

INTRODUCTION: YELLOW-EYED CATS

Paddy's idea wasn't the most daring in the class.

When you first met him, you could tell he came from a military background. It was evident in his stance—stoic and somewhat intimidating. He went to boarding school in Northern Ireland from age seven to eighteen and then joined the Royal Marines, where he served for ten years.

Civilian life scared him, and after leaving the military, he quickly sought out the safety net of a job within a large corporation and a regimented schedule. A journalist, he moved around the world quite a bit, finding work at places like the BBC and CNBC. "I'm something of a company man," he would later tell me.

When I met him he was at Stanford University on a one-year fellowship for midcareer journalists. He was taking a class of mine, "The Designer in Society," which encourages students to examine and take control of their lives. I've been a professor of engineering at Stanford for fifty-two years, and

along the way I've met too many engineers who once dreamed of starting a company of their own—and instead ended up working for large Silicon Valley companies and never taking that big step toward making their dreams a reality. Only a small percentage ever followed through on what they really wanted to do with their lives, and I hoped to do something to change that. Having talent and good ideas is only part of the equation. The next step—the harder step—is the *doing*, taking the responsibility for designing success in your own life.

In 1969 I created my “Designer in Society” class as a way to encourage students to think differently about how they achieve goals in their lives—to get them to stop thinking wistfully about possibilities and start actually *doing*.¹ In developing the course, I employed principles that we now call “design thinking” (a big concept we'll get into a bit later) as well as a series of ideas and exercises I've found to be useful in assisting people to break through walls that are mostly of their own making.

At the heart of the course is a self-selected term project: students must either do something they have wanted to do but never done, or handle something that is a problem in their lives. I am available to discuss their choices. I emphasize that it is their project, however, and that they are doing it for themselves, not for me. Ultimately they decide which projects to work on. I don't decide whether they're good enough or big enough, and I don't grade on anything other than whether they do what they set out to do. If they finish, they pass. If they don't, they don't get credit.

One of the most important lessons students take away from the class is to be honest with themselves—really deep-down honest. The more self-aware you can become, the happier you can be; by better understanding your motivations and identity,

you can figure out how to design your life to be more satisfying and fulfilling.

Paddy dug deep and came to the realization that although he had thrived in every institution he was part of, he had never been really happy. That was in part because he had a very conflicted relationship with authority and the large media organization he belonged to. He had sought it out because it was what he knew, yet he also resented and rebelled against it because he wanted something more personally satisfying. Once he realized and acknowledged this fact, he was able to use that knowledge.

For his project, Paddy decided to produce his own radio show.

When he compared his idea to others', he wasn't sure it stacked up very well. After all, we had students doing things that seemed on the surface much more exciting (one student was going to hurl himself out of an airplane!), creative (building a rocket), or ambitious (students turning their bodies into machines to prepare for their first triathlons).

For Paddy a radio show was a major undertaking, and it took him a while to realize why he was so drawn to it. He had been a radio reporter, but never a producer. For the first time in his life he would be making something from his own ideas, without oversight. It *was* a daring choice for him, akin to starting his own business.

I NOW TEACH MY class at one of the world's leading centers for innovation, the Hasso Plattner Institute of Design at Stanford, commonly called the d.school, where I am the academic director and one of the founders. It's gotten pretty famous—the *Wall Street Journal* called it “the hottest graduate program,” and we have more students signing up for our classes than we

have seats for them.² The d.school is not linked to any particular department but instead brings together students and faculty from many disciplines to create an environment that fosters creativity, innovation, and collaboration.

What the d.school does for students is open up their worlds, challenging their “automatic” thinking and assumptions and showing them the vast multitude of possibilities around them. We write on whiteboards, Post-it notes, and napkins. We try things. We fail. We try again. We fail better. We get things right in ways we might never have imagined, and we gain a better understanding about ourselves and others in the process.

