them.

For example, items at eye level tend to be purchased more than those down near the floor. For this reason, you'll find expensive brand names featured in easy-to-reach locations on store shelves because they drive the most profit, while cheaper alternatives are tucked away in harder-to-reach spots. The same goes for end caps, which are the units at the end of aisles. End caps are moneymaking machines for retailers because they are obvious locations that encounter a lot of foot traffic. For example, 45 percent of Coca-Cola sales come specifically from end-of-the-aisle racks.

The more obviously available a product or service is, the more likely you are to try it. People drink Bud Light because it is in every bar and visit Starbucks because it is on every corner. We like to think that we are in control. If we choose water over soda, we assume it is because we wanted to do so. The truth, however, is that many of the actions we take each day are shaped not by purposeful drive and choice but by the most obvious option.

Every living being has its own methods for sensing and understanding the world. Eagles have remarkable long-distance vision. Snakes can smell by "tasting the air" with their highly sensitive tongues. Sharks can detect small amounts of electricity and vibrations in the water caused by nearby fish. Even bacteria have chemoreceptors—tiny sensory cells that allow them to detect toxic chemicals in their environment.

In humans, perception is directed by the sensory nervous system. We perceive the world through sight, sound, smell, touch, and taste. But we also have other ways of sensing stimuli. Some are conscious, but many are nonconscious. For instance, you can "notice" when the temperature drops before a storm, or when the pain in your gut rises during a stomachache, or when you fall off balance while walking on rocky ground. Receptors in your body pick up on a wide range of internal stimuli, such as the amount of salt in your blood or the need to drink when thirsty.

The most powerful of all human sensory abilities, however, is vision. The human body has about eleven million sensory receptors. Approximately ten million of those are dedicated to sight. Some experts estimate that half of the brain's resources are used on vision. Given that we are more dependent on vision than on any other sense, it should come as no surprise that visual cues are the greatest catalyst of our behavior. For this reason, a small change in what you *see* can lead to a big shift in what you *do*. As a result, you can imagine how important it is to live and work in environments that are filled with productive cues and devoid of unproductive ones.

Thankfully, there is good news in this respect. You don't have to be the victim

of your environment. You can also be the architect of it.

HOW TO DESIGN YOUR ENVIRONMENT FOR SUCCESS

During the energy crisis and oil embargo of the 1970s, Dutch researchers began to pay close attention to the country's energy usage. In one suburb near Amsterdam, they found that some homeowners used 30 percent less energy than their neighbors—despite the homes being of similar size and getting electricity for the same price.

It turned out the houses in this neighborhood were nearly identical except for one feature: the location of the electrical meter. Some had one in the basement. Others had the electrical meter upstairs in the main hallway. As you may guess, the homes with the meters located in the main hallway used less electricity. When their energy use was obvious and easy to track, people changed their behavior.

Every habit is initiated by a cue, and we are more likely to notice cues that stand out. Unfortunately, the environments where we live and work often make it easy *not* to do certain actions because there is no obvious cue to trigger the behavior. It's easy *not* to practice the guitar when it's tucked away in the closet. It's easy *not* to read a book when the bookshelf is in the corner of the guest room. It's easy *not* to take your vitamins when they are out of sight in the pantry. When the cues that spark a habit are subtle or hidden, they are easy to ignore.

By comparison, creating obvious visual cues can draw your attention toward a desired habit. In the early 1990s, the cleaning staff at Schiphol Airport in Amsterdam installed a small sticker that looked like a fly near the center of each urinal. Apparently, when men stepped up to the urinals, they aimed for what they thought was a bug. The stickers improved their aim and significantly reduced "spillage" around the urinals. Further analysis determined that the stickers cut bathroom cleaning costs by 8 percent per year.

I've experienced the power of obvious cues in my own life. I used to buy apples from the store, put them in the crisper in the bottom of the refrigerator, and forget all about them. By the time I remembered, the apples would have gone bad. I never saw them, so I never ate them.

