

## THE BIG IDEAS

### Psychology of Possibility

The science of what is possible.

### Turning Back the Clock

By dialing in your mind.

### Zeno's Paradox

Time to reverse it.

### Science of Role-Playing

Pilots and your vision.

### What's in a Word?

Answer: A lot.

### Room Attendants

And their thoughts on exercise.

### Aging

How's your relationship to it?

### Presumed Limits

Let's question them!

*"Over time I have come to believe less and less that biology is destiny. It is not primarily our physical selves that limit us but rather our mindset about our physical limits."*

~ Ellen Langer

## Counterclockwise

### Mindful Health and the Power of Possibility

BY ELLEN J. LANGER · BALLANTINE BOOKS © 2009 · 215 PAGES

"Mindful health is not about how we should eat right, exercise, or follow medical recommendations, nor is it about abandoning these things. It is not about New Age medicine nor traditional understandings of illness. It is about the need to free ourselves from constricting mindsets and the limits they place on our health and well-being, and to appreciate the importance of becoming the guardians of our own health. Learning how to change requires understanding how we go astray. The goal of this book is to convince you to open your mind and take back what is rightfully, sensibly, importantly yours."

~ Ellen Langer from *Counterclockwise*

Dr. Ellen Langer is one of the world's leading research scientists, a professor of psychology at Harvard, a painter, and a brilliant human being.

She has spent the last several decades exploring what she calls "The Psychology of Possibility." Whereas most researchers describe what is, Dr. Langer has passionately explored *what may be*.

In *Counterclockwise*, Langer walks us through a fascinating array of inspiring, empirically-based research studies looking at the subtle and not so subtle effects of language, priming, control and mindfulness that will change the way you see your health and your life. (Get a copy [here](#).)

The book is named after her classic "counterclockwise study." Conducted in 1979, the study featured elderly men spending a week together acting as if they were living in 1959. Shockingly, after a mere week (!), the men showed a range of significant improvements in their physical health. More on that and other remarkable stories in a moment.

For now, I'm excited to share a handful of my favorite Big Ideas so let's jump straight in!

## THE PSYCHOLOGY OF POSSIBILITY

"In most of psychology, researchers describe what is. Often they do this with great acumen and creativity. But *knowing what is and knowing what can be are not the same thing*. My interest, for as long as I can remember, is in what can be, and in learning what subtle changes might make that happen. My research has shown how using a different word, offering a small choice, or making a subtle change in the physical environment can improve our health and well-being. Small changes can make large differences, so we should open ourselves to the impossible and embrace the psychology of possibility."

The psychology of possibility first requires that we begin with the assumption that we do not know what we can do or become. Rather than starting from the status quo, it argues for a starting point of what we would like to be. From that beginning, we can ask how we might reach that goal and make progress toward it. It's a subtle change in thinking, although not difficult to make once we realize how stuck we are in culture, language, and modes of thought that limit our potential."

*"Too many of us believe the world is to be discovered, rather than a product of our own construction and thus to be invented."*

~ Ellen Langer

## The Psychology of Possibility.

(Where was *that* major when I was studying psychology as an undergraduate at UCLA?! Hah!)

Imagine a study testing whether monkeys could learn language or whether dogs could yodel.

Traditional psychology would focus on whether the majority of monkeys tested showed a particular effect. If they didn't, the study would be shelved and go unpublished.

The psychology of *possibility*, however, would look to see if even one monkey could speak one word. With *THAT* success, you've demonstrated that it's at least *possible*. Then you'd have fun seeing if you could get the monkey to speak two words and then three and...

Reminds me of [Joe De Sena](#) (creator of Spartan Race) and [Scott Adams](#) (creator of *Dilbert*).

In *Spartan Up!* ([see Notes](#)), De Sena challenges us to differentiate between "difficult" and "impossible" as he shares this incredible story: *"Take the survival tale of Swedish adventurer Göran Kropp. In October 1995, he left Stockholm, Sweden, on a bicycle and rode it to the base of Mount Everest, arriving there in April 1996. He climbed Everest, reaching the summit with no oxygen mask and no help from Sherpas. He descended the mountain and eventually pedaled back to Sweden. If someone invited you to undertake such a wild adventure, you might say: 'That's impossible!' or 'You're crazy!' As it turns out, it's not impossible. It's hard — really hard — but doable under the right circumstances. The cliché is true: Where there's a will, there's a way. Seemingly unsurmountable challenges confronting your business, sports, health and fitness, and relationships are far more manageable than you might imagine."*

Difficult. Not impossible.

