

# Book Why We Make Mistakes

## How We Look Without Seeing, Forget Things in Seconds, and Are All Pretty Sure We are Way Above Average

Joseph T. Hallinan  
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### Recommendation

A woman hanged herself in a tree on a busy street. Yet, no one reported the suicide for more than 14 hours even though her body was clearly visible. Why? Because the incident occurred on October 31st and passersby mistook the body for a Halloween decoration. This horrifying example demonstrates the way context – as well as traits that are innately human – plays a role in how people make errors. As Joseph T. Hallinan explains, human beings are biased, overconfident, judgmental, downright irrational creatures of habit who are blissfully unaware of their limitations. All these traits will cause people to make errors – some are silly, such as saying “unicorn” when you mean “unicycle,” and some horrendous, such as administering the wrong dose of medicine or flying a plane into the ground. This intriguing book focuses more on why people err than on preventing errors, though it does suggest solid, useful measures. *BooksInShort* recommends it to those who are interested in why they blunder and in how to become more goof-proof. Taking the steps Hallinan outlines could keep you out of a lot of trouble.

### Take-Aways

- Most mistakes in business are the result of human error.
- People often make mistakes because of universal biases in the way they perceive their environment.
- People see what they expect, rather than what is actually present.
- People remember things better when they attach a meaning to them.
- Humans process subtle, almost unnoticeable cues to form quick opinions.
- People tend to recall their own thoughts, words and conduct much more favorably than what really took place.
- Human beings have a limited ability to multitask.
- The way a problem is framed affects the way a person will try to solve it, even if the presentation is misleading. Calibrate your information.
- Overconfidence, or an inflated perception of your own abilities, is a primary contributor to making errors.
- Getting enough sleep, being happy and taking small preventive steps can help you avoid errors. To prevent mistakes, consider in advance what could go wrong.

### Summary

#### You’re Only Human

If you make a mistake, you might comfort yourself with the phrase, “I’m only human!” Most mistakes are, indeed, the result of human error. People often err because of universal biases in the way they perceive the world. For instance, right-handed people usually turn right when they enter a building, even if it isn't the correct way to the door they seek. Expectations also play a role. If the sommelier says you are drinking wine from California, it will taste better to you than if the server says it comes from North Dakota. The problem with such systemic biases is that people don’t know they have them. People think they are objective when they are not, or observant when they are oblivious. They also like to place blame when something goes wrong, but often they misdirect it. Most folks repeat the same kinds of errors. They forget names and miss things that are right in front of them. Mistakes often follow a pattern. Once you analyze and understand these patterns, you can do what most humans are unable to do: learn from your mistakes.

#### “Looked But Didn’t See”

In an interview, actor Burt Reynolds recounted the story of an incident he considers his biggest mistake. He walked into a bar and slid onto a barstool. A man sitting farther down the bar was loud and belligerent. When he began berating a woman, Reynolds warned him to be quiet, but he continued his rant. Having heard enough, Reynolds hit him with a right hook. The man flew off his stool, hitting the ground several feet away. Only then did Reynolds notice what he had failed to observe earlier. The man had no legs!

“Our expectations can shape the way we see the world and, often, the way we act in it as well.”

This problem is so common that researchers have a name for it: It’s a “looked-but-didn’t-see” mistake. People’s eyes do not work like cameras taking exact pictures. Instead, they dart around, seeing bits and pieces. Then, the brain fills in the blanks. People see what they expect to see. An expert golfer sees the ball differently than a novice. The expert has a longer “quiet-eye period,” the time he or she needs to program a response. People also fail to observe evidence that contradicts their unconscious conclusions. This “change blindness” often occurs in movie making. Movies are filmed out of order and over long periods. Mistakes known as “continuity errors” occur in every film in spite of staffers whose job is to prevent them. For instance, the famous chariot race in *Ben-Hur* begins with nine chariots. Six crash, leaving three – but four end the race.

