



Visual Intelligence: How We Create What We See

By Donald D. Hoffman

Download now

Read Online 

Visual Intelligence: How We Create What We See By Donald D. Hoffman

"Don Hoffman . . . combines a deep understanding of the logic of perception, a gift for explaining it with simple displays that anyone can-quite literally-see, and a refreshing sense of wonder at the miracle of it all."--Steven Pinker, author of *How the Mind Works*

Cognitive scientist Donald Hoffman's exploration of the extraordinary creative genius of the mind's eye "has many virtues, of which sheer intellectual excitement is the foremost" (*Nature*). Hoffman explains that far from being a passive recorder of a preexisting world, the eye actively constructs every aspect of our visual experience. In an informal style replete with illustrations, Hoffman presents the compelling scientific evidence for vision's constructive powers, unveiling a grammar of vision - a set of rules that govern our perception of line, color, form, depth, and motion. Hoffman also describes the loss of these constructive powers in patients such as an artist who can no longer see or dream in color and a man who sees his father as an impostor. Finally, Hoffman explores the spinoffs of visual intelligence in the arts and technology, from film special effects to virtual reality. This is, in sum, "an outstanding example of creative popular science" (*Publishers Weekly*). 20 full-color and 130 black-and-white illustrations

 [Download Visual Intelligence: How We Create What We See ...pdf](#)

 [Read Online Visual Intelligence: How We Create What We See ...pdf](#)

Visual Intelligence: How We Create What We See

By Donald D. Hoffman

Visual Intelligence: How We Create What We See By Donald D. Hoffman

"Don Hoffman . . . combines a deep understanding of the logic of perception, a gift for explaining it with simple displays that anyone can-quite literally-see, and a refreshing sense of wonder at the miracle of it all."--Steven Pinker, author of *How the Mind Works*

Cognitive scientist Donald Hoffman's exploration of the extraordinary creative genius of the mind's eye "has many virtues, of which sheer intellectual excitement is the foremost" (*Nature*). Hoffman explains that far from being a passive recorder of a preexisting world, the eye actively constructs every aspect of our visual experience. In an informal style replete with illustrations, Hoffman presents the compelling scientific evidence for vision's constructive powers, unveiling a grammar of vision - a set of rules that govern our perception of line, color, form, depth, and motion. Hoffman also describes the loss of these constructive powers in patients such as an artist who can no longer see or dream in color and a man who sees his father as an impostor. Finally, Hoffman explores the spinoffs of visual intelligence in the arts and technology, from film special effects to virtual reality. This is, in sum, "an outstanding example of creative popular science" (*Publishers Weekly*). 20 full-color and 130 black-and-white illustrations

Visual Intelligence: How We Create What We See By Donald D. Hoffman Bibliography

- Sales Rank: #342905 in Books
- Color: White
- Brand: Hoffman, Donald David
- Published on: 2000-02-17
- Original language: English
- Number of items: 1
- Dimensions: 9.30" h x .90" w x 6.20" l, 1.20 pounds
- Binding: Paperback
- 320 pages

 [Download Visual Intelligence: How We Create What We See ...pdf](#)

 [Read Online Visual Intelligence: How We Create What We See ...pdf](#)

Download and Read Free Online *Visual Intelligence: How We Create What We See* By Donald D. Hoffman

Editorial Review

Amazon.com Review

Visual intelligence, cognitive scientist Donald Hoffman writes, is the power that people use to "construct an experience of objects out of colors, lines, and motions." And what an underappreciated ability it is, too; despite the fact that the visual process uses up a considerable chunk of our brainpower, we're only just learning how it works. Hoffman aptly demonstrates the mysterious constructive powers of our eye-brain machines using lots of simple drawings and diagrams to illustrate basic rules of the visual road. Many of the examples are familiar optical illusions--perspective-confounding cubes, a few lines that add up to a more complex shape than seems right. Hoffman also takes a cue from Oliver Sacks, employing anecdotes about people with various specific visual malfunctions to both further his mechanical explanation of visual intelligence and drive home how important this little-understood aspect of cognition can be in our lives. An especially intriguing example involves a boy, blind from birth, who is surgically given the power to see. At first, he is completely unable to visually distinguish objects familiar by touch, such as the cat and the dog. Other poignant examples show clearly how image construction is normally linked to our emotional well-being and sense of place. *Visual Intelligence* is a fascinating, confounding look (as it were) at an aspect of human physiology and psychology that very few of us think about much at all. --*Therese Littleton*

