

Nassim Nicholas Taleb's book, *The Black Swan*, tells about the nature of what we perceive as random events, in addition to the logical difficulties making us overlook the bigger picture. These seemingly random events which generally have extensive results for the individual and for societies as well eventually, named by the writer as "Black Swans."

In the book, Taleb provides us a realization of our own deficiencies in making predictions. This realization could help us to recognize when our judgment is clouded by the desire to fit information into neat, easy-to-understand narratives.

By the help of this book, the reasons for thinking as a turkey could be harmful to our health will be understood.

Indeed, It will also be found out that why the biggest menace to a casino may have little or nothing to do with gambling.

Lastly, understanding the reasons for "knowing what you don't know" might rescue us from losing your life possessions.

"Black Swans" are considered as events lying outside of the area of possibility, and yet happen anyway.

We, mankind, have special abilities in converting all of the stimuli from our territory into meaningful and clear data. Creating the scientific method, philosophizing about the nature of creation and devising complex mathematical models are the result of this skill.

However, this does not mean that just because we can reflect on and command the world around us we are very good at it.

First of all, we generally tend to be narrow-minded in our beliefs about the world because when we have a new idea about how the world functions, we tend to cling to that belief.

But our knowledge is gradually growing and evolving, therefore clinging to a belief is not logical. For instance, just two-hundred years ago, scientists and doctors were supremely self-confident in their information about medicine, but today their self-confidence is foolish or funny: think about going to the hospital and complaining about the cold to the doctor, and getting a prescription for snakes and leeches!

Dogmatism makes us blind to new concepts that are not in the realm of our paradigms we've already accepted as true. In order to make it clear, for example, how can we understand the medicine if we're not aware of the existence of germs? We might face a sensible explanation for an illness but it will be flawed by a lack of important knowledge.

This dogmatic way of thinking can cause many surprises, this is the result of our narrow-angle of vision, not because of the events make us surprised are random. Such surprises are known as "Black Swans," and they can prompt us to fundamentally reconsider our worldview:

As you'll see, Black Swans can be as learning not all swans are white, or as life-changing as losing everything because of a stock market crash.

Before anyone had ever seen a black swan, people assumed that all swans were white. Because of this, all their depictions and imaginations of the swan were white, meaning that white was an essential part of “swans.” So, when they discovered their first black swan, this fundamentally transformed their understanding of what a swan could be.

As it'll be seen Black Swans might not be as important as after learning that all swans are not White, and as life-changing as losing all possessions due to an economic crisis.

Moreover, there might be shocking results of the cases related to Black Swan for the people who are unaware of those cases.

Black Swan affects every individual in a different way. While ones can be affected much, others might not feel the effect of it as much as the others. The power of their effect is largely determined by your access to relevant information: the more information you have, the less likely you are to be hit by a Black Swan; and the more ignorant you are, the more you are at risk. While Black Swan affects some People much, it does not affect the others at all. This difference is due to the how much knowledge about Black Swan the person has. That is, if the person has enough knowledge about Black Swan, He or she will be less likely hit by the effect of it, if that person is not aware of it or has less knowledge, the possibility of his or her being in a trouble will increase.

We can write the following scenario in order to clarify the case:

Let's imagine wagering on your favorite horse, Racket. Due to its build, her past track record, the natural skills of the jockey and the poor competitors, you are strongly sure about that your favorite horse is the best choice to gamble on and you risk all your own on the horse Rocket to win.

Now let's think about your surprise, when the race starts and your horse Rocket, not only does not leave the gates but prefers instead of laying down on the track.

This example would be a Black Swan case. Regarding the information about the favorite horse, Rocket winning was a good and safe choice, but you lost all at the beginning of the race.

But this event will not be a tragedy for everyone. For example, Rocket's owner made a fortune by betting against his own horse. Unlike you, he had additional information, knowing that Rocket was going to go on strike to protest animal cruelty. Just that small amount of information saved him from having to suffer a Black Swan event.

But this event, this case will not be a tragedy for all though. For instance, the owner made a pile by wagering against his own horse. He had extra knowledge, which you do not have, and

he knew that Rocket was about to go on a strike in order to protest animal cruelty. Only that little extra knowledge saved him from the condition in which he would suffer a Black Swan event.

When this happens, a Black Swan can transform how the world works, impacting many areas of society, like philosophy, theology, and physics.

Black Swans' effect changes on a wide scale. It affects not only individuals but also, sometimes, it has huge effects on whole societies.

