Subtract

What’s in it for me? Subtract your urge to add.

We’ve all heard that less is more. But look around your city, your home, or your office, and you’ll find that most of us live by the mantra that more is better. Whether we’re going shopping or writing an email, we itch to add. These blinks will explain why. You’ll take a whistle-stop tour through human history to discover why we’re so in love with adding, and why we don’t like its opposite: subtracting. From the cradle of civilization to our modern economies, from our genes to our architecture, you’ll discover how addition and subtraction are intimately linked to our humanity – and to our way of life. In these blinks, you’ll learn

how subtraction can fight racial injustice; why we prefer to add things than take them away; and what Legos can teach us about psychology.

Subtraction is an overlooked force for change.

In 1985, Sue Bierman was a city planner with a mission. She wanted the people of San Francisco to agree to remove something from their city. The thing she wanted taken away? An ugly double-decker freeway that blocked the city’s waterfront. Without this freeway, Bierman argued, San Franciscans could actually enjoy their beautiful shoreline. But Bierman quickly encountered the problem you’ll discover in these blinks: people don’t like to subtract. Even though Bierman’s proposal was sound, San Franciscans from all walks of life – politicians to business owners to ordinary citizens – voted to keep the freeway. It was only four years later, when the freeway was badly damaged by the devastating Loma Prieta earthquake, that the city finally had no choice but to remove it. This is the key message: Subtraction is an overlooked force for change. What happened after the freeway was subtracted from San Francisco? Well, these days, the space it used to occupy is known as the Embarcadero waterfront. It's one of the most popular tourist attractions in America, bringing visitors, jobs, and money to the city. Sue Bierman realized she could create positive change by taking something away. But like the citizens of San Francisco, most of us struggle to think positively about subtraction. When we think about how to make things better, we usually think about adding things. Not convinced? Then consider these questions: When you make a New Year’s resolution, do you resolve to do more of something rather than less? When you’re working on a piece of writing, do you spend more time writing new sentences than editing what you’ve already written? If you answered yes to either of the above, then you might be neglecting subtraction – and suffering as a result. Think about your home. Your house might not be packed with ugly freeways, but the average American home contains over 250,000 items! That’s a lot of stuff; it’s also a mammoth task to keep it all organized. Failing to subtract is a problem on a much larger scale, too. Most of us realize that we’re adding too much carbon to our climate. But when we consider global warming, we often focus on how to add carbon more slowly – and rarely talk about how we can remove existing carbon from the atmosphere. In the next blink, we’ll explore why we fail to subtract.

Subtracting is less mentally accessible than adding.

Like Sue Bierman, the author's own journey into subtraction also began with architecture. It all started when the author and his little boy were building a Lego bridge, and the bridge's supporting pillars ended up being different heights. Instinctively, the author picked up another block to add to the shorter pillar. At that moment, the author had a startling realization: it would never even have occurred to him to take away a block from the taller pillar. Could this be an indication of something bigger, he wondered? Might it be that human beings overwhelmingly add rather than subtract? Here's the key message: Subtracting is less mentally accessible than adding. To test his theory, he ran some experiments. The evidence was clear: people changed a piece of music by adding more notes, varied a soup recipe by adding more ingredients, and updated a travel itinerary by adding more activities. In short, when given the choice, the vast majority of people added. But what was really going on here? Were the participants making a conscious choice to add things? After all, it's possible that people just like packed travel itineraries and soups with lots of ingredients. Or maybe people prefer things they feel they've built themselves, and that was why they kept adding. Then again, could it be something else? Were people adding rather than subtracting because they couldn't imagine subtracting – because it simply didn't occur to them to remove Lego blocks or ingredients? If this was true, adding wouldn't be about preference, but about mental accessibility. This phenomenon explains why some ideas seem more obvious to us than others. Think of a child deciding which toy to select from a cupboard. All the toys in there are fair game – in theory. In reality, though, the child will select the toys on the shelves she can see and reach. Similarly, we all know how to subtract, but if adding is on a more accessible mental shelf, then that's the solution we'll reach for. To test this theory, the author devised another adding experiment. Participants were asked to improve a hypothetical mini-golf course by either adding or removing things. He found that when participants were reminded that subtraction was an option, significantly more of them took things away. This is another indicator that subtracting is less mentally accessible; we simply don't think about "taking away" as an option.

Adding makes us feel competent and happy.

