

## INTRODUCTION

### Why I Love the Circus

I love the circus. I love to watch a juggler throwing screaming chain saws in the air, or a tightrope walker performing ten flips in a row. I love the spectacle and the sense of amazement and delight at witnessing the seemingly impossible.

When I was a child my dream was to become a circus artist. My parents' dream, though, was for me to get the good education they never had. So I ended up studying medicine.

One afternoon at medical school, in an otherwise dry lecture about the way the throat worked, our professor explained, "If something is stuck, the passage can be straightened by pushing the chin bone forward." To illustrate, he showed an X-ray of a sword swallower in action.

I had a flash of inspiration. My dream was not over! A few weeks earlier, when studying reflexes, I had discovered that of all my classmates, I could push my fingers farthest down my throat without gagging. At the time, I had not been too proud: I didn't think it was an important skill. But now I understood its value, and instantly my childhood dream sprang back to life. I decided to become a sword swallower.

My initial attempts weren't encouraging. I didn't own a sword so used a fishing rod instead, but no matter how many times I stood in front of the bathroom mirror and tried, I'd get as far as an inch and it would get stuck. Eventually, for a second time, I gave up on my dream.

Three years later I was a trainee doctor on a real medical ward. One of my first patients was an old man with a persistent cough. I would always ask what my patients did for a living, in case it was relevant, and it turned out he used to swallow swords. Imagine my surprise when this patient turned out to be the very same sword swallower from the X-ray! And imagine this, when I told him all about my attempts with the fishing rod. "Young doctor," he said, "don't you know the throat is flat? You can only slide flat things down there. That is why we use a sword."

That night after work I found a soup ladle with a straight flat handle and immediately resumed my practice. Soon I could slide the handle all the way down my throat. I was excited, but being a soup ladle shaft swallower was not my dream. The next day, I put an ad in the local paper and soon I had acquired what I needed: a Swedish army bayonet from 1809. As I successfully slid it down my throat, I felt both deeply proud of my achievement and smug that I had found such a great way to recycle weapons.

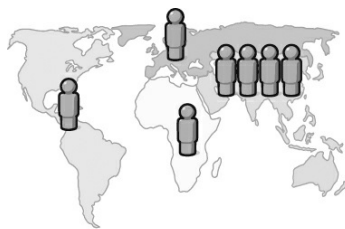
Sword swallowing has always shown that the seemingly impossible can be possible, and inspired humans to think beyond the obvious. Occasionally I demonstrate this ancient Indian art at the end of one of my lectures on global development. I step up onto a table and rip off my professorial checked shirt to reveal a black vest top decorated with a gold sequined lightning bolt. I call for complete silence, and to the swirling beat of a snare drum I slowly slide the army bayonet down my throat. I stretch out my arms. The audience goes wild.



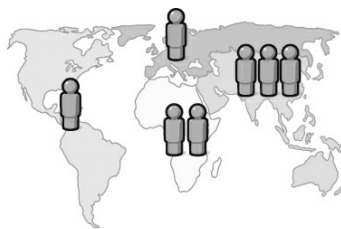
### Test Yourself

This book is about the world, and how to understand it. So why start with the circus? And why would I end a lecture by showing off in a sparkly top? I'll soon explain. But first, I would like you to test your knowledge about the world. Please find a piece of paper and a pencil and answer the 13 fact questions below.

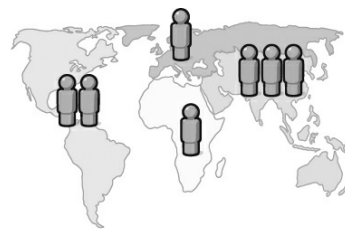
1. In all low-income countries across the world today, how many girls finish primary school?
  - ☐ A: 20 percent
  - ☐ B: 40 percent
  - ☐ C: 60 percent
2. Where does the majority of the world population live?
  - ☐ A: Low-income countries
  - ☐ B: Middle-income countries
  - ☐ C: High-income countries
3. In the last 20 years, the proportion of the world population living in extreme poverty has ...
  - ☐ A: almost doubled
  - ☐ B: remained more or less the same
  - ☐ C: almost halved
4. What is the life expectancy of the world today?
  - ☐ A: 50 years
  - ☐ B: 60 years
  - ☐ C: 70 years
5. There are 2 billion children in the world today, aged 0 to 15 years old. How many children will there be in the year 2100, according to the United Nations?
  - ☐ A: 4 billion
  - ☐ B: 3 billion
  - ☐ C: 2 billion
6. The UN predicts that by 2100 the world population will have increased by another 4 billion people. What is the main reason?
  - ☐ A: There will be more children (age below 15)
  - ☐ B: There will be more adults (age 15 to 74)
  - ☐ C: There will be more very old people (age 75 and older)
7. How did the number of deaths per year from natural disasters change over the last hundred years?
  - ☐ A: More than doubled
  - ☐ B: Remained about the same
  - ☐ C: Decreased to less than half
8. There are roughly 7 billion people in the world today. Which map shows best where they live? (Each figure represents 1 billion people.)



A



B



C

9. How many of the world's 1-year-old children today have been vaccinated against some disease?
  - ☐ A: 20 percent
  - ☐ B: 50 percent
  - ☐ C: 80 percent

10. Worldwide, 30-year-old men have spent 10 years in school, on average. How many years have women of the same age spent in school?

- ☐ A: 9 years
- ☐ B: 6 years
- ☐ C: 3 years

11. In 1996, tigers, giant pandas, and black rhinos were all listed as endangered. How many of these three species are more critically endangered today?

- ☐ A: Two of them
- ☐ B: One of them
- ☐ C: None of them

12. How many people in the world have some access to electricity?

- ☐ A: 20 percent
- ☐ B: 50 percent
- ☐ C: 80 percent

13. Global climate experts believe that, over the next 100 years, the average temperature will ...

- ☐ A: get warmer
- ☐ B: remain the same
- ☐ C: get colder

Here are the correct answers:

1: C, 2: B, 3: C, 4: C, 5: C, 6: B, 7: C, 8: A, 9: C, 10: A, 11: C, 12: C, 13: A

*Score one for each correct answer, and write your total score on your piece of paper.*

## Scientists, Chimpanzees, and You

How did you do? Did you get a lot wrong? Did you feel like you were doing a lot of guessing? If so, let me say two things to comfort you.

First, when you have finished this book, you will do much better. Not because I will have made you sit down and memorize a string of global statistics. (I am a global health professor, but I'm not crazy.) You'll do better because I will have shared with you a set of simple thinking tools. These will help you get the big picture right, and improve your sense of how the world works, without you having to learn all the details.

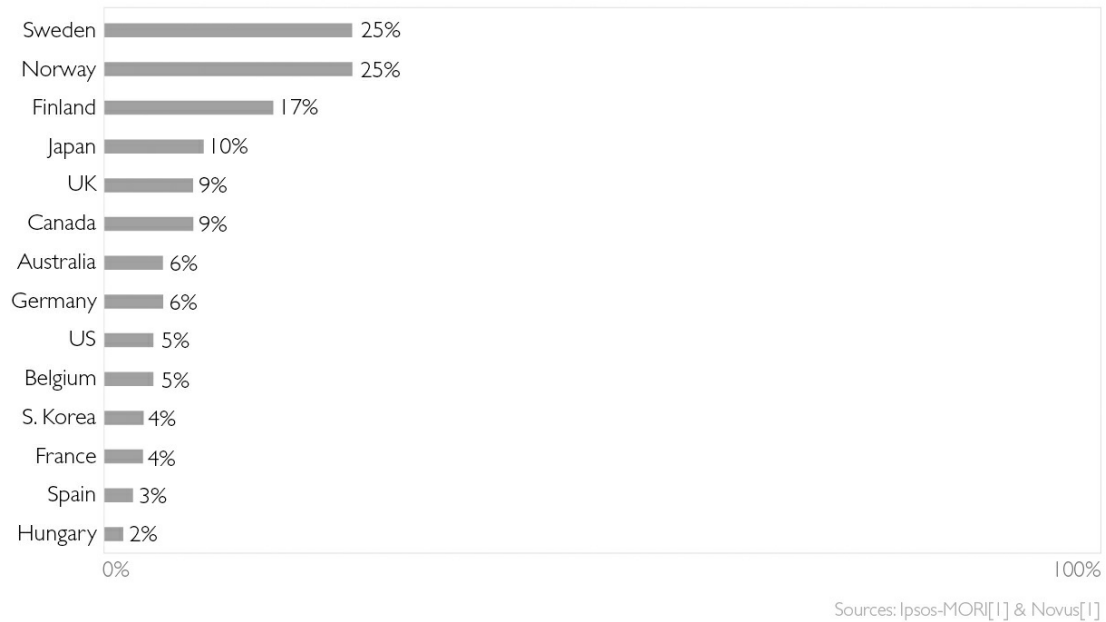
And second: if you did badly on this test, you are in very good company.

Over the past decades I have posed hundreds of fact questions like these, about poverty and wealth, population growth, births, deaths, education, health, gender, violence, energy, and the environment—basic global patterns and trends—to thousands of people across the world. The tests are not complicated and there are no trick questions. I am careful only to use facts that are well documented and not disputed. Yet most people do extremely badly.

Question three, for example, is about the trend in extreme poverty. Over the past twenty years, the proportion of the global population living in extreme poverty has halved. This is absolutely revolutionary. I consider it to be the most important change that has happened in the world in my lifetime. It is also a pretty basic fact to know about life on Earth. But people do not know it. On average only 7 percent—less than one in ten!—get it right.

### FACT QUESTION 3 RESULTS: percentage who answered correctly.

In the last 20 years, the proportion of the world population living in extreme poverty has ... ?  
(Correct answer: almost halved.)



(Yes, I have been talking a lot about the decline of global poverty in the Swedish media.)

