

# Factfulness Reading Guide

This reading guide is being provided to you in order for you to (a) better understand the arguments Hans Rosling makes, and (b) focus on key concepts and topics that will be used in your classes this coming year.

Visit the Gapminder Foundation website: [www.gapminder.org](http://www.gapminder.org) Revisit that site regularly. It will be used regularly in various classes next year. The graph below is a screenshot of the moving graph for Life Expectancy and Income of every nation from 1800 to the present.



## Step One

Read the very short final chapter, “**Outro**,” first, in order to understand Hans Rosling’s purpose, and his personal circumstances, for which this book was written.

## Introduction

- Take the 13-item test of your knowledge about the world.
- Why are people generally ignorant (not stupid) about the world.
- What does *systemically wrong* mean?
- People have knowledge, but it is “outdated [knowledge], often several decades old....  
...“a world view dated to the time when their teachers had left school.”
- The **World Economic Forum** in Davos, Switzerland



**Top 10 skills** ECONOMIC FORUM

**in 2020**

1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence
7. Judgment and Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility

- What is “the overdramatic world view”?
- Data as therapy

## Chapter 1 The Gap Instinct

- Misconception: “Rich versus Poor,” “Us and Them”
- The concept of “**the West**” – the wealthy, mainly white, nations



- Birth rates & child mortality data
- Low-income countries are much more developed than most people think.
- What are **the four income levels** and why are they important?
- Make sure you understand how averages “mislead by hiding a spread (a range of different numbers) in a single number.”
- “Extreme examples” and “the view from up here” also mislead.
- What is needed to replace misconceptions?

## Chapter 2 The Negativity Instinct

- Our tendency to notice the bad more than the good
- Rosling argues that international collaboration is critical for global financial stability, peace and protected natural resources. He is a **globalist**. This is not a position that **nationalists** agree with. Make sure you understand what a nationalist is and why one would disagree with Rosling’s globalist view.
- “...never trust data 100 percent.”
- Extreme poverty has dropped by half in the last 20 years.
- Why is 1966 a **watershed year**? (See the graph, “Extreme Poverty Rate From 1800 to Today”)
- Life expectancy everywhere in the world in 1800 was 30, but it was so low because so many babies died in childhood. Survive childhood and most people lived to 50-70 years.
- Understand what caused China’s man-made famine in 1960, in which 15 million to 40 million starved to death.
- Study the data charts, “**Sweden’s Health and Wealth from 1800 to Today**”
- Lesotho is the country with the shortest life expectancy in the world today.
- Study the charts: “16 Bad Things Decreasing” and “16 Good Things Increasing”
- “The goal of higher income is not just bigger piles of money...not just extra time...” So what does Rosling argue the ultimate goal of higher income is? ... Freedom.
- The Negativity Instinct: Misremembering the past...selective reporting by journalists and activists...the feeling that as long as things are bad it’s heartless to say they are getting better. Pessimists *feel* the world is getting worse; they are not *thinking*.

- Optimist..Pessimist...Possibilist
- “The Global Burden of Disease”—tracking deaths

### Chapter 3 The Straight Line Instinct

- 2014 Ebola outbreak in West Africa...No effective treatment for Ebola...Rate of the disease spreading...increasing arithmetically? Doubling?
- “The world population is just increasing” – The word “just” is a misconception. At what number does the UN expect the world’s population to reach its apex, for the curve to flatten out?
- What is “the Straight Line Instinct”?
- “As billions of people left extreme poverty, most of them decided to have fewer children.” Rosling credits modern contraception and sexual education.
- The world’s population will grow because by 2100 life expectancy will increase by 11 years.
- Until 1800 women gave birth to 6 children on average, and four of them died before they became parents themselves. “Humans *died* in balance with nature. It was utterly brutal and tragic.”
- The single factor that does have a strong connection with large families: **extreme poverty**. He argues that if we eradicate extreme poverty, thereby lowering child mortality) and give people better lives (with sex education and contraceptives) and people will have fewer children.
- Examples: Bangladesh & Egypt
- Money and health go hand-in-hand. So, too, does income go with education, marriage age, and recreation.
- On Level 2 almost everyone has their basic needs met.
- Look at that section of dental health and how it gets worse as people move from Level 1 to Level 2.

“School Has Been a Right for Girls in India Since 2009. So Why Aren’t They Going?”

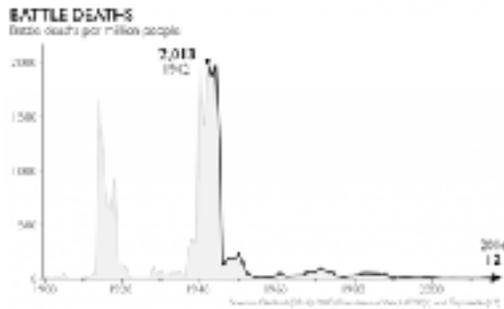
<https://time.com/5614642/india-girls-education/>

### Chapter 4 The Fear Instinct

- “I didn’t see what I wanted to see. I saw what I was afraid of seeing.” Critical thinking is almost impossible when you are scared.
- The Fear Instinct: physical harm, captivity, & contamination
- Rosling argues: “The image of a dangerous world has never been broadcast more effectively than it is now, while the world has never been less violent and more safe.”
- Deaths from acts of nature are 25% of what it was 100 years ago.
- Plane-Crash Deaths--40 million commercial flights in 2016, ten ended in fatal accidents