Many who have taken my course over the years credit it with helping them achieve significant personal and professional successes in their lives, and I have gone on to conduct workshops throughout the world based on the concepts taught in the class. It’s empowering to realize you have more control than you ever knew over what you achieve in life. When you are not happy with an aspect of your life, you can change it! Really, you can.

In my class students have designed and built musical instruments, furniture, vehicles, and clothing. They’ve written books, poetry, and music. They’ve flown and jumped out of various aircraft, done stand-up comedy, and driven racing cars. They’ve learned how to cook, weld, tend bar, speak new languages, and save lives. They’ve repaired relationships with parents, siblings, and friends. They’ve run marathons, lost weight, and braved the wilderness.

One of the most inspiring projects I watched unfold was that of a student named Joel who reconciled with his father two months before his father died unexpectedly of an aortic aneurysm. Thirty years later I still feel tears of joy well up in my eyes whenever I run into Joel, his wife, or his children.

The father of another student, Cyndie, had always prohibited her from riding a motorcycle because he'd suffered a terrible accident when he was younger. Naturally, Cyndie wanted to learn to ride one. She decided to buy a motorcycle and learn to drive it as her project. Several months after my class, Bill, one of her former drawing instructors, was standing in front of his design office in Palo Alto when she rode up on her motorcycle and asked if he would like to go for a ride. He got on, thinking she meant around the block. Forty-five minutes later they arrived at the beach. That was twenty-eight years ago. They now have three grown children together.

Another woman in my class overcame her fear of water and learned to swim. I ran into her some months later and she told me she was learning Italian, having felt empowered by her first endeavor in my class. A few years after that she earned special training certificates that enabled her to change her career field—all thanks to the momentum and inspiration gained from developing her achievement habit.

What she and other students demonstrate not only in class but also in their lives after graduation is that achievement *can* be learned. It is a muscle, and once you learn to flex it, there's no end to what you can accomplish in life.

One of my favorite things to do with a group is to ask people to think about who stops them from accomplishing the things they want. It's always entertaining to listen to them explain how their parents, spouses, children, colleagues, bosses—you name it—prevent them from reaching their goals. These perceived obstacles are simply excuses; in almost every case, when you really dig down, it's you who are sabotaging yourself.

Yes, sometimes there are real external obstacles, and most people don't realize that they have the power to overcome them.

I once interviewed a job applicant who told me of her encounter with pirates when she and her boyfriend were sailing around the world. While the boat was anchored off the coast of Indonesia, she was sunbathing while he went into town. Suddenly she heard a noise and saw heavily armed men boarding their boat. They pointed guns at her and demanded money. Vulnerable and alone, with no money to give them, she kept her composure and was able to convince them that the powdered milk she had on board was a worthy replacement for cash. She appealed to their parental instincts, knowing milk was hard to come by and that they probably desperately needed some for their children. They accepted the milk with gratitude and left her and the boat unharmed. After hearing her unique solution and admiring her clearheadedness, I hired her on the spot.

That said, most of the time there are no pirates. We simply stop ourselves.

To demonstrate this in my class, I ask for a volunteer to come to the front of the room. When he is standing in front of me, I hold out a water bottle (or other object) and say, “Please try to take it away from me.” The volunteer will tug at the bottle—at first tentatively, because I’m older and look weaker, and then more forcefully when he realizes I have it firmly in my grasp. Eventually I ask the student to stop trying.

I then ask him to listen carefully to my next instruction. This time I say, “Please *take* the bottle from me.” What follows is essentially the same action as before, with more force and maybe some twisting added. Sometimes he’ll decide to change tactics and ask me to hand it over. I always refuse.

Finally I ask him, “Do you have a younger sibling or cousin?” I then ask the student to imagine that I am that person, we’re both kids, and there are no parents around. Furthermore, I tell

him to imagine the situation has gotten very annoying, and it is time for him to reclaim the bottle from me. Then I repeat the instruction, “*Take* the bottle from me.”

