

The Art of Thinking Clearly
ROLF DOBELLI

Fallacy of the So god Cause
There's always more than one reason for something

Planning Fallacy
No learning curve when it comes tonplanning
Sydney Opera House (1957)
Projected to be done in 1963 for \$7 million
Completed in 1973 for \$102 million

Procrastination
Tendency to delay unpleasant but important acts
Requires a lot of mental energy
Happens because of delay between sowing and reaping
Willpower is limited

Default Effect
People crave what they know

Not-Invented-Here (NIH) Syndrome
Causes you to fall in love with your own ideas

Inability to Close Doors
Burn the boats (eliminate retreat as an option)

Twaddle Tendency
The tendency to hide behind lots of words when you have nothing to say
"When you have nothing to say, say nothing."

"Because" Justification
When you justify your behavior people are more tolerant and helpful

Association Bias
Our brain makes impractical connection between things
Pavlov's Dogs

Omission Bias
We feel worse about things we do than those that we don't do

Alternative Paths
Alternative paths are invisible so we contemplate them very rarely
Your brain will obscure any path but the one you are on

Winner's Curse
The winner of an auction often turns out to be the loser (they systematically pay too much)
Sportsball Corner: Free Agency

Induction
The inclination to draw universal truths from individual observations

Group Think
Form of social proof
Where a group of smart people makes reckless decisions because everyone aligns their opinions with the supposed consensus
Built by illusion of invincibility
Action Item: bring on the conflict!

Outcome Bias
We tend to evaluate decisions based on the outcome rather than the decision process
Never judge a decision purely by its results

Overconfidence Effect
We think we're better than the average
Favor the pessimistic scenario

Availability Bias
We create a picture of the world using examples that most easily come to mind
"Smoking can't be bad for you because my grandma smokes every day and she lives to be a hundred"
Causes us to overestimate chances of plane/car crashes and underestimate the chances of diabetes or cancer

Reciprocity (and revenge)
Why we read books for Bookworm

Sunk cost fallacy
Refusing to abandon something because of the sum already invested

Contrast Effect
We judge something to be beautiful, expensive, or large if we have something ugly, cheap, or small in front of us
We have difficulty with absolute judgments
We don't notice small, gradual changes
The "I told you so" phenomenon

Hindsight Bias
People who are aware of it are just as susceptible as everyone else
Strategy: keep a journal and write your predictions

Regression-to-Mean error
For example: back pain that goes away after visiting a chiropractor or golf game getting better after visiting a pro
It would have improved on its own

Endowment Effect
We consider things to be more valuable the moment we own them

Gambler's Fallacy
There is no "balancing force" in the universe
A coin always has a 50% chance of being heads (even if it has been heads 10 times in a row)
Regression to Mean doesn't work here because something's don't get balanced out like the weather does

Exponential Growth
We understand linear growth much better
Penny doubled every day or \$1,000 for 30 days? (Penny results in over \$5,000,000)
Nothing that grows exponentially grows forever
Persian story about chess

Halo Effect
When a single aspect affects how we see the whole

Action Bias
Look active, even if it achieves nothing
We'd be better off waiting, but we feel like we have to do something

Self-Selection Bias
We overestimate the chances that we encounter an event when we it happens to us

Hyperbolic Discounting
Avoid instant gratification

Motivation Crowding
When people do something for well-meaning, non monetary reasons, payments throw a wrench in things

Introspection Illusion
Belief that reflection leads to truth or accuracy
Nothing is more convincing than your own beliefs

Social Comparison Bias
Tendency to withhold assistance to people who might outdo us
A players hire B players, etc. (leads to "Bozo Explosion")

Ambiguity Aversion
We favor known probabilities over unknown ones
Risk = probabilities are known
Uncertainty = probabilities are unknown
Learn to tolerate ambiguity

House-Money Effect
We treat money we win, discover, or inherit much more frivolously than hard-earned cash

