Review of *Factfulness: Ten Reasons We're Wrong About the World—and Why Things Are Better Than You Think*, by Hans Rosling, Anna Rosling Rönnlund, and Ola Rosling.

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**Recommended Citation**  
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**Abstract**


Rosling et al.’s *Factfulness* is built around a thirteen-question public-health, environment, and population survey that nobody scores well on, not even people who should know better (for example, academics, politicians, diplomats, and business leaders): We all utterly fail to appreciate key ways in which the earth is steadily becoming a better place for people to live. Despite its title, and subtitle, though, *Factfulness* is not just about positive change. Its other goal is to explore the dramatic, alarmist instincts that make it hard to recognize such change, and to explore why we often fail to distinguish what is frightening, like terrorism, nuclear accidents, and overpopulation, from what is, statistically speaking, actually dangerous, like drunk drivers, diarrhea, and poverty.

**Keywords**

International health, public health, quantitative literacy, critical thinking

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**Cover Page Footnote**

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Factfulness, by Hans Rosling, Anna Rosling Rönnlund, and Ola Rosling, exudes charts, graphs, tables, numbers, and survey questions (with answers). The book’s goal, though, is not just to convey data in novel, engaging ways. Rather, the book asks why, despite all the positive data we have at our disposal, people remain mired in negative news and drama, persistently and systematically ignoring important ways in which our world is becoming a better place to live.

This book is a fun romp, not only for casual readers (or listeners; my own first run-through was as an audiobook), but more specifically for those interested in quantitative literacy, and for those generally willing to ponder the cognitive and emotional obstacles we all face to drawing data-driven conclusions.

After a brief side story about how Rosling became a sword swallower (pp. 1-2; cf. pp. 16, 38, 145), the book launches into a short survey that provides its central, unifying thread: thirteen questions covering a series of related topics, such as how many people there are in the world, where we live, how rich or poor we are, how much schooling we complete, and whether the world is changing for better or worse (pp. 2-5). Despite being primed for optimistic responses to the survey (the book’s subtitle, after all, is, “Ten Reasons We’re Wrong About the World—and Why Things Are Better Than You Think”), I didn’t score particularly well. And it turns out I’m in very good company.

Rosling has found, through many years of lecturing and presenting, that nobody scores well, anywhere. Actually, it’s worse than that. Our performance is systematically abysmal. It is worse, as Rosling is so fond of repeating, than chimps randomly pressing buttons (pp. 9, 12, 29 et alibi). Yes, Factfulness does go on to give us the correct answers to the thirteen survey questions, and those answers are (mostly) good news. The book is quantitatively rich. But, fundamentally, the journey Rosling and his co-authors take us on is not just about the data. It is a search for what in the human psyche leads us to score worse than chimps on their survey.

For the authors, the cognitive disconnect comes down to ten persistent, data-distorting human instincts. Instinct one, for example, is the “gap” instinct, the tendency to want to see data as bimodal, polarized: us vs. them, rich vs. poor, good vs. evil, developed vs. developing nations—two clumps of data with a big gap in between. The authors go on to talk about nine more instincts (the fear instinct, the negativity instinct, the generalization instinct, the blame instinct, the urgency instinct, and so on), illustrating these instincts not only with facts and figures but also with a plethora of personal observations and stories. Some are drawn from Rosling’s time in the classroom, while others come from the lecture circuit. Still others are drawn from experience on the front lines, providing care in underserved areas of the world.