Participants who get what I’m driving at simply whisk the object out of my hand, leaving me no time to resist. I am overpowered by their intention to take the object. They have manifested a dynamic, elegant flow of intention to *do*, which is in sharp contrast to their previous static, tentative *attempt* at doing. Even better, in taking the object they usually actually exert less force than they did before.

I use this exercise to show that when you *do*, you are using *power*; when you *try*, you are using *force*. In life, if you want to get things done, it is much better to be powerful than to be forceful.

Of course the switch isn’t so easy to make in real life. We’ve all had the experience of making up our minds to do something and then not doing it—New Year’s resolutions, exercise, fidelity, deadlines, and work habits being just a few examples. In order to make the switch we must understand our behavior. The classic model (and popular wisdom) says that we think things through first and then act on our thoughts. Interestingly, this does not hold up in clinical testing.

By decoding local patterns of MRI signals in various brain regions, clinicians have shown that the brain can send motor signals for actions *before* the brain consciously forms the actual thoughts that account for the actions. You do what you do, and then you make up the reason for doing it. Most of our action is more the result of habit than reasoning. So that leads to a question: How do you bridge the gap between trying and doing, between talking about something and acting on it, and ultimately between failure and success?

In this book you'll find stories, advice, and exercises designed to help you create a different experience in your life—experience being the real teacher. When we established the d. school at Stanford, we were determined to create experiences where students deal with real people, solve real problems, and make a difference. The results have been hugely gratifying. The students have gained a sense of purpose, mastery, and intrinsic motivation. A magical thing happens: the grade is no longer a useful or meaningful motivator. Intrinsic motivation has taken over, and the work is its own reward.

By the end of the book, as a reader you will understand:

- Why *trying* is not good enough and how it is very different from *doing*.
- Why excuses, even legitimate ones, are self-defeating.
- How to change your self-image into one of a doer and achiever, and why this is important.
- How subtle language changes can resolve existential dilemmas and also barriers to action.
- How to build resiliency by reinforcing what you do (your action) rather than what you accomplish, so you can easily recover from temporary setbacks.
- How to train yourself to ignore distractions that prevent you from achieving your goals.
- How to be open to learning from your own experience and that of others.

The mind is trickier than we think and is always working with our egos to sabotage our best intentions. That's the human condition. What we have going for us is that, if we choose to,

we can be mindful about controlling our intentions to create habits that make our lives better.

The ideas in this book are rooted in the design thinking tradition. Whereas others have applied its tenets in organizational innovation and change,³ I have chosen to focus on personal transformation and empowerment. Stanford's d.school is a pioneer in the design thinking movement, and as one of its founders I have witnessed intense interest from all sectors of education, industry, and government.

A wonderful book called *The Adjusted American*, a now somewhat outdated sociology text, attempts to explain the everyday neuroses of the average American.⁴ In it is a great story about the authors' three-year-old son. The boy had known only two cats, both Siamese, a breed with blue eyes. One day a Persian cat appeared and the boy squatted down on the sidewalk for a better look. Suddenly he jumped up and ran into the house, shouting, "I saw a cat with yellow eyes, Mommy! A cat with yellow eyes!"

Encountering a different breed of cat forever changed a small piece of this child's worldview. In the same way, we don't realize how many of our fixed views of the world are based on limited samples of reality. It is my hope that this book will bring yellow-eyed cats into your world.

YELLOW-EYED CATS WERE BROUGHT into Paddy's world. Until the class, he had not thought of himself as an innovator or creator. He was achieving in the more commonly accepted sense—that is, he had become an officer in the marines and he was doing well as a journalist—but he had not

had any breakthrough *personal* achievements that were of his own making. He was just doing a good job walking the paths others had created. In my class he learned not to recoil or procrastinate when a new idea arose, but to act. Just that small insight, which we call bias toward action (which we'll discuss later), has changed his worldview and pushed him down several roads in the last two years. He prototyped and produced several new products for the radio program *Marketplace*, published a book about economics (*Man vs. Markets*), completed a previously abandoned novel, and started on the road to building his own business.

