

THE ILLUSION OF UNDERSTANDING

The trader-philosopher-statistician Nassim Taleb could also be considered a psychologist. In *The Black Swan*, Taleb introduced the notion of a *narrative fallacy* to describe how flawed stories of the past shape our views of the world and our expectations for the future. Narrative fallacies arise inevitably from our continuous attempt to make sense of the world. The explanatory stories that people find compelling are simple; are concrete rather than abstract; assign a larger role to talent, stupidity, and intentions than to luck; and focus on a few striking events that happened rather than on the countless events that failed to happen. Any recent salient event is a candidate to become the kernel of a causal narrative. Taleb suggests that we humans constantly fool ourselves by constructing flimsy accounts of the past and believing they are true.

Good stories provide a simple and coherent account of people's actions and intentions. You are always ready to interpret behavior as a manifestation of general propensities and personality traits—causes that you can readily match to effects. The halo effect discussed earlier contributes to coherence, because it inclines us to match our view of all the qualities of a person to our judgment of one attribute that is particularly significant. If we think a baseball pitcher is handsome and athletic, for example, we are likely to rate him better at throwing the ball, too. Halos can also be negative: if we think a player is ugly, we will probably underrate his athletic ability. The halo effect helps keep explanatory narratives simple and coherent by exaggerating the consistency of evaluations: good people do only good things and bad people are all bad. The statement “Hitler loved dogs and little children” is shocking no matter how many times you hear it, because any trace of kindness

in someone so evil violates the expectations set up by the halo effect. Inconsistencies reduce the ease of our thoughts and the clarity of our feelings.

A compelling narrative fosters an illusion of inevitability. Consider the story of how Google turned into a giant of the technology industry. Two creative graduate students in the computer science department at Stanford University come up with a superior way of searching information on the Internet. They seek and obtain funding to start a company and make a series of decisions that work out well. Within a few years, the company they started is one of the most valuable stocks in America, and the two former graduate students are among the richest people on the planet. On one memorable occasion, they were lucky, which makes the story even more compelling: a year after founding Google, they were willing to sell their company for less than \$1 million, but the buyer said the price was too high. Mentioning the single lucky incident actually makes it easier to underestimate the multitude of ways in which luck affected the outcome.

A detailed history would specify the decisions of Google's founders, but for our purposes it suffices to say that almost every choice they made had a good outcome. A more complete narrative would describe the actions of the firms that Google defeated. The hapless competitors would appear to be blind, slow, and altogether inadequate in dealing with the threat that eventually overwhelmed them.

I intentionally told this tale blandly, but you get the idea: there is a very good story here. Fleshed out in more detail, the story could give you the sense that you understand what made Google succeed; it would also make you feel that you have learned a valuable general lesson about what makes businesses succeed. Unfortunately, there is good reason to believe that your sense of understanding and learning from the Google story is largely illusory. The ultimate test of an explanation is whether it would have made the event predictable in advance. No story of Google's unlikely success will meet that test, because no story can include the myriad of events that would have caused a different outcome. The human mind does

not deal well with nonevents. The fact that many of the important events that did occur involve choices further tempts you to exaggerate the role of skill and underestimate the part that luck played in the outcome. Because every critical decision turned out well, the record suggests almost flawless prescience—but bad luck could have disrupted any one of the successful steps. The halo effect adds the final touches, lending an aura of invincibility to the heroes of the story.

Like watching a skilled rafter avoiding one potential calamity after another as he goes down the rapids, the unfolding of the Google story is thrilling because of the constant risk of disaster. However, there is an instructive difference between the two cases. The skilled rafter has gone down rapids hundreds of times. He has learned to read the roiling water in front of him and to anticipate obstacles. He has learned to make the tiny adjustments of posture that keep him upright. There are fewer opportunities for young men to learn how to create a giant company, and fewer chances to avoid hidden rocks—such as a brilliant innovation by a competing firm. Of course there was a great deal of skill in the Google story, but luck played a more important role in the actual event than it does in the telling of it. And the more luck was involved, the less there is to be learned.

At work here is that powerful WYSIATI rule. You cannot help dealing with the limited information you have as if it were all there is to know. You build the best possible story from the information available to you, and if it is a good story, you believe it. Paradoxically, it is easier to construct a coherent story when you know little, when there are fewer pieces to fit into the puzzle. Our comforting conviction that the world makes sense rests on a secure foundation: our almost unlimited ability to ignore our ignorance.

I have heard of too many people who “knew well before it happened that the 2008 financial crisis was inevitable.” This sentence contains a highly objectionable word, which should be removed from our vocabulary in discussions of major events. The word is, of course, *knew*. Some people thought well in advance that there would be a crisis, but they did not know it. They now say they