Overthinking
Think too much and you cut your mind off from the wisdom of your feelings
Emotions form in the brain just like rational thoughts and are merely a different form of information

Cherry Picking
Selecting and showcasing the most attractive features and hiding the rest

News Illusion
We are incredibly well informed, yet we know incredibly little
We don't need to know everything that is going on

Zeigarnik Effect
We keep uncompleted things in our head and clear them when they are finished
Outstanding tasks only gnaw at us until we know how we deal with them (why task managers are so important)

Illusion of Attention
Confident we see everything that takes place in front of us, but we only see what we are focusing on
Why texting (or even talking) and driving is so dangerous

Fear of Regret
Don't want to miss out ("last chance")
Overestimating unanimity with others, thinking they think and feel exactly like you do

False Consensus Effect
People who don't share our opinions are categorized as abnormal

Sleeper Effect
The source of the argument fades faster than the argument (why propaganda works)

Information Bias
The delusion that more information = better decisions

Decision Fatigue
You are exhausted after comparing, considering, and deciding
Average person makes 35,000 decisions every day

Beginner's Luck
Beware when things get off to a great start

Self-Serving Bias
Attributing success to ourselves but failure to others

Conjunction Fallacy
We are attracted to more plausible stories

Fundamental Attribution Error
Attributing all success/failure/guilt to one person

Loss Aversion
People lose more happiness when they lose \$100 than they gain when they get \$100

Scarcity Error
We attribute more value to things that are in scarce supply or things we can't have
Romeo & Juliet (forbidden love)

Paradox of Choice
Large selection leads to inner paralysis
Broader selection leads to poorer decisions

Chauffeur Knowledge
Knowledge learned from people who have learned to put on a show
Circle of confidence
What lies inside you understand intuitively
What lies outside you may only partially understand
True experts recognize the limits of what they know and what they don't know

It'll-Get-Worse-Before-It-Gets-Better Fallacy
Variation of the confirmation bias

Confirmation bias
Interpreting new information to fit existing theories, beliefs, and convictions
"Murder your darlings"

Survivorship bias
People systematically overestimate their chances of success

Herd Instinct
Social proof (i.e. Group of people looking up, so you look up)
Following others used to be a good survivalist strategy
"If 50 million people say something foolish, it is still foolish" - W. Somerset Maugham

Authority Bias
Electrical shock experiment
Don't trust the experts just because they are experts
Challenge the authorities

Story bias
Stories attract us, abstract details repel us
Can give us a false sense of understanding

Illusion of Control
The tendency to believe that we can influence something over which we have absolutely no sway
Placebo buttons (fake thermostats,

Liking Bias
Driver of multi-level marketing

Base-Rate Neglect
Consider the most likely scenarios first
"When you hear good eats behind you, don't expect to see a zebra."

Social Loafing
When individual effort is not directly visible, it blends into group effort and the incentive is to not try as hard

False Causality
"Correlation does not equal causation"

Framing
It's not what you say, it's how you say it

Hedonic Treadmill
Studies show that that things stop making you happy after about 3 months
Avoid negative things you cannot grow accustomed to
Expect only short-term happiness from things
Aim for as much free time and autonomy as you can

Cognitive Dissonance
Justification for your choice instead of admitting a mistakes

Contagion Bias
We are incapable of ignoring the connection we feel to certain items

Effort Justification
When you put s lot of energy into the task, you tend to overvalue the result
A form of cognitive dissonance

Alternative Blindness
Failure to consider all the options

In-Group Out-Group Bias
Prejudice and aversion are biological responses to anything foreign
Identifying with a group distorts your view of the facts

Saliency Effect
Ensures outstanding features receive more attention than they deserve

Strategic Misrepresentarion
The higher the stakes, the more exaggerated your assertions become
Bigger mega projects are more vulnerable

Feature-Positive Effect
Absence is much harder to detect than presence
We are blind to what doesn't exist