So, human beings tend to overlook subtraction. But the question remains: Why? Perhaps the behavior of another species might suggest an answer. Male bowerbirds also do a lot of adding. But they don't add soup ingredients or Lego blocks. Instead, they add sticks, leaves, and colorful objects to their nests – bowerbirds are the showy architects of the bird world. What's more, a lot of this addition seems arbitrary. The bowerbirds never use these nests. As soon as the female has decided which complicated nest she likes the most, she mates with the male who built it, and then they leave the palatial nest behind. So why does the male bowerbird add so much stuff to a nest that will never be used? There's a straightforward answer: it helps him demonstrate his competence to potential mates. The key message here is this: Adding makes us feel competent and happy. Competence is important to humans, too. In fact, we have an intrinsic biological desire to feel competent. After all, it's much better to look and feel as if you're in control of

your surroundings rather than out of control, isn’t it? Of course, choosing to subtract can also be a competent decision. But the problem is, it's much harder to demonstrate your competence through subtraction. After all, how can you show what you’ve taken away? Even if subtracting is the competent choice, you're not left with much evidence that you made the right call. The author, for instance, keeps thousands of documents on his computer that relate to his subtraction research. He knows he should delete most of them, and yet . . . he doesn't. Somewhere deep in his brain, crafted by millions of years of evolution, his instinct is to keep adding to this collection of first drafts and pointless subfolders. In this way, he keeps building his own bowerbird nest. But there’s another biological reason why humans overwhelmingly add rather than subtract, and it has to do with food. For our hunter-gatherer ancestors, any opportunity to acquire food was a good thing. It meant survival. As a result, our brains evolved to react positively to acquisition. But not just to the acquisition of food – to any acquisition at all. This means that whether we’re adding a juicy peach or a useless plastic freebie to our possessions, our hunter-gatherer brains react in the same, triumphant way. Quite simply, adding feels good.

First came addition; then came civilization.

Our journey into the science of adding and subtracting now takes us to Turkey – specifically, to an archaeological site called Göbekli Tepe. What archaeologists found here shows us that adding isn’t just a biological instinct that we share with other animals. Instead, adding might be the driving force behind human civilization itself. So what incredible wonder is Göbekli Tepe hiding? The answer is an ancient stone temple. This temple is an extremely early example of monumental architecture, a type of building whose sheer scale and intricacy goes far beyond what is necessary for its purpose. Göbekli Tepe consists of enormous stone pillars; it would have taken hundreds of people a gargantuan amount of time and effort to build the temple. This in itself was impressive, but what the archaeologists discovered next would change everything they thought they knew about the history of human development. The key message here is: First came addition; then came civilization. They found that the huge temple predated the nearest human settlements and villages. What’s more, there were no signs of human settlement around the temple itself – no houses, no farm animal bones, no children’s toys. Eventually, it dawned on the archaeologists that the people who made the temple had been hunter-gatherers. Constructing the temple had been the very reason why they had settled down and begun living together in larger groups. Through their shared desire to build and add to the superfluous temple, multiple bands of hunter-gatherers had started working together. The fact that they needed a secure, nearby food supply while they built the temple was the impetus for leaving their hunter-gatherer lifestyle behind and pursuing agriculture. In other words, our overwhelming preference for adding, in the form of creating monumental architecture, was the catalyst for humans to go from living in small groups of wandering nomads to cooperative villages and settlements. In other words, when we started adding, human civilization took off. The humans who lived in the time of Göbekli Tepe inhabited a world in which not much of anything existed. A built environment, and everything that came with it, were new and valuable innovations; no one would have considered subtracting them. In this sense, then, to embark on human civilization is to add – and addition is perhaps humanity’s oldest cultural heritage.

Keynesian economics tells us we can get rich by adding.

So we've inherited our ancestors' preference for adding. But there's also a very modern reason why we prefer to add rather than subtract: our economies demand it. And not only do modern capitalist economies encourage us to add – we're also urged to think of constant adding as a good thing. But what do economics, addition, and morality have to do with one another? To discover the answer, we have to travel back to 1949, when President Harry Truman addressed a nation of fed-up, war-weary Americans. In his seminal speech, Truman declared that the way to prevent future world wars was to assist people around the world in bettering themselves. America, he said, would ensure that people in every country had more food, more clothing, and more access to the good things in life. This is the key message: Keynesian economics tells us we can get rich by adding. The key to world peace, Truman believed, was economic growth. Based on the recommendations of economist John Maynard Keynes, the citizens of the free world would be encouraged to add like they'd never added before. The reasoning was this: If people bought more products, then manufacturing companies would grow and be able to provide more jobs for people. All these new jobs would mean that more people would be able to spend more on even more products – and so on, until the economy and everyone in it was booming. Truman's speech marked the birth of modern consumer capitalism, and we haven't stopped adding to our lives ever since. After all, we're not just shopping – we're shopping for world peace. This post-war recipe of consumerism and growth has worked pretty well. Global per capita income was $14,500 in 2016, up from $3,000 in 1950. And we're not just richer; we live longer, too. The global average life expectancy has risen from 48 years to 70 in the same length of time. As a result of gains like these, most of us now take it for granted that constant economic growth is good. But is it? Arguably, in our race to gain prosperity, we've sacrificed a commodity that we'll never be able to make more of: time. Just think about how often your friends and coworkers tell you how busy they are, or vice versa. We live in a culture of busyness; some of us even wear it as a badge of honor. But it also leads to anxiety and stress. The fact is, for all our peace and prosperity, a person living in the Middle Ages probably had more leisure time than you do.