Once, Rosling was out on a research mission in a remote village setting up sampling equipment when he found himself confronted by a crowd of fifty angry
villagers, several of whom were waving machetes. Looking back, Rosling admits that he had erred in failing to properly explain to the villagers what he wanted to do and why. When he asked what the problem was, his translator explained that the villagers thought he was selling their blood and giving the chief kickbacks, leaving them with nothing. Rosling told the villagers that he was just trying to determine whether local cassava preparation methods had triggered a rise in cases of konzo, a vile and crippling disease. The crowd was unmollified. When one of the machete-wielding men started screaming, though, a remarkable thing happened: A barefooted middle-aged woman stepped forward and told the crowd to “shut up” and asked them, “How do you think they discovered the measles vaccine? Do you think it grows on trees in their countries? Do you think they pulled it out of the ground?” As for the konzo, she continued, “I have a grandchild crippled for life by this konzo. The doctor says he can’t cure it. But if we let him study us, perhaps he will find a way to stop it, like they stopped measles, so that we don’t have to see our children and our grandchildren crippled anymore. This makes sense to me. We, the people of Makanga, need this ‘research’.” She then rolled up her sleeve and commanded Rosling, “Here. Doctor. Take my blood” (pp. 245-246).

The authors ended up dedicating *Factfulness* to this courageous figure. They observe: If that villager could be factful under the circumstances, in the middle of an angry, armed crowd—if she could respond to the crowd’s fear, urgency, and desire to place blame with clear and factual arguments—then the rest of us can, and should, aspire to do the same in our generally sedate lives.

There are many such colorful and interesting stories in *Factfulness*, and one of the book’s ironies is that the authors tend towards the dramatic, something they themselves deprecate. To be fair, the authors acknowledge the journalistic necessity of competing “to engage our attention with exciting stories” (p. 252). And unlike most journalism, this book is richly appointed with apt data. Also, unlike most journalism, it delivers basically good news. Most importantly, though, the aim of the book’s dramatic stories is not to inspire fear or rashness, but rather to illustrate mindfulness (or lack thereof) about data, and to reinforce the author’s observations that, in terms of overall human health and wellbeing, the world is an overall improving place. (And I deliberately use the adjective human here because Rosling’s viewpoint is clearly that of an international human health expert.)

Despite the good news for us human beings, Rosling readily admits that not all is well. War fatalities, for example, have recently increased, primarily because of the Syrian civil war. Overfishing, oceanic dead zones, and the lengthening of endangered species lists are worrisome (p. 49). There is also a whole section of the book (p. 237ff.) dedicated to dangers the authors actually do fret about, like the outbreak of a third world war, a global pandemic, and climate change. The authors, though, remain optimistic and possibilistic, and they encourage us all to stop stressing about things that are, as a whole, going pretty well, and to mind the
difference between what is frightening, like plane crashes, terrorism, nuclear accidents, ebola, overpopulation, etc., and what is, statistically speaking, actually dangerous, like drunk drivers, diarrhea, influenza, and poverty (pp. 122, 241).

There is a sad, sweet backstory to this book covered in the outro (pp. 257-259). *Factfulness* got its start in September 2015 when the authors, Hans Rosling, Anna Rosling Rönnlund, and Ola Rosling, agreed to write it together. But on February 5, 2016, Hans received a diagnosis of incurable pancreatic cancer. He was given at most a year to live. He immediately dropped his sixty-seven planned lectures and dedicated his remaining professional life to the production of this now best-selling work.

The account of Rosling’s death adds weight and poignancy to *Factfulness*. This work was Hans Rosling’s last gift to the world. One can nitpick over its anthropocentrism. But in fact, the authors do not claim that everything is perfect. What they claim is that many things are demonstrably better than we think. They also claim, correctly, that people have a hard time interpreting numbers, charts, and tables, and applying them, especially in certain contexts. We possess various negative, dramatic instincts that hinder the process. With this truth, we arrive at the authors’ deeper goal (something missed by a number of reviewers), which is simply to make us aware of these instincts, and to open us up to seeing that, when it comes to human life on earth, not all is dark and gloom.

Hans, wherever you are: It turns out you were right. Good news is news after all.

**Acknowledgements**

My thanks go to Amy Goerwitz, Jaye Lawrence, and Austin Robinson-Coolidge for reading over drafts of this review and commenting on them. Naturally, I did everything they told me to do.