Important distinction.

Then there's Scott Adams. In *How to Fail at Almost Everything and Still Win Big* ([see Notes](#)), he shares his incredible story of possibility when he defied the odds and became the first person to cure a supposedly incurable disease. He tells us: *"Realistically, what were the odds of being the first person on earth to beat a focal dystonia? One in a million? One in ten million? I didn't care. That person was going to be me. Thanks to my odd life experiences, and odder genes, I'm wired to think things will work out well for me no matter how unlikely it might seem."*

Possibility...

What would YOU like to be?

As Langer advises, let's start there!

*"I want to be clear that I am not arguing against medical tests. I am arguing against mindless reliance on them and the mindless state that they can lead to."*

~ Ellen Langer

## TURNING BACK THE CLOCK

*"When the experimental group participants were brought together for their trip orientation, we introduced the present-tense nature of their experience; we stressed that the best way to approach the study might not be through simple reminiscence. Rather, they should return as completely as possible in their minds to that earlier time. I remember the excitement of saying, 'Therefore, we're going to a very beautiful retreat where we will live as if it were 1959.... We told them that all of their interactions and conversations would reflect the 'fact' that it was 1959. 'It may be difficult at first, but the sooner you let yourselves go, the more fun you'll have,' I said enthusiastically. A few men laughed nervously, one giggled in excitement, and a couple just shrugged cynically."*

The classic counterclockwise study.

It's 1979. 16 men in their late seventies/early eighties are recruited to join a study on "reminiscing." Langer and her team convert an old monastery into a 1959-themed retreat—complete with old *Sports Illustrated* magazines plus music and movies from the era.

*"With language placing the experimental groups' minds in a healthier place, their bodies followed suit."*

~ Ellen Langer

The control group is asked to simply "reminisce" about their lives in 1959. The experimental group is asked to ACT AS IF IT WAS 1959—speaking and acting as if they were living in 1959.

Testing the men before and after, Langer and her team discovered that "On many of the measures, the participants got 'younger.' The experimental group showed greater improvement on joint flexibility, finger length (their arthritis diminished and they were able to strengthen their fingers more), and manual dexterity. On intelligence tests, 63 percent of the experimental group improved their scores, compared to only 44 percent of the control group. There were also improvements in height, weight, gait and posture. Finally, we asked people unaware of the study's purpose to compare photos taken of the participants at the end of the week to those submitted at the beginning of the study. These objective observers judged that all of the experimental participants looked noticeably younger at the end of the study."

All of those results were after ONE WEEK. Remarkable, eh?

Makes you wonder: If the mind has *that much* power over the body in such a short period of time, what else is possible?

P.S. This study was inspired by another classic study of Langer's in which she studied nursing home residents who were encouraged to make more decisions for themselves—deciding when to receive visitors, if and when to watch movies shown at the home, and stuff like that. They were also given a houseplant to care for and asked to decide where to put their new plant along with when and how much to water it. The other group was not given the encouragement to make more decisions and the staff took care of their new houseplant for them.

In short, Langer says her "intent was to make the nursing home residents more mindful, to help them engage with the world and live their lives more fully."

Fast forward a year and a half. Guess what?

The individuals who were encouraged to cultivate their mindfulness by taking a \*tiny\* bit of control over their environment were more "cheerful, active, and alert." Remarkably, after the year and a half, less than half of those in the engaged group had died than those in the control group. All from a tiny bit of mindfulness. Here's to finding ways to boost *our* mindfulness!

## REVERSING ZENO'S PARADOX

"Ever the optimist in the eyes of others but the realist in my own, I've found a simple, positive use of this thinking that I call Reverse Zeno's Strategy. It states that there is always a step small enough from where we are to get us to where we want to be. If we take that small step, there's always another we can take, and eventually a goal thought to be too far to reach becomes achievable."

*"Noticing differences is the essence of mindfulness. Don't imagine, however, that all this noticing need be exhausting and leave little time for anything else. Mindfulness is actually energizing, not enervating."*

~ Ellen Langer

First, a quick look at Zeno's Paradox. Basic idea: If you always cover half the distance between where you are and where you want to be, you'll never get there.

