CHAPTER 5

HONESTY AND CANDOR

Ask anyone, "Should people be honest?" and of course their answer will be yes. It has to be! Saying no is to endorse dishonesty, which is like coming out against literacy or childhood nutrition—it sounds like a moral transgression. But the fact is, there are often good reasons *not* to be honest. When it comes to interacting with other people in a work environment, there are times when we choose not to say what we really think.

This creates a dilemma. On one level, the only way to get a grip on the facts, issues, and nuances we need to solve problems and collaborate effectively is by communicating fully and openly, by *not* withholding or misleading. There is no doubt that our decision-making is better if we are able to draw on the collective knowledge and unvarnished opinions of the group. But as valuable as the information is that comes from honesty and as loudly as we proclaim its importance, our own fears and instincts for self-preservation often cause us to hold back. To address this reality, we need to free ourselves of *honesty*'s baggage.

One way to do that is to replace the word *honesty* with another word that has a similar meaning but fewer moral connotations: *candor*. Candor is forthrightness or frankness—not so different from honesty, really. And yet, in common usage, the word communicates not just truth-telling but a lack of reserve. Everyone knows that sometimes, being reserved is healthy, even necessary for survival. Nobody thinks that being less than candid makes you a bad person (while no one wants to be called dishonest). People have an easier time talking about their level of candor because they don't think they will be punished for admitting that they sometimes hold their tongues. This is essential. You cannot address the obstacles to candor until people feel free to say that they exist (and using the word *honesty* only makes it harder to talk about those barriers).

Of course, there are sometimes legitimate reasons not to be candid. Politicians, for example, can pay a steep price for speaking too bluntly about contentious issues. CEOs can get dinged for being too open with the press or with shareholders, and they certainly don't want competitors to know their plans. I will be less than candid at work if it means not embarrassing or offending someone or in any number of situations where choosing my words carefully feels like the smart strategy. But that's not to say lack of candor should be celebrated. A hallmark of a healthy creative culture is that its people feel free to share ideas, opinions, and criticisms. Lack of candor, if unchecked, ultimately leads to dysfunctional environments.

So how can a manager ensure that his or her working group, department, or company is embracing candor? I look for ways to institutionalize it by putting mechanisms in place that explicitly say it is valuable. In this chapter, we will look into the workings of one of Pixar's key mechanisms: the Braintrust, which we rely upon to push us toward excellence and to root out mediocrity. The Braintrust, which meets every few months or so to assess each movie we're making, is our primary delivery system for straight talk. Its premise is simple: Put smart, passionate people in a room together,

charge them with identifying and solving problems, and encourage them to be candid with one another. People who would feel obligated to be honest somehow feel freer when asked for their candor; they have a choice about whether to give it, and thus, when they do give it, it tends to be genuine. The Braintrust is one of the most important traditions at Pixar. It's not foolproof—sometimes its interactions only serve to highlight the difficulties of achieving candor—but when we get it right, the results are phenomenal. The Braintrust sets the tone for everything we do.

In many ways, it is no different than any other group of creative people—within it, you will find humility and ego, openness and generosity. It varies in size and purpose, depending on what it has been called upon to examine. But always, its most essential element is candor. This isn't just some pie-in-the-sky idea—without the critical ingredient that is candor, there can be no trust. And without trust, creative collaboration is not possible.

Over the years, as the Braintrust has evolved, the dynamics within the group have evolved along with it, and this has required continual attention on our part. While I attend and participate in almost all Braintrust meetings and enjoy discussing the storytelling, I see my primary role (and that of my colleague Jim Morris, who is Pixar's general manager) as making sure that the compact upon which the meetings are based is protected and upheld. This part of our job is never done because, as it turns out, you can't address or eliminate the blocks to candor once and for all. The fear of saying something stupid and looking bad, of offending someone or being intimidated, of retaliating or being retaliated against—they all have a way of reasserting themselves, even once you think they've been vanquished. And when they do, you must address them squarely.

There is some dispute about when, exactly, the Braintrust came into being. That's because it developed organically, growing out of the

rare working relationship among the five men who led and edited the production of *Toy Story*—John Lasseter, Andrew Stanton, Pete Docter, Lee Unkrich, and Joe Ranft. From Pixar's earliest days, this quintet gave us a solid example of what a highly functional working group should be. They were funny, focused, smart, and relentlessly candid with each other. Most crucially, they never allowed themselves to be thwarted by the kinds of structural or personal issues that can render meaningful communication in a group setting impossible. It was only when we rallied to fix *Toy Story 2*, coming together to solve a crisis, that the "Braintrust" entered the Pixar lexicon as an official term.

Over those nine months in 1999, when we were rushing to reboot this broken film, the Braintrust would evolve into an enormously beneficial and efficient entity. Even in its earliest meetings, I was struck by how constructive the feedback was. Each of the participants focused on the film at hand and not on some hidden personal agenda. They argued—sometimes heatedly—but always about the project. They were not motivated by the kinds of things—getting credit for an idea, pleasing their supervisors, winning a point just to say you did—that too often lurk beneath the surface of work-related interactions. The members saw each other as peers. The passion expressed in a Braintrust meeting was never taken personally because everyone knew it was directed at solving problems. And largely because of that trust and mutual respect, its problem-solving powers were immense.

After the release of *Toy Story 2*, our production slate expanded rapidly. Suddenly, we had several projects going at once, which meant that we couldn't have the same five people working exclusively on every film. We were not a little startup anymore. Pete was off working on *Monsters, Inc.*, Andrew had started *Finding Nemo*, and Brad Bird had joined us to begin work on *The Incredibles*. The Braintrust had to evolve, then, from a tight, well-defined group that worked on one film together until it was done to a larger, more fluid group that assembled, as needed, to solve problems on all our films.

While we still called it the Braintrust, there was no hard-and-fast membership list. Over the years, its ranks have grown to include a variety of people—directors, writers, and heads of story—whose only requirement is that they display a knack for storytelling. (Among those talented additions: Mary Coleman, the head of Pixar's story department; development executives Kiel Murray and Karen Paik; and writers Michael Arndt, Meg LeFauve, and Victoria Strouse.) The one thing that has never changed is the demand for candor—which, while its value seems obvious, is harder to achieve than one might think.

Let's imagine that you just joined a Braintrust meeting for the first time and sat down in a room full of smart and experienced people to discuss a film that has just been screened. There are many good reasons to be careful about what you say, right? You want to be polite, you want to respect or defer to others, and you don't want to embarrass yourself or come off as having all the answers. Before you speak up, no matter how self-assured you are, you will check yourself: Is this a good idea or a stupid one? How many times am I allowed to say something stupid before others begin to doubt me? Can I tell the director that his protagonist is unlikable or that his second act is incomprehensible? It's not that you want to be dishonest or to withhold from others. At this stage, you aren't even thinking about candor. You're thinking about not looking like an idiot.

Compounding matters is the fact that you aren't the only one who's struggling with these doubts. Everyone is; societal conditioning discourages telling the truth to those perceived to be in higher positions. Then there's human nature. The more people there are in the room, the more pressure there is to perform well. Strong and confident people can intimidate their colleagues, subconsciously signaling that they aren't interested in negative feedback or criticism that challenges their thinking. When the stakes are high and there is a sense that people in the room don't understand a director's project, it can feel to that director like everything they've

worked so hard on is in jeopardy, under attack. Their brains go into overdrive, reading all of the subtexts and fighting off the perceived threats to what they've built. When so much is on the line, the barriers to truly candid discussions are formidable.

And yet, candor could not be more crucial to our creative process. Why? Because early on, *all* of our movies suck. That's a blunt assessment, I know, but I make a point of repeating it often, and I choose that phrasing because saying it in a softer way fails to convey how bad the first versions of our films really are. I'm not trying to be modest or self-effacing by saying this. Pixar films are not good at first, and our job is to make them so—to go, as I say, "from suck to not-suck." This idea—that all the movies we now think of as brilliant were, at one time, terrible—is a hard concept for many to grasp. But think about how easy it would be for a movie about talking toys to feel derivative, sappy, or overtly merchandise-driven. Think about how off-putting a movie about rats preparing food could be, or how risky it must've seemed to start *WALL-E* with 39 dialogue-free minutes. We dare to attempt these stories, but we don't get them right on the first pass. And this is as it should be. Creativity has to start somewhere, and we are true believers in the power of bracing, candid feedback and the iterative process—reworking, reworking, and reworking again, until a flawed story finds its throughline or a hollow character finds its soul.

As I've discussed, first we draw storyboards of the script and then edit them together with temporary voices and music to make a crude mock-up of the film, known as reels. Then the Braintrust watches this version of the movie and discusses what's not ringing true, what could be better, what's not working at all. Notably, they do not *prescribe* how to fix the problems they diagnose. They test weak points, they make suggestions, but it is up to the director to settle on a path forward. A new version of the movie is generated every three to six months, and the process repeats itself. (It takes about twelve thousand storyboard drawings to make one 90-minute reel, and because of the iterative nature of the process I'm describing, story teams commonly create ten times that number by the time their work is done.) In general, the movie steadily improves with each iteration, although sometimes a director becomes stuck, unable to address the feedback he or she is being given. Luckily, another Braintrust meeting is usually around the corner.

To understand what the Braintrust does and why it is so central to Pixar, you have to start with a basic truth: People who take on complicated creative projects become lost at some point in the process. It is the nature of things—in order to create, you must internalize and almost *become* the project for a while, and that near-fusing with the project is an essential part of its emergence. But it is also confusing. Where once a movie's writer/director had perspective, he or she loses it. Where once he or she could see a forest, now there are only trees. The details converge to obscure the whole, and that makes it difficult to move forward substantially in any one direction. The experience can be overwhelming.

All directors, no matter how talented, organized, or clear of vision, become lost somewhere along the way. That creates a problem for those who seek to give helpful feedback. How do you get a director to address a problem he or she cannot see? The answer depends, of course, on the situation. The director may be right about the potential impact of his central idea, but maybe he simply hasn't set it up well enough for the Braintrust to understand that. Maybe he doesn't realize that much of what he *thinks* is visible on screen is, in fact, only visible in his own head. Or maybe the ideas presented in the reels don't work and won't ever work, and the only path forward is to blow something up or start over. No matter what, the process of coming to clarity takes patience and candor.

In Hollywood, studio executives typically communicate their criticisms of an early cut of a film by giving extensive "notes" to the director. The movie will be screened and suggestions will be typed up and delivered a few days later. The problem is, directors don't

want the notes, because they are usually coming from people who aren't filmmakers and are seen as ignorant and interfering. There is a built-in tension, then, between directors and the studios that employ them; to put it in stark terms, the studios are paying the bills and want the films to be commercially successful, while the directors want to preserve their artistic vision. I should add that some notes offered by studio executives are quite astute—people outside of the production can often see more clearly. But when you add oft-held resentments about input from "non-creative" people to how difficult it is to be a director in the first place—presiding over a project that, as I've said, sucks for months before it gets good—this tension makes it difficult to bridge the divide between art and commerce.

Which is why we don't give notes this way at Pixar. We have developed our own model, based on our determination to be a filmmaker-led studio. That does not mean there is no hierarchy here. It means that we try to create an environment where people want to hear each other's notes, even when those notes are challenging, and where everyone has a vested interest in one another's success. We give our filmmakers both freedom and responsibility. For example, we believe that the most promising stories are not assigned to filmmakers but emerge from within them. With few exceptions, our directors make movies that they have conceived of and are burning to make. Then, because we know that this passion will at some point blind them to their movie's inevitable problems, we offer them the counsel of the Braintrust.

You may be thinking, *How is the Braintrust different from any other feedback mechanism?*

There are two key differences, as I see it. The first is that the Braintrust is made up of people with a deep understanding of storytelling and, usually, people who have been through the process themselves. While the directors welcome critiques from many sources along the way (and in fact, when our films are screened in-

house, *all* Pixar employees are asked to send notes), they particularly prize feedback from fellow directors and storytellers.

The second difference is that the Braintrust has no authority. This is crucial: The director does not have to follow any of the specific suggestions given. After a Braintrust meeting, it is up to him or her to figure out how to address the feedback. Braintrust meetings are not top-down, do-this-or-else affairs. By removing from the Braintrust the power to mandate solutions, we affect the dynamics of the group in ways I believe are essential.

While problems in a film are fairly easy to identify, the sources of those problems are often extraordinarily difficult to assess. A mystifying plot twist or a less-than-credible change of heart in our main character is often caused by subtle, underlying issues elsewhere in the story. Think of it like a patient complaining of knee pain that stems from his fallen arches. If you operated on the knee, it wouldn't just fail to alleviate the pain, it could easily compound it. To alleviate the pain, you have to identify and deal with the root of the problem. The Braintrust's notes, then, are intended to bring the true causes of problems to the surface—not to demand a specific remedy.

Moreover, we don't *want* the Braintrust to solve a director's problem because we believe that, in all likelihood, our solution won't be as good as the one the director and his or her creative team comes up with. We believe that ideas—and thus, films—only become great when they are challenged and tested. In academia, peer review is the process by which professors are evaluated by others in their field. I like to think of the Braintrust as Pixar's version of peer review, a forum that ensures we raise our game—not by being prescriptive but by offering candor and deep analysis.

That doesn't mean it doesn't get tough sometimes. Naturally, every director would prefer to be told that his film is a masterpiece. But because of the way the Braintrust is structured, the pain of being told that flaws are apparent or revisions are needed is mini-

mized. Rarely does a director get defensive, because no one is pulling rank or telling the filmmaker what to do. The film itself—not the filmmaker—is under the microscope. This principle eludes most people, but it is critical: You are not your idea, and if you identify too closely with your ideas, you will take offense when they are challenged. To set up a healthy feedback system, you must remove power dynamics from the equation—you must enable yourself, in other words, to focus on the problem, not the person.

Here's how it works: On an appointed morning, the Braintrust gathers for a screening of the film-in-progress. After the screening, we head for a conference room, have some lunch, gather our thoughts, and sit down to talk. The director and producer of the film give a summary of where they think they are. "We've locked down the first act, but we know the second act is still gelling," they'll say. Or "The ending still isn't connecting like we want it to." Then, the feedback usually begins with John. While everyone has an equal voice in a Braintrust meeting, John sets the tone, calling out the sequences he liked best, identifying some themes and ideas he thinks need to be improved. That's all it takes to launch the back-and-forth. Everybody jumps in with observations about the film's strengths and weaknesses.

Before we get to the forces that shape that discussion, let's take a moment to look at things from the filmmakers' point of view. To a one, they regard these sessions as essential. Michael Arndt, who wrote *Toy Story 3*, says he thinks to make a great film, its makers must pivot, at some point, from creating the story for themselves to creating it for others. To him, the Braintrust provides that pivot, and it is necessarily painful. "Part of the suffering involves giving up control," he says. "I can think it's the funniest joke in the world, but if nobody in that room laughs, I have to take it out. It hurts that they can see something you can't."

Rich Moore, whose first animated feature for Disney was *Wreck-It Ralph*, likens the Braintrust to a bunch of people who are

Disney Animation, that studio has adopted this tradition of candor as well.) Somehow, and perhaps especially because they have less invested, a director who's struggling with his own dilemmas can see another director's struggles more clearly than his own. "It's like I can put my crossword puzzle away and help you with your Rubik's Cube a little bit," is how he puts it.

