

## The Surprising Habits of Original Thinkers by ted.com

Seven years ago, a student came to me and asked me to invest in his company. He said, "I'm working with three friends, and we're going to try to disrupt an industry by selling stuff online." And I said, "OK, you guys spent the whole summer on this, right?" "No, we all took internships just in case it doesn't work out." "All right, but you're going to go in full time once you graduate." "Not exactly. We've all lined up backup jobs." Six months go by, it's the day before the company launches, and there is still not a functioning website. "You guys realize, the entire company is a website. That's literally all it is." So I obviously declined to invest.

And they ended up naming the company Warby Parker.

(Laughter) They sell glasses online. They were recently recognized as the world's most innovative company and valued at over a billion dollars. And now? My wife handles our investments. Why was I so wrong?

To find out, I've been studying people that I come to call "originals." Originals are nonconformists, people who not only have new ideas but take action to champion them. They are people who stand out and speak up. Originals drive creativity and change in the world. They're the people you want to bet on. And they look nothing like I expected. I want to show you today three things I've learned about recognizing originals and becoming a little bit more like them.

So the first reason that I passed on Warby Parker was they were really slow getting off the ground. Now, you are all intimately familiar with the mind of a procrastinator. Well, I have a confession for you. I'm the opposite. I'm a precrastinator. Yes, that's an actual term. You know that panic you feel a few hours before a big deadline when you haven't done anything yet. I just feel that a few months ahead of time.

(Laughter)

So this started early: when I was a kid, I took Nintendo games very seriously. I would wake up at 5am, start playing and not stop until I had mastered them. Eventually it got so out of hand that a local newspaper came and did a story on the dark side of Nintendo, starring me.

(Laughter)

(Applause)

Since then, I have traded hair for teeth.

(Laughter)

But this served me well in college, because I finished my senior thesis four months before the deadline. And I was proud of that, until a few years ago. I had a student named Jihae, who came to me and said, "I have my most creative ideas when I'm procrastinating." And I was like, "That's cute, where are the four papers you owe me?"

(Laughter)

No, she was one of our most creative students, and as an organizational psychologist, this is the kind of idea that I test. So I challenged her to get some data. She goes into a bunch of companies. She has people fill out surveys about how often they procrastinate. Then she gets their bosses to rate how creative and innovative they are. And sure enough, the procrastinators like me, who rush in and do everything early are rated as less creative than people who procrastinate moderately. So I want to know what happens to the chronic procrastinators. She was like, "I don't know. They didn't fill out my survey."

(Laughter)

No, here are our results. You actually do see that the people who wait until the last minute are so busy goofing off that they don't have any new ideas. And on the flip side, the people who race in are in such a frenzy of anxiety that they don't have original thoughts either. There's a sweet spot where originals seem to live. Why is this? Maybe original people just have bad work habits. Maybe procrastinating does not cause creativity.

To find out, we designed some experiments. We asked people to generate new business ideas, and then we get independent readers to evaluate how creative and useful they are. And some of them are asked to do the task right away. Others we randomly assign to procrastinate by dangling Minesweeper in front of them for either five or 10 minutes. And sure enough, the moderate procrastinators are 16 percent more creative than the other two groups. Now, Minesweeper is awesome, but it's not the driver of the effect, because if you play the game first before you learn about the task, there's no creativity boost. It's only when you're told that you're going to be working on this problem, and then you start procrastinating, but the task is still active in the back of your mind, that you start to incubate. Procrastination gives you time to consider divergent ideas, to think in nonlinear ways, to make unexpected leaps.

So just as we were finishing these experiments, I was starting to write a book about originals, and I thought, "This is the perfect time to teach myself to procrastinate, while writing a chapter on procrastination." So I metaprocrastinated, and like any self-respecting procrastinator, I woke up early the next morning and I made a to-do list with steps on how to procrastinate.

(Laughter)

And then I worked diligently toward my goal of not making progress toward my goal. I started writing the procrastination chapter, and one day -- I was halfway through -- I literally put it away in mid-sentence for months. It was agony. But when I came back to it, I had all sorts of new ideas. As Aaron Sorkin put it, "You call it procrastinating. I call it

thinking." And along the way I discovered that a lot of great originals in history were procrastinators. Take Leonardo da Vinci. He toiled on and off for 16 years on the Mona Lisa. He felt like a failure. He wrote as much in his journal. But some of the diversions he took in optics transformed the way that he modeled light and made him into a much better painter. What about Martin Luther King, Jr.? The night before the biggest speech of his life, the March on Washington, he was up past 3am, rewriting it. He's sitting in the audience waiting for his turn to go onstage, and he is still scribbling notes and crossing out lines. When he gets onstage, 11 minutes in, he leaves his prepared remarks to utter four words that changed the course of history: "I have a dream." That was not in the script. By delaying the task of finalizing the speech until the very last minute, he left himself open to the widest range of possible ideas. And because the text wasn't set in stone, he had freedom to improvise.