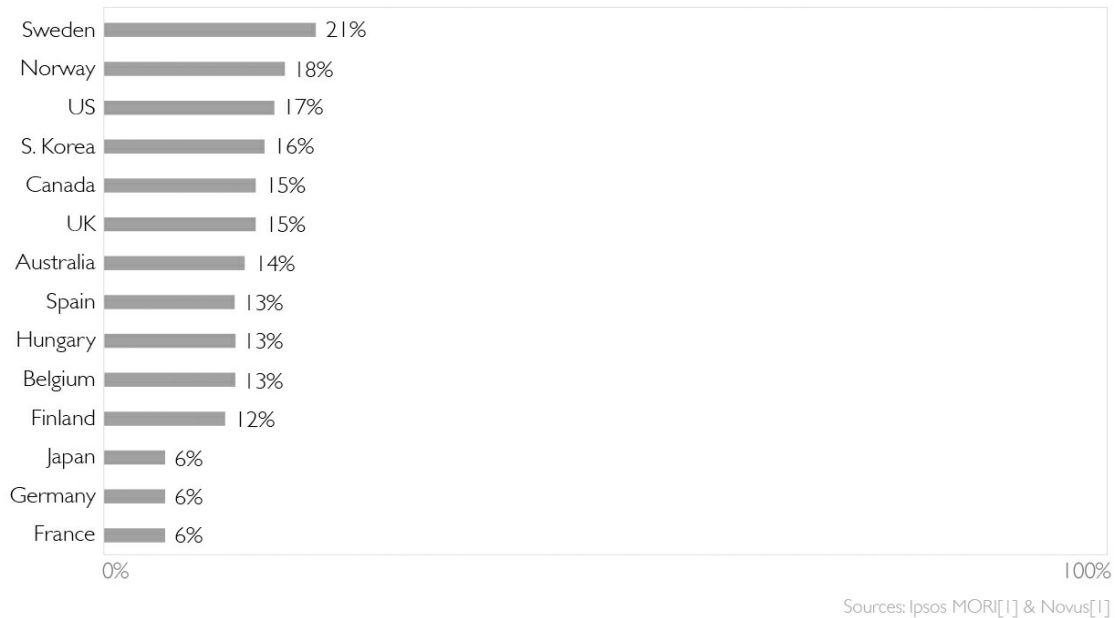
The Democrats and Republicans in the United States often claim that their opponents don't know the facts. If they measured their own knowledge instead of pointing at each other, maybe everyone could become more humble. When we polled in the United States, only 5 percent picked the right answer. The other 95 percent, regardless of their voting preference, believed either that the extreme poverty rate had not changed over the last 20 years, or, worse, that it had actually doubled—which is literally the opposite of what has actually happened.

Let's take another example: question nine, about vaccination. Almost all children are vaccinated in the world today. This is amazing. It means that almost all human beings alive today have some access to basic modern health care. But most people do not know this. On average just 13 percent of people get the answer right.

## FACT QUESTION 9 RESULTS: percentage who answered correctly.

How many of the world's one-year-old children today have been vaccinated against some disease?

(Correct answer: 80%.)



Eighty-six percent of people get the final question about climate change right. In all the rich countries where we have tested public knowledge in online polls, most people know that climate experts are predicting warmer weather. In just a few decades, scientific findings have gone from the lab to the public. That is a big public-awareness success story.

Climate change apart though, it is the same story of massive ignorance (by which I do not mean stupidity, or anything intentional, but simply the lack of correct knowledge) for all twelve of the other questions. In 2017 we asked nearly 12,000 people in 14 countries to answer our questions. They scored on average just two correct answers out of the first 12. No one got full marks, and just one person (in Sweden) got 11 out of 12. A stunning 15 percent scored zero.

Perhaps you think that better-educated people would do better? Or people who are more interested in the issues? I certainly thought that once, but I was wrong. I have tested audiences from all around the world and from all walks of life: medical students, teachers, university lecturers, eminent scientists, investment bankers, executives in multinational companies, journalists, activists, and even senior political decision makers. These are highly educated people who take an interest in the world. But most of them—a stunning *majority* of them—get most of the answers wrong. Some of these groups even score *worse* than the general public; some of the most appalling results came from a group of Nobel laureates and medical researchers. It is not a question of intelligence. Everyone seems to get the world devastatingly wrong.

Not only devastatingly wrong, but *systematically* wrong. By which I mean that these test results are not random. They are worse than random: they are worse than the results I would get if the people answering my questions had no knowledge at all.

Imagine I decide to head down to the zoo to test out my questions on the chimpanzees. Imagine I take with me huge armfuls of bananas, each marked either A, B, or C, and throw them into the chimpanzee enclosure. Then I stand outside the enclosure, read out each question in a loud, clear voice, and note down, as each chimpanzee's "answer," the letter on the banana she next chooses to eat.

If I did this (and I wouldn't ever actually do this, but just imagine), the chimps, by picking randomly, would do consistently better than the well-educated but deluded human beings who take my tests. Through pure luck, the troop of chimps would score 33 percent on each three-answer question, or four out of the first 12 on the whole test. Remember that the humans I have tested get on average just two out of 12 on the same test.

What's more, the chimps' errors would be equally shared between the two wrong answers, whereas the human

errors all tend to be in one direction. Every group of people I ask thinks the world is more frightening, more violent, and more hopeless—in short, more dramatic—than it really is.

## Why Don't We Beat the Chimpanzees?

How can so many people be so wrong about so much? How is it even possible that the majority of people score worse than chimpanzees? *Worse than random!*

When I got my first little glimpse of this massive ignorance, back in the mid-1990s, I was pleased. I had just started teaching a course in global health at Karolinska Institutet in Sweden and I was a little nervous. These students were incredibly smart; maybe they would already know everything I had to teach them? What a relief when I discovered that my students knew less about the world than chimpanzees.

But the more I tested people, the more ignorance I found, not only among my students but everywhere. I found it frustrating and worrying that people were so wrong about the world. When you use the GPS in your car, it is important that it is using the right information. You wouldn't trust it if it seemed to be navigating you through a different city than the one you were in, because you would know that you would end up in the wrong place. So how could policy makers and politicians solve global problems if they were operating on the wrong facts? How could business people make sensible decisions for their organizations if their worldview were upside down? And how could each person going about their life know which issues they should be stressed and worried about?

I decided to start doing more than just testing knowledge and exposing ignorance. I decided to try to understand why. Why was this ignorance about the world so widespread and so persistent? We are all wrong sometimes—even me, I will readily admit that—but how could so many people be wrong about so much? Why were so many people scoring worse than the chimps?

Working late one night at the university I had a eureka moment. I realized the problem couldn't simply be that people lacked the knowledge, because that would give randomly incorrect answers—chimpanzee answers—rather than worse-than-random, worse-than-chimpanzee, systematically wrong answers. Only actively wrong “knowledge” can make us score so badly.

Aha! I had it! What I was dealing with here—or so I thought, for many years—was an upgrade problem: my global health students, and all the other people who took my tests over the years, did have knowledge, but it was outdated, often several decades old. People had a worldview dated to the time when their teachers had left school.

So, to eradicate ignorance, or so I concluded, I needed to upgrade people's knowledge. And to do that, I needed to develop better teaching materials setting out the data more clearly. After I told Anna and Ola about my struggles over a family dinner, both of them got involved and started to develop animated graphs. I traveled the world with these elegant teaching tools. They took me to TED talks in Monterey, Berlin, and Cannes, to the boardrooms of multinational corporations like Coca-Cola and IKEA, to global banks and hedge funds, to the US State Department. I was excited to use our animated charts to show everyone how the world had changed. I had great fun telling everyone that they were emperors with no clothes, that they knew nothing about the world. We wanted to install the worldview upgrade in everyone.

But gradually, gradually, we came to realize that there was something more going on. The ignorance we kept on finding was not just an upgrade problem. It couldn't be fixed simply by providing clearer data animations or better teaching tools. Because even people who loved my lectures, I sadly realized, weren't really hearing them. They might indeed be inspired, momentarily, but after the lecture, they were still stuck in their old negative worldview. The new ideas just wouldn't take. Even straight after my presentations, I would hear people expressing beliefs about poverty or population growth that I had just proven wrong with the facts. I almost gave up.

Why was the dramatic worldview so persistent? Could the media be to blame? Of course I thought about that. But it wasn't the answer. Sure, the media plays a role, and I discuss that later, but we must not make them into a pantomime villain. We cannot just shout “boo, hiss” at the media.

I had a defining moment in January 2015, at the World Economic Forum in the small and fashionable Swiss town of Davos. One thousand of the world's most powerful and influential political and business leaders, entrepreneurs, researchers, activists, journalists, and even many high-ranking UN officials had queued for seats at the forum's main session on socioeconomic and sustainable development, featuring me, and Bill and Melinda Gates. Scanning the room as I stepped onto the stage, I noticed several heads of state and a former secretary-general of the UN. I saw heads of UN organizations, leaders of major multinational companies, and journalists I recognized from TV.

I was about to ask the audience three fact questions—about poverty, population growth, and vaccination rates—

and I was quite nervous. If my audience *did* know the answers to my questions, then none of the rest of my slides, revealing with a flourish how wrong they were, and what they should have answered, would work.

I shouldn't have worried. This top international audience who would spend the next few days explaining the world to each other did indeed know more than the general public about poverty. A stunning 61 percent of them got it right. But on the other two questions, about future population growth and the availability of basic primary health care, they still did worse than the chimps. Here were people who had access to all the latest data and to advisers who could continuously update them. Their ignorance could not possibly be down to an outdated worldview. Yet even they were getting the basic facts about the world wrong.

After Davos, things crystallized.

## Our Dramatic Instincts and the Overdramatic Worldview

So here is this book. It shares with you the conclusions I finally reached—based on years of trying to teach a fact-based worldview, and listening to how people misinterpret the facts even when they are right there in front of them—about why so many people, from members of the public to very smart, highly educated experts, score worse than chimpanzees on fact questions about the world. (And I will also tell you what you can do about it.) In short:

Think about the world. War, violence, natural disasters, man-made disasters, corruption. Things are bad, and it feels like they are getting worse, right? The rich are getting richer and the poor are getting poorer; and the number of poor just keeps increasing; and we will soon run out of resources unless we do something drastic. At least that's the picture that most Westerners see in the media and carry around in their heads. I call it the overdramatic worldview. It's stressful and misleading.