For instance, after the Theory of Copernicus telling that the Earth is not the center of the universe, its results were overwhelming, his discovery defied the authority of the religious institutions such as Catholics and Bible itself.

For all of European society, finally, a new approach was set up by the help of this specific Black Swan.

The most basic misconceptions can even easily deceive us.

Even though it is believed that humans are the most clever creatures in the world, there is still a long way to go before we get rid of our bad habits.

This kind of bad habits of us is creating narratives related to what we knew in the past. Although we think that our past is a good indicator of our future, this is often a deception. It makes us apt to making mistakes because there are simply lots of parameters that might run counter to our narratives.

To make it clear, let's think that you are a turkey living on a farm with the help of the farmer Who provides you a place, feeds you and allows you roam freely. Regarding your past as your guide, it is not logical to think that tomorrow should be any different.

For Thanksgiving Day, which is tomorrow, Alas and you are decapitated, filled with spices, put in an oven, and devoured by the people who have raised you.

According to this example, the idea of making predictions about the future based on our past knowledge is a deception and this might have possible dire results.

A similar deception is confirmation of prejudice, that is, we generally look for such beliefs that we already know, even to the extent that we do not take into consideration any information against them.

When we see information against our beliefs, we are generally unlikely to accept it and do not tend to investigate further. If we do investigate, we most probably search for the information that undermines this information.

For instance, if you think that “climate change” is a complot, and however you randomly see documentary named “ The Undeniable Evidence for a Changing Climate “ then you will probably be upset.

All after this, if you do a web search for information about climate change, the words that you use will be probably “climate change hoax” and not “evidence for and against climate change.”While both of these deceptions are anti-scientific, it ends up with bad reasoning: it is a part of our nature.

The method of our brains classifies information that gains make exact predictions difficult.

Human brain developed certain methods in order to classify information within the period of our evolution. When we had to learn and adapt quickly to new dangerous conditions, these methods were great, however, today, there are complex conditions and those methods are not useful anymore.

For example, narrative fallacy by which we create linear narratives in order to describe our current situation is one method among those methods.

The reason for this is the huge amount of information we face every single day. In order to make sense of all of them, our brains select only the information that it considers as important. For instance, you can remember what you had for breakfast this morning, whereas you might not surely remember the color of everyone’s shoes on the subway.

We convert this irrelevant information into a coherent narrative in order to be able to give meaning to them. For instance, once you think about your own life to understand how you became the person that you are now, you generally select only some events as meaningful, and you order those events into a narrative. For example, the reason for you loves music is the Beatles songs sung by your mother every single night.

However, creating that kind of narratives is not the best way to understand the world in a meaningful method. The reason for this is this method is based on only looking back in the past but does not take into consideration the near-infinite possible explanations for any event.

The important thing here is apparently unimportant, small events might have unpredictable and major results.

Let’s think that a butterfly flapping her wings in India causes a hurricane in New York City one month later.

In order to be able to see a clear, causal relationship between events, we need to list each stage of cause and effect occur in this method. However, since we only see the result - in this

event, the hurricane - all we can do is to guess which of the simultaneously occurring events actually affected that result.

It is not easy for us to distinguish between scalable and non-scalable information.

In order to understand the world better and classify information, we have developed many new methods and models, I am afraid, yet, we are not very good at recognizing the difference between different types of information - especially the difference between "scalable" and "non-scalable" information.

However, the difference lay beneath those types is fundamental.

Non-scalable information has an exact and statistically upper and lower limit such as body weight and height.

Because the properties of such non-scalable information are clearly limited, it's possible for us to make almost meaningful predictions. Properties of the non-scalable information are clearly limited and thus it is possible for us to make average meaningful predictions. For example, body weight, there are physical limitations for a person's weight.

On the contrary, scalable things are non-physical or basically abstract such as the distribution of wealth and albums. For instance, if you sell your album through iTunes, there is no limitation of a number of sales because the distribution does not depend on the physical copies you could produce. Moreover, there is no shortage of physical currency to bar you from selling how much you want, because the operation is online.

To have a clear picture of the world, making clear the difference between scalable and non-scalable information is quite important. In addition, their rules are different and can not be applied to each other, otherwise, some mistakes might come up.

For instance, in order to calculate the wealth of the population of England, the easiest way is adding up their total income and dividing the result by the number of population of England. But, wealth is indeed scalable, because a small population of the whole can have a great amount of total wealth. By solely getting data per capita income will represent the income distribution and this is not a real representation of the actual situation of people in England.

