

Making a Sure Bet: Optionality, Decision Making, and How to Embrace Uncertainty | Annie Duke

June 12, 2018

The quality of a decision cannot be solely judged based on its outcome. Given the unpredictability of future events and, especially, the presence of randomness in the world, a lot of well-reasoned decisions produce losses, and plenty of poor decisions are profitable. — Howard Marks

INTRODUCTION

What's up everybody? Welcome to this week's episode of Hidden Forces with me, Demetri Kofinas. Today, I speak with Annie Duke, who was, for two decades during her professional run, one of the top poker players in the world. In 2004, Annie bested a field of 234 players to win her first World Series of Poker bracelet. The same year, she triumphed in the \$2 million winner-take-all, invitation-only World Series of Poker Tournament of Champions, and in 2010, she won the prestigious NBC National Heads-Up Poker Championship. Annie has drawn on her undergraduate and graduate work in behavioral and cognitive psychology and her experience in professional poker to advise and consult companies and organizations in how to improve decision making. She is also the author of the 2018 book "Thinking in Bets: Making Smarter Decisions When You Don't Have All the Facts." Annie, welcome to Hidden Forces...

WHY DO I CARE?

We all could benefit from better decisions, but making them requires keeping an open mind and being willing to relinquish our biases. Making better decisions also requires us to judge the merits of those decisions independently of their outcomes. This is counterintuitive; it requires us to implement findings from the latest and greatest research in behavioral/evolutionary psychology and statistics. I'm personally fascinated by the challenge of navigating the line between instinct and science. We know that our biology can often lead us astray. At the same time, not listening to our instincts can lead to catastrophic error or simply, underperformance.

THE BOOK

1. **The Book** — Have you always wanted to write a book? **How did the idea for this book come together? Was it an organic process or did you see a need for reaching a broader audience?**
2. **The Process** — What was the process like for writing this book? **What did you find most challenging? What have you found most rewarding?**

POKER, NOT CHESS



3. **Resulting** — You open the book with a story from the NFL. Specifically, from **Super Bowl XLIX (49)** and the infamous [interception by Malcom Butler](#) at the goal line to give the New England Patriots the victory over the Seattle Seahawks. The commentators ripped Pete Carroll apart and the press headlines were brutal, calling Carroll's decision the "worst call in Super Bowl history." **Why did you choose to open with this story? How does this anecdote depict what you call "resulting?"**
4. **Indeterminism** — **Chess is a deterministic game.** Given enough computational power (or a library of the most statistically likely outcomes to reference) it would

Life is Poker, not Chess...

be impossible to lose. If Laplace's Demon were to play chess against himself, the match would always end in a stalemate. **Poker, on the other hand, introduces the variable of chance.** It is more like the real world. **How much of poker is determined by skill vs. by chance?** Is it fair to say that the longer the game lasts the more advantage is gained by the skilled players?

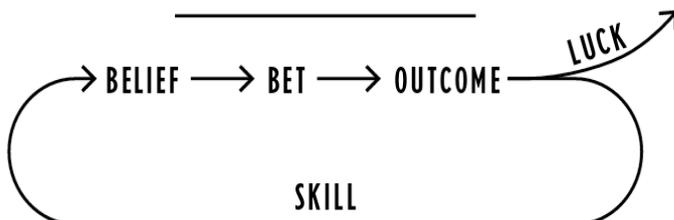
5. **Game Theory** — What are the **common variables found in poker and in life that make it such a complex game?** Where would you **rank the variable of luck?** Is it more prevalent in life or in **poker?** What about uncertainty and the fact that you are **operating with incomplete information (cards down)?** Where do you rank the skill of understanding or **appreciating the level of uncertainty and risk in a particular situation?** How does the opponent's body language and behavior factor in? How do all of these things relate to real life and **how accurate of a microcosm do you feel that poker really is?**
6. **Doubt** — How can we learn to become more comfortable with doubt?
7. **Wanna Bet?** — You make the point time and again in the book that having money on the line incentivizes you to "keep yourself honest" and to "check your biases." **Is this because losing money feels so bad, and the moment the quality of our choices become directly tied up with the quality of our outcomes, we give a stronger effort at uncovering "the truth?"** You also write in the book that all bets are "**bets against ourselves.**" What do you mean by this?
8. **Smarty Pants** — You write that being smarter make us more susceptible to bad decision making. **Is this because of overconfidence in our ability "to be right?"** How about over-estimating our ability to exert control over a given situation? **Do smarter people think they have more control over the outcome?**
9. **Non-Binary** — Most people tend to make binary statements about the future. "I believe that we are going to war with China in the next 10 years," or "stocks are going to decline by 20% over the next 12 months." Statements like this suggest that the variable in question is not one's level of certainty or confidence in the outcome, but in the outcome itself. In other words, the way in which most of us consider what will happen in the future is by making a very specific prediction and then waiting to see if it comes true. **What would be an analogy in poker for someone that applied such binary reasoning? How do evolutionary psychologists explain our lack of probabilistic thinking?**