In fact, the vast majority of the world's population lives somewhere in the middle of the income scale. Perhaps they are not what we think of as middle class, but they are not living in extreme poverty. Their girls go to school, their children get vaccinated, they live in two-child families, and they want to go abroad on holiday, not as refugees. Step-by-step, year-by-year, the world is improving. Not on every single measure every single year, but as a rule. Though the world faces huge challenges, we have made tremendous progress. This is the fact-based worldview.

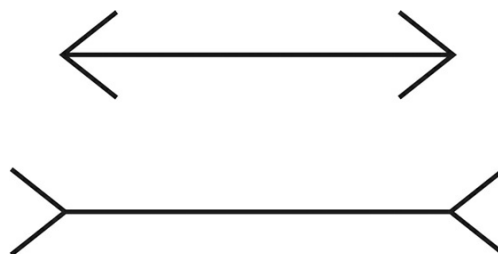
It is the overdramatic worldview that draws people to the most dramatic and negative answers to my fact questions. People constantly and intuitively refer to their worldview when thinking, guessing, or learning about the world. So if your worldview is wrong, then you will systematically make wrong guesses. But this overdramatic worldview is not caused simply by out-of-date knowledge, as I once thought. Even people with access to the latest information get the world wrong. And I am convinced it is not the fault of an evil-minded media, propaganda, fake news, or wrong facts.

My experience, over decades of lecturing, and testing, and listening to the ways people misinterpret the facts even when they are right in front of them, finally brought me to see that the overdramatic worldview is so difficult to shift because it comes from the very way our brains work.

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### Optical Illusions and Global Illusions

*Look at the two horizontal lines below. Which line is longest?*



Source: Müller-Lyer illusion

You might have seen this before. The line on the bottom looks longer than the line on the top. You know it isn't, but even if you already know, even if you measure the lines yourself and confirm that they are the same, you keep seeing them as different lengths.

My glasses have a custom lens to correct for my personal sight problem. But when I look at this optical illusion, I still misinterpret what I see, just like everyone else. This is because illusions don't happen in our eyes, they happen in our brains. They are systematic misinterpretations, unrelated to individual sight problems. Knowing that most people are deluded means you don't need to be embarrassed. Instead you can be curious: how does the illusion work?

Similarly, you can look at the results from the public polls and skip being embarrassed. Instead be curious. How does this "global illusion" work? Why do so many people's brains systematically misinterpret the state of the world?

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The human brain is a product of millions of years of evolution, and we are hard-wired with instincts that helped our ancestors to survive in small groups of hunters and gatherers. Our brains often jump to swift conclusions without much thinking, which used to help us to avoid immediate dangers. We are interested in gossip and dramatic stories, which used to be the only source of news and useful information. We crave sugar and fat, which used to be life-saving sources of energy when food was scarce. We have many instincts that used to be useful thousands of years ago, but we live in a very different world now.

Our cravings for sugar and fat make obesity one of the largest health problems in the world today. We have to teach our children, and ourselves, to stay away from sweets and chips. In the same way, our quick-thinking brains and cravings for drama—our dramatic instincts—are causing misconceptions and an overdramatic worldview.

Don't misunderstand me. We still need these dramatic instincts to give meaning to our world and get us through the day. If we sifted every input and analyzed every decision rationally, a normal life would be impossible. We should not cut out all sugar and fat, and we should not ask a surgeon to remove the parts of our brain that deal with emotions. But we need to learn to control our drama intake. Uncontrolled, our appetite for the dramatic goes too far, prevents us from seeing the world as it is, and leads us terribly astray.

## Factfulness and the Fact-Based Worldview

This book is my very last battle in my lifelong mission to fight devastating global ignorance. It is my last attempt to make an impact on the world: to change people's ways of thinking, calm their irrational fears, and redirect their energies into constructive activities. In my previous battles I armed myself with huge data sets, eye-opening software, an energetic lecturing style, and a Swedish bayonet. It wasn't enough. But I hope that this book will be.

This is data as you have never known it: it is data as therapy. It is understanding as a source of mental peace. Because the world is not as dramatic as it seems.

Factfulness, like a healthy diet and regular exercise, can and should become part of your daily life. Start to practice it, and you will be able to replace your overdramatic worldview with a worldview based on facts. You will be able to get the world right without learning it by heart. You will make better decisions, stay alert to real dangers and possibilities, and avoid being constantly stressed about the wrong things.

I will teach you how to recognize overdramatic stories and give you some thinking tools to control your dramatic instincts. Then you will be able to shift your misconceptions, develop a fact-based worldview, and beat the chimps every time.

## Back to the Circus

I occasionally swallow swords at the end of my lectures to demonstrate in a practical way that the seemingly impossible is possible. Before my circus act, I will have been testing my audience's factual knowledge about the world. I will have shown them that the world is completely different from what they thought. I will have proven to them that many of the changes they think will never happen have *already happened*. I will have been struggling to awaken their curiosity about what is possible, which is absolutely different from what they believe, and from what they see in the news every day.

I swallow the sword because I want the audience to realize how wrong their intuitions can be. I want them to realize that what I have shown them—both the sword swallowing and the material about the world that came before it—however much it conflicts with their preconceived ideas, however impossible it seems, is true.

I want people, when they realize they have been wrong about the world, to feel not embarrassment, but that childlike sense of wonder, inspiration, and curiosity that I remember from the circus, and that I still get every time I discover I have been wrong: "Wow, how is that even possible?"

This is a book about the world and how it really is. It is also a book about you, and why you (and almost



everyone I have ever met) do not see the world as it really is. It is about what you can do about it, and how this will make you feel more positive, less stressed, and more hopeful as you walk out of the circus tent and back into the world.

So, if you are more interested in being right than in continuing to live in your bubble; if you are willing to change your worldview; if you are ready for critical thinking to replace instinctive reaction; and if you are feeling humble, curious, and ready to be amazed—then please read on.

## CHAPTER ONE

### THE GAP INSTINCT



**Capturing a monster in a classroom using only a piece of paper**

#### Where It All Started

It was October 1995 and little did I know that after my class that evening, I was going to start my lifelong fight against global misconceptions.

“What is the child mortality rate in Saudi Arabia? Don’t raise your hands. Just shout it out.” I had handed out copies of tables 1 and 5 from UNICEF’s yearbook. The handouts looked dull, but I was excited.

A choir of students shouted in unison: “THIRTY-FIVE.”

“Yes. Thirty-five. Correct. This means that 35 children die before their fifth birthday out of every thousand live births. Give me the number now for Malaysia?”

“FOURTEEN,” came the chorus.

As the numbers were thrown back at me, I scribbled them with a green pen onto a plastic film on the overhead projector.

“Fourteen,” I repeated. “Fewer than Saudi Arabia!”

My dyslexia played a little trick on me and I wrote “Malaysia.” The students laughed.

“Brazil?”

“FIFTY-FIVE.”

“Tanzania?”

“ONE HUNDRED AND SEVENTY-ONE.”

I put the pen down and said, “Do you know why I’m obsessed with the numbers for the child mortality rate? It’s not *only* that I care about children. This measure takes the temperature of a whole society. Like a huge thermometer. Because children are very fragile. There are so many things that can kill them. When only 14 children die out of 1,000 in Malaysia, this means that the other 986 survive. Their parents and their society manage to protect them from all the dangers that could have killed them: germs, starvation, violence, and so on. So this number 14 tells us that most families in Malaysia have enough food, their sewage systems don’t leak into their drinking water, they have good access to primary health care, and mothers can read and write. It doesn’t just tell us about the health of children. It measures the quality of the whole society.

“It’s not the numbers that are interesting. It’s what they tell us about the lives behind the numbers,” I continued. “Look how different these numbers are: 14, 35, 55, and 171. Life in these countries must be extremely different.”

I picked up the pen. “Tell me now how life was in Saudi Arabia 35 years ago? How many children died in 1960? Look in the second column.”

“TWO HUNDRED ... and forty two.”

The volume dropped as my students articulated the big number: 242.

“Yes. That’s correct. Saudi Arabian society has made amazing progress, hasn’t it? Child deaths per thousand dropped from 242 to 35 in just 33 years. That’s way faster than Sweden. We took 77 years to achieve the same

improvement.

“What about Malaysia? Fourteen today. What was it in 1960?”

“Ninety-three,” came the mumbled response. The students had all started searching through their tables, puzzled and confused. A year earlier, I had given my students the same examples, but with no data tables to back them up, and they had simply refused to believe what I told them about the improvements across the world. Now, with all the evidence right in front of them, this year’s students were instead rolling their eyes up and down the columns, to see if I had picked exceptional countries and tried to cheat them. They couldn’t believe the picture they saw in the data. It didn’t look anything like the picture of the world they had in their heads.

“Just so you know,” I said, “you won’t find any countries where child mortality has increased. Because the world in general is getting better. Let’s have a short coffee break.”

## The Mega Misconception That “The World Is Divided in Two”

This chapter is about the first of our ten dramatic instincts, the gap instinct. I’m talking about that irresistible temptation we have to divide all kinds of things into two distinct and often conflicting groups, with an imagined gap—a huge chasm of injustice—in between. It is about how the gap instinct creates a picture in people’s heads of a world split into two kinds of countries or two kinds of people: rich versus poor.

It’s not easy to track down a misconception. That October evening in 1995 was the first time I got a proper look at the beast. It happened right after coffee, and the experience was so exciting that I haven’t stopped hunting mega misconceptions ever since.

I call them mega misconceptions because they have such an enormous impact on how people misperceive the world. This first one is the worst. By dividing the world into two misleading boxes—poor and rich—it completely distorts all the global proportions in people’s minds.