Bob Peterson, a member of the Braintrust who has helped write (and provide voices for) eleven Pixar films, uses another analogy to describe the Braintrust. He calls it "the grand eye of Sauron"—a reference to the lidless, all-seeing character in the *Lord of the Rings* trilogy—because when it focuses on you, there's no avoiding its gaze.

But the Braintrust is benevolent. It wants to help. And it has no selfish agenda.

Andrew Stanton, who has been on the giving or the receiving end of almost every Braintrust meeting we've ever had, likes to say that if Pixar is a hospital and the movies are the patients, then the Braintrust is made up of trusted doctors. In this analogy, it's important to remember that the movie's director and producer are doctors, too. It's as if they've gathered a panel of consulting experts to help find an accurate diagnosis for an extremely confounding case. But ultimately, it's the filmmakers, and no one else, who will make the final decisions about the wisest course of treatment.

Jonas Rivera, who started as an office assistant on *Toy Story* and has gone on to produce two films for us, alters Andrew's hospital analogy slightly, adding this: If the movies are patients, then they are in utero when the Braintrust first evaluates them. "The Braintrust meetings," he says, "are where the movie is born."

To get a clearer sense of how candor is delivered at Pixar, I want to take you inside a Braintrust meeting. This one followed an early screening of a Pete Docter film, then known as *The Untitled Pixar Movie That Takes You Inside the Mind*. The premise for the film

had emerged straight out of Pete's cranium, and it was predictably ambitious, layered, and complex. Already, Pete and his team had spent months hashing out whose mind, exactly, he was going to take viewers inside of and what those viewers would ultimately find when they got there. As Braintrusts go, this was a crowded one, with about twenty people at the table and fifteen more in chairs against the walls. Everyone grabbed plates of food on the way in and, after a little small talk, got down to business.

Earlier, before the screening, Pete had described what they'd come up with so far in terms of the overall conceit of the film and the specific story points that he hoped would connect with the audience. "What's inside the mind?" he asked his colleagues. "Your emotions—and we've worked really hard to make these characters look the way those emotions feel. We have our main character, an emotion called Joy, who is effervescent. She literally glows when she's excited. Then we have Fear. He thinks of himself as confident and suave, but he's a little raw nerve and tends to freak out. The other characters are Anger, Sadness—her shape is inspired by teardrops—and Disgust, who basically turns up her nose at everything. And all these guys work at what we call Head-quarters."

That got a laugh—as did many scenes in the roughed-out ten-minute preview that followed, which everyone agreed had the potential to be, like Pete's previous film *Up*, among our most original and affecting. As I've said, Pete is superb at teasing out subtle moments that are both funny and emotionally authentic, and this idea of bringing a person's competing emotions to life was inspired, rich with possibility. But as the Braintrust came to life, there seemed to be a consensus that one of the movie's major scenes—an argument between two characters about why certain memories fade while others burn bright forever—was too minor to sufficiently connect audiences to the profound ideas the film was attempting to tackle.

Pete is a big guy—6 foot 4½—but despite his size, he projects an undaunted gentleness. This was in evidence in the conference room now, as he listened to us parse what was amiss in this pivotal

scene. His face was open, not pained. He'd been through this many times before, and he believed in its power to help him get where he was trying to go.

Midway down the table, Brad Bird shifted in his chair. Brad joined Pixar in 2000, after having written and directed *The Iron Giant* at Warner Bros., and his first movie for us was *The Incredibles,* which opened in 2004. Brad is a born rebel who fights against creative conformity in any guise. The smell of artistic victory is his drug, and with his rapid, high-energy delivery, he will turn almost everything into a battle to win for the cause of creativity (even if there isn't anybody around to fight). So it was no surprise that he was among the first to articulate his worries about the core of the story feeling too slight. "I understand that you want to keep this simple and relatable," he told Pete, "but I think we need something that your audience can get a little more *invested* in."

Andrew Stanton spoke next. Andrew is fond of saying that people need to be wrong as fast as they can. In a battle, if you're faced with two hills and you're unsure which one to attack, he says, the right course of action is to hurry up and choose. If you find out it's the wrong hill, turn around and attack the other one. In that scenario, the only unacceptable course of action is running *between* the hills. Now, he seemed to be suggesting that Pete and his team had stormed the wrong hill. "I think you need to spend more time settling on the rules of your imagined world," he said.

Every Pixar movie has its own rules that viewers have to accept, understand, and enjoy understanding. The voices of the toys in the *Toy Story* films, for example, are never audible to humans. The rats in *Ratatouille* walk on four paws, like normal vermin, except for Remy, our star, whose upright posture sets him apart. In Pete's film, one of the rules—at least at this point—was that memories (depicted as glowing glass globes) were stored in the brain by traveling through a maze of chutes into a kind of archive. When retrieved or remembered, they'd roll back down another tangle of chutes, like bowling balls being returned to bowlers at the alley.

That particular construct was elegant and effective, but Andrew suggested that another rule needed to be firmed up and clarified: how memories and emotions change over time, as the brain gets older. This was the moment in the film, Andrew said, to establish some key themes. Listening to this, I remembered how in *Toy Story 2*, the addition of Wheezy immediately helped establish the idea that damaged toys could be discarded, left to sit, unloved, on the shelf. Andrew felt there was a similarly impactful opportunity here that was being missed—and, thus, was keeping the film from working—and he said so candidly. "Pete, this movie is about the inevitability of change," he said. "And of growing up."

This set Brad off. "A lot of us in this room have *not* grown up—and I mean that in the best way," he said. "The conundrum is how to become mature, how to take on responsibility and become reliable while at the same time preserving your childlike wonder. People have come up to me many times, as I'm sure has happened to many people in this room, and said, 'Gee, I wish I could be creative like you. That would be something, to be able to draw.' But I believe that *everyone* begins with the ability to draw. Kids are instinctively there. But a lot of them unlearn it. Or people tell them they can't or it's impractical. So yes, kids have to grow up, but maybe there's a way to suggest that they could be better off if they held onto some of their childish ideas.

"Pete, the thing I want to give you a huge round of applause for is: This is a frickin' *big* idea to try to make a movie about," Brad continued, his voice full of affection. "I've said to you on previous films, 'You're trying to do a triple back flip into a gale force wind, and you're mad at yourself for not sticking the landing. Like, it's amazing you're *alive*.' What you're doing with this film is the same—and it's the kind of thing that nobody else in the movie industry is doing with a sizable budget. So, huge round of applause." Brad paused as everyone clapped. Then he grinned at Pete, who grinned back. "And you're in for a world of hurt," Brad said.

An important corollary to the assertion that the Braintrust

must be candid is that filmmakers must be ready to hear the truth; candor is only valuable if the person on the receiving end is open to it and willing, if necessary, to let go of things that don't work. Jonas Rivera, the producer of Pete's film, tries to make that painful process easier by doing something he calls "headlining" the main points of a Braintrust session for whichever director he's assisting—distilling the many observations down to a digestible takeaway. Once this Braintrust meeting wrapped up, this is exactly what he did for Pete, ticking off the areas that seemed the most problematic, reminding him of the scenes that resonated most. "So what do we blow up?" Jonas asked. "What do we go backwards on? And what do you love? Is what you loved about the film different now than it was when we started?"

"The way the movie opens," Pete responded, "I love."

Jonas raised his hand in a salute. "Okay, that's the movie, then," he said. "How we set up the story has to handshake with that."

"I agree," Pete said.

They were on their way.

Frank talk, spirited debate, laughter, and love. If I could distill a Braintrust meeting down to its most essential ingredients, those four things would surely be among them. But newcomers often notice something else first: the volume. Routinely, Braintrust attendees become so energized and excited that they talk over each other, and voices tend to rise. I'll admit that there have been times when outsiders think they've witnessed a heated argument or even some kind of intervention. They haven't—though I understand their confusion, which stems from their inability (after such a brief visit) to grasp the Braintrust's *intent*. A lively debate in a Braintrust meeting is not being waged in the hopes of any one person winning the day. To the extent there is "argument," it seeks only to excavate the truth.

That is part of the reason why Steve Jobs didn't come to Brain-

trust meetings at Pixar—a mutually agreed prohibition, based on my belief that his bigger-than-life presence would make it harder to be candid. We had reached this agreement way back in 1993, on a day that I happened to be visiting Microsoft, and Steve reached me by phone, worried that I was being wooed to take a job there. I had no intention of working at Microsoft, and it wasn't why I was there, but I knew he was nervous, and I took the opportunity to exert some leverage. "This group works well together," I told him of the Braintrust. "But if you go to its meetings it will change what they are." He agreed, and believing that John and the story people knew more about narrative than he did, he left it to them. At Apple, he had the reputation for being deeply involved in the most minute detail of every product, but at Pixar, he didn't believe that his instincts were better than the people here, so he stayed out. That's how much candor matters at Pixar: It overrides hierarchy.

Braintrust meetings require giving candid notes, but they do a great deal more than that. The most productive creative sessions allow for the exploration of myriad trains of thought. Take *WALL-E*, for example, which was known, early on, as *Trash Planet*. For a long time, that movie ended with our googly-eyed trash compactor robot saving his beloved droid, EVE, from destruction in a dumpster. But there was something about that ending that nagged, that never quite felt right. We had countless discussions about it, but Andrew Stanton, the director, was having difficulty putting his finger on what was wrong, let alone finding a solution. The confusing thing was that the romantic plotline *seemed* right. Of course WALL-E would save EVE—he'd fallen in love with her the moment he saw her. In a sense, that was precisely the flaw. And it was Brad Bird who pointed that out to Andrew in a Braintrust meeting. "You've denied your audience the moment they've been waiting for," he said, "the moment where EVE throws away all her programming and goes all out to save WALL-E. Give it to them. The audience wants it." As soon as Brad said that, it was like: *Bing!* After the meeting, Andrew went off and wrote an entirely new ending in which EVE saves WALL-E, and at the next screening, there wasn't a dry eye in the house.

Michael Arndt remembers it was Andrew, meanwhile, who gave a Braintrust note on *Toy Story 3* that fundamentally altered the end of that movie's second act. At that point in the film, Lotso—the pink teddy bear and mean-spirited leader of the day-care center toys—is overthrown after the toys mutiny. But the problem was, the mutiny wasn't believable, because the impetus behind it didn't ring true. "In that draft," Michael told me, "I had Woody giving this big, heroic speech about what a mean guy Lotso was, and it changed everyone's mind about Lotso. But in the Braintrust, Andrew said, 'Nope, I don't buy it. These toys aren't stupid. They *know* Lotso isn't a good guy. They've only aligned themselves with him because he's the most powerful.' " This sparked a pitched discussion in the room, until, finally, Michael hit on an analogy: If you think of Lotso as Stalin and the other toys as his cowering subjects, then Big Baby—the bald-headed doll with one droopy eye who acts as Lotso's enforcer—was Stalin's army. At that point, a fix began to emerge at last. "If you flip the army, then you can get rid of Stalin," Michael said. "So the question was, What can Woody do that will turn Big Baby's sympathies against Lotso? That was the problem I faced."

The solution—a reveal of a previously unknown injustice: that Lotso's duplicity had led Big Baby to be abandoned by his little girl owner—was all Michael's, but he never would have found it if not for the Braintrust.

It is natural for people to fear that such an inherently critical environment will feel threatening and unpleasant, like a trip to the dentist. The key is to look at the viewpoints being offered, in any successful feedback group, as additive, not competitive. A competitive approach measures other ideas against your own, turning the discussion into a debate to be won or lost. An additive approach, on the other hand, starts with the understanding that each participant contributes something (even if it's only an idea that fuels the

discussion—and ultimately doesn't work). The Braintrust is valuable because it broadens your perspective, allowing you to peer—at least briefly—through others' eyes.

Brad Bird has a terrific example of exactly this—an instance when the Braintrust helped him fix something he didn't realize was a problem. It was during production on *The Incredibles,* when people raised concerns about a scene in which Helen and Bob Parr (a.k.a. Elastigirl and Mr. Incredible) are having an argument. Many people in the Braintrust thought the scene, in which Bob is caught sneaking into his house late one night after doing a little superhero moonlighting, felt all wrong. What Brad likes best about this example is that the Braintrust helped him find a solution even though it failed to diagnose what was truly amiss! The fix that was suggested in the Braintrust session wasn't the right one—and yet, Brad says that it helped him immensely.

"Sometimes the Braintrust will know something's wrong, but they will identify the wrong symptom," he told me. "I knew what the film's tone was—I had pitched the tone, and everybody bought the tone that was pitched. But this was one of the first scenes that the Braintrust was seeing illustrated, with voices. And I think they were privately thinking, are we doing a Bergman film? Bob was yelling at Helen, and the note I got was, 'God, it seems like he's bullying her. I really don't like him. You've got to rewrite it.' So I go in to rewrite it, and I look at it, and think, 'No, that *is* what he would say. And that *is* how she would respond.' I don't want to change a damn thing—but I know I can't say that, because something's not working. And then I realize the problem: Physically, Bob is the size of a house, and Helen is this little tiny thing. Even though Helen is his equal, what you're seeing on the screen is this big threatening guy yelling and it felt like he was abusing her. Once I figured that out, all I did was have Helen stretch when she holds her ground and says, 'This is not about you.' I didn't change any of the dialogue. I just changed the drawings to make her body bigger, as if to say, 'I'm a match for you.' And when I played the revised scene,

the Braintrust said, 'That's *much* better. What lines did you change?' I said, 'I didn't change a comma.' That's an example of the group knowing something was wrong, but not having the solution. I had to go deep and ask, 'If the dialogue is not wrong, what is?' And then I saw it: Oh, *that.*"

In the very early days of Pixar, John, Andrew, Pete, Lee, and Joe made a promise to one another. No matter what happened, they would always tell each other the truth. They did this because they recognized how important and rare candid feedback is and how, without it, our films would suffer. Then and now, the term we use to describe this kind of constructive criticism is "good notes."

A good note says what is wrong, what is missing, what isn't clear, what makes no sense. A good note is offered at a timely moment, not too late to fix the problem. A good note doesn't make demands; it doesn't even have to include a proposed fix. But if it does, that fix is offered only to illustrate a potential solution, not to prescribe an answer. Most of all, though, a good note is specific. "I'm writhing with boredom," is not a good note.

As Andrew Stanton says, "There's a difference between criticism and constructive criticism. With the latter, you're constructing at the same time that you're criticizing. You're building as you're breaking down, making new pieces to work with out of the stuff you've just ripped apart. That's an art form in itself. I always feel like whatever notes you're giving should inspire the recipient—like, 'How do I get that kid to want to redo his homework?' So, you've got to act like a teacher. Sometimes you talk about the problems in fifty different ways until you find that one sentence that you can see makes their eyes pop, as if they're thinking, 'Oh, I want to do it.' Instead of saying, 'The writing in this scene isn't good enough,' you say, 'Don't you want people to walk out of the theater and be quoting those lines?' It's more of a challenge. 'Isn't this what you want? I want that too!' "

Telling the truth is difficult, but inside a creative company, it is the only way to ensure excellence. It is the job of the manager to watch the dynamics in the room, although sometimes a director will come in after a meeting to say that some people were holding back. In these cases, the solution is often to convene a smaller group—a sort of mini-Braintrust—to encourage more direct communication by limiting the number of participants. Other times there are problems that require special attention, people dodging and weaving without even knowing it. In my experience, people usually don't intend to be evasive, and a gentle nudge is all it takes to put them back on the right path.