Eventually, I took my own advice and redesigned my environment. I bought a large display bowl and placed it in the middle of the kitchen counter. The next time I bought apples, that was where they went—out in the open where I could see them. Almost like magic, I began eating a few apples each day simply because they were obvious rather than out of sight.

Here are a few ways you can redesign your environment and make the cues for your preferred habits more obvious:

- If you want to remember to take your medication each night, put your pill bottle directly next to the faucet on the bathroom counter.
- If you want to practice guitar more frequently, place your guitar stand in the middle of the living room.
- If you want to remember to send more thank-you notes, keep a stack of stationery on your desk.
- If you want to drink more water, fill up a few water bottles each morning and place them in common locations around the house.

If you want to make a habit a big part of your life, make the cue a big part of your environment. The most persistent behaviors usually have multiple cues. Consider how many different ways a smoker could be prompted to pull out a cigarette: driving in the car, seeing a friend smoke, feeling stressed at work, and so on.

The same strategy can be employed for good habits. By sprinkling triggers throughout your surroundings, you increase the odds that you'll think about your habit throughout the day. Make sure the best choice is the most obvious one. Making a better decision is easy and natural when the cues for good habits are right in front of you.

Environment design is powerful not only because it influences how we engage with the world but also because we rarely do it. Most people live in a world others have created for them. But you can alter the spaces where you live and work to increase your exposure to positive cues and reduce your exposure to negative ones. Environment design allows you to take back control and become the architect of your life. Be the designer of your world and not merely the consumer of it.

THE CONTEXT IS THE CUE

The cues that trigger a habit can start out very specific, but over time your habits become associated not with a single trigger but with the entire *context* surrounding the behavior.

For example, many people drink more in social situations than they would ever drink alone. The trigger is rarely a single cue, but rather the whole situation: watching your friends order drinks, hearing the music at the bar, seeing the beers on tap.

We mentally assign our habits to the locations in which they occur: the home, the office, the gym. Each location develops a connection to certain habits and routines. You establish a particular relationship with the objects on your desk, the items on your kitchen counter, the things in your bedroom.

Our behavior is not defined by the objects in the environment but by our relationship to them. In fact, this is a useful way to think about the influence of the environment on your behavior. Stop thinking about your environment as filled with objects. Start thinking about it as filled with relationships. Think in terms of how you interact with the spaces around you. For one person, her couch is the place where she reads for an hour each night. For someone else, the couch is where he watches television and eats a bowl of ice cream after work. Different people can have different memories—and thus different habits—associated with the same place.

The good news? You can train yourself to link a particular habit with a particular context.

In one study, scientists instructed insomniacs to get into bed only when they were tired. If they couldn't fall asleep, they were told to sit in a different room until they became sleepy. Over time, subjects began to associate the context of their bed with the action of sleeping, and it became easier to quickly fall asleep when they climbed in bed. Their brains learned that sleeping—not browsing on their phones, not watching television, not staring at the clock—was the only action that happened in that room.

The power of context also reveals an important strategy: habits can be easier to change in a new environment. It helps to escape the subtle triggers and cues that nudge you toward your current habits. Go to a new place—a different coffee shop, a bench in the park, a corner of your room you seldom use—and create a new routine there.

It is easier to associate a new habit with a new context than to build a new habit in the face of competing cues. It can be difficult to go to bed early if you watch television in your bedroom each night. It can be hard to study in the living room without getting distracted if that's where you always play video games. But when you step outside your normal environment, you leave your behavioral biases behind. You aren't battling old environmental cues, which allows new habits to form without interruption.

Want to think more creatively? Move to a bigger room, a rooftop patio, or a building with expansive architecture. Take a break from the space where you do your daily work, which is also linked to your current thought patterns.

Trying to eat healthier? It is likely that you shop on autopilot at your regular supermarket. Try a new grocery store. You may find it easier to avoid unhealthy food when your brain doesn't automatically know where it is located in the store.

When you can't manage to get to an entirely new environment, redefine or rearrange your current one. Create a separate space for work, study, exercise, entertainment, and cooking. The mantra I find useful is "One space, one use."