## Hunting Down the First Mega Misconception

Starting up the lecture again, I explained that child mortality was highest in tribal societies in the rain forest, and among traditional farmers in the remote rural areas across the world. “The people you see in exotic documentaries on TV. Those parents struggle harder than anyone to make their families survive, and still they lose almost half of their children. Fortunately, fewer and fewer people have to live under such dreadful conditions.”

A young student in the first row raised his hand. He tilted his head and said, “They can never live like us.” All over the room other students nodded in support.

He probably thought I would be surprised. I was not at all. This was the same kind of “gap” statement I had heard many times before. I wasn’t surprised, I was thrilled. This was what I had hoped for. Our dialogue went something like this:

ME: Sorry, who do you mean when you say “they”?

HIM: I mean people in other countries.

ME: All countries other than Sweden?

HIM: No. I mean ... the non-Western countries. They can’t live like us. It won’t work.

ME: Aha! (As if now I understood.) You mean like Japan?

HIM: No, not Japan. They have a Western lifestyle.

ME: So what about Malaysia? They don’t have a “Western lifestyle,” right?

HIM: No. Malaysia is not Western. All countries that haven’t adopted the Western lifestyle yet. They shouldn’t.

You know what I mean.

ME: No, I don’t know what you mean. Please explain. You are talking about “the West” and “the rest.” Right?

HIM: Yes. Exactly.

ME: Is Mexico ... “West”?

He just looked at me.

I didn’t mean to pick on him, but I kept going, excited to see where this would take us. Was Mexico “the West” and could Mexicans live like us? Or “the rest,” and they couldn’t? “I’m confused,” I said. “You started with ‘them and us’ and then changed it to ‘the West and the rest.’ I’m very interested to understand what you mean. I have

heard these labels used many times, but honestly I have never understood them.”

Now a young woman in the third row came to his rescue. She took on my challenge, but in a way that completely surprised me. She pointed at the big paper in front of her and said, “Maybe we can define it like this: ‘*we in the West*’ have few children and few of the children die. While ‘*they in the rest*’ have many children and many of the children die.” She was trying to resolve the conflict between his mind-set and my data set—in a pretty creative way, actually—by suggesting a definition for how to split the world. That made me so happy. Because she was absolutely wrong—as she would soon realize—and more to the point, she was wrong in a concrete way that I could test.

“Great. Fantastic. Fantastic.” I grabbed my pen and leaped into action. “Let’s see if we can put the countries in two groups based on how many children they have and how many children die.”

The skeptical faces now became curious, trying to figure out what the heck had made me so happy.

I liked her definition because it was so clear. We could check it against the data. If you want to convince someone they are suffering from a misconception, it’s very useful to be able to test their opinion against the data. So I did just that.

And I have been doing just that for the rest of my working life. The big gray photocopying machine that I had used to copy those original data tables was my first partner in my fight against misconceptions. By 1998, I had a new partner—a color printer that allowed me to share a colorful bubble graph of country data with my students. Then I acquired my first human partners, and things really picked up. Anna and Ola got so excited by these charts and my idea of capturing misconceptions that they joined my cause, and accidentally created a revolutionary way to show hundreds of data trends as animated bubble charts. The bubble chart became our weapon of choice in our battle to dismantle the misconception that “the world is divided into two.”

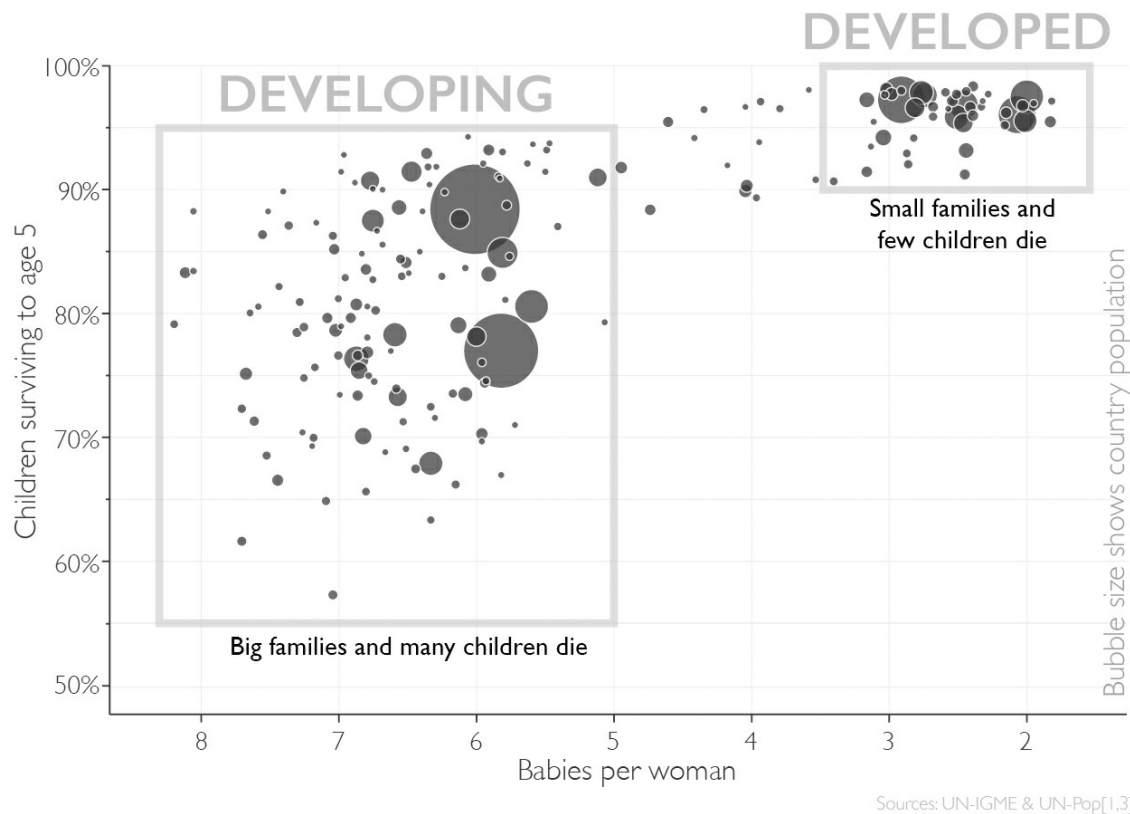
## What’s Wrong with This Picture?

My students talked about “them” and “us.” Others talk about “the developing world” and “the developed world.” You probably use these labels yourself. What’s wrong with that? Journalists, politicians, activists, teachers, and researchers use them all the time.

When people say “developing” and “developed,” what they are probably thinking is “poor countries” and “rich countries.” I also often hear “West/rest,” “north/south,” and “low-income/high-income.” Whatever. It doesn’t really matter which terms people use to describe the world, as long as the words create relevant pictures in their heads and mean something with a basis in reality. But what pictures *are* in their heads when they use these two simple terms? And how do those pictures compare to reality?

Let’s check against the data. The chart on the next page shows babies per woman and child survival rates for all countries.

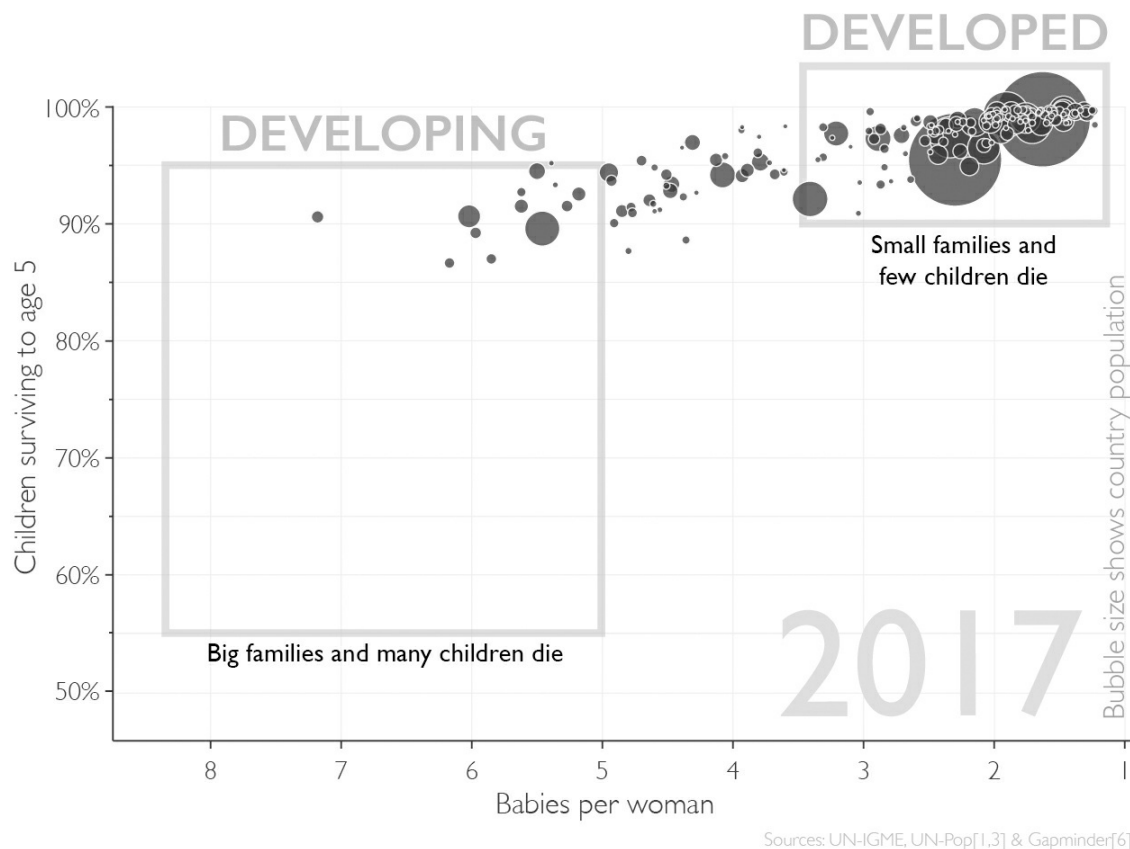
Each bubble on the chart represents a country, with the size of the bubble showing the size of the country’s population. The biggest bubbles are India and China. On the left of the chart are countries where women have many babies, and on the right are countries where women have few babies. The higher up a country is on the chart, the better the child survival rate in that country. This chart is exactly what my student in the third row suggested as a way of defining the two groups: “us and them,” or “the West and the rest.” Here I have labeled the two groups “developing and developed” countries.