Candor isn't cruel. It does not destroy. On the contrary, any successful feedback system is built on empathy, on the idea that we are all in this together, that we understand your pain because we've experienced it ourselves. The need to stroke one's own ego, to get the credit we feel we deserve—we strive to check those impulses at the door. The Braintrust is fueled by the idea that every note we give is in the service of a common goal: supporting and helping each other as we try to make better movies.

It would be a mistake to think that merely gathering a bunch of people in a room for a candid discussion every couple of months will automatically cure your company's ills. First, it takes a while for any group to develop the level of trust necessary to be truly candid, to express reservations and criticisms without fear of reprisal, and to learn the language of good notes. Second, even the most experienced Braintrust can't help people who don't understand its philosophies, who refuse to hear criticism without getting defensive, or who don't have the talent to digest feedback, reset, and start again. Third, as I'll discuss in later chapters, the Braintrust is something that evolves over time. Creating a Braintrust is not something you do once and then check off your to-do list. Even when populated with talented and generous people, there is plenty that can go wrong. Dynamics change—between people, between departments—and so the only way to ensure that your Braintrust is doing its job is to watch and protect it continually, making adaptations as needed.

I want to stress that you don't have to work at Pixar to create a Braintrust. Every creative person, no matter their field, can draft into service those around them who exhibit the right mixture of intelligence, insight, and grace. "You can and should make your own solution group," Andrew Stanton says, adding that on each of his own films, he has made a point of doing this on a smaller scale, separate from the official Braintrust. "Here are the qualifications required: The people you choose must (a) make you think smarter and (b) put lots of solutions on the table in a short amount of time. I don't care who it is, the janitor or the intern or one of your most trusted lieutenants: If they can help you do that, they should be at the table."

Believe me, you don't want to be at a company where there is more candor in the hallways than in the rooms where fundamental ideas or matters of policy are being hashed out. The best inoculation against this fate? Seek out people who are willing to level with you, and when you find them, hold them close.

CHAPTER 6

FEAR AND FAILURE

The production of *Toy Story 3* could be a master class in how to make a film. At the beginning of the process, in 2007, the team that had made the original *Toy Story* gathered for a two-day off-site in a rustic cabin, 50 miles north of San Francisco, that often functions as our unofficial retreat center. The place, called the Poet's Loft, is all redwood and glass—perched on stilts over Tomales Bay, a perfect place to think. The team's goal, this day, was to rough out a movie they could imagine paying to see.

Sitting on couches with a whiteboard in the center of the room, the participants started by asking some basic questions: Why even do a third movie? What was left to say? What are we still curious about? The *Toy Story* team knew and trusted each other—over the years, they'd made stupid mistakes together and solved seemingly insurmountable problems together. The key was to focus less on the end goal and more on what still intrigued them about the characters who, by this point, felt like people we actually knew. Every so often, someone would stand up and road test what they had so

far—trying to summarize a three-part story as if it were the blurb on the back of a DVD cover. Feedback would be given, and they'd go back—literally—to the drawing board.

Then somebody said the one thing that snapped everything into focus. *We've talked so much over the years, in so many different ways, about Andy growing up and growing out of his toys. So what if we just leaped right into that idea directly? How would the toys feel if Andy left for college?* While no one knew exactly how they'd answer that question, everyone present knew that we'd landed on the idea—the line of tension—that would animate *Toy Story 3*.

From that moment forward, the film seemed to fall right into place. Andrew Stanton wrote a treatment, Michael Arndt wrote a script, Lee Unkrich and Darla Anderson, the director and producer, rocked the production, and we hit our deadlines. Even the Braintrust found relatively little to argue with. I don't want to overstate this—the project had its problems—but since our founding, we'd been striving for a production as smooth as this. At one point, Steve Jobs called me to check in on our progress.

"It's really strange," I told him. "We haven't had a single big problem on this film."

Many people would have been happy with this news. Not Steve. "Watch out," he said. "That's a dangerous place to be."

"I wouldn't be too alarmed," I said. "This is our first time, in eleven movies, without a major meltdown. And besides, we have a few more meltdowns coming up."

I wasn't being glib. Over the next two years, we were about to rack up a string of costly misfires. Two of those—*Cars 2* and *Monsters University*—were solved by replacing the films' original directors. Another, a film we spent three years developing, proved so confounding that we shut it down altogether.

I'm going to talk more about our misfires, but I'm gratified to say that because we caught them midstream, before they were finished and released to the public, we were able to treat them as

learning experiences. Yes, they cost us money, but the losses were not as sizable as they would have been had we not intervened. And yes, they were painful, but we emerged better and stronger because of them. I came to think of our meltdowns as a necessary part of doing our business, like investments in R&D, and I urged everyone at Pixar to see them the same way.

For most of us, failure comes with baggage—a lot of baggage—that I believe is traced directly back to our days in school. From a very early age, the message is drilled into our heads: Failure is bad; failure means you didn't study or prepare; failure means you slacked off or—worse!—aren't smart enough to begin with. Thus, failure is something to be ashamed of. This perception lives on long into adulthood, even in people who have learned to parrot the oft-repeated arguments about the upside of failure. How many articles have you read on that topic alone? And yet, even as they nod their heads in agreement, many readers of those articles still have the emotional reaction that they had as children. They just can't help it: That early experience of shame is too deep-seated to erase. All the time in my work, I see people resist and reject failure and try mightily to avoid it, because regardless of what we say, mistakes feel embarrassing. There is a visceral reaction to failure: It hurts.

We need to think about failure differently. I'm not the first to say that failure, when approached properly, can be an opportunity for growth. But the way most people interpret this assertion is that mistakes are a necessary evil. Mistakes aren't a necessary evil. They aren't evil at all. They are an inevitable consequence of doing something new (and, as such, should be seen as valuable; without them, we'd have no originality). And yet, even as I say that embracing failure is an important part of learning, I also acknowledge that acknowledging this truth is not enough. That's because failure is painful, and our feelings about this pain tend to screw up our understanding of its worth. To disentangle the good and the bad

parts of failure, we have to recognize both the reality of the pain and the benefit of the resulting growth.

Left to their own devices, most people don't want to fail. But Andrew Stanton isn't most people. As I've mentioned, he's known around Pixar for repeating the phrases "fail early and fail fast" and "be wrong as fast as you can." He thinks of failure like learning to ride a bike; it isn't conceivable that you would learn to do this without making mistakes—without toppling over a few times. "Get a bike that's as low to the ground as you can find, put on elbow and knee pads so you're not afraid of falling, and go," he says. If you apply this mindset to everything new you attempt, you can begin to subvert the negative connotation associated with making mistakes. Says Andrew: "You wouldn't say to somebody who is first learning to play the guitar, 'You better think *really* hard about where you put your fingers on the guitar neck before you strum, because you only get to strum once, and that's it. And if you get that wrong, we're going to move on.' That's no way to learn, is it?"

This doesn't mean that Andrew enjoys it when he puts his work up for others to judge, and it is found wanting. But he deals with the possibility of failure by addressing it head on, searching for mechanisms that turn pain into progress. To be wrong as fast as you can is to sign up for aggressive, rapid learning. Andrew does this without hesitation.

Even though people in our offices have heard Andrew say this repeatedly, many still miss the point. They think it means accept failure with dignity and move on. The better, more subtle interpretation is that failure is a manifestation of learning and exploration. If you aren't experiencing failure, then you are making a far worse mistake: You are being driven by the desire to avoid it. And, for leaders especially, this strategy—trying to avoid failure by outthinking it—dooms you to fail. As Andrew puts it, "Moving things forward allows the team you are leading to feel like, 'Oh, I'm on a boat that is actually going towards land.' As opposed to having a leader who says, 'I'm still not sure. I'm going to look at the map

a little bit more, and we're just going to float here, and all of you stop rowing until I figure this out.' And then weeks go by, and morale plummets, and failure becomes self-fulfilling. People begin to treat the captain with doubt and trepidation. Even if their doubts aren't fully justified, you've become what they see you as because of your inability to move."

Rejecting failure and avoiding mistakes seem like high-minded goals, but they are fundamentally misguided. Take something like the Golden Fleece Awards, which were established in 1975 to call attention to government-funded projects that were particularly egregious wastes of money. (Among the winners were things like an $84,000 study on love commissioned by the National Science Foundation, and a $3,000 Department of Defense study that examined whether people in the military should carry umbrellas.) While such scrutiny may have seemed like a good idea at the time, it had a chilling effect on research. No one wanted to "win" a Golden Fleece Award because, under the guise of avoiding waste, its organizers had inadvertently made it dangerous and embarrassing for everyone to make mistakes.

The truth is, if you fund thousands of research projects every year, some will have obvious, measurable, positive impacts, and others will go nowhere. We aren't very good at predicting the future—that's a given—and yet the Golden Fleece Awards tacitly implied that researchers should know *before* they do their research whether or not the results of that research would have value. Failure was being used as a weapon, rather than as an agent of learning. And that had fallout: The fact that failing could earn you a very public flogging distorted the way researchers chose projects. The politics of failure, then, impeded our progress.

There's a quick way to determine if your company has embraced the negative definition of failure. Ask yourself what happens when an error is discovered. Do people shut down and turn inward, instead of coming together to untangle the causes of problems that might be avoided going forward? Is the question being

asked: Whose fault was this? If so, your culture is one that vilifies failure. Failure is difficult enough without it being compounded by the search for a scapegoat.

In a fear-based, failure-averse culture, people will consciously or unconsciously avoid risk. They will seek instead to repeat something safe that's been good enough in the past. Their work will be derivative, not innovative. But if you can foster a positive understanding of failure, the opposite will happen.

How, then, do you make failure into something people can face without fear?

Part of the answer is simple: If we as leaders can talk about our mistakes and our part in them, then we make it safe for others. You don't run from it or pretend it doesn't exist. That is why I make a point of being open about our meltdowns inside Pixar, because I believe they teach us something important: Being open about problems is the first step toward learning from them. My goal is not to drive fear out completely, because fear is inevitable in high-stakes situations. What I want to do is loosen its grip on us. While we don't want too many failures, we must think of the cost of failure as an investment in the future.

If you create a fearless culture (or as fearless as human nature will allow), people will be much less hesitant to explore new areas, identifying uncharted pathways and then charging down them. They will also begin to see the upside of decisiveness: The time they've saved by not gnashing their teeth about whether they're on the right course comes in handy when they hit a dead end and need to reboot.

It isn't enough to pick a path—you must go down it. By doing so, you see things you couldn't possibly see when you started out; you may not like what you see, some of it may be confusing, but at least you will have, as we like to say, "explored the neighborhood." The key point here is that even if you decide you're in the wrong

place, there is still time to head toward the *right* place. And all the thinking you've done that led you down that alley was not wasted. Even if most of what you've seen doesn't fit your needs, you inevitably take away ideas that will prove useful. Relatedly, if there are parts of the neighborhood you like but that don't seem helpful in the quest you're on, you will remember those parts and possibly use them later.

Let me explain what I mean by exploring the neighborhood. Years before it evolved into the funny, affecting tale of a fierce, shaggy behemoth (Sulley) and his unlikely friendship with the little girl it's his job to scare (Boo), *Monsters, Inc.* was an altogether different story. As first imagined by Pete Docter, it revolved around a thirty-year-old man who was coping with a cast of frightening characters that only he could see. As Pete describes it, the man "is an accountant or something, and he hates his job, and one day his mom gives him a book with some drawings in it that he did when he was a kid. He doesn't think anything of it, and he puts it on the shelf, and that night, monsters show up. And nobody else can see them. He thinks he's starting to go crazy. They follow him to his job, and on his dates, and it turns out these monsters are all the fears that he never dealt with as a kid. He becomes friends with them eventually, and as he conquers the fears, they slowly begin to disappear."

Anyone who's seen the movie knows that the final product bears no resemblance to that description. But what nobody knows is how many wrong turns the story took, over a period of years, before it found its true north. The pressure on Pete, all along, was enormous—*Monsters, Inc.* was the first Pixar film not directed by John Lasseter, so in some very real ways Pete and his crew were under the microscope. Every unsuccessful attempt to crack the story only heightened the pressure.

Fortunately, Pete had a basic concept that he held to throughout: "Monsters are real, and they scare kids for a living." But what was the strongest manifestation of that idea? He couldn't know

until he'd tried a few options. At first, the human protagonist was a six-year-old named Mary. Then she was changed to a little boy. Then back to a six-year-old girl. Then she was seven, named Boo, and bossy—even domineering. Finally, Boo was turned into a fearless, preverbal toddler. The idea of Sulley's buddy character—the round, one-eyed Mike, voiced by Billy Crystal—wasn't added until more than a year after the first treatment was written. The process of determining the rules of the incredibly intricate world Pete created also took him down countless blind alleys—until, eventually, those blind alleys converged on a path that led the story where it needed to go.

"The process of developing a story is one of discovery," Pete says. "However, there's always a guiding principle that leads you as you go down the various roads. In *Monsters, Inc.*, all of our very different plots shared a common feeling—the bittersweet goodbye you feel once a problem"—in this case, Sulley's quest to return Boo to her own world—"has been solved. You suffer through it as you struggle to solve it, but by the end you've developed a sort of fondness for it, and you miss it when it is gone. I knew I wanted to express that, and I was eventually able to get it in the film."

While the process was difficult and time consuming, Pete and his crew never believed that a failed approach meant that *they* had failed. Instead, they saw that each idea led them a bit closer to finding the better option. And that allowed them to come to work each day engaged and excited, even while in the midst of confusion. This is key: When experimentation is seen as necessary and productive, not as a frustrating waste of time, people will enjoy their work—even when it is confounding them.

The principle I'm describing here—iterative trial and error—has long-recognized value in science. When scientists have a question, they construct hypotheses, test them, analyze them, and draw conclusions—and then they do it all over again. The reasoning behind this is simple: Experiments are fact-finding missions that, over time, inch scientists toward greater understanding. That means *any*

outcome is a good outcome, because it yields new information. If your experiment proved your initial theory wrong, better to know it sooner rather than later. Armed with new facts, you can then reframe whatever question you're asking.

This is often easier to accept in the laboratory than in a business. Creating art or developing new products in a for-profit context is complicated and expensive. In our case, when we try to tell the most compelling story, how do we assess our attempts and draw conclusions? How do we determine what works best? And how do we put the need to succeed out of our minds long enough to identify a true emotional storyline that will carry a film?