When I started my career as an entrepreneur, I would often work from my couch or at the kitchen table. In the evenings, I found it very difficult to stop working. There was no clear division between the end of work time and the beginning of personal time. Was the kitchen table my office or the space where I ate meals? Was the couch where I relaxed or where I sent emails? Everything happened in the same place.

A few years later, I could finally afford to move to a home with a separate room for my office. Suddenly, work was something that happened "in here" and personal life was something that happened "out there." It was easier for me to turn off the professional side of my brain when there was a clear dividing line between work life and home life. Each room had one primary use. The kitchen was for cooking. The office was for working.

Whenever possible, avoid mixing the context of one habit with another. When you start mixing contexts, you'll start mixing habits—and the easier ones will usually win out. This is one reason why the versatility of modern technology is both a strength and a weakness. You can use your phone for all sorts of tasks, which makes it a powerful device. But when you can use your phone to do nearly anything, it becomes hard to associate it with one task. You want to be productive, but you're also conditioned to browse social media, check email, and play video games whenever you open your phone. It's a mishmash of cues.

You may be thinking, "You don't understand. I live in New York City. My apartment is the size of a smartphone. I need each room to play multiple roles." Fair enough. If your space is limited, divide your room into activity zones: a chair for reading, a desk for writing, a table for eating. You can do the same with your digital spaces. I know a writer who uses his computer only for writing, his tablet only for reading, and his phone only for social media and texting. Every habit should have a home.

If you can manage to stick with this strategy, each context will become associated with a particular habit and mode of thought. Habits thrive under predictable circumstances like these. Focus comes automatically when you are sitting at your work desk. Relaxation is easier when you are in a space designed for that purpose. Sleep comes quickly when it is the only thing that happens in your bedroom. If you want behaviors that are stable and predictable, you need an

environment that is stable and predictable.

A stable environment where everything has a place and a purpose is an environment where habits can easily form.

Chapter Summary

- Small changes in context can lead to large changes in behavior over time.
- Every habit is initiated by a cue. We are more likely to notice cues that stand out.
- Make the cues of good habits obvious in your environment.
- Gradually, your habits become associated not with a single trigger but with the entire context surrounding the behavior. The context becomes the cue.
- It is easier to build new habits in a new environment because you are not fighting against old cues.

The Secret to Self-Control

 $I_{\rm N}$ 1971, as the Vietnam War was heading into its sixteenth year, congressmen Robert Steele from Connecticut and Morgan Murphy from Illinois made a discovery that stunned the American public. While visiting the troops, they had learned that over 15 percent of U.S. soldiers stationed there were heroin addicts. Follow-up research revealed that 35 percent of service members in Vietnam had tried heroin and as many as 20 percent were addicted—the problem was even worse than they had initially thought.

The discovery led to a flurry of activity in Washington, including the creation of the Special Action Office of Drug Abuse Prevention under President Nixon to promote prevention and rehabilitation and to track addicted service members when they returned home.

Lee Robins was one of the researchers in charge. In a finding that completely upended the accepted beliefs about addiction, Robins found that when soldiers who had been heroin users returned home, only 5 percent of them became readdicted within a year, and just 12 percent relapsed within three years. In other words, approximately nine out of ten soldiers who used heroin in Vietnam eliminated their addiction nearly overnight.

This finding contradicted the prevailing view at the time, which considered heroin addiction to be a permanent and irreversible condition. Instead, Robins revealed that addictions could spontaneously dissolve if there was a radical change in the environment. In Vietnam, soldiers spent all day surrounded by cues triggering heroin use: it was easy to access, they were engulfed by the constant stress of war, they built friendships with fellow soldiers who were also heroin users, and they were thousands of miles from home. Once a soldier returned to the United States, though, he found himself in an environment devoid of those triggers. When the context changed, so did the habit.

