewarding. Good reading, plenty of anecdotes, well placed sarcasm, vivid popularization of Western intellectual heritage — all this dedicated to the cause of reason and common sense.

The book is focused on the out of proportion effects that the extremely rare and hardly predictable events, called “Black Swans”, might have. Taleb insistently points out that while most attention concentrates on the everyday’s details, the total outcome is largely formed by unexpected occurrences. This might seem kind of obvious. Is not human life defined by the singular moments when the genetic lottery produces one’s genotype, the partner for life is first encountered or a false step makes one a cripple, etc? Yet, it doesn’t seem trivial when Taleb notices that: *In the last fifty years, the ten, most extreme days in the financial markets represented half the returns.* This observation relates to the sphere that is assumed to be well controlled by the professional competence.

The book aims to explain why the existence of Black Swans is so commonly ignored. Even admitting that they might have happen in the past, people tend to believe that there were eliminated from the modernity of our times. Taleb explores this phenomenon involving in his arguments ideas of ancient and modern philosophers and referring to the recent research in mathematics and psychology. In this process he is very discriminating with regard to authorities. Some, especially Mandelbrot and Popper get idolized, while a number of idols of market and academia get denigrated. “Black Swan” is certainly a book bent on propagating the ideas of falsification and self-similarity into the mainstream.

The book demonstrates convincingly how poorly our minds are equipped to understand complexity and randomness that pervade the modern environment. There are compelling examples on:

- How even the fully predictable future dissolves due to accumulation of errors (to predict the effect of the ninth rebound of a billiard ball, the gravitational pull of the people standing around the table would have to be taken into account).
- How specialization restricts thinking to the interior of the model (a statistician informed about a “honest coin” that has shown tails 99 times in row, will argue that the probability of tails coming next is 50%; while a man of the street will opt for 100% — assuming disinformation and guessing that the coin must be faked).
- How even in the well defined risk areas the expert knowledge is unreliable (estimates of risk by professionals engaged at stock exchanges provide at average as good results, as assumption that prices will stay the same). This is nicely corroborated by the recent events on the financial markets.

Main concepts

Debilitating fallacies

A large part of the book is devoted to the discussion of some common fallacies that distort perception of reality and hide from view the impact of the highly improbable events.

- Silent evidence fallacy — consists on the selective assessment of history. Attention focuses on *the rosier part of the process*. This forms a base for unjustified optimism.
- Lucid fallacy — exposed when studying uncertainty with an apparatus build on the games of chance. This ignores the real life ambiguity concerning adherence to the rules of the game.
- Narrative fallacy — due to the natural urge of human minds to make sense of what has happened, by wrapping it in a consistent story. This masks the impact of chance.
- Round trip fallacy — visible when the absence of evidence is mistaken with the evidence of absence. This is responsible for a range of serious blunders like the formula feeding frenzy in 1970s.

“Mediocristan” and “Extremistan”

The central construct is the distinction between “Mediocristan” and “Extremistan” . Mediocristan might be interpreted as a kind of traditional, limited environment that our atavistic brains are able to grasp. Extremistan denotes the modern, all-inclusive environment, with complexities beyond human comprehension. The important difference is the scalability of human achievements, leading to the effect that “the winner takes all” (be it personal income, books sold or scientific citations). Taleb points out that a dentist — a representative of a Mediocristan person — might become affluent after 30 years of drilling teeth. This is in sharp contrast to Extremistan careers, where a market player, actor, writer or innovator might achieve colossal and practically instantaneous success. The upside is that, in difference to being a dentist, the chances of total failure among the adepts of Extremistan professions are close to certainty. This explains rat races and gives Taleb an occasion to a nice venture into intricacies of fractal randomness.

Skeptical Empiricism

Taleb is an outspoken critic of “platonicity”, i.e. of tendency to concentrate on the well defined objects and models, while ignoring their interface with the inherently messy real problems. There are many lucid observations that will not endear him to the influential group of what he calls the “Bildungsphilister” type researchers. As an antidote to the Platonic approach Taleb advises skeptical empiricism, which, among others:

- prefers minimal (and falsifiable) theories against grand, general socioeconomic models;
- advocates the virtue of being rather broadly right than precisely wrong;

- recommends suspicion toward data, especially if they pretend to be computed probabilities (all kind of forecasts, especially financial);
- urges to move from observations to books, not from books to practice.

Suspicion of the Gaussian

Taleb is not really eager to discuss where from the Black Swans are coming. He is engaged in angry rhetoric based on supposedly fundamental opposition between the mediocre Gaussian events and the splendid and terrible Black Swans. This seems to me a most disputable part of his reasoning. One might point on a number of truly catastrophic effects that arise suddenly from the usual Gaussian noise, if its effects are selectively accumulated (notch effect, quantitative evolution). Some Black Swans might appear because we were stubbornly not looking in the direction where they are hatching. Both procedural approach and political correctness are very adamant in declaring what should not be taken into account. These parts of the book are better at thought provoking than explaining.

The message

The main message is to be aware of the Black Swan possibility. The arrival of Black Swans is by definition unexpected, but some of them might be already sensed breeding behind horizons of the usual. Especially so, if they emerge from tensions that the system is unable to unload systematically. It might be impossible to predict when and how the discharge will happen, but the ultimate effect is more or less certain, and one might only hope that there will be enough time to react. Taleb calls such events “Mandelbrotian Grey Swans”.