There is an alternative approach to being wrong as fast as you can. It is the notion that if you carefully think everything through, if you are meticulous and plan well and consider all possible outcomes, you are more likely to create a lasting product. But I should caution that if you seek to plot out all your moves before you make them—if you put your faith in slow, deliberative planning in the hopes it will spare you failure down the line—well, you're deluding yourself. For one thing, it's easier to plan derivative work—things that copy or repeat something already out there. So if your primary goal is to have a fully worked out, set-in-stone plan, you are only upping your chances of being unoriginal. Moreover, you cannot plan your way out of problems. While planning is very important, and we do a lot of it, there is only so much you can control in a creative environment. In general, I have found that people who pour their energy into thinking about an approach and insisting that it is too early to act are wrong just as often as people who dive in and work quickly. The overplanners just take longer to be wrong (and, when things inevitably go awry, are more crushed by the feeling that they have failed). There's a corollary to this, as well: The more time you spend mapping out an approach, the more likely you are to get attached to it. The nonworking idea gets worn into your brain, like a rut in the mud. It can be difficult to get free of it and

head in a different direction. Which, more often than not, is exactly what you must do.

There are arenas, of course, in which a zero failure rate is essential. Commercial flying has a phenomenal safety record because there is so much attention paid at every level to removing error, from manufacturing the engines to assembling and maintaining the planes to observing safety checks and the rules that govern air spaces. Likewise, hospitals have elaborate safeguards to make sure that they operate on the right patient, on the correct side of the body, on the right organ, and so on. Banks have protocols to prevent errors; manufacturing companies have a goal of eliminating production line errors; many industries set goals of having zero injuries.

But just because "failure free" is crucial in some industries does not mean that it should be a goal in all of them. When it comes to creative endeavors, the concept of zero failures is worse than useless. It is counterproductive.

To be sure, failure can be expensive. Making a bad product or suffering a major public setback damages your company's reputation and, often, your employees' morale. So we try to make it less expensive to fail, thereby taking some of the onus off it. For example, we've set up a system in which directors are allowed to spend years in the development phase of a movie, where the costs of iteration and exploration are relatively low. (At this point, we're paying the director's and story artists' salaries but not putting anything into production, which is where costs explode.)

It's one thing to talk about the value of people encountering a number of small failures as they grope their way to understanding, but what about a big, catastrophic failure? What about a project you sink millions of dollars into, commit to publicly, and then have to walk away from? This happened on a film we were developing a few years back, which was based on a terrific idea that originated

in the mind of one of our most creative and trusted colleagues (but, notably, one who had never directed a feature film before). He wanted to tell the story of what happens when the last remaining male and female blue-footed newts on the planet are forced together by science to save the species—but they can't stand each other. When he got up and pitched the idea, we were blown away. The story was, like *Ratatouille,* a somewhat challenging concept, but if handled the right way, we could see that it would be a phenomenal movie.

Significantly, the pitch also came at a time when Jim Morris and I were thinking a lot about whether the success of Pixar was making us complacent. Among the questions we'd been asking ourselves and each other: Had we, in the interest of governing production and making it efficient, created habits and rules that were unnecessary? Were we in danger of growing lethargic and set in our ways? Were our budgets on each movie inching higher and higher for no reason? We were looking for an opportunity to change it up, to create our own little startup, within Pixar and yet separate from it, to try to tap back into the energy that permeated the place when we were young and small and striving. This project seemed to fit the bill. As we put it into production, we decided to treat it as an experiment: What if we brought in new people from the outside with fresh ideas, gave them the charter of rethinking the entire production process (and gave them experienced teammates to help carry this out), and then put them two blocks away from our main campus to minimize their contact with those who might encourage them to adopt the status quo? In addition to making a memorable movie, we were looking to challenge and improve our processes. We called the experiment the Incubator Project.

Within Pixar, some expressed doubts about this approach, but the spirit behind it—the desire not to rest on our laurels—was appealing to all. Andrew Stanton told me later that he worried from the outset about how isolated the project's crew was, even though

it was by design. We were so enamored, he felt, of the possibilities of reinventing the wheel that we underestimated the impact of making so many changes at once. It was as if we'd picked four talented musicians, left them to their own devices, and hoped like hell they'd figure out how to be the Beatles.

But we didn't see that clearly then. The idea for the movie was strong, which was confirmed when we unveiled it at a presentation for the media on upcoming Pixar and Disney movies. As the website *Ain't It Cool News* reported with enthusiasm, the main character, who'd been in captivity since he was a tadpole, lived in a cage in a lab where he could see a flowchart on the wall that spelled out the mating rituals of his species. Because he was lonely, he would practice the steps day in and day out, getting ready for scientists to capture him a girlfriend. Unfortunately, he couldn't read the ninth and final mating ritual because it was obscured by the lab's coffee machine. Therein lay the mystery.

The presentation drew raves. It was classic Pixar, people gushed—offbeat, witty, while at the same time tackling meaningful, relatable ideas. But within the production, unbeknownst to us, the story was stalled. It had the beginnings of a plot—our hero gets his wish when scientists catch him a mate in the wild and bring her back to the lab—but when the unhappy couple ends up back in the natural world, the film began to fall apart. The movie was stuck, and even after a lot of thoughtful feedback, it wasn't getting better.

That fact evaded us at first because of the separateness of the enterprise. When we tried to assess how things were going, early reports seemed good. The director had a strong vision, and his crew was excited and working hard, but they didn't know what they didn't know: that the first two years of a movie's development should be a time of solidifying the story beats by relentlessly testing them—much like you temper steel. And that required decision-making, not just abstract discussion. While everyone working on it had the best intentions, it got bogged down in hypotheticals and

possibilities. The bottom line was that while everyone was rowing the boat, to use Andrew's analogy, there was no forward movement.

When we finally figured this out—after a few experienced Pixar people were sent in to help and reported back about what they saw—it was too late. The Pixar way is to invest in a singular vision, and we'd done so, in a major way, on this project. We didn't consider replacing the director—the story was his, and without him as the engine, we didn't think we could push it to completion. So in May 2010, with heavy hearts, we shut it down.

There are some who will read this and conclude that putting this film into production in the first place was a mistake. An untested director, an unfinished script—it's easy to look back, after the shutdown, and say that those factors alone should have dissuaded us at the outset. But I disagree. While it cost us time and money to pursue, to my mind it was worth the investment. We learned better how to balance new ideas with old ideas, and we learned that we had made a mistake in not getting very explicit buy-in from all of Pixar's leaders about the nature of what we were trying to do. These are lessons that would serve us very well later as we adopted new software and changed some of our technical processes. While experimentation is scary to many, I would argue that we should be far more terrified of the opposite approach. Being too risk-averse causes many companies to stop innovating and to reject new ideas, which is the first step on the path to irrelevance. Probably more companies hit the skids for this reason than because they dared to push boundaries and take risks—and, yes, to fail.

To be a truly creative company, you must start things that might fail.

For all of this talk about accepting failure, if a movie—or any creative endeavor—isn't improving at a reasonable rate, there is a problem. If a director devises a series of solutions that are not making a movie better, one could come to the conclusion that he or she isn't right for the job. Which is sometimes precisely the right conclusion to reach.

But where to draw that line? How many errors are too many? When does failure go from a stop on the road to excellence to a red flag that signals change is needed? We put a lot of faith in our Braintrust meetings to make sure that our directors get all the feedback and support they need, but there are problems that process can't fix. What do you do when candor is not enough?

These were the questions we faced on our various meltdowns.

We are a filmmaker-driven studio, which means that our goal is to let the creative people guide our projects. But when a movie gets stuck and it becomes clear that not only is it broken but its directors are at a loss as to how to fix it, we must replace them or shut the project down. You may ask: *If it is true that all the movies suck at first, and if Pixar's way is to give filmmakers—not the Braintrust—the ultimate authority to fix what's broken, then how do you know when to step in?*

The criteria we use is that we step in if a director loses the confidence of his or her crew. About three hundred people work on each Pixar movie, and they are used to endless adjustments and changes being made while the story is finding its feet. In general, movie crews are an understanding bunch. They recognize that there are always problems, so while they can be judgmental, they don't tend to *rush* to judgment. Their first impulse is to work harder. When a director stands up in a meeting and says, "I realize this scene isn't working, I don't yet know how to fix it, but I'm figuring it out. Keep going!"—a crew will follow him or her to the ends of the earth. But when a problem is festering and everyone seems to be looking the other way or when people are sitting around waiting to be told what to do, the crew gets antsy. It's not that they don't like the director—they usually do. It's that they lose confidence in the

director's ability to bring the movie home. Which is part of why, to me, they are the most reliable barometer. If the crew is confused, then their leader is, too.

When this happens, we must act. To know when to act, we much watch carefully for signs that a movie is stuck. Here is one: A Braintrust meeting will occur, notes will be given, and three months later, the movie will come back essentially unchanged. That is not okay. You may say, "Wait a minute—I thought you just said the directors didn't *have* to obey the notes!" They don't. But directors must find ways to address problems that are raised by the group because the Braintrust represents the audience; when they are confused or otherwise dissatisfied, there's a good chance moviegoers will be too. The implication of being director-led is that the director must lead.

But any failure at a creative company is a failure of many, not one. If you're a leader of a company that has faltered, any misstep that occurs is yours as well. Moreover, if you don't use what's gone wrong to educate yourself and your colleagues, then you'll have missed an opportunity. There are two parts to any failure: There is the event itself, with all its attendant disappointment, confusion, and shame, and then there is our reaction to it. It is this second part that we control. Do we become introspective, or do we bury our heads in the sand? Do we make it safe for others to acknowledge and learn from problems, or do we shut down discussion by looking for people to blame? We must remember that failure gives us chances to grow, and we ignore those chances at our own peril.

Which raises the question: When failure occurs, how should you get the most out of it? When it came to our meltdowns, we were determined to look inward. We had picked talented, creative people to preside over these projects, so we clearly were doing something that was making it hard for them to succeed. Some worried the meltdowns were an indication that we were losing our touch. I disagreed. We never said it was going to be easy—we'd only insisted that our movies be great. Had we not stepped in and

taken action, I said, *then* we'd be abandoning our values. After several misfires, though, it was important that we take a moment to reassess and to try to absorb the lessons they had to teach us.

So in March 2011, Jim Morris, Pixar's general manager, arranged an off-site with the studio's producers and directors—twenty or so people in all. On the agenda was one question: Why did we have so many meltdowns in a row? We weren't looking to point fingers. We wanted to rally the company's creative leadership to figure out the underlying problems that were leading us astray.

Jim kicked the meeting off by thanking everyone for coming and reminding us why we were there. Nothing is more critical to our continued success as a studio, he said, than the ability to develop new projects and directors, and yet we were clearly doing something wrong. We had been trying to increase the number of movies we released, but we'd hit a roadblock. Over the next two days, he said, our goal was to figure out what was missing and to chart out ways to create it and put it in place.

What became immediately apparent was that no one in the room was running from his or her role in these failures. They neither blamed the existing problems on others nor asked for someone else to solve them. The language they used to talk about the issues showed that they thought of them as their own. "Is there a way, other than Braintrust notes, that we could do a better job of teaching our directors the importance of an emotional arc?" asked one person. "I feel like I should be formally sharing my experience with other people," said another. I could not have been prouder. It was obvious that they felt they owned the problem and the responsibility for its solution. Even though we had serious problems, the culture of the place—the willingness to roll up our pant legs and wade into the muck for the good of the company—felt more alive than ever.

As a team, we analyzed our assumptions, why we'd made such flawed choices. Were there essential qualities we needed to look for in our director candidates, going forward, that we'd overlooked in

the past? More significantly, how had we failed to prepare new directors adequately for the daunting job they faced? How many times had we said, "We won't let him or her fail"—only to let them fail? We discussed how we had been blinded by the fact that the directors of our first films—John, Andrew, and Pete—had each figured out how to be a director without formal training, something that we now saw was much rarer than we'd previously believed. We talked about the fact that Andrew, Pete, and Lee had spent years working side by side with John, absorbing his lessons—the need for decisiveness, for example—and his collaborative way of teasing out ideas. Andrew and Pete, the first directors at Pixar to follow in John's footsteps, had been challenged by the process but in the end had succeeded spectacularly. We assumed that others would do the same. But we had to face the fact that as we'd gotten bigger, our newer directors did not have the benefit of that experience.

Then we turned to the future. We identified individuals who we thought had the potential to become directors, listing their strengths and weaknesses and being specific about what we would do to teach them, give them experience, and support them. In the wake of our failures, we still didn't want to make only "safe" choices going forward; we understood that taking creative and leadership risks is essential to who we are and that sometimes this means handing the keys to someone who may not fit the traditional conception of a movie director. And yet, as we made those unconventional choices, everyone agreed, we needed to outline better, more explicit steps to train and prepare those we felt had the necessary skills to make movies. Instead of hoping that our director candidates would absorb our shared wisdom through osmosis, we resolved to create a formal mentoring program that would, in a sense, give to others what Pete and Andrew and Lee had experienced working so closely with John in the early days. Going forward, every established director would check in weekly with his mentees—giving them both practical and motivational advice as they developed ideas they hoped would become feature films.

Later, when I was reflecting on the off-site with Andrew, he made what I think is a profound point. He told me that he thinks he and the other proven directors have a responsibility to be teachers—that this should be a central part of their jobs, even as they continue to make their own films. "The Holy Grail is to find a way that we can teach others how to make the best movie possible with whoever they've got on their crew, because it's just logic that someday we won't be here," he said. "Walt Disney didn't do that. And without him, Disney Animation wasn't able to survive without enduring a decade and a half, if not two, of a slump. That's the real goal: Can we teach in a way that our directors will think smart when we're not around?"

Who better to teach than the most capable among us? And I'm not just talking about seminars or formal settings. Our actions and behaviors, for better or worse, teach those who admire and look up to us how to govern their own lives. Are we thoughtful about how people learn and grow? As leaders, we should think of ourselves as teachers and try to create companies in which teaching is seen as a valued way to contribute to the success of the whole. Do we think of most activities as teaching opportunities and experiences as ways of learning? One of the most crucial responsibilities of leadership is creating a culture that rewards those who lift not just our stock prices but our aspirations as well.

Discussing failure and all its ripple effects is not merely an academic exercise. We face it because by seeking better understanding, we remove barriers to full creative engagement. One of the biggest barriers is fear, and while failure comes with the territory, fear shouldn't have to. The goal, then, is to uncouple fear and failure—to create an environment in which making mistakes doesn't strike terror into your employees' hearts.

How, exactly, do you do that? By necessity, the message companies send to their managers is conflicting: Develop your people,

help them grow into strong contributors and team members, and oh, by the way, make sure everything goes smoothly because there aren't enough resources, and the success of our enterprise depends on your group doing its job on time and on budget. It is easy to be critical of the micromanaging many managers resort to, yet we must acknowledge the rock and the hard place we often place them between. If they have to choose between meeting a deadline and some less well defined mandate to "nurture" their people, they will pick the deadline every time. We tell ourselves that we will devote more time to our people if we, in turn, are given more slack in the schedule or budget, but somehow the requirements of the job always eat up the slack, resulting in increased pressure with even less room for error. Given these realities, managers typically want two things: (1) for everything to be tightly controlled, and (2) to appear to be in control.

But when control is the goal, it can negatively affect other parts of your culture. I've known many managers who hate to be surprised in meetings, for example, by which I mean they make it clear that they want to be briefed about any unexpected news in advance and in private. In many workplaces, it is a sign of disrespect if someone surprises a manager with new information in front of other people. But what does this mean in practice? It means that there are pre-meetings before meetings, and the meetings begin to take on a pro forma tone. It means wasted time. It means that the employees who work with these people walk on eggshells. It means that fear runs rampant.