Compare this situation to that of a typical drug user. Someone becomes

addicted at home or with friends, goes to a clinic to get clean—which is devoid of all the environmental stimuli that prompt their habit—then returns to their old neighborhood with all of their previous cues that caused them to get addicted in the first place. It's no wonder that usually you see numbers that are the exact opposite of those in the Vietnam study. Typically, 90 percent of heroin users become readdicted once they return home from rehab.

The Vietnam studies ran counter to many of our cultural beliefs about bad habits because it challenged the conventional association of unhealthy behavior as a moral weakness. If you're overweight, a smoker, or an addict, you've been told your entire life that it is because you lack self-control—maybe even that you're a bad person. The idea that a little bit of discipline would solve all our problems is deeply embedded in our culture.

Recent research, however, shows something different. When scientists analyze people who appear to have tremendous self-control, it turns out those individuals aren't all that different from those who are struggling. Instead, "disciplined" people are better at structuring their lives in a way that *does not require* heroic willpower and self-control. In other words, they spend less time in tempting situations.

The people with the best self-control are typically the ones who need to use it the least. It's easier to practice self-restraint when you don't have to use it very often. So, yes, perseverance, grit, and willpower are essential to success, but the way to improve these qualities is not by wishing you were a more disciplined person, but by creating a more disciplined environment.

This counterintuitive idea makes even more sense once you understand what happens when a habit is formed in the brain. A habit that has been encoded in the mind is ready to be used whenever the relevant situation arises. When Patty Olwell, a therapist from Austin, Texas, started smoking, she would often light up while riding horses with a friend. Eventually, she quit smoking and avoided it for years. She had also stopped riding. Decades later, she hopped on a horse again and found herself craving a cigarette for the first time in forever. The cues were still internalized; she just hadn't been exposed to them in a long time.

Once a habit has been encoded, the urge to act follows whenever the environmental cues reappear. This is one reason behavior change techniques can backfire. Shaming obese people with weight-loss presentations can make them feel stressed, and as a result many people return to their favorite coping strategy: overeating. Showing pictures of blackened lungs to smokers leads to higher levels of anxiety, which drives many people to reach for a cigarette. If you're not careful about cues, you can cause the very behavior you want to stop.

Bad habits are autocatalytic: the process feeds itself. They foster the feelings

they try to numb. You feel bad, so you eat junk food. Because you eat junk food, you feel bad. Watching television makes you feel sluggish, so you watch more television because you don't have the energy to do anything else. Worrying about your health makes you feel anxious, which causes you to smoke to ease your anxiety, which makes your health even worse and soon you're feeling more anxious. It's a downward spiral, a runaway train of bad habits.

Researchers refer to this phenomenon as "cue-induced wanting": an external trigger causes a compulsive craving to repeat a bad habit. Once you *notice* something, you begin to *want* it. This process is happening all the time—often without us realizing it. Scientists have found that showing addicts a picture of cocaine for just thirty-three milliseconds stimulates the reward pathway in the brain and sparks desire. This speed is too fast for the brain to consciously register—the addicts couldn't even tell you what they had seen—but they craved the drug all the same.

Here's the punch line: You can break a habit, but you're unlikely to forget it. Once the mental grooves of habit have been carved into your brain, they are nearly impossible to remove entirely—even if they go unused for quite a while. And that means that simply resisting temptation is an ineffective strategy. It is hard to maintain a Zen attitude in a life filled with interruptions. It takes too much energy. In the short-run, you can choose to overpower temptation. In the long-run, we become a product of the environment that we live in. To put it bluntly, I have never seen someone consistently stick to positive habits in a negative environment.

A more reliable approach is to cut bad habits off at the source. One of the most practical ways to eliminate a bad habit is to reduce exposure to the cue that causes it.

- If you can't seem to get any work done, leave your phone in another room for a few hours.
- If you're continually feeling like you're not enough, stop following social media accounts that trigger jealousy and envy.
- If you're wasting too much time watching television, move the TV out of the bedroom.
- If you're spending too much money on electronics, quit reading reviews of the latest tech gear.
- If you're playing too many video games, unplug the console and put it in a closet after each use.