We, human, are far too much confidence in the information that we have now.

We developed some methods to keep ourselves from harm, one of them is assessing and managing the possibility of potential risk such as accident insurance, trying not to put all eggs in one basket.

In order not to miss opportunities, most of us try to do our best to assess the risks that we can face and at the same time we try to ensure that we don't do anything we might regret later.

To do this, we should evaluate potential risks and then calculate the probability of these risks' realization.

Let's imagine you are planning to buy insurance which covers your expenses in case of worst scenario, however, at the same time you do not want to waste your money. Because of this, you should take the potential threat of the event and its arising consequences into consideration to make a reasonable decision.

We think that we know all the possible risks that we have to know to protect ourselves against diseases or accidents, this is a deception and, called a ludic fallacy. According to it, before we play, we are keen to handle risks like we play the game with a set of rules and probabilities that we can determine. However, dealing with risks like a game is risky as well. For instance, casinos improve security systems, observe the players who win too much and too frequently and then ban them to earn as much as possible. However, they look for the threats in wrong places, this is based on a ludic fallacy. The biggest threats might be unpredictable such as a kidnapper, or an employee failing to submit the casino's earning with the IRS. According to this, calculating every risk is almost impossible, no matter how hard we try. Next time, we will explain that being aware of our ignorance is indeed better than being unaware of it.

Thinking about what you don't know will make you assess risks in a better way.

"Knowledge is power" however, this motto limits us in our life, then recognizing what we don't know is quite advantageous.

Actually, if you only focus on what you know, you will limit your perception of the results of an event and cause an available field for Black Swan events.

For instance, you have a plan to buy stocks from a company, however, your information is limited to the period, 1209-1928, which is one year before the biggest stock market crash in the US history, so that you'd observe only a few dips and peaks, however, you'd usually notice that the trend is going upward. In this case, you invest in stocks. Later, however, the market might crash and you can lose all you have.

There are lots of observed booms and busts throughout the market history, by onşy focusing on what we know, we are exposed to many unpredicted risks.

At the same time, if you determine the things which you don't know, you can reduce the risk substantially.

For example, in order to be successful, good poker players try to apply this principle in the game in which they play.

Other than they know the rules and the probability of their opponents' having better cards than they have, they are also aware of that there is exact information that they don't know such as the strategy and power of their opponents.

They are not only focused on their own cards. This strategy was developed by the unknowns that they are aware of and thus helping them make a better assessment of the risk.

Making better decisions strictly depends on our perception of our limitations.

Probably, the most useful defense against falling into conceptual pitfalls is a better understanding of the tools and ways which we use in order to make predictions and limitations of the tools.

Although understanding our limitations can't save us from every kind of blunder that we make, it might help us increase our good decisions.

For example, if you know that you are under the influence of cognitive bias as everyone, then it is much easier to recognize when you are solely searching for information that approves what you already believe to be true.

Identically, if you understand of the behavior of human which tends to simplify the complexity of the world, then you will be able to search for further information to gain a better view of the whole picture.

This little critical self-analysis might help you get ahead of others in your field.

Being aware of your shortcomings is exactly preferable. For instance, if you are aware of possible risks of any kind of opportunity, despite how much it is promising, you will probably be less prone to invest in it.

While we can not succeed at randomness or our restricted capacity in order to understand the high complexity of our world, we can at least decrease the damage caused by our ignorance.

The Black Swan: The Impact of the Highly Improbable by Nassim Nicholas Taleb Book Review

Generally, we are terrible at our future predictions, the reason for it is underestimating our ignorance and putting far too much confidence in our knowledge. We have strictly depended on methods that seem to make sense, we can not understand and determine the randomness, and even our biology and all this contribute to wrong decisions, and even “Black Swans” which we believe to be impossible but it causes redefining our understanding of the world.

Our nature is prone to search for linear and causal relations between events to explain the meaning of the life and world, however, we generally absolutely bad at both making predictions and establishing cause and effect relations. Rather than seeing events in a simple clear-cut cause and effect, it is better to take into a few of possibilities consideration without focusing on only one.

Instead, you should also be consciously aware of what you don't know so that you don't unnecessarily limit the information that you are working with.

When you are making predictions about the future such as buying insurance, making investments, changing jobs, conducting research, it is not possible to take all of the knowns into consideration so that you can not guess all risks before making predictions. In this condition, you should know what you don't know, by this way you don't limit the information you are interested in for nothing.

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