Getting middle managers to tolerate (and not feel threatened by) problems and surprises is one of our most important jobs; they already feel the weight of believing that if they screw up, there will be hell to pay. How do we get people to reframe the way they think about the process and the risks?

The antidote to fear is trust, and we all have a desire to find something to trust in an uncertain world. Fear and trust are powerful forces, and while they are not opposites, exactly, trust is the best

tool for driving out fear. There will always be plenty to be afraid of, especially when you are doing something new. Trusting others doesn't mean that they won't make mistakes. It means that if they do (or if you do), you trust they will act to help solve it. Fear can be created quickly; trust can't. Leaders must demonstrate their trustworthiness, over time, through their actions—and the best way to do that is by responding well to failure. The Braintrust and various groups within Pixar have gone through difficult times together, solved problems together, and that is how they've built up trust in each other. Be patient. Be authentic. And be consistent. The trust will come.

When I mention authenticity, I am referring to the way that managers level with their people. In many organizations, managers tend to err on the side of secrecy, of keeping things hidden from employees. I believe this is the wrong instinct. A manager's default mode should not be secrecy. What is needed is a thoughtful consideration of the cost of secrecy weighed against the risks. When you instantly resort to secrecy, you are telling people they can't be trusted. When you are candid, you are telling people that you trust them and that there is nothing to fear. To confide in employees is to give them a sense of ownership over the information. The result—and I've seen this again and again—is that they are less likely to leak whatever it is that you've confided.

The people at Pixar have been extremely good at keeping secrets, which is crucial in a business whose profits depend on the strategic release of ideas or products when they are ready and not before. Since making movies is such a messy process, we need to be able to talk candidly, among ourselves, about the mess without having it shared outside the company. By sharing problems and sensitive issues with employees, we make them partners and part-owners in our culture, and they do not want to let each other down.

Your employees are smart; that's why you hired them. So treat them that way. They know when you deliver a message that has been heavily massaged. When managers explain what their plan is

without giving the reasons for it, people wonder what the "real" agenda is. There may be no hidden agenda, but you've succeeded in implying that there is one. Discussing the thought processes behind solutions aims the focus on the solutions, not on second-guessing. When we are honest, people know it.

Pixar's head of management development, Jamie Woolf, put together a mentoring program that pairs new managers with experienced ones. A key facet of this program is that mentors and mentees work together for an extended period of time—eight months. They meet about all aspects of leadership, from career development and confidence building to managing personnel challenges and building healthy team environments. The purposes are to cultivate deep connections and to have a place to share fears and challenges, exploring the skills of managing others by wrestling together with real problems, whether they be external (a volatile supervisor) or internal (an overly active inner critic). In other words, to develop a sense of trust.

While I work with a couple of mentees, I also speak every year to the entire group. In this talk, I tell the story of how, when I was first a manager at New York Tech, I didn't feel like a manager at all. And while I liked the idea of being in charge, I went to work every day feeling like something of a fraud. Even in the early years of Pixar, when I was the president, that feeling didn't go away. I knew many presidents of other companies and had a good idea of their personality characteristics. They were aggressive and extremely confident. Knowing that I didn't share many of those traits, again I felt like a fraud. In truth, I was afraid of failure.

Not until about eight or nine years ago, I tell them, did the imposter feeling finally go away. I have several things to thank for that evolution: my experience of both weathering our failures and watching our films succeed; my decisions, post–*Toy Story,* to recommit myself to Pixar and its culture; and my enjoyment of my

maturing relationship with Steve and John. Then, after fessing up, I ask the group, "How many of *you* feel like a fraud?" And without fail, every hand in the room shoots up.

As managers, we all start off with a certain amount of trepidation. When we are new to the position, we imagine what the job is in order to get our arms around it, then we compare ourselves against our made-up model. But the job is never what we think it is. The trick is to forget our models about what we "should" be. A better measure of our success is to look at the people on our team and see how they are working together. Can they rally to solve key problems? If the answer is yes, you are managing well.

This phenomenon of not perceiving correctly what our job is occurs frequently with new directors. Even if a person works side by side with an experienced director in a supporting role, a role in which they repeatedly demonstrate the abilities to take the reins on their own film, when they actually get the job it isn't quite what they thought it was. There is something scary about discovering that they have responsibilities that were not part of their mental model. In the case of first-time directors, the weight of those responsibilities is not only new, it is further amplified by the track record of our previous films. Every director at Pixar worries that his or her movie will be the one that fails, that breaks our streak of number-one hits. "That pressure is there: You can't be the first bomb," says Bob Peterson, a longtime Pixar writer and voice artist. "What you want is for that pressure to light a fire under you to make you say, 'I'm going to do better.' But there's a fear of not knowing if you can find the right answer. The directors here who are successful are able to just relax and let ideas be born out of that pressure."

Bob jokes that to relieve that pressure, Pixar should intentionally do a bad film "just to correct the market." Of course we'd never set out to make something terrible, but Bob's idea is thought-provoking: Are there ways to prove to your employees that your company doesn't stigmatize failure?

All of this attention on not only allowing but even *expecting* errors has helped make Pixar a unique culture. For proof of just how unique, consider the example of *Toy Story 3* once again. As I said at the start of this chapter, this was the only Pixar production during which we didn't have a major crisis, and after the film came out, I repeatedly said so in public, lauding its crew for racking up not a single disaster during the film's gestation.

You might imagine that the *Toy Story 3* crew would have been happy when I said this, but you'd imagine wrong. So ingrained are the beliefs I've been describing about failure at Pixar that the people who worked on *Toy Story 3* were actually offended by my remarks. They interpreted them to mean that they hadn't tried as hard as their colleagues on other films—that they hadn't pushed themselves enough. That isn't at all what I meant, but I have to admit: I was thrilled by their reaction. I saw it as proof that our culture is healthy.

As Andrew Stanton puts it, "It's gotten to the point that we get worried if a film is not a problem child right away. It makes us nervous. We've come to recognize the signs of invention—of dealing with originality. We have begun to welcome the feeling of, 'Oh, we've never had this exact problem before—and it's incredibly recalcitrant and won't do what we want it to do.' That's familiar territory for us—in a good way."

Rather than trying to prevent all errors, we should assume, as is almost always the case, that our people's intentions are good and that they want to solve problems. Give them responsibility, let the mistakes happen, and let people fix them. If there is fear, there is a reason—our job is to find the reason and to remedy it. Management's job is not to prevent risk but to build the ability to recover.

CHAPTER 7

THE HUNGRY BEAST AND THE UGLY BABY

During the late 1980s and early 1990s, as an ascendant Disney Animation was enjoying a remarkable string of hit films—*The Little Mermaid, Beauty and the Beast, Aladdin, The Lion King*—I began to hear a phrase being used again and again in the executive suites of its Burbank headquarters: "You've got to feed the Beast."

As you may recall, Pixar had entered into a contract to write a graphics system for Disney—the Computer Animation Production System, or CAPS—that would paint and manage animation cels. We began working on CAPS while Disney was producing *The Little Mermaid*, so I had a front-row seat from which to view the way that film's success led to the studio's expansion and to its need for more film projects to justify (and occupy) the growing staff. In other words, I was there to witness the creation of Disney's Beast—and by "Beast" I mean any large group that needs to be fed an uninterrupted diet of new material and resources in order to function.

I should say that none of this was happening by accident or for the wrong reasons. The Walt Disney Company's CEO, Michael

Eisner, and the studio's chairman, Jeffrey Katzenberg, had committed to reviving animation after the long fallow period that followed Walt's death. To their credit, the result was an artistic flourishing that drew on the talents of legendary artists who'd been at the studio for decades as well as the fresh thinking of more recent hires. The films they produced not only were huge economic drivers for the company, but they immediately became iconic in the popular culture and, in turn, prompted the animation explosion that would ultimately enable Pixar to make *Toy Story*.

But the success of each new Disney film also did something else: It created a hunger for more. As the infrastructure of the studio grew to service, market, and promote each successful film, the need for more product in the pipeline only expanded. The stakes were simply too high to let all those employees at all those desks in all those buildings sit idle. If you'd asked around Disney at the time, you would have had trouble finding someone who believed that animated storytelling was a product that could or should be made on an assembly line, even though the term "Feed the Beast" has that very idea embedded in it. In fact, the intentions and values of the high-caliber people working in production were surely admirable. But the Beast is powerful and can overwhelm even the most dedicated individuals. As Disney expanded its release schedule, its need for output increased to the point that it opened animation studios in Burbank, Florida, France, and Australia just to keep up with its appetites. The pressure to create—and quickly!—became the order of the day. To be clear, this happens at many companies, not just in Hollywood, and its unintended effect is always the same: It lessens quality across the board.

After *The Lion King* was released in 1994, eventually grossing $952 million worldwide, the studio began its slow decline. It was hard, at first, to deduce why—there had been some leadership changes, yet the bulk of the people were still there, and they still had the talent and the desire to do great work. Nevertheless, the drought that was beginning then would last for the next sixteen

years: From 1994 to 2010, not a single Disney animated film would open at number one at the box office. I believe this was the direct result of its employees thinking that their job was to feed the Beast.

Seeing even the earliest manifestation of this trend at Disney, I felt an urgency to understand the hidden factors that were behind it. Why? Because I sensed that if we continued to be successful, whatever was happening at Disney Animation would almost certainly happen to us, too.

Originality is fragile. And, in its first moments, it's often far from pretty. This is why I call early mock-ups of our films "ugly babies." They are not beautiful, miniature versions of the adults they will grow up to be. They are truly ugly: awkward and unformed, vulnerable and incomplete. They need nurturing—in the form of time and patience—in order to grow. What this means is that they have a hard time coexisting with the Beast.

The Ugly Baby idea is not easy to accept. Having seen and enjoyed Pixar movies, many people assume that they popped into the world already striking, resonant, and meaningful—fully grown, if you will. In fact, getting them to that point involved months, if not years, of work. If you sat down and watched the early reels of any of our films, the ugliness would be painfully clear. But the natural impulse is to compare the early reels of our films to finished films—by which I mean to hold the new to standards only the mature can meet. Our job is to protect our babies from being judged too quickly. Our job is to protect the new.

Before I go on, I want to say something about the word *protection*. I worry that because it has such a positive connotation, by implication anything being protected seems, ipso facto, worth protecting. But that's not always the case. Sometimes within Pixar, for example, production tries to protect processes that are comfortable and familiar but that don't make sense; legal departments are famous for being overly cautious in the name of protecting their

companies from possible external threats; people in bureaucracies often seek to protect the status quo. *Protection* is used, in these contexts, to further a (small-c) conservative agenda: Don't disrupt what already is. As a business becomes successful, meanwhile, that conservatism gains strength, and inordinate energy is directed toward protecting what has worked so far.

When I advocate for protecting the new, then, I am using the word somewhat differently. I am saying that when someone hatches an original idea, it may be ungainly and poorly defined, but it is also the opposite of established and entrenched—*and that is precisely what is most exciting about it*. If, while in this vulnerable state, it is exposed to naysayers who fail to see its potential or lack the patience to let it evolve, it could be destroyed. Part of our job is to protect the new from people who don't understand that in order for greatness to emerge, there must be phases of not-so-greatness. Think of a caterpillar morphing into a butterfly—it only survives because it is encased in a cocoon. It survives, in other words, because it is protected from that which would damage it. It is protected from the Beast.

Pixar's first battle with the Beast came in 1999, after we'd released two successful films and were putting what we hoped would be our fifth movie, *Finding Nemo,* into production.

I remember Andrew Stanton's initial pitch about Marlin, an overprotective clownfish, and his search for Nemo, his abducted son. It was a brisk day in October, and we had gathered in a crowded conference room to hear Andrew talk through his story beats. His presentation was nothing short of magnificent. The narrative, as he described it, would be intercut with a series of flashbacks that explained what had happened to make Nemo's father such an overprotective worrywart when it came to his son (Nemo's mother and siblings, Andrew said, had been slain by a barracuda). Standing there in the front of the room, Andrew seamlessly wove together two stories: what was happening in Marlin's world, during the epic search he undertakes after Nemo is scooped up by a scuba diver,

and what was happening in the aquarium in Sydney, where Nemo had ended up with a group of tropical fish called "the Tank Gang." The tale Andrew wanted to tell got to the heart of the struggle for independence that often shapes the father-son relationship. And what's more, it was funny.

When Andrew finished his pitch, those of us in attendance were silent for a moment. Then, John Lasseter spoke for all of us when he said, "You had me at the word *fish*."

At this point, the specter of *Toy Story 2*, which had taken such a devastating toll on our employees, still loomed large in our memories. Stretched to the breaking point, we'd emerged from that film with a clear understanding that what we had gone through was not healthy for our employees or our business. We had vowed not to repeat those mistakes on *Monsters, Inc.*, and for the most part, we hadn't. But our determination on that front also meant that *Monsters, Inc.* ended up taking nearly five years to make. In the wake of that, we were actively looking for ways to improve and speed up our process. In this, we were driven by a particular observation: It was obvious to us that a large portion of our costs stemmed from the fact that we never seemed to stop tinkering with the scripts of our movies, even long after we started making them. It didn't take a genius to see that if we could only settle on the story early on, our movies would be much easier—and thus cheaper—to make. This then became our goal—finalize the script *before* we start making the film. After Andrew's tour de force pitch, *Finding Nemo* seemed like the perfect project with which to test our new theory. As we gave Andrew the go-ahead, we were confident that locking in the story early would yield not just a phenomenal movie but a cost-efficient production.

Looking back, I realize we weren't just trying to be more efficient. We were hoping to avoid the messy (and at times uncomfortable) part of the creative process. We were trying to eliminate errors (and, in so doing, to efficiently feed our beast). Of course, it was not to be. All those flashbacks that we'd loved in Andrew's pitch?

They proved confusing when we saw them on early reels—in a Braintrust meeting, Lee Unkrich was the first to call them cryptic and impressionistic, and he lobbied for a more linear storytelling structure. When Andrew tried it, an unexpected benefit emerged. Before, Marlin had come off as unsympathetic and unlikable because it took too long to find out the reason he was being such a smothering father. Now, with a more chronological approach, Marlin was more appealing and sympathetic. Moreover, Andrew found that his intention to weave together two concurrent storylines—the action in the ocean vs. the action in the aquarium—was far more complicated than he had imagined. The tale of the Tank Gang, originally intended as a major throughline, became a subplot. And those were just two of many difficult changes that were made during the production as unforeseen problems presented themselves—and our goal of a predetermined story and a streamlined production fell apart.

Despite our hopes that *Finding Nemo* would be the film that changed the way we did business, we ended up making as many adjustments during production as we had on any other film we had made. The result, of course, was a movie we're incredibly proud of, one that went on to become the second-highest-grossing film of 2003 and the highest-grossing animated film ever.

The only thing it *didn't* do was transform our production process.

My conclusion at the time was that finalizing the story before production began was still a worthy goal—we just hadn't achieved it yet. As we continued to make films, however, I came to believe that my goal was not just impractical but naïve. By insisting on the importance of getting our ducks in a row early, we had come perilously close to embracing a fallacy. Making the process better, easier, and cheaper is an important aspiration, something we continually work on—but *it is not the goal.* Making something great is the goal.