Langer reverses that logic by telling us that there's always (note: ALWAYS!!) a tiny little step we can take in the direction of our goals.

If we take that small step, there's always another one we can take. Continue that process and the goal that felt so impossibly out of reach becomes possible.

For example, maybe losing 50 pounds feels impossible. But can you lose 1 ounce?

What little baby step could you take to lose that single ounce? Because if you can do that, you can lose another and another... and sooner than you may think, you've made the impossible possible.

This is tied to another Big Idea Langer comes back to often. We need to see our health (and various aspects of our lives) on a *continuum*. We're not "healthy" or "sick." It's never that binary.

*"The mindlessness of our approach to our health is remarkable in its backwardness. We ignore our health until we think we need to become health experts. Instead, we ought to attend to our bodies mindfully while being health learners."*

~ Ellen Langer

It's always a continuum.

And when we view it through *that* lens, we can bring more mindfulness to our lives and see how slight variability in our behavior leads to significant results. Let's do that! :)

## YOU AS AN AIR FORCE PILOT

"When we see mind and body as parts of a single entity, the research on placebos takes on new meaning and suggests we can not only control much of our disease experience, but we may also be able to extend our ability to gain, recover, or enhance our health.

Placebos often come in the form of a single word that captures a richer mindset. In one study I conducted with my students, we explored the mindset most of us have regarding excellent vision air force pilots have. All participants were given a vision test. One group of participants were then encouraged to role-play "air force pilots." They dressed the part and, in uniform, sat in a flight simulator. They were asked to read the letters on the wing of a nearby plane, which were actually part of an eye chart. Those participants who adopted the 'pilot' mindset, primed to have excellent vision, showed improved vision over those who were simply asked to read an eye chart from the same distance."

Imagine that.

Two groups. One group role-plays being an air force pilot. The other group does not. And... The role-playing pilots suddenly have better vision! (Wow.)

Think about that for a moment longer. Simply imagining you're playing the part of a pilot LITERALLY (and instantly) improves your vision.

In his classic *The Inner Game of Tennis* ([see Notes](#)), Tim Gallwey tells us that one of the best ways to get your mind right and improve your tennis is to simply act the part of a great tennis player. Move the way he or she would move, act with that confidence, invite those qualities in that you admire. And, voilà. Your performance goes up. Very much like our make-believe pilots and their vision, eh?

Langer dedicates an entire chapter to the power of words and how easily our behaviors can be changed with simple primes. For example, you can give people a crossword puzzle that has words associated with old age and they will walk more slowly to the elevator following the study than those who were not primed. (\*rubs eyes\*)

Here's another fascinating study (the book is \*packed\* with them): Imagine testing Asian women on math. The stereotype of Asians is that they are good at math. The stereotype of women is that they are not good at math.

Get this: If you prime Asian women to think about their gender as women, their math test scores will drop. If you prime them to think about their ethnicity as Asian, their scores will soar.

Begs the question: With what are you priming yourself throughout your day?!

## WHAT'S IN A WORD?

"With respect to cancer, however, being in 'remission' means that we are waiting for 'it' to return. If 'it' does return, the recurrence is seen as part of the same cancer. Psychologically, this may lead us to feel defeated. For each new cold we beat, we implicitly think, 'I beat this before, so I can beat it again.' If the cancer comes back, however, we think, 'It' is winning. I am just not as strong as 'it' is.' Surely the cancer will in some ways bear a similarity to the last cancer, but in other ways, it is just as surely different. Our language leads us to see the similarities in recurring episodes of cancer, while with the common cold we see the dissimilarities. Of course, the stakes are so much higher with cancer that there is even more reason to consider our language choices."

*"How would things be different if we viewed all disease as psychosomatic? If this were the case, it might seem unreasonable and perhaps irresponsible not to try to heal ourselves."*

~ Ellen Langer

This is from a chapter called "What's in a word?" that takes a deeper look at the not-so-subtle effects of the words we use.

Quick question: If priming Asian women with associations of their gender vis-a-vis their ethnicity results in significant differences in math scores, do you think the use of the word "remission" will lead to different effects than the word "cure"?

It's worth thinking about, eh?

Again, that's an essential point of the book: We need to quit mindlessly accepting culturally accepted frames of mind and bring more mindfulness to our lives.

The words we use matter. Let's choose them mindfully.