Look how nicely the world's countries fall into the two boxes: developing and developed. And between the two boxes there is a clear gap, containing just 15 small countries (including Cuba, Ireland, and Singapore) where just 2 percent of the world's population lives. In the box labeled "developing," there are 125 bubbles, including China and India. In all those countries, women have more than five children on average, and child deaths are common: fewer than 95 percent of children survive, meaning that more than 5 percent of children die before their fifth birthday. In the other box labeled "developed," there are 44 bubbles, including the United States and most of Europe. In all those countries the women have fewer than 3.5 children per woman and child survival is above 90 percent.

The world fits into two boxes. And these are exactly the two boxes that the student in the third row had imagined. This picture clearly shows a world divided into two groups, with a gap in the middle. How nice. What a simple world to understand! So what's the big deal? Why is it so wrong to label countries as "developed" and "developing"? Why did I give my student who referred to "us and them" such a hard time?

Because this picture shows the world in 1965! When I was a young man. That's the problem. Would you use a map from 1965 to navigate around your country? Would you be happy if your doctor was using cutting-edge research from 1965 to suggest your diagnosis and treatment? The picture below shows what the world looks like today.



The world has completely changed. Today, families are small and child deaths are rare in the vast majority of countries, including the largest: China and India. Look at the bottom left-hand corner. The box is almost empty. The small box, with few children and high survival, that's where all countries are heading. And most countries are already there. Eighty-five percent of mankind are already inside the box that used to be named "developed world." The remaining 15 percent are mostly in between the two boxes. Only 13 countries, representing 6 percent of the world population, are still inside the "developing" box. But while the world has changed, the worldview has not, at least in the heads of the "Westerners." Most of us are stuck with a completely outdated idea about the rest of the world.

The complete world makeover I've just shown is not unique to family size and child survival rates. The change looks very similar for pretty much any aspect of human lives. Graphs showing levels of income, or tourism, or democracy, or access to education, health care, or electricity would all tell the same story: that the world used to be divided into two but isn't any longer. Today, most people are in the middle. There is no gap between the West and the rest, between developed and developing, between rich and poor. And we should all stop using the simple pairs of categories that suggest there is.

My students were dedicated, globally aware young people who wanted to make the world a better place. I was shocked by their blunt ignorance of the most basic facts about the world. I was shocked that they actually thought there were two groups, "us" and "them," shocked to hear them saying that "they" could not live like "us." How was it even possible that they were walking around with a 30-year-old worldview in their heads?

Pedaling home through the rain that evening in October 1995, my fingers numb, I felt fired up. My plan had worked. By bringing the data into the classroom I had been able to prove to my students that the world was not divided into two. I had finally managed to capture their misconception. Now I felt the urge to take the fight further. I realized I needed to make the data even clearer. That would help me to show more people, more convincingly, that their opinions were nothing more than unsubstantiated feelings. That would help me to shatter their illusions that they knew things that really they only felt.

Twenty years later I'm sitting in a fancy TV studio in Copenhagen in Denmark. The "divided" worldview is 20 years older, 20 years more outdated. We're live on air, and the journalist tilts his head and says to me, "We still see

an enormous difference between the small, rich world, the old Western world mostly, and then the large part.”

“But you’re totally wrong,” I reply.

Once more I explain that “poor developing countries” no longer exist as a distinct group. That there is no gap. Today, most people, 75 percent, live in middle-income countries. Not poor, not rich, but somewhere in the middle and starting to live a reasonable life. At one end of the scale there are still countries with a majority living in extreme and unacceptable poverty; at the other is the wealthy world (of North America and Europe and a few others like Japan, South Korea, and Singapore). But the vast majority are already in the middle.

“And what do you base that knowledge on?” continued the journalist in an obvious attempt to be provocative. And he succeeded. I couldn’t help getting irritated and my agitation showed in my voice, and my words: “I use normal statistics that are compiled by the World Bank and the United Nations. This is not controversial. These facts are not up for discussion. I am right and you are wrong.”

## Capturing the Beast

Now that I have been fighting the misconception of a divided world for 20 years, I am no longer surprised when I encounter it. My students were not special. The Danish journalist was not special. The vast majority of the people I meet think like this. If you are skeptical about my claim that so many people get it wrong, that’s good. You should always require evidence for claims like these. And here it is, in the form of a two-part misconception trap.

First, we had people disclose how they imagined life in so-called low-income countries, by asking questions like this one from the test you did in the introduction.

### FACT QUESTION 1

In all low-income countries across the world today, how many girls finish primary school?

- ☐ A: 20 percent
- ☐ B: 40 percent
- ☐ C: 60 percent

On average just 7 percent picked the correct answer, C: 60 percent of girls finish primary school in low-income countries. (Remember, 33 percent of the chimps at the zoo would have gotten this question right.) A majority of people “guessed” that it was just 20 percent. There are only a very few countries in the world—exceptional places like Afghanistan or South Sudan—where fewer than 20 percent of girls finish primary school, and at most 2 percent of the world’s girls live in such countries.

When we asked similar questions about life expectancy, undernourishment, water quality, and vaccination rates—essentially asking what proportion of people in low-income countries had access to the basic first steps toward a modern life—we got the same kinds of results. Life expectancy in low-income countries is 62 years. Most people have enough to eat, most people have access to improved water, most children are vaccinated, and most girls finish primary school. Only tiny percentages—way less than the chimps’ 33 percent—got these answers right, and large majorities picked the worst alternative we offered, even when those numbers represented levels of misery now being suffered only during terrible catastrophes in the very worst places on Earth.

## FACT QUESTION 1 RESULTS: percentage who answered correctly.

In all low-income countries across the world today, how many girls finish primary school?

(Correct answer: 60%.)



Sources: Ipsos MORI[1] & Novus[1]

Now let's close the trap, and capture the misconception. We now know that people believe that life in low-income countries is much worse than it actually is. But how many people do they imagine live such terrible lives? We asked people in Sweden and the United States:

*Of the world population, what percentage lives in low-income countries?*

The majority suggested the answer was 50 percent or more. The average guess was 59 percent.

The real figure is 9 percent. Only 9 percent of the world lives in low-income countries. And remember, we just worked out that those countries are not nearly as terrible as people think. They are really bad in many ways, but they are not at or below the level of Afghanistan, Somalia, or Central African Republic, the worst places to live on the planet.

To summarize: low-income countries are much more developed than most people think. And vastly fewer people live in them. The idea of a divided world with a majority stuck in misery and deprivation is an illusion. A complete misconception. Simply wrong.

### Help! The Majority Is Missing

If the majority doesn't live in low-income countries, then where does it live? Surely not in high-income countries?

How do you like your bath water? Ice cold or steam hot? Of course, those are not the only alternatives. You can also have your water freezing, tepid, scalding, or anything in between. Many options, along a range.

#### FACT QUESTION 2

Where does the majority of the world population live?

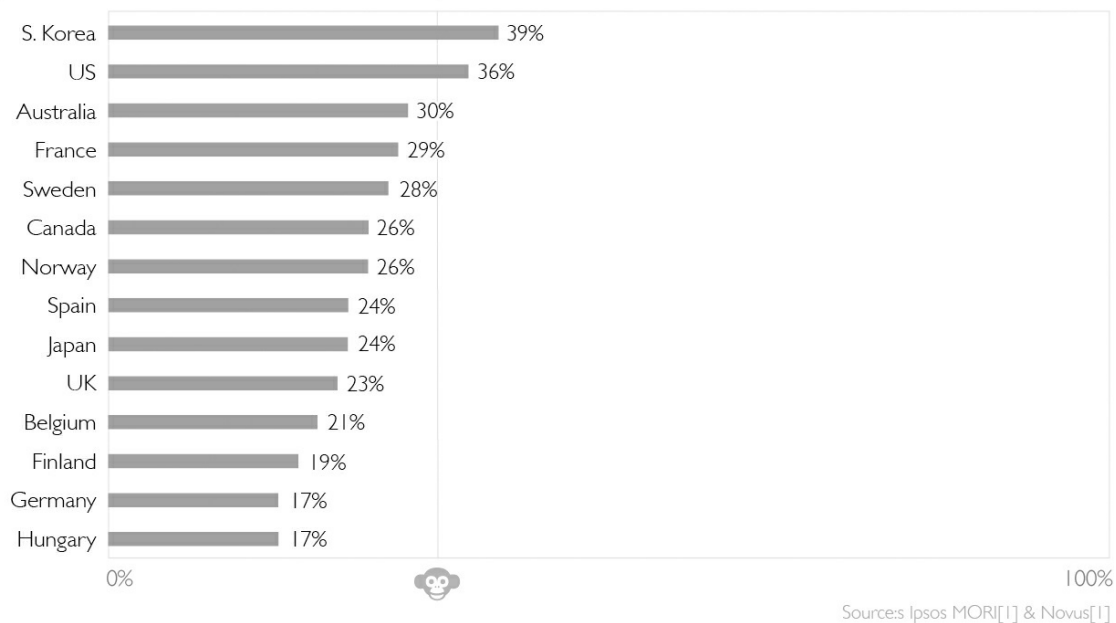
- ☐ A: Low-income countries
- ☐ B: Middle-income countries
- ☐ C: High-income countries



## FACT QUESTION 2 RESULTS: percentage who answered correctly.

Where does the majority of the world population live?

(Correct answer: middle-income countries.)



The majority of people live neither in low-income countries nor in high-income countries, but in middle-income countries. This category doesn't exist in the divided mind-set, but in reality it definitely exists. It's where 75 percent of humanity lives, right there where the gap is supposed to be. Or, to put it another way, there is no gap.