I see this over and over again in other companies: A subversion

takes place in which streamlining the process or increasing production supplants the ultimate goal, with each person or group thinking they're doing the right thing—when, in fact, they have strayed off course. When efficiency or consistency of workflow are not balanced by other equally strong countervailing forces, the result is that new ideas—our ugly babies—aren't afforded the attention and protection they need to shine and mature. They are abandoned or never conceived of in the first place. Emphasis is placed on doing safer projects that mimic proven money-makers just to keep something—anything!—moving through the pipeline (see *The Lion King 1½*, a direct-to-video effort that came out in 2004, six years after *The Lion King 2: Simba's Pride*). This kind of thinking yields predictable, unoriginal fare because it prevents the kind of organic ferment that fuels true inspiration. But it does feed the Beast.

When I talk about the Beast and the Baby, it can seem very black and white—that the Beast is all bad and the Baby is all good. The truth is, reality lies somewhere in between. The Beast is a glutton but also a valuable motivator. The Baby is so pure and unsullied, so full of potential, but it's also needy and unpredictable and can keep you up at night. The key is for your Beast and your Babies to coexist peacefully, and that requires that you keep various forces in balance.

How do we balance these forces that seem so at odds, especially when it always appears to be such an unfair fight? The needs of the Beast seem to trump the needs of the Baby every time, given that the Baby's true worth is often unknown or in doubt and can remain so for months on end. How do we hold off the Beast, curbing its appetites, without putting our companies in jeopardy? Because every company needs its Beast. The Beast's hunger translates into deadlines and urgency. That's a good thing, as long as the Beast is kept in its place. And that's the tough part.

Many talk of the Beast as if it is a greedy, unthinking creature, insistent and beyond our control. But in fact, any group that produces a product or drives revenue could be considered to be part of the Beast, including marketing and distribution. Each group operates according to its own logic, and many have neither the responsibility for the quality of what is produced nor a good understanding of their own impact on that quality. It simply isn't their problem; keeping the process going and the money flowing is. Each group has its own goals and expectations and acts according to its own appetites.

In many businesses, the Beast requires so much attention that it acquires inordinate power. The reason: It is expensive, accounting for the vast majority of most companies' costs. Any company's profit margin depends in large part on how effectively it uses its people: The auto workers on the assembly line who are being paid whether the line is in motion or not; the stock boys in Amazon's warehouses who come to work regardless of how many shoppers are online that day; the lighting and shading experts (to pick one of dozens of examples in the world of animation) who must wait for many others to complete their duties on a particular shot before they can begin to do their work. If inefficiencies result in anyone waiting for too long, if the majority of your people aren't engaged in the work that drives your revenue most of the time, you risk being devoured from the inside out.

The solution, of course, is to feed the Beast, to occupy its time and attention, putting its talents to use. Even when you do that, though, the Beast cannot be sated. It is one of life's cruel ironies that when it comes to feeding the Beast, success only creates more pressure to hurry up and succeed again. Which is why at too many companies, the schedule (that is, the need for product) drives the output, not the strength of the ideas at the front end. I want to be careful not to imply that it is the individual people who comprise the Beast who are the problem—they are doing the best they can to accomplish what they've been charged with doing. Despite good

intentions, the result is troubling: Feeding the Beast becomes the central focus.

The Beast thrives not only within animation or movie companies, of course. No creative business is immune, from technology to publishing to manufacturing. But all Beasts have one thing in common. Frequently, the people in charge of the Beast are the most organized people in the company—people wired to make things happen on track and on budget, as their bosses expect them to do. When those people and their interests become too powerful—when there is not sufficient push-back to protect new ideas—things go wrong. The Beast takes over.

The key to preventing this is balance. I see the give and take between different constituencies in a business as central to its success. So when I talk about taming the Beast, what I really mean is that keeping its needs balanced with the needs of other, more creative facets of your company will make you stronger.

Let me give you an example of what I mean, drawn from the business I know best. In animation, we have many constituencies: story, art, budget, technology, finance, production, marketing, and consumer products. The people within each constituency have priorities that are important—and often opposing. The writer and director want to tell the most affecting story possible; the production designer wants the film to look beautiful; the technical directors want flawless effects; finance wants to keep the budgets within limits; marketing wants a hook that is easily sold to potential viewers; the consumer products people want appealing characters to turn into plush toys and to plaster on lunchboxes and T-shirts; the production managers try to keep everyone happy—and to keep the whole enterprise from spiraling out of control. And so on. Each group is focused on its own needs, which means that no one has a clear view of how their decisions impact other groups; each group is under pressure to perform well, which means achieving stated goals.

Particularly in the early months of a project, these goals—which are subgoals, really, in the making of a film—are often easier

to articulate and explain than the film itself. But if the director is able to get everything he or she wants, we will likely end up with a film that's too long. If the marketing people get their way, we will only make a film that mimics those that have already been "proven" to succeed—in other words, familiar to viewers but in all likelihood a creative failure. Each group, then, is trying to do the right thing, but they're pulling in different directions.

If any one of those groups "wins," we lose.

In an unhealthy culture, each group believes that if their objectives trump the goals of the other groups, the company will be better off. In a healthy culture, all constituencies recognize the importance of balancing competing desires—they want to be heard, but they don't have to win. Their interaction with one another—the push and pull that occurs naturally when talented people are given clear goals—yields the balance we seek. But that only happens if they understand that achieving balance is a central goal of the company.

While the idea of balance always sounds good, it doesn't capture the dynamic nature of what it means to actually achieve balance. Our mental image of balance is somewhat distorted because we tend to equate it with stillness—the calm repose of a yogi balancing on one leg, a state without apparent motion. To my mind, the more accurate examples of balance come from sports, such as when a basketball player spins around a defender, a running back bursts through the line of scrimmage, or a surfer catches a wave. All of these are extremely dynamic responses to rapidly changing environments. In the context of animation, directors have told me that they see their engagement when making a film as extremely active. "It seems like it's good psychologically to expect these movies to be troublesome," Byron Howard, one of our directors at Disney, told me. "It's like someone saying, 'Here, take care of this tiger, but watch your butt, they're tricky.' I feel like my butt is safer when I *expect* the tiger to be tricky."

As director Brad Bird sees it, every creative organization—be it an animation studio or a record label—is an ecosystem. "You need all the seasons," he says. "You need storms. It's like an ecology. To view lack of conflict as optimum is like saying a sunny day is optimum. A sunny day is when the sun wins out over the rain. There's no conflict. You have a clear winner. But if every day is sunny and it doesn't rain, things don't grow. And if it's sunny all the time—if, in fact, we don't ever even *have* night—all kinds of things don't happen and the planet dries up. The key is to view conflict as *essential,* because that's how we know the best ideas will be tested and survive. You know, it can't only be sunlight."

It is management's job to figure out how to help others see conflict as healthy—as a route to balance, which benefits us all in the long run. I'm here to say that it can be done—but it is an unending job. A good manager must always be on the lookout for areas in which balance has been lost. For example, as we expand our animation staff at Pixar, which has the positive impact of allowing us to do more quality work, there is also a negative impact that we must deal with: Meetings have become larger and less intimate, with each participant having a proportionally smaller ownership in the final film (which can mean feeling less valued). In response, we created smaller subgroups in which departments and individuals are encouraged to feel they have a voice. In order to make corrections like this—to reestablish balance—managers must be diligent about paying attention.

In chapter 4, I talked about a key moment in Pixar's development, as we embarked on making *Toy Story 2,* when we realized that we never wanted to foster a culture in which some workers were viewed as first-class, and others as second-class, where some employees were held to a higher standard and others were effectively relegated to the B-team. This may have sounded vaguely idealistic to some, but it was just another way of saying that we believe in preserving balance in our culture. If some employees or constituencies or goals are perceived to matter more, or to "win," there can be no balance.

Imagine a balance board—one of those planks of wood that rests, at its midsection, on a cylinder. The trick is to place one foot on each end of the board, then shift your weight in order to achieve equilibrium as the cylinder rolls beneath you. If there's a better example of balance—and of the ability to manage two competing forces (the left and the right)—I can't think of one. But while I can try to explain to you how to do it, show you videos, and suggest different methods for getting started, I could never fully explain *how* to achieve balance. That you learn only by doing—by allowing your conscious and subconscious mind to figure it out while in motion. With certain jobs, there isn't any other way to learn than by doing—by putting yourself in the unstable place and then feeling your way.

I often say that managers of creative enterprises must hold lightly to goals and firmly to intentions. What does that mean? It means that we must be open to having our goals change as we learn new information or are surprised by things we thought we knew but didn't. As long as our intentions—our values—remain constant, our goals can shift as needed. At Pixar, we try never to waver in our ethics, our values, and our intention to create original, quality products. We are willing to adjust our goals as we learn, striving to get it right—*not* necessarily to get it right the first time. Because that, to my mind, is the only way to establish something else that is essential to creativity: a culture that protects the new.

For many years, I was on a committee that read and selected papers to be published at SIGGRAPH, the annual computer graphics conference I mentioned in chapter 2. These papers were supposed to present ideas that advanced the field. The committee was composed of many of the field's most prominent players, all of whom I knew; it was a group that took the task of selecting papers very seriously. At each of the meetings, I was struck that there seemed to be two kinds of reviewers: some who would look for flaws in the

papers, and then pounce to kill them; and others who started from a place of seeking and promoting good ideas. When the "idea protectors" saw flaws, they pointed them out gently, in the spirit of improving the paper—not eviscerating it. Interestingly, the "paper killers" were not aware that they were serving some other agenda (which was often, in my estimation, to show their colleagues how high their standards were). Both groups thought they were protecting the proceedings, but only one group understood that by looking for something new and surprising, they were offering the most valuable kind of protection. Negative feedback may be fun, but it is far less brave than endorsing something unproven and providing room for it to grow.

You'll notice, I hope, that I'm in no way asserting that protecting the new should mean isolating the new. As much as I admire the efficiency of the caterpillar in its cocoon, I do not believe that creative products should be developed in a vacuum (arguably, that was one of the mistakes we made on the film about blue-footed newts). I know some people who like to keep their gem completely to themselves while they polish it. But allowing this kind of behavior isn't protection. In fact, it can be the opposite: a failure to protect your employees from themselves. Because if history is any guide, some are diligently trying to polish a brick.

At Pixar, protection means populating story meetings with idea protectors, people who understand the difficult, ephemeral process of developing the new. It means supporting our people, because we know that the best ideas emerge when we've made it safe to work through problems. (Remember: People are more important than ideas.) Finally, it does not mean protecting the new forever. At some point, the new has to engage with the needs of the company—with its many constituencies and, yes, with the Beast. As long as the Beast is not allowed to run roughshod over everyone else, as long as we don't let it invert our values, its presence can be an impetus for progress.

At some point, the new idea has to move from the cocoon of

protection into the hands of other people. This engagement process is typically very messy and can be painful. Once, after one of our special effects software guys resigned, he wrote me an email containing two complaints. First, he said, he didn't like that his job involved cleaning up so many little problems caused by the new software. Second, he wrote, he was disappointed that we weren't taking more technical risks in our movies. The irony was that his job was to help solve problems that arose precisely because we *were* taking a major technical risk by implementing new software systems. The mess that he encountered—the reason he quit—was, in fact, caused by the complexity of trying to do something new. I was struck by how he didn't understand that taking a risk necessitated a willingness to deal with the mess created by the risk.

So: When is that magic moment when we shift from protection to engagement? This is sort of like asking the mama bird how she knows it's time to nudge her baby out of the nest. Will the baby have the strength to fly on its own? Will it figure out how to use its wings on the way down, or will it crash to earth?

The fact is, we struggle with this question on every film. Hollywood famously uses the term *green light* to reference the moment in a project's development when a studio officially decides it is viable (and many, many projects remain stuck in "development hell," never to emerge to face the world). In Pixar's history, though, we have only developed one feature film that didn't make it through to completion.

One of my favorite examples of how protection can give way to engagement comes not from a Pixar film but from our intern program. In 1998, I decided that the company would benefit from a summer program—like those at many creative companies—that would bring bright young people into Pixar for a couple of months to learn from working with experienced production people. But when I ran the idea past our production managers, they said no thanks: They had no interest in taking interns on. At first, I thought this was because they were too busy to spend time attending to in-

experienced college kids and teaching them the ropes. But when I probed more deeply, it became clear that the resistance wasn't a question of time but of money. They didn't want the added expense of paying the interns. They only had so much cash in their budget and would rather spend it on experienced people. They had only so much time and resources, and the Beast was bearing down upon them. Their reaction was a form of protection, I suppose, motivated by a desire to protect the film and to aim every dollar at making it a success. But this stance didn't benefit the company as a whole. Internship programs are mechanisms for spotting talent and seeing if outsiders fit in. Moreover, new people bring an infusion of energy. To me, it seemed like a win-win.

I suppose I could simply have mandated that our production managers add the cost of adding interns to their budgets. But that would have made this new idea the enemy—something to resent. Instead, I decided to make the interns a corporate expense—they would essentially be available, at no extra cost, to any department who wanted to take them on. The first year, Pixar hired eight interns who were placed in the animation and technical departments. They were so eager and hard-working and they learned so fast that every one of them, by the end, was doing real production work. Seven of them ultimately returned, after graduation, to work for us in a full-time capacity. Every year since then, the program has grown a little more, and every year more managers have found themselves won over by their young charges. It wasn't just that the interns lightened the workload by taking on projects. Teaching them Pixar's ways made our people examine how they did things, which led to improvements for all. A few years in, it became clear that we didn't need to fund interns out of the corporate coffers anymore; as the program proved its worth, people became willing to absorb the costs into their budgets. In other words, the intern program needed protection to establish itself at first, but then grew out of that need. Last year, we had ten thousand applications for a hundred spots.

Whether it's the kernel of a movie idea or a fledgling internship program, the new needs protection. Business-as-usual does not. Managers do *not* need to work hard to protect established ideas or ways of doing business. The system is tilted to favor the incumbent. The challenger needs support to find its footing. And protection of the new—of the future, not the past—must be a conscious effort.

I can't help but think of one of my favorite moments in any Pixar movie, when Anton Ego, the jaded and much-feared food critic in *Ratatouille,* delivers his review of Gusteau's, the restaurant run by our hero Remy, a rat. Voiced by the great Peter O'Toole, Ego says that Remy's talents have "challenged my preconceptions about fine cooking . . . [and] have rocked me to my core." His speech, written by Brad Bird, similarly rocked me—and, to this day, sticks with me as I think about my work.

"In many ways, the work of a critic is easy," Ego says. "We risk very little yet enjoy a position over those who offer up their work and their selves to our judgment. We thrive on negative criticism, which is fun to write and to read. But the bitter truth we critics must face is that in the grand scheme of things, the average piece of junk is probably more meaningful than our criticism designating it so. But there are times when a critic truly risks something, and that is in the discovery and defense of the new. The world is often unkind to new talent, new creations. The new needs friends."