Elements of critique of the modern society

Taleb admits that he is most often irritated by these who exercise their skepticism against religion but not against economists, social scientists and phony statisticians. He points sarcastically on academic philosophers, who are professionally employed in the business of questioning what people used to take for granted. They exercise skepticism toward existence of gods, definition of truth, redness of red, meaning of meaning, etc. Yet they believe blindly in stock market and abilities of their pension plan managers to multiply their income. This observation extends easily to less elevated layers of society. Contempt for old superstitions is more than matched by adulation of the new ones. Supposedly rational economy and politics are hanging on irrational beliefs of consumers and electorate that everything is going well.

Elements of personal advice to the fellow humans

The book is saturated with personal advice that I find both intelligent and amusing. Taleb is practical about necessity to earn enough money to gain the freedom of action. Then he advocates the attitude of the 19th century gentlemen; i.e. doing what one finds worthy of doing. He writes that: *not matching the idea of success others are expecting from you is only painful if that's what you are seeking*. His existential position is: *I don't run for trains* implying elegance and control of one's own life that is most refreshing. It brings to my mind an ironic comment by Professor Tadeusz Zipser: *we do everything to jump on the tram that is*

just driving to the depot. (It was given in a somewhat different context of public discussion on some modernization by imitation venture.)

The future of regions input

Taleb notes that Black Swans might be of the disastrous and of the hopeful kind. One might denote a market meltdown, the other some crucial technological innovation. He admits that *half of the time I hate Black Swans, the other half I love them. I love the randomness that produces the texture of life, the positive accidents.* It might be argued that the properly run regions provide a good ground for breeding the second and avoiding the first type of Swans.

We live in the period of globalization. In this perspective regions are very secondary beings. Yet, it might be noted that attempts to globalize — i.e. to encompass the whole available sphere of interactions with one order — abound in history. Globalization has all appearances of a perfect business arrangement. Its benefits are obvious: it provides the greatest markets and simplest rules. The reasons, why globalization has not yet finally succeeded, are more ambiguous.

One of the reasons is that global solutions leave no options. The global system itself, as well as its principal corporations and organizations, have no real competitors. This lack of diversity makes learning on errors practically impossible, as there are no viable competitive alternatives to compare the effects. All policies are by necessity the “only possible” policies, with the painfully well know implications.

Taleb expounds a lot on the Frederic Bastiat’s remark: *We can see what governments are doing and therefore sing their praises – but we don’t see the alternative. But there is an alternative; it is less obvious and remains unseen.* This might be a crucial realization, when the sense of the division of power between regions and states is considered. It is obvious that some decisions have to be taken at the higher level of governance. It is evident that some decisions can be taken both at the central and at the local level. Arguments against devolution of power point at lower cost, increased order, superior competence, enhanced control etc. Argument for devolution use to point at possibilities of local optimization and pay homage to democratic principles. The ultimate reason for implementing subsidiarity principle is rarely mentioned. And the reason is that devolution of power will make alternatives and their effects visible. Once they are visible the learning by doing might start, thus opening the way for the system evolution.

Another deficiency of globalization is that global actors tend to escape local limits to growth by moving growth to the wider arena (e.g., the real estate amok and Harry Potter frenzy). This brings successes and failures on the unprecedented scale and their consequences tend to be cumulative and crushing.

Still another deficiency is a strong tendency to shift local problems elsewhere, instead of solving them on the spot (e.g. European CAP effect on the global food market). In this way the tensions become global and have to relax globally. The global system operates as an “Extremistan” *par excellence*.

This three reason might be helpful in understanding why the episodes of globalization in human history were so short-lived their obvious advantages notwithstanding. Each success prolongs the game, but one irreparable failure might close it. And the global system tends to accumulate little failures into failures big enough to crash down the whole; while providing little forewarning and no reliable alternatives. The necessity to deal with such cumulative crashes might reveal a new, unasked for, face of globalization — an authoritarian global crisis management. In the Autumn of 2008 we might be just witnessing its emergence.

If the global systems were more decomposed and scaled down, the effects of the *winner takes all* rule would be softened and the learning abilities restored. In terms of the Black Swan, regions belong to the realm of Mediocristan. Successes are on the lesser scale and so are disasters. The common cultural platform makes them easier to predict and to contain. The experiences of the neighboring regions might offer useful advice on how to develop successes and avoid troubles. In addition, in the world where the sought for careers would have regional rather than global dimension, the total amount of the available human satisfaction should greatly increase. In such conditions the regional cultures might flourish, greatly augmenting the cultural deposits of humanity.

Conclusions

The main “Black Swan” input to the discussion on predicting future is — forget it. Future is based on uncertainty, unless it is a stagnating future, i.e. the prolonged present. Future might and should be controlled, but awareness is more important than planning. Control of the future is a matter of strategic initiative. It demands good maneuvering abilities of vivid intelligence rather than procedural fortifications of fake certainty. Taleb is adamant in his message: *Avoiding being a sucker. The antidote to Black Swans is to be non-commoditized in ones thinking.*

It should be stressed again that “Black Swan” was written by a financial markets insider. An insider that succeeded in Extremistan and become deeply critical of its working. Critics go very deep, and many potent ideas from classical philosophy to modern mathematics are invoked in argumentation. Despite of the Author’s academic credentials, “Black Swan” is not an academic book — it is a book of passion and it is only broadly right. This is advantageous, as it gives Taleb a chance to influence culture not just specialization.

It is impossible not to remark on timing. This highly speculative work has hit the market just a moment before its speculations started to turn real. Now the world wobbles on the brink of an precipitous crisis resulting from the wrong assessment of chances. Taleb asks: *How these whose job is to make us aware of uncertainty fail us and divert us into bogus certainties through the back door?* There is hardly a more timely subject to consider.