P.S. Here are a couple more examples: Why do we say that an individual who struggled with alcohol but hasn't had a drink in ten years is "recovering" rather than "recovered"? And would we relate to alcoholism differently if it was described it as an "allergy" rather than a "disease"?

## ROOM ATTENDANTS + EXERCISE

"Room attendants also tend to have the mindless view that exercise and work are distinct and separate activities, which provides an opportunity to see whether they can get the health benefits of exercise if we prime exercise. When Ali Crum and I decided to study this group in 2007, we determined that they did not initially view their work as exercise. At the outset of the experiment, two-thirds of them reported not exercising regularly, and around one-third reported not getting any exercise at all. If we change the attitudes of room attendants who are getting the required physical activity but do not perceive it as exercise, will they reap the benefits?"

... This shift in mindset from the lack of awareness of exercise to exercise was accompanied by a remarkable improvement in physiological health. After only four weeks of knowing that their work is good exercise, the participants in the informed group lost an average of two pounds. In addition to the weight loss, the room attendants also showed a significant reduction in body fat percentage."

Another wow.

Quick re-cap: Hotel room attendants clean on average fifteen rooms a day, each taking twenty to thirty minutes and requiring a considerable amount of physical exertion. However, the women typically don't think they're getting enough exercise to be healthy—even though they are.

So, Langer's question: What would happen if we primed these women with the knowledge that they are, in fact, meeting the recommended levels of exercise?

Fast-forward four weeks to get our answer: Simply knowing that the work they do is like going to the gym for exercise (*without changing any other behaviors!*) led to significant health gains. (!!)

Langer makes the point that, although we don't know the precise reason why these changes occur, the mere fact that they do should be enough to help us become more mindful about how we choose to see the world!

## HOW'S YOUR RELATIONSHIP TO AGING?

"In checking the records of the participants more than twenty years after the survey, Levy and her colleagues found that those who viewed aging more positively lived, on average, seven and a half years longer than those who were negative about it. Simply, having a positive attitude made far more difference than any to be gained from lowering blood pressure or reducing cholesterol, which typically improve life span by about four years. It also beats the benefits of exercise, maintaining proper weight, and not smoking, which are found to add one to three years."

*"While we object strenuously to people trying to control our minds, we too easily give up control of our bodies. It is time to take back control, to become more mindful-to notice subtle changes in our bodies, in our circumstances, and in our relationships, and to help those we care about do the same."*

~ Ellen Langer

Did you know that your attitude toward aging makes a bigger difference to your longevity than lowering your blood pressure or not smoking? (I didn't. That's remarkable.)

And, of course, it begs another question: How do *you* feel about aging?

Here's to mindfully choosing to ignore society's negativity about the aging process and getting excited about the process of living and growing!

## QUESTIONING PRESUMED LIMITS

"Questioning presumed limits is the essence of the psychology of possibility. Asking why we can't become better even when we feel at our best and our healthiest is the only way we will ever know how good we can be. The psychology of possibility takes our desired ends as its starting point. It's not just a matter of asking if we can reverse paralysis, blindness, brain damage, or 'terminal' cancer, or even regenerate limbs that we've lost, because we've been taught that we cannot. And as such, the past determines our present. Everything is the same, however, until it is not. When we acknowledge that things change and that once again our current 'facts' are not immutable, possibility presents itself. If instead of asking whether we can effectively change any of these we ask how we can do it, we begin finding out."

What's *your* ideal life look like?

What if we used that as our starting point instead of presumed limits? How would your life improve if you opened up to the possibility that you could create that ideal?

And, what *tiny* step can you take to optimize your life a little more *today*?

Here's to bringing mindfulness to our lives and living within the psychology of possibility!

B

**Brian Johnson,**  
*Heroic Philosopher CEO*

If you liked this Note,  
you'll probably like...

[Emotional Intelligence](#)

[Flourish](#)

[Learned Optimism](#)

[Flow](#)

[The How of Happiness](#)

[You Are the Placebo](#)

## About the Author of This Note

BRIAN JOHNSON



Brian Johnson is the Founder + CEO of Heroic. He's spent half of the last 25 years as a Founder/CEO and the other half as a Philosopher. Brian loves integrating ancient wisdom and modern science to help YOU become the best, most heroic version of yourself so we can create a world in which 51% of humanity is flourishing by 2051. Learn more at [heroic.us](https://heroic.us).