Sway

The Irresistible Pull of Irrational Behavior

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Chapter 1

ANATOMY of an ACCIDENT

Taking off at Tenerife.

The oversensitive egg shoppers.

The lure of the flat rate.

Would you like insurance with that?

So long, Martha's Vineyard.
The passengers aboard KLM Flight 4805 didn’t know it, but they were in the hands of one of the most experienced and accomplished pilots in the world. Captain Jacob Van Zanten didn’t just have a knack for flying. His attention to detail, methodical approach, and spotless record made him a natural choice to head KLM’s safety program. It was no surprise, then, that the airline was keen to show him off. One magazine ad featuring the smiling captain captured it all: “KLM: from the people who made punctuality possible.” Even seasoned pilots—not exactly the type of individuals prone to swoon—regarded him as something of a celebrity.

On the flight deck of the 747, en route from Amsterdam to Las Palmas Airport in the Canary Islands, Van Zanten must have felt a sense of pride. Today’s trip was moving along with the smooth precision that had become his hallmark. The schedule was straightforward: land in Las Palmas, refuel, and transport a new set of passengers back home to Holland.

But then Van Zanten got an urgent message from air-traffic control. A terrorist bomb had exploded at the airport flower shop, causing massive chaos on the ground; Las Palmas would be closed until further notice.

The captain knew that at times like this the most important thing was to remain calm and proceed with caution. He had performed drills preparing for this kind of situation countless times. In fact, Van Zanten had just returned from leading a six-month safety course on how to react in exactly this kind of situation.

Following standard procedure, the captain obeyed orders to land fifty nautical miles from his original destination, on the island of Tenerife. There, at 1:10 p.m., his plane joined several others that had been similarly diverted.

Now, you don’t need to be a seasoned airline pilot to appreciate that Tenerife was no JFK. It was a tiny airport, with a single runway not meant to support jumbo jets.

With his plane safely parked at the edge of the runway, the captain checked his watch. Seeing the time, he was struck with a worrisome thought: the mandated rest period.

The Dutch government had recently instituted strict, complicated rules to which every pilot had to adhere. After getting in touch with HQ and performing some quick calculations, Van Zanten figured the latest he could take off was 6:50 p.m.
Flying after the start of his mandated rest period was out of the question—it wasn't just against policy; it was a crime punishable by imprisonment. But taking the rest period would open its own can of worms. Here in Tenerife there would be no replacement crew to take over. Hundreds of passengers would be stranded overnight. That would mean the airline would have to find them a place to stay, and there weren't enough hotel rooms on the island. In addition, a delay here would initiate a cascade of flight cancellations throughout KLM. A seemingly minor diversion could easily become a logistical nightmare.

It's easy to imagine the stress that Van Zanten was experiencing and why he became so determined to save time. It was like being stuck at a red light when you're late for a big meeting. Try as you might to stay calm, you know that your reputation is on the line; your frustration grows, and there's really not much you can do. But there was one thing Van Zanten could do: the captain decided to keep the passengers on board, so that when Las Palmas reopened, he could get back in the air immediately.

But the air-traffic control personnel who worked at Tenerife tower were of a different mind-set. Here was a small airport on a tropical island, now inundated with planes from all over the world that had been diverted because of the Las Palmas explosion. Not only was the tower understaffed, but the air-traffic controllers were in no hurry to get planes out of the gate; they were, in fact, getting ready to listen to a live soccer match on their transistor radios. Twenty minutes after landing, Van Zanten received word from the tower that he should let his passengers off; it looked like they would be here for a while.

From there, events at Tenerife continued to move forward like molasses. Twenty minutes turned into an hour. The captain spent every moment thinking of ways to minimize the delay. He held a strategy session with his crew. He called KLM headquarters to find out exactly how much time he had left before the mandated rest period kicked in. An hour on the ground had turned into two; then the captain came up with another idea. He decided to refuel at Tenerife and thus shave half an hour off the turnaround in Las Palmas.

But this time-saving idea backfired. As soon as Van Zanten started refueling, word came from Las Palmas that the airport had finally reopened. But it was too late to stop the thirty-five-minute refueling process.

Finally, just when it looked like the plane was set to go, nature threw its own wrench into the plan: a thick layer of fog descended upon the runway.

Kicking himself over his decision to refuel, Van Zanten became even more intent on getting under way. With the fog growing thicker, visibility dropped to just 500 meters—so poor that gazing out the cockpit window the captain couldn't see the end of the runway.