Procrastinating is a vice when it comes to productivity, but it can be a virtue for creativity. What you see with a lot of great originals is that they are quick to start but they're slow to finish. And this is what I missed with Warby Parker. When they were dragging their heels for six months, I looked at them and said, "You know, a lot of other companies are starting to sell glasses online." They missed the first-mover advantage. But what I didn't realize was they were spending all that time trying to figure out how to get people to be comfortable ordering glasses online. And it turns out the first-mover advantage is mostly a myth. Look at a classic study of over 50 product categories, comparing the first movers who created the market with the improvers who introduced something different and better. What you see is that the first movers had a failure rate of 47 percent, compared with only 8 percent for the improvers. Look at Facebook, waiting to build a social network until after Myspace and Friendster. Look at Google, waiting for years after Altavista and Yahoo. It's much easier to improve on somebody else's idea than it is to create something new from scratch. So the lesson I learned is that to be original you don't have to be first. You just have to be different and better.

But that wasn't the only reason I passed on Warby Parker. They were also full of doubts. They had backup plans lined up, and that made me doubt that they had the courage to be original, because I expected that originals would look something like this.

(Laughter)

Now, on the surface, a lot of original people look confident, but behind the scenes, they feel the same fear and doubt that the rest of us do. They just manage it differently. Let me show you: this is a depiction of how the creative process works for most of us.

(Laughter)

Now, in my research, I discovered there are two different kinds of doubt. There's self-doubt and idea doubt. Self-doubt is paralyzing. It leads you to freeze. But idea doubt is energizing. It motivates you to test, to experiment, to refine, just like MLK did. And so the key to being original is just a simple thing of avoiding the leap from step three to step four. Instead of saying, "I'm crap," you say, "The first few drafts are always crap, and I'm just not there yet." So how do you get there? Well, there's a clue, it turns out, in the Internet browser that you use. We can predict your job performance and your commitment just by knowing what web browser you use. Now, some of you are not going to like the results of this study --

(Laughter)

But there is good evidence that Firefox and Chrome users significantly outperform Internet Explorer and Safari users. Yes.

(Applause)

They also stay in their jobs 15 percent longer, by the way. Why? It's not a technical advantage. The four browser groups on average have similar typing speed and they also have similar levels of computer knowledge. It's about how you got the browser. Because if you use Internet Explorer or Safari, those came preinstalled on your computer, and you accepted the default option that was handed to you. If you wanted Firefox or Chrome, you had to doubt the default and ask, is there a different option out there, and then be a little resourceful and download a new browser. So people hear about this study and they're like, "Great, if I want to get better at my job, I just need to upgrade my browser?"

(Laughter)

No, it's about being the kind of person who takes the initiative to doubt the default and look for a better option. And if you do that well, you will open yourself up to the opposite of déjà vu. There's a name for it. It's called vuja de.

(Laughter)

Vuja de is when you look at something you've seen many times before and all of a sudden see it with fresh eyes. It's a screenwriter who looks at a movie script that can't get the green light for more than half a century. In every past version, the main character has been an evil queen. But Jennifer Lee starts to question whether that makes sense. She rewrites the first act, reinvents the villain as a tortured hero and Frozen becomes the most successful animated movie ever. So there's a simple message from this story. When you feel doubt, don't let it go.

(Laughter)

What about fear? Originals feel fear, too. They're afraid of failing, but what sets them apart from the rest of us is that they're even more afraid of failing to try. They know you can fail by starting a business that goes bankrupt or by failing to start a business at all. They know that in the long run, our biggest regrets are not our actions but our inactions. The things we wish we could redo, if you look at the science, are the chances not taken.

Elon Musk told me recently, he didn't expect Tesla to succeed. He was sure the first few SpaceX launches would fail to make it to orbit, let alone get back, but it was too important not to try. And for so many of us, when we have an important idea, we don't bother to try. But I have some good news for you. You are not going to get judged on your bad ideas. A lot of people think they will. If you look across industries and ask people about their biggest idea, their most important suggestion, 85 percent of them stayed silent instead of speaking up. They were afraid of embarrassing themselves, of looking stupid. But guess what? Originals have lots and lots of bad ideas, tons of them, in fact. Take the guy who invented this. Do you care that he came up with a talking doll so creepy that it scared not only kids but adults, too? No. You celebrate Thomas Edison for pioneering the light bulb.

(Laughter)

If you look across fields, the greatest originals are the ones who fail the most, because they're the ones who try the most. Take classical composers, the best of the best. Why do some of them get more pages in encyclopedias than others and also have their compositions rerecorded more times? One of the best predictors is the sheer volume of compositions that they generate. The more output you churn out, the more variety you get and the better your chances of stumbling on something truly original. Even the three icons of classical music -- Bach, Beethoven, Mozart -- had to generate hundreds and hundreds of compositions to come up with a much smaller number of masterpieces. Now, you may be wondering, how did this guy become great without doing a whole lot? I don't know how Wagner pulled that off. But for most of us, if we want to be more original, we have to generate more ideas.

The Warby Parker founders, when they were trying to name their company, they needed something sophisticated, unique, with no negative associations to build a retail brand, and they tested over 2,000 possibilities before they finally put together Warby and Parker. So if you put all this together, what you see is that originals are not that different from the rest of us. They feel fear and doubt. They procrastinate. They have bad ideas. And sometimes, it's not in spite of those qualities but because of them that they succeed.

So when you see those things, don't make the same mistake I did. Don't write them off. And when that's you, don't count yourself out either. Know that being quick to start but slow to finish can boost your creativity, that you can motivate yourself by doubting your ideas and embracing the fear of failing to try, and that you need a lot of bad ideas in order to get a few good ones.

Look, being original is not easy, but I have no doubt about this: it's the best way to improve the world around us.

Thank you.

(Applause)