Systemic oppression can be tackled with subtraction.

Before any subtraction happens, there needs to be understanding – after all, you have to know all the constituent parts of the thing, or situation, that you want to change. Only then can you make informed decisions about which parts to take away. That's because a lot of the things we want to change don't exist in a vacuum; they're complex systems that are more than the sum of their parts. To demonstrate this point, let's take a look at something that many people would like to change: racism. Author Ibram X. Kendi argues that all racism is systemic racism because the systems that govern our lives, like the justice system, are innately racist. Racism is so difficult to "subtract" because most people don't fully understand how these systems perpetuate it. Here's the key message: Systemic oppression can be tackled with subtraction. When it comes to anti-racism, most people make the same old mistake: they seek to add rather than to subtract. For instance, anti-racism campaigners seek to add educational programs for

underprivileged communities, or to add funds to fight systemic discrimination. But while these additions might be effective, they will never be as effective as subtraction-based changes. Whereas these additions focus on helping people overcome the barriers to equality, subtraction focuses on removing the barriers to equality altogether. Removing these barriers is so much more effective because it releases, rather than adds, tension to the complex system of racism. Let’s look at an example of this theory in action. One of the worst racial injustices of the twentieth century was South Africa’s apartheid regime, which was introduced in 1948. International campaigners tried to change the situation by adding support, such as money and resources, to anti-apartheid forces in South Africa. But this only added tension to the system – it scaled up the size of the conflict. As a result, these additive efforts had little effect. By the late 1980s, apartheid was still firmly in place. So instead, campaigners began to focus on how they could subtract resources and support from the regime. Thus began a series of divestments from South African companies, as investors across America withdrew financial support for the regime and its industries. This released tension from the system because it diminished the force of the regime itself. By 1990, apartheid had begun to crumble.

Subtraction is well worth the extra effort.

You may have heard the expression, I’ve written you a long letter because I didn’t have time to write you a short one. This pithy remark has been attributed to the author Mark Twain – but it could have been written by any one of us going about our daily lives. That’s because it gets at an essential truth: subtraction is hard work. Whether you’re chipping away at a concrete freeway or a wordy sentence, cutting out the unnecessary to arrive at something better takes much more effort than just leaving things as they are. It's easier to walk away when something’s “good enough.” After all, that short letter probably would have been better, but the longer one did the job, too. The key message here is: Subtraction is well worth the extra effort. Nobel Prize–winning economist Herbert Simon even came up with a word for our tendency to leave things at “good enough.” He called it satisficing: a blend of satisfying and sufficient. In everyday life, we often fall into the trap of thinking that satisficing is the best option – but, as we’ll see, when we satisfice, we miss out on a whole host of benefits. A great example of going beyond satisficing comes from the city of Lexington, Kentucky. When Lexington ran a competition to redesign the cityscape, the winning entry came from an urban designer with a passion for subtraction. Her name was Kate Orff, and she quickly identified the satisficing status quo in Lexington. Over a hundred years earlier, the city had decided to block off the creek that ran through the town. This was done to prevent flooding and outbreaks of cholera – a disease that was rampant in the nineteenth century. People hastily covered up the town's creek with houses and roads. This wasn't the perfect solution, but it prevented illness and was “good enough” for over a hundred years. But fast forward to the twenty-first century, and Orff saw an opportunity to subtract what was now unnecessary. She removed the buildings and roads that had been built on the creek, and uncovered Lexington’s waterway. Thanks to her subtraction, the creek now provides a calming focal point for the city – and lots of space for waterside sitting and leisure. Through her refusal to accept “good enough,” Orff reinvigorated a whole community, simply by taking things away.

Final summary

The key message in these blinks: Our biology, our culture, and our economies all conspire to keep us locked in a cycle of acquisition. But you can create positive change by going against the grain, and removing things instead. Subtracting isn’t the easy road – or the shorter process – but by actively taking away, you can transcend “good enough” and get to beauty, simplicity, and real progress. Got feedback? We’d love to hear what you think about our content! Just drop an email to with Subtract as the subject line and share your thoughts!