CHAPTER 8

CHANGE AND RANDOMNESS

There's nothing quite like the feeling you get, deep in your gut, when you're about to stand up in front of your entire company and say something you know has the potential to be upsetting. The day Steve, John, and I called an all-employee meeting to announce our decision to sell Pixar to Disney in 2006 was definitely one of those moments. We knew that the prospect of our little studio being absorbed into a much larger entity would worry many people. While we'd worked hard to put safeguards in place that would ensure our independence, we still expected our employees to be fearful that the merger would negatively impact our culture. I'll say more about the specific steps we took to protect Pixar in a later chapter, but here I want to discuss what happened when, in my eagerness to ease my colleagues' fears, I stood up and assured them that Pixar would not change.

It was one of the dumbest things I've ever said.

For the next year or so, whenever we wanted to try something new or rethink an established way of working, a steady stream of

alarmed and upset people would show up at my office. "You promised the merger wouldn't affect the way we work," they'd say. "You said that Pixar would never change."

This happened enough that I called another company-wide meeting to explain myself. "What I *meant*," I said, "was that we aren't going to change *because* we were acquired by a larger company. We will still go through the kinds of changes that we would have gone through anyway. Furthermore, we are *always* changing, because change is a good thing."

I was glad I'd cleared that up. Except that I hadn't. In the end, I had to give the "Of course we will continue to change" speech three times before it finally sunk in.

What was interesting to me was that the changes that sparked so much concern had nothing to do with the merger. These were the normal adjustments that have to be made when a business expands and evolves. It's folly to think you can avoid change, no matter how much you might want to. But also, to my mind, you *shouldn't* want to. There is no growth or success without change.

For example, around the time of the merger, we were evaluating how to strike a balance between original films and sequels. We knew that audiences who loved our films were eager to see more stories set in those worlds (and, of course, the marketing and consumer products people want films that are easier to sell, which sequels always are). However, if we only made sequels, Pixar would wither and die. I thought of sequels as a sort of creative bankruptcy. We needed a constant churn of new ideas, even though we knew that original films are riskier. We recognized that making sequels, which were likely to do well at the box office, gave us more leeway to take those risks. Therefore, we came to the conclusion that a blend—one original film each year and a sequel every other year, or three films every two years—seemed a reasonable way to keep us both financially and creatively healthy.

At that point, Pixar had undertaken only one sequel, *Toy Story 2*. So our decision, because it occurred in such proximity to

the merger, made many people assume that Disney was pressuring us to make more sequels. This isn't what happened. In fact, Disney gave us a great deal of latitude. Though we said this at the time, our words were greeted with skepticism.

We experienced similar confusion around the issue of office space. As we staffed up to meet the more intense production demands, we quickly outgrew our main Pixar building. Needing more room, we leased an annex a few blocks away that would house the next production we were developing, *Brave*, as well as the engineers in the software tools group, who were working on the next generation of our animation software. Soon after, people began showing up in my office again. Why, they wanted to know, were we separating our tools engineers from all of our production artists except those working on *Brave*? Why were we splitting up our story and art departments, who were accustomed to sitting together?

In short, it seemed like every issue, big or small, that arose around this time was chalked up to the merger: "You said things wouldn't change! You're breaking your word! We don't want to lose the old Pixar!" I should say that this outcry came despite the fact that the measures we had put in place to protect Pixar's culture were *working*—and, in my view, were a model for how to maintain cultural integrity after a merger. Still, people felt vulnerable—and that bred suspicion. More and more, I began to think that many of our employees viewed *any* change as a threat to the Pixar way (and, as such, to our ability to be successful going forward).

People want to hang on to things that work—stories that work, methods that work, strategies that work. You figure something out, it works, so you keep doing it—this is what an organization that is committed to learning does. And as we become successful, our approaches are reinforced, and we become even more resistant to change.

Moreover, it is precisely because of the inevitability of change that people fight to hold on to what they know. Unfortunately, we often have little ability to distinguish between what works and is

worth hanging on to and what is holding us back and worth discarding. If you polled the employees of any creative company, my guess is that the vast majority would say they *believe* in change. But my experience, postmerger, taught me something else: Fear of change—innate, stubborn, and resistant to reason—is a powerful force. In many ways, it reminded me of Musical Chairs: We cling as long as possible to the perceived "safe" place that we already know, refusing to loosen our grip until we feel sure another safe place awaits.

In a company like Pixar, each individual's processes are deeply interconnected with those of other people, and it is nearly impossible to get everyone to change in the same way, at the same pace, all at once. Frequently, trying to force simultaneous change just doesn't seem worth it. How, as managers, do we differentiate between sticking with the tried-and-true and reaching for some unknown that might—or might not—be better?

Here's what we all know, deep down, even though we might wish it weren't true: Change is going to happen, whether we like it or not. Some people see random, unforeseen events as something to fear. I am not one of those people. To my mind, randomness is not just inevitable; it is part of the beauty of life. Acknowledging it and appreciating it helps us respond constructively when we are surprised. Fear makes people reach for certainty and stability, neither of which guarantee the safety they imply. I take a different approach. Rather than fear randomness, I believe we can make choices to see it for what it is and to let it work for us. The unpredictable is the ground on which creativity occurs.

Our tenth movie, *Up*, would be one of our most emotionally rich and original films, but it was also a case study in change and randomness. Conceived and directed by Pete Docter, it would be heralded by critics as a heartfelt adventure impeccably crafted with wit and depth. But boy, did it ever change during its development.

In the first version, there was a castle floating in the sky, completely unconnected to the world below. In this castle lived a king and his two sons, who were each vying to inherit the kingdom. The sons were opposites—they couldn't stand each other. One day, they both fell to earth. As they wandered around, trying to get back to their castle in the sky, they came across a tall bird who helped them understand each other.

This version was intriguing, but ultimately it could not be made to work. Those who saw it had trouble empathizing with spoiled princes or understanding the rules of this strange, floating world. Pete recalls that he had to think hard, then, about what he was trying to express. "I was after a feeling—an experience of life," he says. "For me, there are days when the world is overwhelming—especially when I'm directing a crew of three hundred people. As a result, I often daydream of running away. I have lots of daydreams about getting marooned on a tropical island or walking alone across America. I think we can all relate to the idea of wanting to get away from everything. Once I was able to understand what I was after, we were able to retool the story to better communicate that feeling."

Only two things survived from that original version, the tall bird and the title: *Up*.

For the next pass, Pete and his team introduced an old man, Carl Fredrickson, whose lifelong love affair with his childhood sweetheart Ellie was summarized in a brilliant prologue that set the emotional tone for the rest of the film. After Ellie dies, a grief-stricken Carl attaches his house to a huge bouquet of balloons that makes the structure slowly lift into the sky. He soon discovers that he has an eight-year-old stowaway (and eager cub scout) with him named Russell. Eventually, the house lands on an abandoned Soviet-era spy dirigible that's camouflaged to look like a giant cloud. Much of this version of the story unfolded on this airship until someone noted that—while it worked okay story-wise—it bore a slight resemblance to an idea Pixar had optioned that had to

do with clouds. Though Pete had not been inspired at all by that idea, the echo felt too strong. So it was back to the drawing board.

In the third version, Pete and his team dumped the cloud, but kept the seventy-eight-year-old Carl, his sidekick Russell, the tall bird, and the idea of the house being lifted into the sky by balloons. Together, Carl and Russell floated in the house to a flat-topped Venezuelan mountain, called a tepui, where they encountered a famous explorer named Charles Muntz, whom Frederickson had read about and been inspired by when he was a boy. The reason Muntz hadn't died of old age by this point was that the aforementioned bird laid eggs that had a magical, fountain-of-youth effect if you ate them. However, the egg mythology was complicated and got in the way of the core story—it felt like too much of an aside. So Pete revised again.

In the fourth iteration, there were no youth-prolonging eggs—Pete had taken them out. Which left us with a chronological problem: While the emotional throughline of the film was working, the age difference between Muntz and Carl (who'd admired him since childhood) should have meant that Muntz was pushing a hundred. But we were late in the game—too late to fix it—and in the end, we simply decided not to address it. We've found over the years that if people are enjoying the world you've created, they will forgive little inconsistencies, if they notice them at all. In this case, nobody noticed—or if they did, they didn't care.

Up had to go through these changes—changes that unfolded over not months but years—to find its heart. Which meant that the people working on *Up* had to be able to roll with that evolution without panicking, shutting down, or growing discouraged. It helped that Pete understood what they were feeling.

"It wasn't until I finished directing *Monsters, Inc.* that I realized failure is a healthy part of the process," he told me. "Throughout the making of that film, I took it personally—I believed my mistakes were personal shortcomings, and if I were only a better director I wouldn't make them." To this day, he says, "I tend to flood and

freeze up if I'm feeling overwhelmed. When this happens, it's usually because I *feel* like the world is crashing down and all is lost. One trick I've learned is to force myself to make a list of what's actually wrong. Usually, soon into making the list, I find I can group most of the issues into two or three larger all-encompassing problems. So it's really not all that bad. Having a finite list of problems is much better than having an illogical feeling that *everything* is wrong."

It also helped that Pete never lost sight of his mission on *Up*, which was to drill down to the emotional core of his characters and then build the story around that. I've heard people who've been on Pete's crews say that they would volunteer to take out the trash if it meant getting to work with him again. He is beloved. But the path he followed on *Up* was difficult and unpredictable; there was nothing about where the movie started that indicated where it would end up. It wasn't a matter of unearthing a buried story; in the beginning, there *was* no story.

"If I start on a film and right away know the structure—where it's going, the plot—I don't trust it," Pete says. "I feel like the only reason we're able to find some of these unique ideas, characters, and story twists is through discovery. And, by definition, 'discovery' means you don't know the answer when you start. This could just be my Lutheran, Scandinavian upbringing, but I believe life should not be easy. We're meant to push ourselves and try new things—which will definitely make us feel uncomfortable. Living through a few big catastrophes helps. After people survived *A Bug's Life* and *Toy Story 2*, they realized the pressure led to some pretty cool ideas."

Pete has a few methods he uses to help manage people through the fears brought on by pre-production chaos. "Sometimes in meetings, I sense people seizing up, not wanting to even talk about changes," he says. "So I try to trick them. I'll say, 'This would be a big change if we were really going to do it, but just as a thought exercise, what if . . .' Or, 'I'm not actually suggesting this, but go

with me for a minute . . .' If people anticipate the production pressures, they'll close the door to new ideas—so you have to pretend you're not actually going to do anything, we're just talking, just playing around. Then if you hit upon some new idea that clearly works, people are excited about it and are happier to act on the change."

Another trick is to encourage people to play. "Some of the best ideas come out of joking around, which only comes when you (or the boss) give yourself permission to do it," Pete says. "It can feel like a waste of time to watch YouTube videos or to tell stories of what happened last weekend, but it can actually be very productive in the long run. I've heard some people describe creativity as 'unexpected connections between unrelated concepts or ideas.' If that's at all true, you have to be in a certain mindset to make those connections. So when I sense we're getting nowhere, I just shut things down. We all go off to something else. Later, once the mood has shifted, I'll attack the problem again."

This idea—that change is our friend because only from struggle does clarity emerge—makes many people uncomfortable, and I understand why. Whether you're coming up with a fashion line or an ad campaign or a car design, the creative process is an expensive undertaking, and blind alleys and unforeseen snafus inevitably drive up your costs. The stakes are so high, and the crises that pop up can be so unpredictable, that we try to exert control. The potential cost of failure appears far more damaging than that of micromanaging. But if we shun such necessary investment—tightening up controls because we fear the risk of being exposed for having made a bad bet—we become the kind of rigid thinkers and managers who impede creativity.

What is it, exactly, that people are *really* afraid of when they say they don't like change? There is the discomfort of being confused or the extra work or stress the change may require. For many people, changing course is also a sign of weakness, tantamount to admitting that you don't know what you are doing. This strikes me as particularly bizarre—personally, I think the person who can't change his or her mind is dangerous. Steve Jobs was known for changing his mind instantly in the light of new facts, and I don't know anyone who thought he was weak.

Managers often see change as a threat to their existing business model—and, of course, it is. In the course of my life, the computer industry has moved from mainframes to minicomputers to workstations to desktop computers and now to iPads. Each machine had a sales, marketing, and engineering organization built around it, and thus the shift from one to the next required radical changes to the organization. In Silicon Valley, I have seen the sales forces of many computer manufacturers fight to maintain the status quo, even as their resistance to change caused their market share to be gobbled up by rivals—a short-term view that sank many companies. One good example is Silicon Graphics, whose sales force was so accustomed to selling large, expensive machines that they fiercely resisted the transition to more economical models. Silicon Graphics still exists, but I rarely hear about them anymore.

"Better the devil you know than the devil you don't." For many, these are words to live by. Politicians master whatever system it took to get elected, and afterward there is little incentive to change it. Companies of all sorts hire lobbyists to keep the government from changing anything that would disrupt their way of doing business. In Hollywood, there are throngs of agents, lawyers, and so-called talent (actors and other performers) who recognize that the system is seriously flawed, but they don't attempt to change it because stepping outside the norm could eat into their revenues, at least for the short-term. Why would anybody want to change a system in ways that would endanger—or even eliminate—one's own job?

Self-interest guides opposition to change, but lack of self-awareness fuels it even more. Once you master any system, you

typically become blind to its flaws; even if you can see them, they appear far too complex and intertwined to consider changing. But to remain blind is to risk becoming the music industry, in which self-interest (trying to protect short-term gains) trumped self-awareness (few people realized that the old system was about to be overtaken altogether). Industry executives clung to their outdated business model—selling albums—until it was too late and file sharing and iTunes had turned everything upside down.

To be clear, I am not endorsing change for change's sake. There are often good reasons to hang on to things that work. The wrong kind of change can endanger our projects, which is why those who oppose it are in earnest when they say that they just want to protect the companies in which they work. When people who run bureaucracies balk at change, they are usually acting in the service of what they think is right. Many of the rules that people find onerous and bureaucratic were put in place to deal with real abuses, problems, or inconsistencies or as a way of managing complex environments. But while each rule may have been instituted for good reason, after a while a thicket of rules develops that may not make sense in the aggregate. The danger is that your company becomes overwhelmed by well-intended rules that only accomplish one thing: draining the creative impulse.

So we've covered change. Where does randomness fit in? Once, when I was on a retreat in Marin, I heard a delightful—and possibly apocryphal—story about what happened when the British introduced golf to India in the 1820s. Upon building the first golf course there, the Royal Calcutta, the British discovered a problem: Indigenous monkeys were intrigued by the little white balls and would swoop down out of the trees and onto the fairways, picking them up and carrying them off. This was a disruption, to say the least. In response, officials tried erecting fences to keep the monkeys out, but the monkeys climbed right over. They tried capturing

and relocating the monkeys, but the monkeys kept coming back. They tried loud noises to scare them away. Nothing worked. In the end, they arrived at a solution: They added a new rule to the game—"Play the ball where the monkey drops it."

Randomness is part of the folklore of history and literature; it has been studied extensively by mathematicians, scientists, and statisticians; it is deeply embedded in everything we do. We are aware of it in the abstract sense, by which I mean we have developed methods to acknowledge its existence. We talk about lucky breaks, good days and bad days, crazy coincidences, fortune smiling upon us, or being in the wrong place at the wrong time; we know that a drunk driver can come out of nowhere or, as the saying goes, that we could be hit by a bus tomorrow. Yet randomness remains stubbornly difficult to understand.