Van Zanten knew that every moment the fog got worse made it that much likelier that the Tenerife tower would
shut down the airport. He saw that his window of opportunity to get out of Tenerife before an overnight stay was closing. It was now or never—time to go.

But what the captain did next was completely out of character. Van Zanten revved up the engines, and the plane lurched down the runway.

"Wait a minute," Van Zanten's copilot said in confusion.
"We don't have ATC clearance."
"I know that," replied the captain as he hit the brakes. "Go ahead and ask."
The copilot got on the radio and received airway clearance—approval of the flight plan. But the tower said nothing about the vital takeoff clearance. And yet, determined to take off, Van Zanten turned the throttles to full power and roared down the foggy runway.

The jumbo jet was gaining momentum when, seemingly out of nowhere, the scariest sight Van Zanten could have imagined appeared before him. A Pan Am 747 was parked across the runway, and Van Zanten was approaching it at take-off speed.

There was no way to stop or swerve. Instinctively, Van Zanten knew that his only chance was to take off early. "Come on! Please!" the captain urged his plane. He pulled the aircraft's nose up desperately, dragging its tail on the ground and throwing up a blinding spray of sparks.

The nose of Van Zanten's plane managed to narrowly clear the parked 747. But just when it looked like he was in the clear, the underside of Van Zanten's fuselage ripped through the top of the Pan Am plane.

The KLM plane burst into a fiery explosion as it hurtled another five hundred yards down the runway.

Van Zanten, his entire crew, and all of his passengers were killed. In all, 584 people lost their lives that day.

The aeronautical community was stunned. It was by far the deadliest airplane collision in history. An international team of experts descended on Tenerife airport. They examined every bit of evidence, interviewed the eyewitnesses, and scrutinized every moment of the cockpit records in an attempt to pinpoint the cause of the accident.

The experts quickly ruled out a mechanical failure or terrorist attack. Piecing together the events of that day, it was clear that the other plane on the runway, Pan Am Flight 1736, had missed a taxiway turnoff and ended up in the wrong place. The thick fog contributed to the disaster. Van Zanten couldn't see the Pan Am plane, the Pan Am pilot couldn't see him, and the tower controllers couldn't see either one of them. On top of that, the tower was unmanned and the controllers were distracted by the day's events.

Despite all these factors, though, the tragedy would never have occurred if Van Zanten hadn't taken off without clearance. Why would this seasoned pilot, the head of safety at the airline, make such a rash and irresponsible decision?

The best explanation the investigators could come up with
was that Van Zanten was feeling frustrated. But that didn't quite add up. Feeling frustrated is one thing; completely disregarding protocol and forgetting about safety is another.

Clearly, Van Zanten was experienced. Clearly, he was well trained. And clearly, he was good at what he did. How could he cast aside every bit of training and protocol when the stakes were so high?

The aeronautical experts turned over every stone in their search for an explanation. But there was something in Tenerife that remained completely hidden. Alongside the rolling fog and crowded airfield, an unseen psychological force was at work, steering Van Zanten off the path of reason.

A growing body of research reveals that our behavior and decision making are influenced by an array of such psychological undercurrents and that they are much more powerful and pervasive than most of us realize. The interesting thing about these forces is that, like streams, they converge to become even more powerful. As we follow these streams, we notice unlikely connections among events that lie along their banks: the actions of an investor help us to better understand presidential decision making; students buying theater tickets illuminate a bitter controversy in the archeological community over human evolution; NBA draft picks point to a fatal flaw in common job-interview procedures; women talking on the phone show why a shaky bridge can be a powerful aphrodisiac.

Charting these psychological undercurrents and their unexpected effects, we can see where the currents are strongest and how their dynamics help us understand some of the most perplexing human mysteries. These hidden currents and forces include loss aversion (our tendency to go to great lengths to avoid possible losses), value attribution (our inclination to imbue a person or thing with certain qualities based on initial perceived value), and the diagnosis bias (our blindness to all evidence that contradicts our initial assessment of a person or situation). When we understand how these and a host of other mysterious forces operate, one thing becomes certain: whether we're a head of state or a college football coach, a love-struck student or a venture capitalist, we're all susceptible to the irresistible pull of irrational behavior. And as we gain insight about irrational motives that affect our work and personal lives, fascinating patterns emerge, connecting seemingly unrelated events.

Let's examine the first of these streams, to help us solve the mystery of what happened with Captain Van Zanten. We find our first clue in an unlikely place—the egg and orange juice aisles of our neighborhood supermarket.

