

## Thoughts on How we Think by Dan Brundage 1/16/18

The Undoing Project. Michael Lewis.

Salient excerpts from the Introduction: The Problem That Never Goes Away. ... .where do biases come from? Why do people have them? I'd set out to tell a story about the way markets worked, or failed to work, especially when they were valuing people. But buried somewhere inside it was another story, one I'd left unexplored and untold, about the way the human mind worked, or failed to work when it was forming judgements or making decisions. When faced with uncertainty – about investments or people or anything else – how did it arrive at conclusions? How did it process evidence – from a baseball game, an earnings report, a trial, a medical examination, or a speed date? What were people's minds doing – even the minds of supposed experts – that led them to the misjudgments that could be exploited for profit by others, who ignored the experts and relied on data?

And how did a pair of Israeli psychologists come to have so much to say about these matters that they more or less anticipated a book about American baseball written decades in the future? What possessed two guys in the Middle East to sit down and figure out what the mind was doing when it tried to judge a baseball player or an investment or a presidential candidate? And how on earth does a psychologist win a Nobel Prize in economics? In answers to those questions, it emerged, there is another story to tell. Here it is. (end of excerpts from Introduction)

The two Israeli psychologists were Amos Tversky and Daniel Kahneman.

Michael Lewis found a single scrap of paper with words on it in Amos's effects after he died that were from Daniel's and Amos's work together in 1972. For some reason Amos had saved it and Michael has used the words to talk or write about their work.

People predict by making up stories.

People predict very little and explain everything.

People live under uncertainty whether they like it or not.

People believe they can tell the future if they work hard enough.

People accept any explanation as long as it fits the facts.

The handwriting was on the wall, it was just the ink was invisible.

People often work hard to obtain information they already have and avoid new knowledge.

Man is a deterministic device thrown into a probabilistic universe.

In this match surprises are expected.

Everything that has already happened must have been inevitable.

In making predictions and judgements under uncertainty they wrote (quote from the Undoing Project),

“People do not follow the calculus of chance or the statistical theory of prediction. Instead they rely on a limited number of heuristics that sometimes lead to reasonable judgements and sometimes lead to severe and systematic error.”

Some additional items I have found by reading the books Undoing Project by Michael Lewis and Thinking Fast and Slow by Daniel Kahneman:

(Excerpts from Undoing Project pages 303 and 304. (note this reading is written in past tense as are technical reports of experiments, research and test results.))

“Imagination wasn’t a flight with limitless destinations. It was a tool for making sense of a world of infinite possibilities by reducing them”.

“The imagination obeyed rules: the rules of undoing”. (undoing, death, grief, hurts, wounds, errors, etc.)

“One rule was that the more items there were to undo in order to create some alternative reality, the less likely the mind was to undo them” “The more consequences an event has, the larger the change that is involved in eliminating that event”.

“Another rule was that “an event becomes gradually less changeable as it recedes into the past. With the passage of time, the consequences of any event accumulates and left more to undo. And the more there is to

undo, the less likely the mind is to even try. This was perhaps one way time heals wounds, by making them feel less avoidable”.

There are many more treasures in these two books. I am still learning.