The problem is that our brains aren't wired to think about it. Instead, we are built to look for patterns in sights, sounds, interactions, and events in the world. This mechanism is so ingrained that we see patterns even when they aren't there. There is a subtle reason for this: We can store patterns and conclusions in our heads, but we cannot store randomness itself. Randomness is a concept that defies categorization; by definition, it comes out of nowhere and can't be anticipated. While we intellectually accept that it exists, our brains can't completely grasp it, so it has less impact on our consciousness than things we can see, measure, and categorize.

Here's a simple example: You leave late for work but still arrive in time for your 9 A.M. meeting. Congratulating yourself, you are oblivious to the fact that two minutes behind you on the freeway, someone blew a tire and blocked traffic for a half-hour. Without knowing it, you narrowly missed being late. Perhaps you draw the conclusion that tomorrow, you can afford to sleep a little later. But if you'd been in that traffic jam, you'd draw the opposite conclusion: Never leave late again. Because it is our nature to attach great significance to the patterns we witness, we ignore the things we cannot see and make deductions and predictions accordingly.

This is the puzzle of trying to understand randomness: Real patterns are mixed in with random events, so it is extraordinarily difficult for us to differentiate between chance and skill. Did you arrive early to work because you left on time, planned ahead, and drove carefully? Or were you just in the right place at the right time? Most people would choose the former answer without a second thought—without even acknowledging the latter was an option. As we try to learn from the past, we form patterns of thinking based on our experiences, not realizing that the things that happened have an unfair advantage over the things that didn't. In other words, we can't see the alternatives that might well have happened if not for some small chance event. When a bad thing happens, people will draw conclusions that might include conspiracy or forces acting against them or, conversely, if a good thing happens, that they are brilliant and deserving. But these kinds of misperceptions ultimately deceive us. And this has consequences in business—and for the way we manage.

When companies are successful, it is natural to assume that this is a result of leaders making shrewd decisions. Those leaders go forward believing that they have figured out the key to building a thriving company. In fact, randomness and luck played a key role in that success.

If you run a business that is covered with any frequency by the media, you may face another challenge. Journalists tend to look for patterns that can be explained in a relatively small number of words. If you haven't done the work of teasing apart what is random and what you have intentionally set in motion, you will be overly influenced by the analysis of outside observers, which is often oversimplified. When managing a company that is often in the news, as Pixar is, we must be careful not to believe our own hype. I say this knowing that it is difficult to resist, especially when we are flying high and tempted to think we have done everything right. But the truth is, I have no way of accounting for all of the factors involved in any given success, and whenever I learn more, I

have to revise what I think. That's not a weakness or a flaw. That's reality.

Physics is a discipline that is dedicated to trying to find the underlying mechanisms that govern how our world works. One truly influential idea in physics is the famous principle known as Occam's Razor, attributed to William of Ockham, a fourteenth-century English logician. On the most basic level, it says that if there are competing explanations for why something occurs the way it does, you should pick the one that relies on the fewest assumptions and is thus the simplest. When Renaissance astronomers were trying to explain the movement of the planets, for example, there were many complex theories. The prevailing belief was that orbits were perfect circles, or epicycles, but as planetary observation improved, the models based on circles had to be made extremely complex in order to work. Then, Johannes Kepler hit upon the comparatively simple idea that the orbit of every planet is an ellipse, with the sun at one of two foci within it. The explanation's simplicity seemed proof that it was the right one—and with that simplicity came great power.

Unlike some theoretical ideas, Occam's Razor accords easily with human nature. In general, we seek what we think are simple explanations for events in our lives because we believe the simpler something is, the more fundamental—the more true—it is. But when it comes to randomness, our desire for simplicity can mislead us. Not everything is simple, and to try to force it to be is to misrepresent reality.

I believe that the inappropriate application of simple rules and models onto complex mechanisms causes damage—to whatever project is at hand and even to the company as a whole. The simple explanation is so desirable that it is often embraced even when it's completely inappropriate.

So what if we oversimplify in order to get through our days? So what if we hold tight to familiar ideas that give us the answers we crave? What does it matter? In my view, it matters a lot. In creative

endeavors, we must face the unknown. But if we do so with blinders on—if we shut out reality in the interest of keeping things simple—we will not excel. The mechanisms that keep us safe from unknown threats have been hardwired into us since before our ancestors were fighting off saber-toothed tigers with sticks. But when it comes to creativity, the unknown is not our enemy. If we make room for it instead of shunning it, the unknown can bring inspiration and originality. How, then, do we make friends with the random and unknowable? How do we get more comfortable with our lack of control? It helps to understand just how pervasive randomness is.

One mathematical concept that everybody understands (though they may not know the name for it) is linearity—the idea that things proceed along the same course or repeat themselves in predictable ways. The rhythm of the day or the year is always the same—it's a repetitive cycle. The sun comes up. The sun goes down. Monday is followed by Tuesday. February is cold, August is warm. None of that feels like change—or, at least, it feels like predictable, understandable change. It is linear, and that is comforting.

A slightly less obvious concept is that of the bell curve, although most of us have an intuitive sense of what it means. In school we are sometimes graded on the bell curve—with a few people getting poor grades, a few getting excellent grades, and the rest bunched in the middle. If you plotted these test results on a graph, putting the scores on one axis and the number of people who received them on the other, the result is shaped like a bell. Human height works the same way, with most adults between five feet and six feet tall, and fewer numbers on either extreme. Professionals such as doctors or plumbers also have a similar distribution in their abilities—some are extraordinary, and some you wouldn't trust to tie your shoes. But most exist in the range between excellent and bumbling.

We are quite adept at working with repeatable events and at understanding bell-shaped variance. However, since we aren't good at modeling random events, we tend to use the mental facilities that we are good at and apply them to our view of the world, even when such an application is demonstrably wrong. Randomness, for example, doesn't occur in a linear fashion. For one thing, random processes do not evolve only in one way; by definition, they are indeterminate. So how do we develop ways of understanding randomness? By which I mean: How can we think clearly about unexpected events that are lurking out there that don't fit any of our existing models?

There is a third concept, also from the world of mathematics, that can help: stochastic self-similarity. *Stochastic* simply means random or chance; *self-similarity* describes the phenomenon—found in everything from stock market fluctuations to seismic activity to rainfall—of patterns that look the same when viewed at different degrees of magnification. If you break off a branch of a tree and hold that branch upright, for example, it looks a lot like a little tree. A stretch of coastline has that craggy coastline shape whether it is glimpsed from a hang glider or from outer space. Look at a tiny section of a snowflake under a microscope, and it will resemble a miniature version of the whole. This phenomenon occurs all the time in nature—in cloud formations, in the human circulatory system, in mountain ranges, in the way fern fronds are shaped.

But how does stochastic self-similarity relate to human experience?

We face hundreds of challenges, every day, in our lives. The majority hardly qualify as challenges at all: One of our shoes has disappeared under the couch, the toothpaste tube is empty, the light in the refrigerator burns out. A smaller number are more disruptive but still relatively minor: You sprain your ankle while jogging or the alarm clock fails to go off, making you late for work. An even smaller set causes larger ripples: You are passed over for an

system tonight. We'll only lose half a day of work." But then came random event number two: The backup system, we discovered, hadn't been working correctly. The mechanism we had in place specifically to help us recover from data failures had itself failed. *Toy Story 2* was gone and, at this point, the urge to panic was quite real. To reassemble the film would have taken thirty people a solid year.

I remember the meeting when, as this devastating reality began to sink in, the company's leaders gathered in a conference room to discuss our options—of which there seemed to be none. Then, about an hour into our discussion, Galyn Susman, the movie's supervising technical director, remembered something: "Wait," she said. "I might have a backup on my home computer." About six months before, Galyn had had her second baby, which required that she spend more of her time working from home. To make that process more convenient, she'd set up a system that copied the entire film database to her home computer, automatically, once a week. This—our third random event—would be our salvation.

Within a minute of her epiphany, Galyn and Oren were in her Volvo, speeding to her home in San Anselmo. They got her computer, wrapped it in blankets, and placed it carefully in the backseat. Then they drove in the slow lane all the way back to the office, where the machine was, as Oren describes it, "carried into Pixar like an Egyptian pharaoh." Thanks to Galyn's files, Woody was back—along with the rest of the movie.

Here, in rapid succession, we'd had two failures and one success, all of them random, all of them unforeseen. The real lesson of the event, though, was in how we dealt with its aftermath. In short, we didn't waste time playing the blame game. After the loss of the film, our list of priorities, in order, were: (1) Restore the film; (2) Fix our backup systems; (3) Install precautionary restrictions to make it much more difficult to access the deletion command directly.

Notably, one item was not on our list: Find the person responsible who typed the wrong command and punish him or her.

Some people may question that decision, reasoning that as valuable as creating a trusting environment can be, responsibility without accountability can undermine an expectation of excellence. I'm all for accountability. But in this case, my reasoning went like this: Our people have good intentions. To think you can control or prevent random problems by making an example of someone is naïve and wrongheaded. Moreover, if you say it is important to let the people you work with solve their own problems, then you must behave like you mean it. Drill down, certainly, to make sure everyone understands how important it is that we strive to avoid such problems in the future. But always—*always*—walk your talk.

How does this relate to stochastic, or random, self-similarity? In short, when you begin to grasp that big and little problems are structured similarly, then that helps you maintain a calmer perspective. Moreover, it helps you remain open to an important reality: If all our careful planning cannot prevent problems, then our best method of response is to enable employees at every level to own the problems and have the confidence to fix them. We want people to feel like they can take steps to solve problems without asking permission. In this case, Galyn's need to get her work done with a newborn at home led her to improvise and to download a version of the film once a week. Had she not solved that problem that way, Pixar would have missed its deadline on *Toy Story 2*, which would have been catastrophic for a small public company. People who act without an approved plan should not be punished for "going rogue." A culture that allows everyone, no matter their position, to stop the assembly line, both figuratively and literally, maximizes the creative engagement of people who want to help. In other words, we must meet unexpected problems with unexpected responses.

The second takeaway relates to our understanding of the boundary between the big and the small—and, for that matter, between good and bad, important and not important. We tend to think there is delineation—a bright line—between minor, ex-

pected problems and massive, unforeseen meltdowns. That encourages us to believe, wrongly, that we should approach these two phenomena—these two buckets, as I referred to them earlier—differently. But there isn't a bright line. Big and small problems are, in key ways, the same.

There is a crucial yet hard-to-understand concept here. Most people grasp the need to set priorities; they put the biggest problems at the top, with smaller problems beneath them. There are simply too many small problems to consider them all. So they draw a horizontal line beneath which they will not tread, directing all their energies to those above the line. I believe there is another approach: If we allow more people to solve problems without permission, and if we tolerate (and don't vilify) their mistakes, then we enable a much larger set of problems to be addressed. When a random problem pops up in this scenario, it causes no panic, because the threat of failure has been defanged. The individual or the organization responds with its best thinking, because the organization is not frozen, fearful, waiting for approval. Mistakes will still be made, but in my experience, they are fewer and farther between and are caught at an earlier stage.

As I've said, you don't always know how big a problem is when you first encounter it. It may seem small, but it also might be the straw that breaks the camel's back. If you have the tendency to put problems in buckets, you may not know which bucket to put it in. The difficulty is that we prioritize problems by size and importance, frequently ignoring small problems because of their abundance. But if you push the ownership of problems down into the ranks of an organization, then everyone feels free (and motivated) to attempt to solve whatever problem they face, big or small. I can't predict everything that our employees will do or how they will respond to problems, and that is a good thing. The key is to create a response structure that matches the problem structure.

The silver lining of a major meltdown is that it gives managers

a chance to send clear signals to employees about the company's values, which inform the role each individual should expect to play. When we respond to the flaws of a movie in development by throwing it out and restarting, we are telling people that we value the quality of our movies more than anything else.

So far, I've been talking about randomness in the context of events. But human potential can be unpredictable, too. I've known some geniuses who were such a pain to work with that we had to let them go; then again, some of our most brilliant, delightful, and effective people were let go by previous employers for being none of those things. It would be nice if there were some magic bullet that turned difficult people into success stories, but there isn't. There are just too many unknowns and immeasurable personal characteristics involved for us to pretend that we have figured out how to do that. Everyone says they want to hire excellent people, but in truth we don't *really* know, at first, who will rise up to make a difference. I believe in putting in place a framework for finding potential, then nurturing talent and excellence, believing that many will rise, while knowing that not all will.

When Walt Disney was alive, he was such a singular talent that it was difficult for anyone to conceive of what the company would be like without him. And sure enough, after his death, there wasn't anybody who came close to filling his shoes. For years, Disney employees attempted to keep his spirit alive by constantly asking themselves, "What would Walt do?" Perhaps they thought that if they asked that question they would come up with something original, that they would remain true to Walt's pioneering spirit. In fact, this kind of thinking only accomplished the opposite. Because it looked backward, not forward, it tethered the place to the status quo. A pervasive fear of change took root. Steve Jobs was quite aware of this story and used to repeat it to people at Apple, adding

that he never wanted people to ask, "What would Steve do?" No one—not Walt, not Steve, not the people of Pixar—ever achieved creative success by simply clinging to what used to work.

When I look back on Pixar's history, I have to recognize that so many of the good things that happened could easily have gone a different way. Steve could have sold us—he tried more than once. *Toy Story 2* could have been deleted for good, bringing the company down. For years, Disney was trying to steal John back, and they could have succeeded. I am distinctly aware that Disney Animation's success in the 1990s gave Pixar its chance with *Toy Story* and also that their later struggles enabled us to join together and ultimately merge.

I know that a lot of our successes came because we had pure intentions and great talent, and we did a lot of things right, but I also believe that attributing our successes solely to our own intelligence, without acknowledging the role of accidental events, diminishes us. We must acknowledge the random events that went our way, because acknowledging our good fortune—and not telling ourselves that everything we did was some stroke of genius—lets us make more realistic assessments and decisions. The existence of luck also reminds us that our activities are less repeatable. Since change is inevitable, the question is: Do you act to stop it and try to protect yourself from it, or do you become the master of change by accepting it and being open to it? My view, of course, is that working with change is what creativity is about.

CHAPTER 9

THE HIDDEN

In ancient Greek mythology, Apollo, god of poetry and prophecy, falls in love with the beautiful Cassandra, daughter of the king and queen of Troy, whose tangle of red hair and alabaster skin is famed throughout the land. He woos her by giving her a rare and treasured gift—the ability to see the future—and, in response, she agrees to be his consort. But when she later betrays him and breaks that vow, a furious Apollo curses her with a kiss, breathing words into her mouth that forever take away her powers of persuasion. From that day forward, she is doomed to scream into the wind: No one will believe the truths she speaks, and everyone judges her to be insane. Though Cassandra foresees the coming destruction of Troy—she warns that a Greek army will sneak into the city inside a huge wooden horse—she is unable to prevent the tragedy because no one heeds her warning.

The story of Cassandra is traditionally taken as a parable about what happens when valid warnings are ignored. But for me, it raises