Combining middle- and high-income countries, that makes 91 percent of humanity, most of whom have integrated into the global market and made great progress toward decent lives. This is a happy realization for humanitarians and a crucial realization for global businesses. There are 5 billion potential consumers out there, improving their lives in the middle, and wanting to consume shampoo, motorcycles, menstrual pads, and smartphones. You can easily miss them if you go around thinking they are "poor."

## So What Should "We" Call "Them" Instead? The Four Levels

I am often quite rude about the term "developing countries" in my presentations.

Afterward, people ask me, "So what should we call them instead?" But listen carefully. It's the same misconception: we and them. What should "we" call "them" instead?

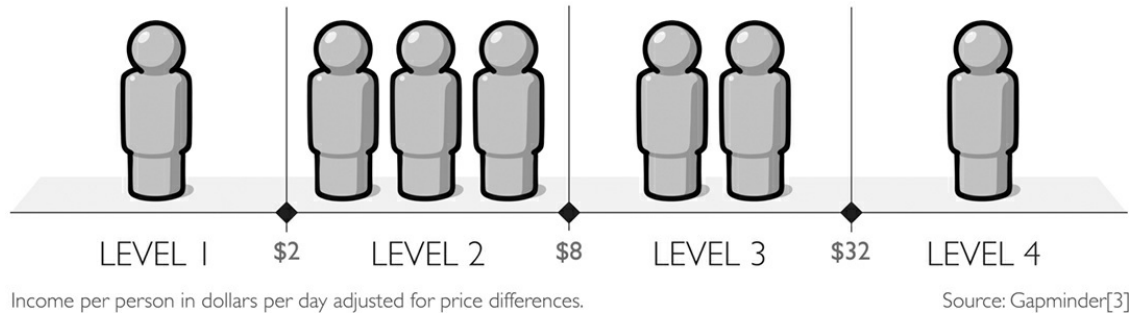
What we should do is stop dividing countries into two groups. It doesn't make sense anymore. It doesn't help us to understand the world in a practical way. It doesn't help businesses find opportunities, and it doesn't help aid money to find the poorest people.

But we need to do some kind of sorting to make sense of the world. We can't give up our old labels and replace them with ... nothing. What should we do?

One reason the old labels are so popular is that they are so simple. But they are wrong! So, to replace them, I will now suggest an equally simple but more relevant and useful way of dividing up the world. Instead of dividing the world into two groups I will divide it into four income levels, as set out in the image below.

## FOUR INCOME LEVELS

The world population in 2017. Billions of people on different income.



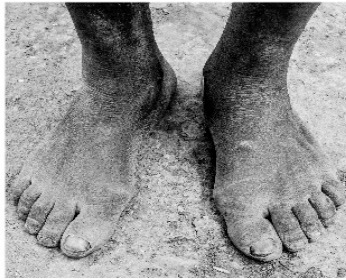
Each figure in the chart represents 1 billion people, and the seven figures show how the current world population is spread out across four income levels, expressed in terms of dollar income per day. You can see that most people are living on the two middle levels, where people have most of their basic human needs met.

Are you excited? You should be. Because the four income levels are the first, most important part of your new fact-based framework. They are one of the simple thinking tools I promised would help you to guess better about the world. Throughout the book you will see how the levels provide a simple way to understand all kinds of things, from terrorism to sex education. So I want to try to explain what life is like on each of these four levels.

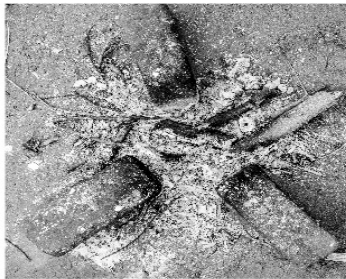
Think of the four income levels as the levels of a computer game. Everyone wants to move from Level 1 to Level 2 and upward through the levels from there. Only, it's a very strange computer game, because Level 1 is the hardest. Let's play.



Water



Transport



Cooking

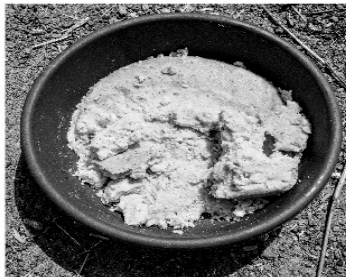
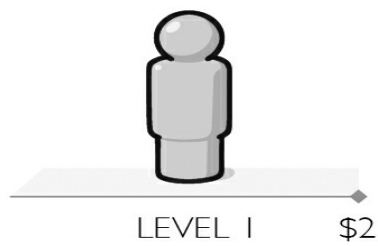


Plate of food



Source: Dollar Street

**LEVEL 1.** You start on Level 1 with \$1 per day. Your five children have to spend hours walking barefoot with your single plastic bucket, back and forth, to fetch water from a dirty mud hole an hour's walk away. On their way home they gather firewood, and you prepare the same gray porridge that you've been eating at every meal, every day, for your whole life—except during the months when the meager soil yielded no crops and you went to bed hungry. One day your youngest daughter develops a nasty cough. Smoke from the indoor fire is weakening her lungs. You can't afford antibiotics, and one month later she is dead. This is extreme poverty. Yet you keep struggling on. If you are lucky and the yields are good, you can maybe sell some surplus crops and manage to earn more than \$2 a day, which would move you to the next level. Good luck! (Roughly 1 billion people live like this today.)



Water



Transport



Cooking

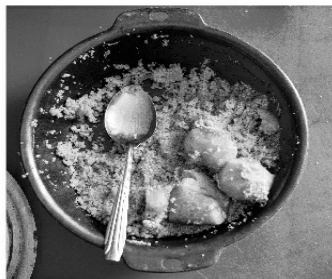
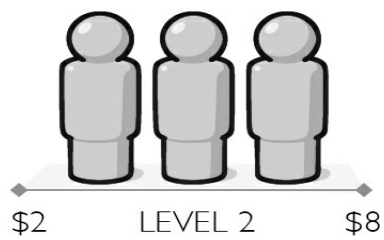


Plate of food



Source: Dollar Street

**LEVEL 2.** You've made it. In fact, you've quadrupled your income and now you earn \$4 a day. Three extra dollars every day. What are you going to do with all this money? Now you can buy food that you didn't grow yourself, and you can afford chickens, which means eggs. You save some money and buy sandals for your children, and a bike, and more plastic buckets. Now it takes you only half an hour to fetch water for the day. You buy a gas stove so your children can attend school instead of gathering wood. When there's power they do their homework under a bulb. But the electricity is too unstable for a freezer. You save up for mattresses so you don't have to sleep on the mud floor. Life is much better now, but still very uncertain. A single illness and you would have to sell most of your possessions to buy medicine. That would throw you back to Level 1 again. Another three dollars a day would be good, but to experience really drastic improvement you need to quadruple again. If you can land a job in the local garment industry you will be the first member of your family to bring home a salary. (Roughly 3 billion people live like this today.)



Water



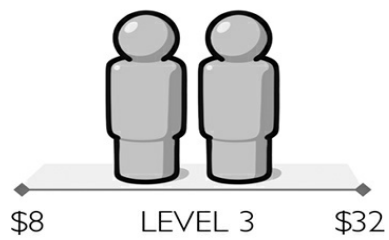
Transport



Cooking



Plate of food



Source: Dollar Street

**LEVEL 3.** Wow! You did it! You work multiple jobs, 16 hours a day, seven days a week, and manage to quadruple your income again, to \$16 a day. Your savings are impressive and you install a cold-water tap. No more fetching water. With a stable electric line the kids' homework improves and you can buy a fridge that lets you store food and serve different dishes each day. You save to buy a motorcycle, which means you can travel to a better-paying job at a factory in town. Unfortunately you crash on your way there one day and you have to use money you had saved for your children's education to pay the medical bills. You recover, and thanks to your savings you are not thrown back a level. Two of your children start high school. If they manage to finish, they will be able to get better-paying jobs than you have ever had. To celebrate, you take the whole family on its first-ever vacation, one afternoon to the beach, just for fun. (Roughly 2 billion people live like this today.)





Water



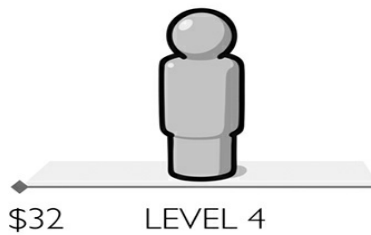
Transport



Cooking



Plate of food



LEVEL 4

Source: Dollar Street

**LEVEL 4.** You have more than \$64 a day. You are a rich consumer and three more dollars a day makes very little difference to your everyday life. That's why you think three dollars, which can change the life of someone living in extreme poverty, is not a lot of money. You have more than twelve years of education and you have been on an airplane on vacation. You can eat out once a month and you can buy a car. Of course you have hot and cold water indoors.

But you know about this level already. Since you are reading this book, I'm pretty sure you live on Level 4. I don't have to describe it for you to understand. The difficulty, when you have always known this high level of income, is to understand the huge differences between the other three levels. People on Level 4 must struggle hard not to misunderstand the reality of the other 6 billion people in the world. (Roughly 1 billion people live like this today.)

I've described the progress up the levels as if one person managed to move through several levels. That is very unusual. Often it takes several generations for a family to move from Level 1 to Level 4. I hope though that you now have a clear picture of the kinds of lives people live on different levels; a sense that it is possible to move through the levels, both for individuals and for countries; and above all the understanding that there are not just two kinds of lives.

Human history started with everyone on Level 1. For more than 100,000 years nobody made it up the levels and most children didn't survive to become parents. Just 200 years ago, 85 percent of the world population was still on Level 1, in extreme poverty.

Today the vast majority of people are spread out in the middle, across Levels 2 and 3, with the same range of standards of living as people had in Western Europe and North America in the 1950s. And this has been the case for many years.

## The Gap Instinct

The gap instinct is very strong. The first time I lectured to the staff of the World Bank was in 1999. I told them the labels "developing" and "developed" were no longer valid and I swallowed my sword. It took the World Bank 17 years and 14 more of my lectures before it finally announced publicly that it was dropping the terms "developing" and "developed" and would from now on divide the world into four income groups. The UN and most other global organizations have still not made this change.