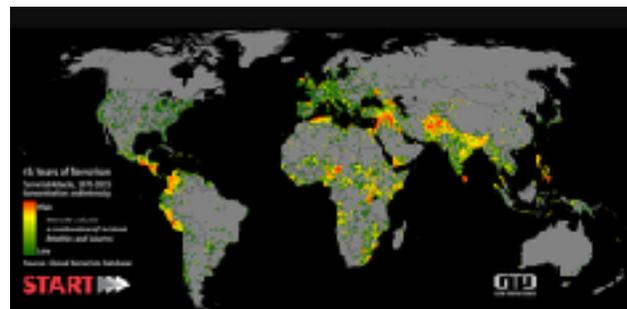
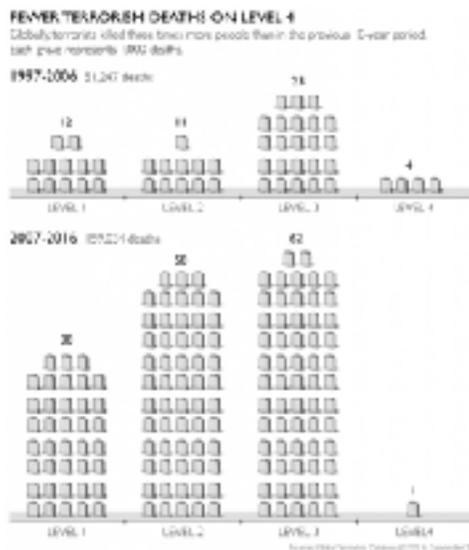


- 1944's Chicago Convention – “One of humanity’s most impressive collaborations ever” -- common rules for reporting and sharing aviation incidents –
- Deaths Due to War



- Evaluating the risks and advantages of DDT
  - Who was Rachel Carson? What is *Silent Spring*?
- What is Rosling’s argument about parents who avoid vaccinating their children for measles and other childhood diseases?

- Terrorism
- The Global Terrorism Database – Terrorist deaths are decreasing in Level 4 countries.



## Chapter 5 The Size Instinct

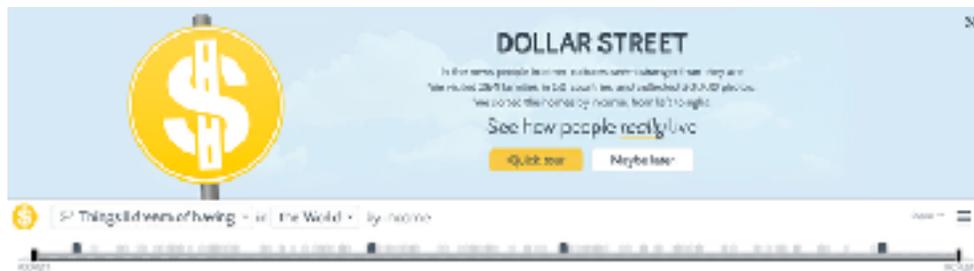
- Child mortality in Mozambique 1980s – What does Rosling mean by “the medicine of extreme poverty”?
- *“In the deepest poverty you should never do anything perfectly. If you do you are stealing resources from where they can be better used.”* –Ingegerd Rooth
- “Increased child survival is achieved through preventive measures outside hospitals by local nurses, midwives, and well-educated parents.”
- What does he mean when he says, “Never leave a number all by itself.” (Compare & Divide)

- Perspective:
  - Vietnam's War Monuments...
  - Bear attacks and Domestic violence in Sweden
  - Tuberculosis and swine flu
- What is the 80/20 Rule?
- Why is 1-1-1-4 the PIN code of the world?
- 2007 World Economic Forum panel discussion on climate change..."From now on we count carbon dioxide emission *per person*."
  - Here is the Youtube link to a portion of that 2007 discussion: [https://www.youtube.com/watch?v=GgHgm\\_o-dbc](https://www.youtube.com/watch?v=GgHgm_o-dbc)

## Chapter 6 The Generalization Instinct

- Dividing the world into "us" and "them."
- Commercial companies on Level 4 may be missing the majority of potential customers because of their generalizations. Example: the marketing of menstrual pads
- Ways to avoid being misled:
  - **Travel** – Travel exposes people's stereotypical thinking
  - Dollar Street – "to tech armchair travelers about the world"

<https://www.gapminder.org/dollar-street/matrix?thing=Things%20I%20dream%20of%20having>



- Five Ways to Question Your Favorite Categories
  - Look for differences within and similarities across groups
  - Beware of "the majority"—51% & 99% are both majorities, but they are not the same
  - Beware of exceptional examples --
  - Assume you are not "normal"
  - Beware of generalizing from one group to another – Eg, the "recovery position" of laying wounded soldiers on their fronts, versus laying babies on their tummies

Enjoy this quick YouTube video, "How to Lie While Telling the Truth"

<https://www.youtube.com/watch?v=JuR8jGnZV2U&feature=youtu.be>

**Reading Guides for Chapters 7-11 to come next week...**