LEARNING LOOP 1



LEARNING LOOP 2



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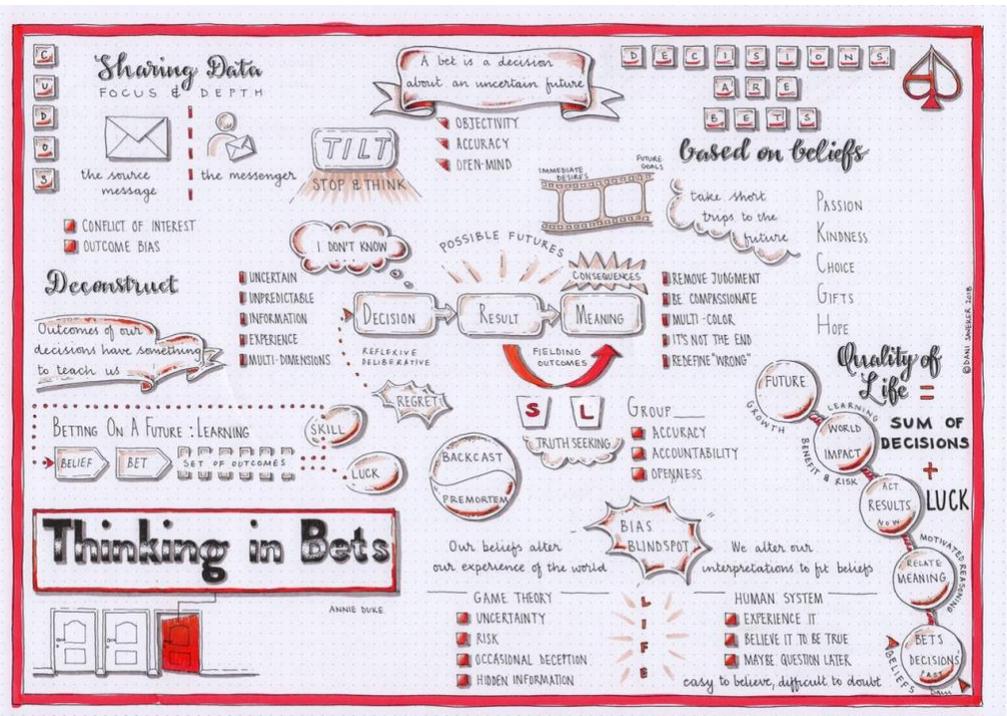
10. **Objectivity** — There has been a movement in the media over the past two decades that has embraced subjectivity at the expense of objective journalism. **"We**

are all bias,” the theory goes, “so why not embrace our bias and let the public decide the truth by taking in different viewpoints?” There are problems with this proposition, but putting those aside, how do you try and respond constructively to those who say that we cannot rid ourselves of bias and that trying to see the world objectively is pointless?

11. **Sounding Boards** — Getting honest and constructive feedback from people you can trust is easier said than done. You talk about the importance of surrounding yourself with people who do not confirm your bias. How do you advise clients to cultivate an environment that promotes good decisions? How important is promoting a diversity of viewpoints? Are we at risk, as a society/nation, of devolving into a state of making increasingly bad decisions as a result of our political polarization?
12. **“I’m not Sure”** — I really enjoyed the point you made in the book that “real skeptics make arguments *and* friends.” You write that “skepticism is about approaching the world by asking why things might not be true rather than why they are true.” I’m easily turned off by people who see every interaction as an argument rather than a conversation. Such interactions are framed as arguments where one side or another comes out as a winner and the other as a loser. How much do we lose by conditioning ourselves to approach interactions with other people in such a confrontational, competitive manner?

13. **Methods to Thinking in Bets**

- ◆ CUDOS system
- ◆ Visiting your future-self
- ◆ Avoiding tilt
- ◆ Ulysses contracts
- ◆ Decision “Swear Jar”
- ◆ Future mapping
- ◆ Back-casting and pre-mortems



14. **Mind-Set** — A study from 1999 found that Asian-American women performed better on a math test when their ethnic identity was activated, but worse when their gender identity was activated, compared with a control group who had neither identity activated. How difficult of a balancing act do you think it is to try and hold yourself accountable without selling yourself short? How many people actually have the opposite problem of the one you focus on which is that they discount the effect of bad luck in favor of blaming themselves? How important is how we frame a situation? How important are our objectives and does it help to articulate them where we can? How can we get better at being wrong? (being committed to being right vs. being committed to coming closer to the truth)
15. **Execution** — Let’s talk about execution. One of the things I’ve learned with experience is that more inexperienced competitors/people discount the importance of execution in favor of some “big idea” or some general sense of their own superior talent. No matter how smart you are or how hard you prepare, nothing can prepare you for the unexpected. This is true the deeper into a game, into a fight, or into life you get. How can we learn to execute better? How can we learn to develop the types of skills we need to draw on in those crucial moments? Is this really about emotional temperament?

16. **Time** — I've heard you discuss your experience playing against your mentor Erik Seidel and how you made a conscious choice to introduce as much variability and luck into the outcome as possible because you knew that he was a more skilled player. This raises to questions for me. The first is, how do you assess your relative skill level in any situation, adjust accordingly, and execute based on that adjustment? My second question has to do with the presence of luck in life. Life is a shit show. You never know what's going to happen in any moment, but if we can imagine that skill is a coin that is slightly tilted in your advantage, it stands to reason that the more times you flip it, the more likely it is to come up in your favor. Isn't the same true of life? Doesn't skill play a bigger role in life the longer we play the game?
17. **Life's Unfair** — Life is unfair. Sometimes, it's really unfair. Have you practiced the art of surrendering to life's caprice? How can we learn to weather the storm without forgetting what it's like to see the sun?
18. **Humility** — You've spoken before about the importance of "being humble in the face of the opponent but you're playing vs. being humble in the face of the game but you're playing." How can we be humble in the face of life?

"What makes a decision great is not that it has a great outcome. A great decision is the result of a good process, and that process must include an attempt to accurately represent our own state of knowledge."
– Annie Duke

"We think that the world is a much more predictable place than it actually is." – Annie Duke

"We are discouraged from saying 'I don't know' or 'I'm not sure.' We regard those expressions as vague, unhelpful, and even evasive. But getting comfortable with 'I'm not sure' is a vital step to being a better decision-maker. We have to make peace with not knowing." – Annie Duke

