

the invisible gorilla

- *And Other Ways Our Intuitions Deceive Us*
- by Christopher Chabris and Daniel Simons, 2010, CROWN: New York, NY.
- Summary by Douglas W. Green, EdD
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Who are these guys?

- Christopher Chabris: Psychology professor at Union College in upstate New York
- Daniel Simons: Psychology professor at the University of Illinois

Six Everyday Illusions

- *The Invisible Gorilla* is about six everyday illusions that profoundly influence our lives. They are the illusions of attention, memory, confidence, knowledge, cause, and potential. These are distorted beliefs we hold about our minds that are not just wrong, but wrong in dangerous ways. Once you know about these illusions, you will view the world differently and think about it more clearly. You will recognize when people are taking advantage of illusions in an attempt to obfuscate or persuade. Seeing through these veils will help connect you with reality. (*Dr. Doug: If you have a brain, you should buy this book. Here is the Amazon.Com link. <http://amzn.to/cB2H2u>)*

What I Left Out

- Here are some things that I did not discuss in my summary in order to give my readers further incentive to buy this book.
- The book starts with a gripping story of a crime that will suck you in. Don't miss it. For each of the main concepts, the authors provide a number of specific stories that are supported by extensive research with excellent documentation.
- In addition to examples of how each illusion can fool, the authors provide advice as to how to avoid being fooled. This is invaluable.
- In the Illusion of Potential chapter there is a lengthy discussion of research on how video games can improve cognitive abilities.

Enter the Gorilla

- The book opens with a description of a research project the authors did. It involved having subjects count the number of times a basketball was passed by people on one team and not by people on the other team. During the video, a researcher appeared in a gorilla suit. About 50% of the subjects were so focused on the task that they did not notice the gorilla. Here is the link to the video used in the experiment. <http://bit.ly/c2kUnf> The gorilla experiment illustrates the *illusion of attention*. We experience far less of our visual world than we think we do. We are often unaware of aspects that fall outside of our current focus of attention.

Looking Isn't Seeing

- Chabris and Simons cite a number of situations where people were looking in the direction of something without seeing it. Vehicular accidents are common. Motorcycle accidents are often the result of the motorist not seeing the motorcycle. The reason is that they don't expect to see one. Walking and biking are the safest where they are done the most. We have limited attention resources. Any distraction means we have less attention for our primary task. Our vision does not record an entire scene like a video recorder. It isn't unusual for two people looking at the same scene to see different things. Eyewitnesses are overrated.

The Illusion of Memory

- The *illusion of memory* happens when what we remember is different from what we think we remember. What is stored in memory is not an exact replica of reality, but a re-creation of it. When we recall a memory, we integrate details we remember with our expectations of what we should remember. Emotional memories, like the ones we have for 9/11, are more likely to induce strong, vivid recall - regardless of whether they are accurate. Beware of memories accompanied by strong emotions and vivid details. They are just as likely to be wrong as mundane memories, but you're far less likely to realize it.

The Illusion of Confidence

- The confidence that people project in a variety of situations, is all too often an illusion. Worse yet, it is the people in the bottom half of an ability range who are more likely to be over confident. Since they don't realize that they are below average, they are unlikely to take steps to improve. The more expertise one has, the more likely they are to say "I don't know" and mean it. If you offer your opinion to a group early and often, people will take your confidence as an indicator of ability, even if you are actually no better than your peers.

The Illusion of Knowledge

- Whenever people think they know more than they do, they are under the influence of the *illusion of knowledge*. Even scientific experts can dramatically overestimate what they know. Until we are asked to produce what we know, we seem blissfully unaware of the shortcomings of our own knowledge. When approaching a project or challenge, one should spend time escaping the illusion of knowledge by finding out what they don't know. Positive illusions do, however, allow us to take on challenges that we might shrink from if we knew the truth.

The Illusion of Cause

- Pattern perception is central to our lives. It allows us to draw conclusions in seconds from our surroundings. Unfortunately, at times we perceive patterns where none exist. We readily infer that causes exist when they do not. We have a bias to perceive meaning out of randomness and coincidence. If two events happen together, we infer that one must have caused the other. The only way to test whether an association is causal is to run an experiment where subjects are randomly selected. Many useful experiments, however, cannot be carried out as it would involve unethical treatment of the subjects. Sometimes laws are given credit for changing things when the changes would have happened anyway. News reports contain all sorts of causal attribution not supported by experiment.

The Illusion of Potential

- We have tremendous potential to learn new skills and improve our cognitive abilities. Many suffer from an illusion, however, that there are easy ways to unlock this potential. The brain's potential is vast, but it takes time and effort to tap it. If you want to get better at something your best bet is to practice that thing. Some mental skills transfer to other highly similar skills, but there doesn't seem to be any single activity that will make you broadly smarter. There is evidence that aerobic physical exercise can lead to improvement in cognitive tasks. Sitting in a chair and doing cognitive puzzles is far less beneficial than walking for as little as a few hours a week.

Beware of Intuition

- When there are few objective grounds for determining whether a decision is right or wrong, intuition can't be beat. Deliberation will generally outperform intuition when you have conscious access to all the necessary data. Be wary of intuitions, especially intuitions about how your mind works.

In Short

- Don't assume you see everything there is to see. You probably think you remember things better than you do. Confident people don't necessarily have better memories, knowledge, or abilities. Don't assume you know the cause of something. Be skeptical of claims that simple tricks can improve your thinking. You can develop high levels of expertise if you study and practice the right way. Try to slow down, relax, and examine your assumptions before you jump to conclusions. After reading this book you won't be as sure of yourself, but you will have new insights to how your mind works, and new ways of understanding why people act the way they do because of the illusions that affect us all. Here is the link for Amazon.com for this book. Go get it. <http://amzn.to/cB2H2u>

Cool Quotes

- “There are things that are extremely hard: steel, a diamond, and to know one’s self.” - Benjamin Franklin
- “Ignorance more frequently begets confidence that does knowledge.” Charles Darwin
- “If I look at the mass, I will never act. If I look at the one, I will.” Mother Teresa