So why is the misconception of a gap between the rich and the poor so hard to change?

I think this is because human beings have a strong dramatic instinct toward binary thinking, a basic urge to divide things into two distinct groups, with nothing but an empty gap in between. We love to dichotomize. Good versus bad. Heroes versus villains. My country versus the rest. Dividing the world into two distinct sides is simple and intuitive, and also dramatic because it implies conflict, and we do it without thinking, all the time.

Journalists know this. They set up their narratives as conflicts between two opposing people, views, or groups. They prefer stories of extreme poverty and billionaires to stories about the vast majority of people slowly dragging themselves toward better lives. Journalists are storytellers. So are people who produce documentaries and movies. Documentaries pit the fragile individual against the big, evil corporation. Blockbuster movies usually feature good fighting evil.

The gap instinct makes us imagine division where there is just a smooth range, difference where there is convergence, and conflict where there is agreement. It is the first instinct on our list because it's so common and distorts the data so fundamentally. If you look at the news or click on a lobby group's website this evening, you will probably notice stories about conflict between two groups, or phrases like "the increasing gap."

## How to Control the Gap Instinct

There are three common warning signs that someone might be telling you (or you might be telling yourself) an overdramatic gap story and triggering your gap instinct. Let's call them comparisons of averages, comparisons of extremes, and the view from up here.

### Comparisons of Averages

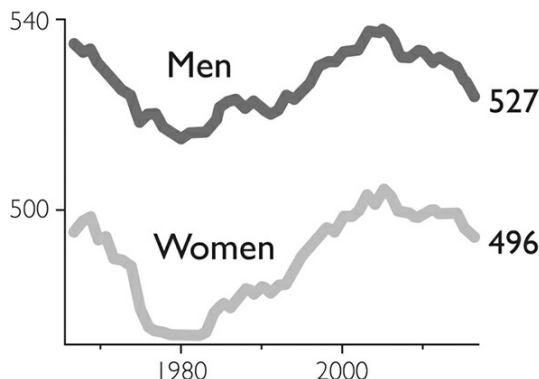
All you averages out there, please do not take offense at what I am about to say. I love averages. They are a quick way to convey information, they often tell us something useful, and modern societies couldn't function without them. Nor could this book. There will be many averages in this book. But any simplification of information may

also be misleading, and averages are no exception. Averages mislead by hiding a spread (a range of different numbers) in a single number.

When we compare two averages, we risk misleading ourselves even more by focusing on the gap between those two single numbers, and missing the overlapping spreads, the overlapping ranges of numbers, that make up each average. That is, we see gaps that are not really there.

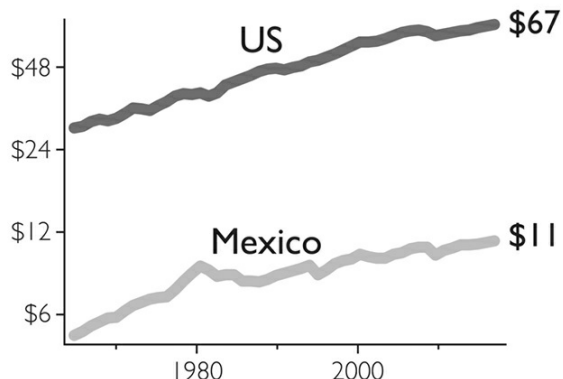
Look at the two (unrelated) graphs here, for example:

**AVERAGE MATH SCORES**



Source: College Board via Perry

**AVERAGE INCOME \$/DAY**

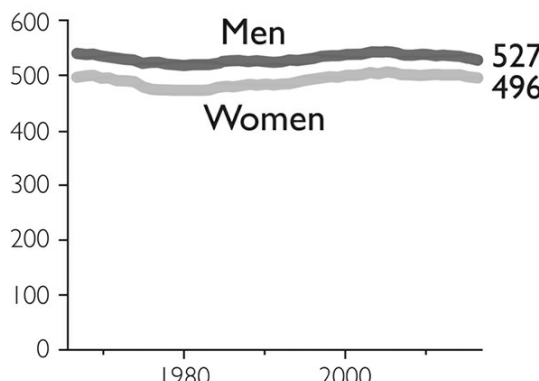


Source: Gapminder[10] based on PovcalNet & IMF[1]

The graph on the left shows the gap between the average math scores of men and women taking SAT tests in the United States, for every year since 1965. The graph on the right shows the gap between the average income of people living in Mexico and the United States. Look at the huge differences between the two lines in each graph. Men versus women. United States versus Mexico. These graphs seem to show that men are better at math than women, and that people living in the United States have a higher income than Mexicans. And in a sense this is true. It is what the numbers say. But in what sense? To what extent? Are all men better than all women? Are all US citizens richer than all Mexicans?

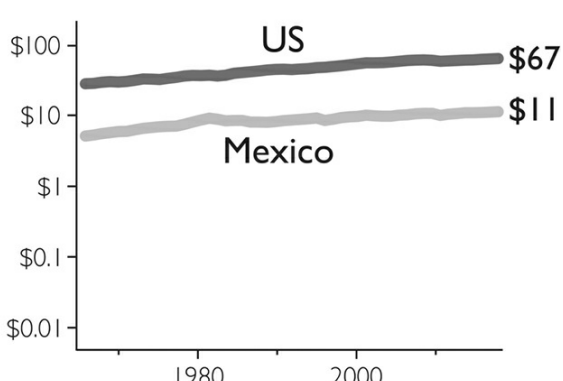
Let's get a better sense of the reality behind the numbers. First, let's change the scale on the vertical axis. Using the same numbers, we now get a very different impression. Now the "gap" seems almost gone.

**AVERAGE MATH SCORES**



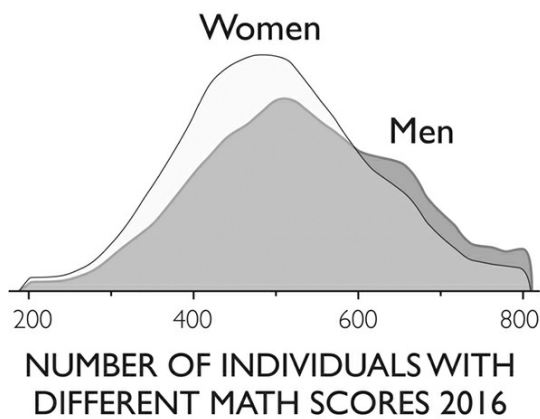
Source: College Board via Perry

**AVERAGE INCOME \$/DAY**

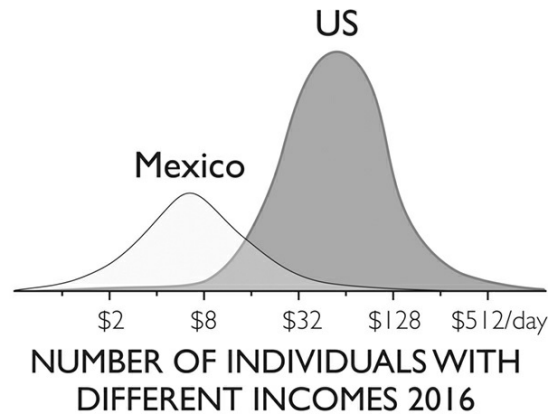


Source: Gapminder[10] based on PovcalNet & IMF[1]

Now let's look at the same data in a third way. Instead of looking at the averages each year, let's look at the range of math scores, or incomes, in one particular year.



Source: College Board



Source: Gapminder[8] based on ENIGH, US-CPS & PovcalNet

Now we get a sense of all the individuals who were bundled into the average number. Look! There is an almost complete overlap between men and women's math scores. The majority of women have a male math twin: a man with the same math score as they do. When it comes to incomes in Mexico and the United States, the overlap is there but it is only partial. What is clear, though, looking at the data this way, is that the two groups of people—men and women, Mexicans and people living in the United States—are not separate at all. They overlap. There is no gap.

Of course, gap stories *can* reflect reality. In apartheid South Africa, black people and white people lived on different income levels and there was a true gap between them, with almost no overlap. The gap story of separate groups was absolutely relevant.

But apartheid was very unusual. Much more often, gap stories are a misleading overdramatization. In most cases there is no clear separation of two groups, even if it seems like that from the averages. We almost always get a more accurate picture by digging a little deeper and looking not just at the averages but at the spread: not just the group all bundled together, but the individuals. Then we often see that apparently distinct groups are in fact very much overlapping.

### Comparisons of Extremes

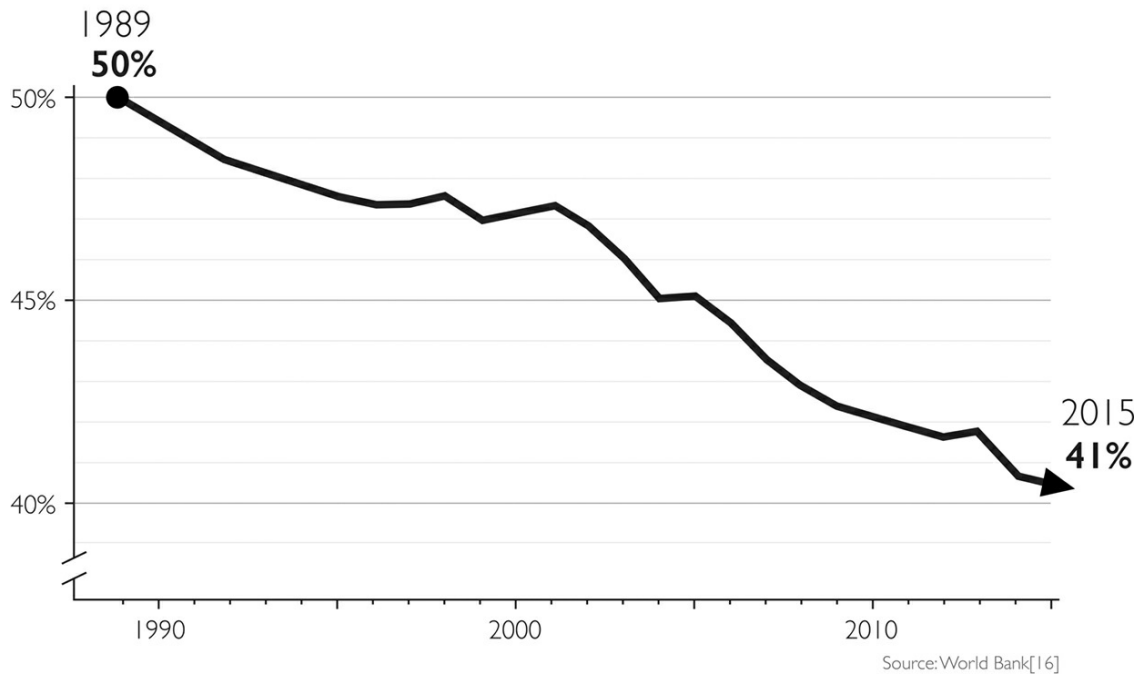
We are naturally drawn to extreme examples, and they are easy to recall. For example, if we are thinking about global inequality we might think about the stories we have seen on the news about famine in South Sudan, on the one hand, and our own comfortable reality on the other. If we are asked to think about different kinds of government systems, we might quickly recall on the one hand corrupt, oppressive dictatorships and on the other hand countries like Sweden, with great welfare systems and benevolent bureaucrats dedicating their lives to safeguarding the rights of all citizens.