Today, three years after leaving the d.school, Paddy is making another gut-wrenching leap, from the safety of being an employee to the wide-open space of being his own boss. Part of him is screaming in terror at this idea, and the part that channels what he learned in the class is telling him to go one small step at a time, to prototype his ideas, and to trust the design thinking process and himself.

You can do the same thing. As you read on, you will find out how you can become more effective at solving problems, more focused on things that matter, and more satisfied with your life. This book will open your eyes to the power you have to change your life for the better. It will give you confidence to finally do things you have always wanted to do while ridding yourself of issues that stand in the way of your full potential. And the *experience* of taking control of your life will change your reality, making it possible to achieve almost anything you seriously want to do.

A NOTE ABOUT DESIGN THINKING

So what is this design thinking stuff, anyway?

Design thinking is a set of general practices a group of us has developed over the years that are effective in solving design challenges. A design challenge can apply to just about any kind of product or experience. It's not just about how to build a better mousetrap (though that's part of it); it's also about things that are not physical objects: how to improve the wait time at a popular amusement park, how to clean up a highway, how to more efficiently get food to needy people, how to improve online dating, and so on.

Design thinking is an amorphous concept that was given its name by David Kelley, another Stanford professor and co-founder of IDEO, when he was trying to explain that successful designers have a different mind-set and approach from most people. We all adopted and adapted it at the d.school, and the idea took off like a shot. Suddenly everyone was talking about this new concept, design thinking, something I'd been practicing for half a century without having a proper name for it.

It's difficult to give an exact definition for design thinking, however, but because I'm one of its "inventors" I can certainly give you an idea of the principles, which we'll get into throughout the book:

1. **Empathize.** This is where it starts. When you design, you're not primarily doing it for yourself; you're doing it with other people's needs and desires in mind. Whether you're designing a better roller coaster or a better hospital

waiting room experience, the idea is to care about the users' experiences and figure out how to help. In this step you're learning what the issues are.

2. Define the problem.⁵ Narrow down which problem you're going to solve or which question you're going to answer.
3. Ideate. Generate possible solutions using any means you like—brainstorming, mind mapping, sketching on napkins . . . however you work best.
4. Prototype. Without going crazy to make anything perfect (or even close to it), build your project in physical form, or develop the plans for what you're going to enact.
5. Test and get feedback.

Though I've just given you a list of principles, it rarely works that neatly or follows that specific order. You may get to step 4 and realize you need to go back to step 2, or repeat step 3 several times. That's built into the process; one of the other important concepts of design thinking is that failure can be a valuable part of the process. "The only thing to fear is fear itself," said Franklin D. Roosevelt, and I say the only thing to fear is not learning from your mistakes. You can fail lots of times as long as you learn from these failures and figure a solution out in the end.

We also focus on action—*doing* rather than overthinking. In one of our classes, "Launchpad," professors lead you through starting your own company in ten weeks, and by the end of that time you'll be producing income. Or you can go to a conventional business school and spend a year plotting and planning before taking an actual step.

Design thinking is very group-focused. We practice radical collaboration—both as professors and as students.

What's different about my work and this book is that design thinking is normally applied *outward*—toward building solutions for other people's problems in a business or school setting. My special interest is in using it toward improving your own life and interpersonal relationships, designing the best version of yourself.

While much of my teaching is rooted in this framework, not all of it is. There are many exercises throughout the book that you can try on for size. My view is that you take what's useful to you and spin it in whatever direction works. Sometimes I'll think someone has done an exercise "wrong," only to find out that he got more out of it than I'd even anticipated. I'm a big fan of whatever works.

It is in this spirit that I say, Let's get started.