Professor Daniel Putler, a former researcher at the U.S. Department of Agriculture, has spent more time thinking about eggs in a year than the rest of us spend in a lifetime. He carefully tracked and studied every aspect of egg sales in southern California. Looking at the data, he found some interesting patterns. Egg sales, for instance, were typically higher during the first week of each month. Not surprisingly, they were abnormally high in the weeks leading up to Easter, only to experience a sharp decline the week after.
That was all well and good, but Putler’s next discovery wasn’t just of use to the USDA and Al the grocer. Poring over cash-register data that reflected egg-price fluctuations, Putler identified what is referred to in economics as an “asymmetry.”

Now, traditional economic theory holds that people should react to price fluctuations with equal intensity whether the price moves up or down. If the price goes down a bit, we buy a little more. If the price goes up a bit, we buy a little less. In other words, economists wouldn’t expect people to be more sensitive to price increases than to price decreases. But what Putler found was that shoppers completely overreacted when prices rose.

It turns out that, when it comes to price increases, egg buyers are a sensitive bunch. If you reduce the price of eggs, consumers buy a little more. But when the price of eggs rises, they cut back their consumption by two and a half times.

Anyone who’s made a shopping list with a budget in mind can tell you how this plays out. If the price drops, we’re mildly pleased. But if we see that the price has gone up since last week, we get an oh no feeling in the pit of our stomachs and decide it’s cereal for breakfast that week instead of scrambled eggs. This feeling of dread over a price increase is disproportionate—or asymmetric—to the satisfaction we feel when we get a good deal.

We experience the pain associated with a loss much more vividly than we do the joy of experiencing a gain. Sensing a loss as a result of the high price, the shoppers can’t help but put the carton back on the shelf.

And it’s not only egg buyers who are affected by the pain of a loss. A group of researchers replicated Putler’s study among orange juice shoppers in Indiana and arrived at the exact same results: Midwest OJ drinkers are just as finicky about price increases as are Los Angeles omelet makers. Regardless of geography and breakfast preferences, losses loom larger than gains.

Putler’s research illuminates a mystery that economists have been grappling with for years. For no apparent logical reason, we overreact to perceived losses.

This principle is key to understanding Van Zanten’s actions. But before we return to Tenerife and the investigation, it’s important to see how our aversion to loss plays out in our own decision making.

Think about the seemingly straightforward decision we make when we sign up for a new phone service. After wading through the phone company’s electronic menus, we’re presented with a choice: we can either pay for service by the minute or opt for a flat monthly fee and talk till the cows come home. Chances are that the pay-as-you-go plan is our better bet. Most of us just don’t talk enough to justify a flat-rate plan.

But at this point loss aversion kicks in; we start imagining ourselves gabbing like teenagers into the night. The fear of a monstrous bill looms, and we sign up for the unlimited plan “just in case.”
Economists can scold us for making a poor choice, but in deciding which service to sign up for, we're willing to sacrifice a little bit to avoid a potential loss.

AOL stumbled upon this same phenomenon when, after years of charging clients by the minute for their dial-up Internet access, it introduced a flat-billing option. The results were catastrophic, but not in the way you'd think. As AOL's CEO explained, the flat-pricing plan was "working too well." New customers were signing up in droves, and for three months AOL's servers were completely jammed. As with the phone service, Internet users wanted to avoid the perceived loss associated with pay-as-you-go.

The word loss alone, in fact, elicits a surprisingly powerful reaction in us. Companies like Avis and Hertz, facing the challenge of selling a product that is both useless and overpriced, have capitalized on this powerful effect. When we rent cars, our credit cards—not to mention our own car insurance—automatically cover us should anything go wrong with the vehicle. But the rental companies push additional coverage that not only is redundant but would cost a whopping $5,000 on an annual basis. Normally, we'd scoff at such a waste of money. But then, as the sales rep behind the counter is about to hand over the keys to that newish Ford Taurus, he asks whether we'd like to buy the loss damage waiver.

When we hear those words, our minds begin to whir: What if I have bad luck and end up in a wreck? What if, for some reason, my credit card won't cover me after all? Normally, we'd never dream of taking out an extra policy at an astronomical rate just to be doubly safe, but the threat of a loss makes us reconsider.

Looking at the larger picture, the behavior of the supermarket shoppers, phone customers, Internet subscribers, and car renters is strikingly similar to that of Captain Van Zanten. The losses that Van Zanten was trying to avoid were all the downsides of the mandated rest period: the cost of putting up the passengers, the chain reaction of delayed flights, and the blot on his reputation for being on time.