## Easy to Forget

People most easily remember things that have meaning. They forget names, but remember faces. To remember a face better, attach an emotional trait to it. Eyewitness identifications – like picking a purse-snatcher out of a police line-up – are notoriously faulty because people who lack that attachment forget the suspect’s hair color and other such features unless they’ve formed a personal judgment. Witnesses at the same scene will remember the thief differently. People tend to forget important details, such as passwords, birthdays, anniversaries and telephone numbers, because random information is hard to recall. You would have difficulty memorizing three-letter syllables unless you related them to something that had meaning. The act of conceiving of data attached to a reminder is called mnemonics and it dates back to the ancient Greeks.

## Rational or Not?

Humans base quick opinions about people on subtle, almost unnoticeable cues. When Princeton University researchers showed study participants photos of political candidates, the viewers made assumptions about the candidates’ competence based solely on their looks. These inferences predicted the outcome of an election better than random chance. That is just one example of how people think they are making decisions based on a rational thought process when, indeed, they aren’t. They make purchases spurred by the music or aroma in a store. They decide key issues based on emotion, often regret. Human beings feel more accountable for incorrect actions than they do for inaction, even if the lack of action results in failure. Inaction is passive, so it constitutes failure by omission, which feels less threatening than actually doing something wrong.

“Simply put, most of us aren’t wired the way we think we’re wired.”

Contrary to the popular saying, hindsight is not 20-20. In fact, people usually embellish past actions in the recounting and tend to recall their own thoughts, words and conduct much more favorably than what actually took place. This self-serving behavior is so ingrained that people don’t realize they are doing it. When researchers asked students to recall their high school grades, more than 75% recollected higher marks than they really received. The outcome of an event also influences how people recall it. This practice is common among historians, who call it “hindsight bias.” Those who write about an event include some facts while excluding others, usually making the outcome appear inevitable.

“We learn so little from experience because we often blame the wrong cause.”

Disclosing a bias does not counteract its power, so “buyer beware” does not change minds. Doctors deny that drug companies influence what they prescribe; yet, pharmaceutical firms spend an average of \$8,000 per doctor to promote their products. Moreover, publicizing the conflict is not enough. Most people don’t know how to process the information and, therefore, they ignore it.

## “Controlled Flight into Terrain”

With all the training pilots receive and all the sophisticated equipment in the cockpit, you might think that flying a plane into the ground is almost impossible. However, this happens often enough that it’s known as Controlled Flight into Terrain, or CFIT. Captain Robert Loft was flying into Miami when he became distracted because an indicator light failed to go on. He, the first officer, the flight engineer and a Boeing mechanic tried to fix the problem. They became so engrossed that nobody was flying the plane. It crashed into the Everglades, killing 99 people.

“What we see also depends, in part, on what is looked for. By and large, we see what we expect to see.”

Human beings actually have a very limited ability to multitask and cannot possibly do two things that require concentration at once. They switch back and forth, forgetting what they were doing previously, and taking longer to focus and refocus. Research shows that talking on a cellphone while driving decreases a driver’s ability to concentrate and respond to traffic. As cars become more equipped with technological devices, such as navigation and entertainment systems, accidents caused by distraction will increase.

## Framing, Timing, Anchoring and Skimming

Researchers in Great Britain found out that the origin of wines bought in a wine store corresponds to the origin of the music played at the store. If customers hear French music, they buy French wine. When German music is playing, they turn to German wine. This demonstrates the power of “framing.” How a problem is presented, or framed, affects the way a person will try to solve it. When an article appeared on *The New York Times*’ front page reporting the success of a new anti-tumor drug, investors responded. However, months earlier, when the *Times* ran the same information on page A28, the market did not respond. Other factors that affect decision making include:

- **“Timing”** – In general, people take bigger gambles when the consequences lie in the future. When researchers asked people what movie they wanted to see the following week, they chose intellectual films, like *The Piano*. When asked what movie they wanted to watch right away, they chose popular movies, such as a *Clear and Present Danger*.
- **“Anchoring”** – In various situations, people often attach or anchor their responses to specific numbers, even improbable ones. Examples abound at your local supermarket. Store owners know that they can boost sales by offering an item priced “Four for \$2” rather than 50 cents each. They also know that, if they impose a purchasing limit, such as six items per customer, people will buy more.
- **“Skimming”** – People skim print material, especially if they are familiar with the subject matter. They see what they expect to see. They generally overlook errors on a page they are reading. Such “proofreader’s errors” happen because readers pay a lot of attention to the beginning of a word and fill in the rest. That’s why no one noticed when *The Wall Street Journal* reported that “contestants in a British competition” rode on unicorns, when it meant to say unicycles.