From Publishers Weekly

With wit, insight and charm, Hoffman, University of California, Irvine professor of computer science, cognitive science and philosophy, explains in this spectacular volume how we use vision to construct the world around us. Hoffman does a masterful job of demonstrating that vision encompasses so much more than merely what we see, and of illustrating that much of what we see may not, in fact, exist. Presenting the 35 rules of vision that scientists claim we use to piece together our environment ("Rule 1. Always interpret a straight line in an image as a straight line in 3D"), he analyzes many common optical illusions, explains how we perceive motion, color and depth, and philosophizes about the nature of reality and perception. Throughout, Hoffman makes wonderful use of myriad photographs to demonstrate the points he is making. The photos in the chapter on motion fail, necessarily, to catch the imagination the way the others do, but an ancillary Web site allows observation of the full motion of his examples. Not only is this book an outstanding example of creative popular science but, given the many optical illusions it presents, it's also the rare book that, in line with its subject, can be thoroughly enjoyed both right side up and upside down. Twenty color and 130 b&w illustrations. Agents: Katinka Matson and John Brockman. Copyright 1998 Reed Business Information, Inc.

From Library Journal

Stuffing his book full of illusions and visual tricks, cognitive science professor Hoffman solidly details how humans construct what they perceive with their eyes into an understandable reality. The many illustrations propel the curious reader through the book, and a website offers additional illustrations that require motion. Writing in an informal style that occasionally strays into pithiness, the author details the "grammar" of vision, or the rules that govern what you see. His text includes heavy philosophy and cognitive theory, but the casual reader is served entertaining examples from pop culture. Some might quibble with defining the ability to see, nearly universal among humans, as an intelligence, but the book will convince everyone that the human brain is an amazing thing. For larger science collections. ?Kelly Hensley, East Tennessee State Univ. Lib., Johnson City
Copyright 1998 Reed Business Information, Inc.

Users Review

From reader reviews:

Heidi Odom:

Have you spare time for a day? What do you do when you have much more or little spare time? Sure, you can choose the suitable activity intended for spend your time. Any person spent all their spare time to take a go walking, shopping, or went to typically the Mall. How about open or perhaps read a book called Visual Intelligence: How We Create What We See? Maybe it is for being best activity for you. You know beside you can spend your time with the favorite's book, you can more intelligent than before. Do you agree with it is opinion or you have other opinion?

Karena Figueroa:

Exactly why? Because this Visual Intelligence: How We Create What We See is an unordinary book that the inside of the reserve waiting for you to snap it but latter it will surprise you with the secret this inside. Reading this book alongside it was fantastic author who write the book in such awesome way makes the content within easier to understand, entertaining means but still convey the meaning totally. So , it is good for you because of not hesitating having this anymore or you going to regret it. This book will give you a lot of rewards than the other book have such as help improving your talent and your critical thinking way. So , still want to postpone having that book? If I were you I will go to the reserve store hurriedly.

Bruce Healy:

Do you have something that you want such as book? The reserve lovers usually prefer to decide on book like comic, small story and the biggest you are novel. Now, why not striving Visual Intelligence: How We Create What We See that give your pleasure preference will be satisfied by means of reading this book. Reading practice all over the world can be said as the method for people to know world better then how they react toward the world. It can't be claimed constantly that reading practice only for the geeky man but for all of you who wants to be success person. So , for every you who want to start examining as your good habit, you are able to pick Visual Intelligence: How We Create What We See become your personal starter.

Cathy Kerby:

The book untitled Visual Intelligence: How We Create What We See contain a lot of information on this. The writer explains your ex idea with easy method. The language is very clear to see all the people, so do not really worry, you can easy to read this. The book was compiled by famous author. The author provides you in the new period of time of literary works. It is easy to read this book because you can read on your smart phone, or program, so you can read the book with anywhere and anytime. In a situation you wish to purchase the e-book, you can open up their official web-site and also order it. Have a nice study.

**Download and Read Online Visual Intelligence: How We Create
What We See By Donald D. Hoffman #M36I51KTCVB**

Read Visual Intelligence: How We Create What We See By Donald D. Hoffman for online ebook

Visual Intelligence: How We Create What We See By Donald D. Hoffman Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Visual Intelligence: How We Create What We See By Donald D. Hoffman books to read online.

Online Visual Intelligence: How We Create What We See By Donald D. Hoffman ebook PDF download

Visual Intelligence: How We Create What We See By Donald D. Hoffman Doc

Visual Intelligence: How We Create What We See By Donald D. Hoffman Mobipocket

Visual Intelligence: How We Create What We See By Donald D. Hoffman EPub

M36I51KTCVB: Visual Intelligence: How We Create What We See By Donald D. Hoffman