Van Zanten's desire to avoid a delay started out small enough. At first he simply wanted to keep the passengers on board to save time. But as the delay grew longer, the potential loss loomed larger. By the time an overnight delay seemed almost inevitable, Van Zanten was so focused on avoiding it that he tuned out all other considerations and, for that matter, his common sense and years of training.

Of course, there's a big difference between signing up for a phone service and causing the tragedy at Tenerife. Needless spending a few dollars is one thing; taking off without tower clearance is another. You would think that in such a situation, with hundreds of lives on the line, the captain would have exercised greater caution and acted even more deliberately than he would have under normal circumstances. That brings us to our second clue. As Columbia Business School professor Eric Johnson explained to us, the more
meaningful a potential loss is, the more loss averse we become. In other words, the more there is on the line, the easier it is to get swept into an irrational decision.

If anyone knows about having a lot on the line, it’s Jordan Walters of the Silicon Valley branch of the investment house Smith Barney. Jordan is exactly the kind of person you’d look for in a financial planner: he’s calm, he’s thoughtful, and he always takes the time to listen. As we sat down in his office and sipped from the minibar-sized can of apple juice he’d offered us, it was easy to forget that just outside the door associates were calling in millions of dollars in stock trades.

The thing about Jordan is that he isn’t just a numbers guy. He genuinely cares about his clients, and when they make bad decisions, it bothers him. He remembers one client in particular. “A fellow comes in,” Jordan recalled. “He had a business he’d started, a biotech start-up that got bought over by a public company—and he’s made! They were going to retire! In Martha’s Vineyard!”

That “fellow” was clearly on a high. He’d probably told everyone—from the gardener to his kids’ teacher to his old college buddies—about his windfall.

But Jordan pointed out to his new client that investing the vast majority of his wealth in his biotech company stock would be putting all his eggs in one basket: “Oh my gosh, it’s such a big concentration—we need to find a way to wean ourselves out of this.” It would have made a lot more sense to diversify, and Jordan came up with a solid plan: Sell a predetermined percentage of your holdings every quarter, he advised his client, “so you take the emotion out of the decision.”

But the investor wanted to ride the stock even higher. He had just sold his company. He’d made it big. Why stop now? “Well, what happened,” Jordan recalled, “when he came in and the stock was at $47, we sold maybe 10 percent of his total position.”

Shortly after that, the stock began to drop. “The stock was down to $42 and he says, ‘If the stock goes back to $47, I’m going to sell.'”

Sensing that money was starting to slip through his fingers, the client developed an aversion to loss that was strikingly similar to Van Zanten’s. Like the captain who was preoccupied with getting back on schedule, the investor was blindly focused on getting back to even.

Jordan realized that his client was so eager to make up for a loss that he was becoming oblivious to the risks he was taking. “What about the downside?” he asked the client. Now, from Jordan’s rational perspective, there was nothing magical about the $47 stock price, and there was no guarantee that the stock would get back up there. On the flip side, the stock was liable to slip even further. But for the client, selling at anything less than $47 represented a loss—a bogeyman to be avoided at all costs.

“Well, the stock goes down to $38,” Jordan recalled, “and the investor says, ‘You know what, if it goes back to $44, I’ll sell it then.’” Stock traders call this kind of behavior “chasing a loss”—when investors ignore the current data, put on
blinders, and proceed with singular purpose to recover as much of their loss as possible.

Jordan explained to his client that holding on to the position in hopes that the stock price would recover was much too risky. But the client would have none of it, and took matters into his own hands. He ignored Jordan’s advice and kept his stake. “[The stock] ended up at twelve cents,” Jordan said. “The only thing he got out of that, the only value, was the initial 10 percent [he sold up front].”

Painful as it might have been, the investor could have sold at $42, perhaps giving up the dream of the fancy yacht but keeping the majority of his assets and realizing his plan to retire to Martha’s Vineyard. Likewise, Van Zanten could have accepted the small blot on his reputation for punctuality and spent the night at Tenerife. Surely it wasn’t worth it for either man to risk everything—be it a huge nest egg or the lives of his passengers—just to avoid a potential loss. You’d think that with a great deal on the line, people would play it safe. But, as Jordan explained, “You may not see that the stock is going to go into a tailspin. I would say you may misinterpret it.” That’s when this hidden force takes over.

So now we have two important clues. First, Van Zanten overreacted to a potential loss. Second, because so much was on the line, he was even more susceptible to taking a dangerous risk. But there’s another missing clue. In order to get to the bottom of the Tenerife mystery, we’ll need to visit the Swamp.