The Issue

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The Impact of Psychology on Business Decisions

Making sense of seemingly irrational decisions

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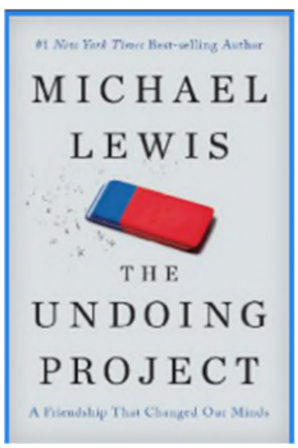
If you had a choice of A, B or C, and "A" is undeniably better than "B", "B" is undeniably better than "C", why is it that, faced with a choice between "A" and "C", do some people choose "C"? Two psychologists, Amos Tversky (1937-1996) and Danny Kahneman (b. 1934) spent a large part of their careers in search of the reason why. I'm not a psychologist…but I've been fascinated by how people make decisions that on the surface seem irrational.



Enter **The Undoing Project: a friendship that changed our minds** by Michael Lewis (c) 2017 [W.W. Norton & Company, Inc., New York]. You may know Michael Lewis as the author of Moneyball. **The Undoing Project** chronicles the careers of these two great psychologists [Kahneman won the Nobel Memorial Prize in Economic Sciences in 2002; unfortunately for Tversky, the Nobel Prize is not awarded posthumously], their interactions, and development and testing of their hypotheses. The two could not have been more different. Their friendship was unpredictable. Yet, together, there was magic. There was mutual respect. Each needed the other as a catalyst of ideas.

The subject matter of their studies, all covered in the book, dealt with a wide range of subjects from **politics** to **sports** to **personnel evaluations** to **medical science** to **casino gambling**. While I've chosen today to focus on **economics**, I highly recommend the book for all the other topics it addresses.

Over a series of years, Tversky and Kahneman, developed and tested hypotheses about systematic human cognitive bias and handling of risk. They developed a set of principles over that span of time, each became more informative than the last.

Here are some examples (all references are to locations in the Kindle® version of the book):

Confirmation Bias

“The human mind was just bad at things it did not expect, and a bit too eager to see what it expected to see.” [Location 373]. In other words, we tend to process and accept events that align with our experience, and have a difficult time with unexpected events or outcomes. From an economic perspective, we tend to accept US dollars or Euros as a measure of currency, as opposed to say, BitCoins, a newer form.

Present Bias

“The tendency when making a decision, to undervalue the future, in relation to the present. There was "hindsight bias," thought of as a tendency for people to look at some outcome and assume it was predictable all along.” [Location 429].

"What people remember about the past is likely to warp their judgment of the future. ‘We often decide that an outcome is extremely unlikely or impossible, because we are unable to imagine any chain of events that could cause it to occur. The defect, often, is in our imagination.’” [Location 2574]

One might take, as an example, the conventional wisdom that the current stock market is overdue for a correction. Why? Because in our recent history, that’s what has happened. And if it *were* to happen, we’d say, “I told you so.” We’ve foreclosed the possibility that the market may reflect a genuine optimism about the future growth of the economy, and may respond favorably if the growth rate of the economy persists or expands.

Similarity Judgment

“When people compared two things, and judged their similarity, they were essentially making a list of features. These features are simply what they notice about objects. They count up the noticeable features shared by two objects; The more they share, the more similar they are; the more they don't share, the more dissimilar they are. The absence of feature is a feature. When people make decisions, they are also making judgments about similarity, between some object in the real world and what they ideally want.” [Location 1438]

“By changing the context in which two things are compared, you submerge certain features and force others to the surface.” [Location 1444].

“Things are grouped together for a reason, but, once they are grouped, their grouping causes them to seem more like each other than they otherwise would. That is, the mere act of classification reinforces stereotypes. If you want to weaken some stereotype, eliminate the classification.”

In the one political statement I will make in this **Issue**, we seem, in this country, to be moving in a direction of identity politics and class warfare. The principle embodied in the Similarity Judgment suggests that if we truly want to come together as a people, then we will eliminate class distinctions that we seem so willingly to currently embrace.

Back to the economic realm, below are two illustrations of how bias works under two additional principles:

Two Illustrations

Illustration #1 [beginning at Location 2016]:

Q: If a coin were flipped ten times, and all ten times it came up heads, how many of you would wager that the next time it would come up tails?

A: The coin is just as likely to come up heads on the eleventh toss as it is to come up tails.

Principle**: The Law of Small Numbers**. Casinos run the lights of Las Vegas on fairly small margins, but experienced over a large number of events, such as the roll of dice or the dealing of a hand in cards. Even they realize that there can be a "hot hand" that will jeopardize their results in the short term. Therefore, they often limit the amount that can be placed on a single bet. But they know the Law of Large Numbers is in their favor, which is why they do everything in their power to get you to the tables, and once there, keep you there.

Illustration #2 [beginning at Location 3475]:

The Allais Paradox: The impact of Risk on Expected Value:

"Situation 1:

You must choose between having:

a) $ 5 million for sure, or

b) An 89 percent chance of winning $ 5 million
A 10 percent chance of winning $ 25 million
A 1 percent chance to win zero"

Most people chose a), even though the expected value of b) is higher

"Situation 2:

You must choose between having:

c) An 11% chance of winning $ 5 million,
and an 89% chance of winning zero, or

d) A 10 % chance of winning $ 25 million, and a
A 90% chance to win zero"

Most people chose d), a slightly lower chance of winning a lot more money.

Why?

Kahneman and Tversky hypothesized that in Situation 1, the answer was **regret**, the special type of pain that would come if you selected b) and walked away with nothing.

In Situation 2, they hypothesized that the pain associated with being wrong was not so great, allowing the participant to choose the alternative with the greater economic value.

Another Example

Leaving **The Undoing Project** behind for a moment, by way of illustration, let me introduce you to James Simons. Founder of the single most successful hedge fund in history, Renaissance Technologies, Simons is a Berkeley-trained PhD in mathematics, who built algorithms run on Cray computers to spot and trade on inefficiencies in the stock market.

Mr. Simons was a board member on a company in which I was the C.F.O. I had the occasion to ask Jim, “Did you ever interfere with a computer trade (i.e. second guess the computer)?” His answer, “No, as it would have introduced human error and invalidated their programming ‘secret sauce.’”

The most successful hedge fund manager in history was aware that human bias might disrupt the programmed trading strategy that had proved so successful over a long period of time.

Summary

So back the original question, of A vs. B vs. C. If Gold is undeniably greater than Silver, and Silver is undeniably greater than Lead, why would anyone, given the choice between Gold and Lead, choose Lead. The answer lies in **Context**. If you are Superman, standing a few feet away from Kryptonite, Lead is going to be infinitely more valuable to you than Gold.

I think a lesson can be learned by all of us, particularly in these contentious times, to be sure that we understand the context in which every alternative is presented. Try to leave past biases aside. Better decisions will result.

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