## “Oh, Say, Can You See?”

Is Reno, Nevada, east or west of San Diego, California? Most people will say that it is east. However, look at a map and you’ll find that it is west. This mistake

happens often because people like to make things nice and neat. They straighten curves, align objects and make things more symmetrical. The mind also organizes data into a hierarchy of information. That's why sailors remember stars by organizing them into constellations.

"If we don't know we've been biased, eliminating the mistakes that stem from that bias can become much more difficult."

The type of person you are affects your memory. You might have difficulty remembering something verbatim, even if you've heard it many times. Just see if you can recite "The Star-Spangled Banner" correctly. This kind of error shows up in storytelling. People omit details, embellish, exaggerate and minimize. Then they believe their revised versions.

"Perception, above all, is economical; we notice some things and not others."

On November 17, 2007, nurses at Cedars-Sinai Hospital in California gave twin babies a 10,000-unit dose of heparin instead of the required 10-unit dose. The next day they did it again. The twins survived, but how could such a mistake happen in a top hospital? Proper constraints were not in place. Constraints are mental aids that help prevent errors. Both heparin doses had similar labels; now they are labeled differently as a constraint.

## Gender and Overconfidence

In general, men are more confident about their abilities than women are. Overconfidence is a primary contributor to making errors. In male-dominated fields, such as the military and finance, men assume they will be high-performers. U.S. Army research shows that men are more trigger-happy than their female counterparts. Women tend to be more risk averse, especially in "finance, health and safety, recreation and ethics." Social situations offer the only setting where women are more likely to take risks than men. Women are tougher on themselves when they make mistakes and have less confidence that they can achieve the results they want. Men like to tinker more than women and often solve problems in the process. Men and women navigate differently, which gives credence to the line that men won't ask for directions. That's because they don't feel lost.

"There are strict limits to the number of things we can do at one time, and the more we do, the greater the chance for error."

If you ask individuals if they are average, no one will claim that label, much less below average. Stefano DellaVigna, a University of California economics professor, drew a conclusion from this research: "Almost everyone is overconfident – except people who are depressed, and they tend to be realists." Such overconfidence causes people to sign up for gym memberships they won't use, buy diet plans they won't stick to and buy into fiscally harmful credit card promotions.

"It's not always easy to recognize when our overconfidence is about to get us snookered."

People's perceptions are apt to be poorly calibrated, that is, their view of their abilities is not aligned with actuality. When the U.S. Army asked soldiers if they were good shots, 75% overestimated their abilities. Feedback helps calibrate a person's perceptions, since it provides data about an action and its result. You can take other steps to prevent making mistakes, including:

- **"Think small"** – Sometimes the smallest change can make the biggest difference. For example, poor handwriting on prescriptions causes more than 7,000 deaths each year. Typing prescriptions is a simple solution.
- **"Calibrate"** – Calibration "measures the difference between actual and perceived abilities." For instance, Shell Oil found that its geologists's estimates of oil field potential were "wrong much more often than their level of confidence implied." Their calibration errors "cost Shell time and money."
- **"Think negatively"** – You may think optimists have the right attitude, but not when it comes to mistake avoidance. Be sure to consider what can go wrong.
- **"Let your spouse proofread"** – Sometimes another set of eyes can catch the things you may overlook due to familiarity, skimming and habit.
- **"Get some sleep"** – People make more mistakes when they are tired. Sleep deprivation can impair reaction time and decision making.
- **"Be happy"** – When you are happy, your creative juices are flowing and you are more apt to find better solutions.

## About the Author

**Joseph T. Hallinan** is a Neiman Fellow, a Pulitzer Prize winner, a former reporter for *The Wall Street Journal* and the author of *Going Up the River*, about the U.S. prison system.

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