These stories of opposites are engaging and provocative and tempting—and very effective for triggering our gap instinct—but they rarely help understanding. There will always be the richest and the poorest, there will always be the worst regimes and the best. But the fact that extremes exist doesn't tell us much. The majority is usually to be found in the middle, and it tells a very different story.

Take Brazil, one of the world's most unequal countries. The richest 10 percent in Brazil earns 41 percent of the total income. Disturbing, right? It sounds too high. We quickly imagine an elite stealing resources from all the rest. The media support that impression with images of the very richest—often not the richest 10 percent but probably the richest 0.1 percent, the ultra-rich—and their boats, horses, and huge mansions.

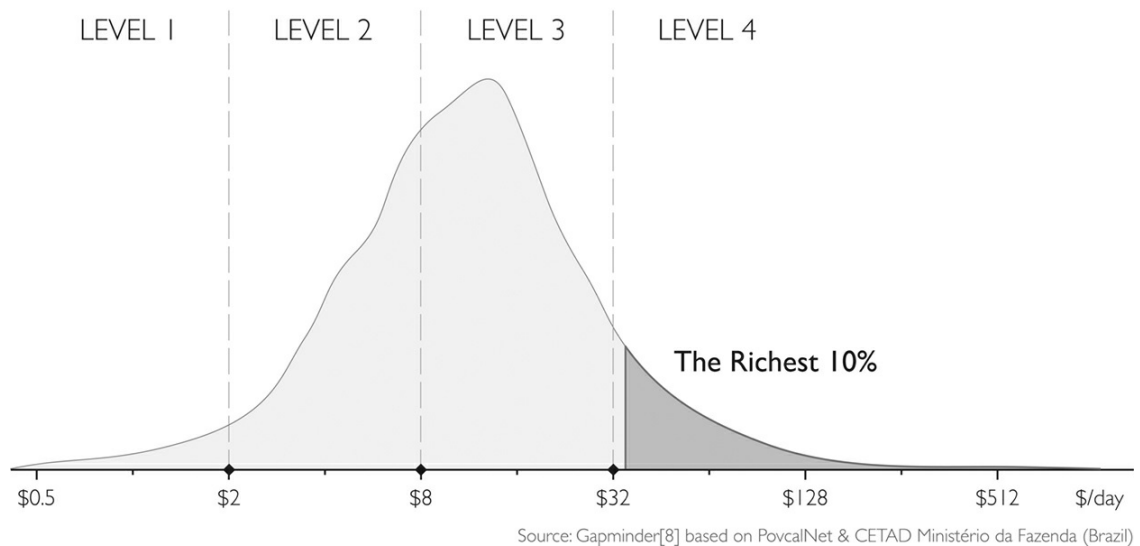
Yes, the number is disturbingly high. At the same time, it hasn't been this low for many years.

## SHARE OF TOTAL INCOME FOR BRAZIL'S RICHEST 10%



Statistics are often used in dramatic ways for political purposes, but it's important that they also help us navigate reality. Let's now look at the incomes of the Brazilian population across the four levels.

## NUMBER OF PEOPLE ON DIFFERENT INCOMES IN BRAZIL, 2016



Most people in Brazil have left extreme poverty. The big hump is on Level 3. That's where you get a motorbike and reading glasses, and save money in a bank to pay for high school and someday buy a washing machine. In reality, even in one of the world's most unequal countries, there is no gap. Most people are in the middle.

### The View from Up Here

As I mentioned, if you are reading this book you probably live on Level 4. Even if you live in a middle-income

country, meaning the average income is on Level 2 or 3—like Mexico, for example—you yourself probably live on Level 4 and your life is probably similar in important ways to the lives of the people living on Level 4 in San Francisco, Stockholm, Rio, Cape Town, and Beijing. The thing known as poverty in your country is different from “extreme poverty.” It’s “relative poverty.” In the United States, for example, people are classified as below the poverty line even if they live on Level 3.

So the struggles people go through on Levels 1, 2, and 3 will most likely be completely unfamiliar to you. And they are not described in any helpful way in the mass media you consume.\*

Your most important challenge in developing a fact-based worldview is to realize that most of your firsthand experiences are from Level 4; and that your secondhand experiences are filtered through the mass media, which loves nonrepresentative extraordinary events and shuns normality.

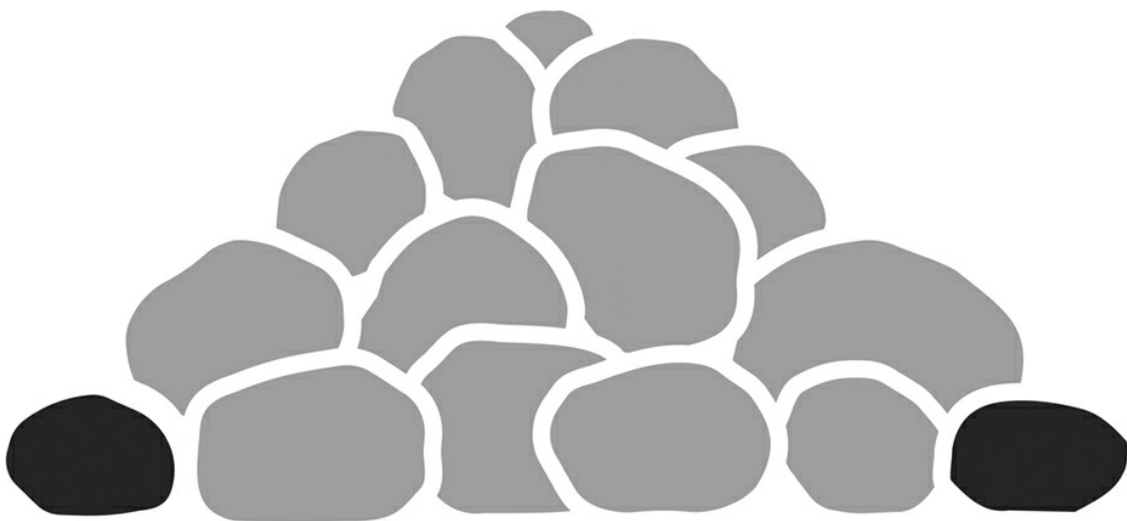
When you live on Level 4, everyone on Levels 3, 2, and 1 can look equally poor, and the word *poor* can lose any specific meaning. Even a person on Level 4 can appear poor: maybe the paint on their walls is peeling, or maybe they are driving a used car. Anyone who has looked down from the top of a tall building knows that it is difficult to assess from there the differences in height of the buildings nearer the ground. They all look kind of small. In the same way, it is natural for people living on Level 4 to see the world as divided into just two categories: rich (at the top of the building, like you) and poor (down there, not like you). It is natural to look down and say “oh, they are all poor.” It is natural to miss the distinctions between the people with cars, the people with motorbikes and bicycles, the people with sandals, and the people with no shoes at all.

I assure you, because I have met and talked with people who live on every level, that for the people living on the ground on Levels 1, 2, and 3, the distinctions are crucial. People living in extreme poverty on Level 1 know very well how much better life would be if they could move from \$1 a day to \$4 a day, not to mention \$16 a day. People who have to walk everywhere on bare feet know how a bicycle would save them tons of time and effort and speed them to the market in town, and to better health and wealth.

The four-level framework, the replacement for the overdramatic “divided” worldview, is the first and most important part of the fact-based framework you will learn in this book. Now you have learned it. It isn’t too difficult, is it? I will use the four levels throughout the rest of the book to explain all kinds of things, including elevators, drownings, sex, cookery, and rhinos. They will help you to see the world more clearly and get it right more often.

What do you need to hunt, capture, and replace misconceptions? Data. You have to show the data and describe the reality behind it. So thank you, UNICEF data tables, thank you, bubble graphs, and thank you, internet. But you also need something more. Misconceptions disappear only if there is some equally simple but more relevant way of thinking to replace them. That’s what the four levels do.

## Factfulness



**Factfulness is ... recognizing when a story talks about a gap, and remembering that this paints a picture of two**

separate groups, with a gap in between. The reality is often not polarized at all. Usually the majority is right there in the middle, where the gap is supposed to be.

To control the gap instinct, **look for the majority.**

- **Beware comparisons of averages.** If you could check the spreads you would probably find they overlap. There is probably no gap at all.
- **Beware comparisons of extremes.** In all groups, of countries or people, there are some at the top and some at the bottom. The difference is sometimes extremely unfair. But even then the majority is usually somewhere in between, right where the gap is supposed to be.
- **The view from up here.** Remember, looking down from above distorts the view. Everything else looks equally short, but it's not.