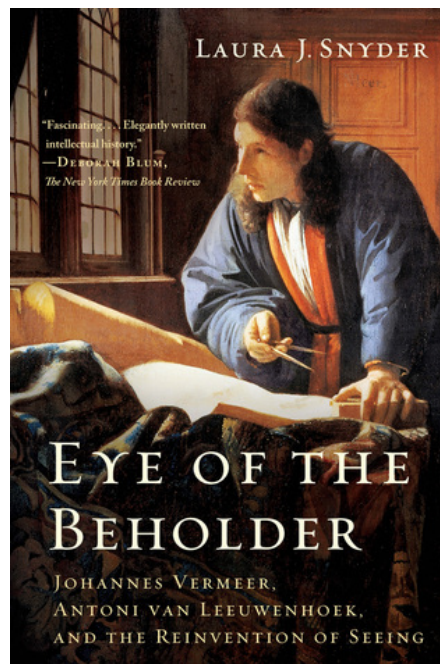




Eye of the Beholder: Johannes Vermeer, Antoni van Leeuwenhoek, and the Reinvention of Seeing

Laura J. Snyder

Download now

Read Online ➔

Eye of the Beholder: Johannes Vermeer, Antoni van Leeuwenhoek, and the Reinvention of Seeing

Laura J. Snyder

Eye of the Beholder: Johannes Vermeer, Antoni van Leeuwenhoek, and the Reinvention of Seeing

Laura J. Snyder

On a summer day in 1674, in the small Dutch city of Delft, Antoni van Leeuwenhoek—a cloth salesman, local bureaucrat, and self-taught natural philosopher—gazed through a tiny lens set into a brass holder and discovered a never-before imagined world of microscopic life. At the same time, in a nearby attic, the painter Johannes Vermeer was using another optical device, a camera obscura, to experiment with light and create the most luminous pictures ever beheld.

“See for yourself!” was the clarion call of the 1600s. Scientists peered at nature through microscopes and telescopes, making the discoveries in astronomy, physics, chemistry, and anatomy that ignited the Scientific Revolution. Artists investigated nature with lenses, mirrors, and camera obscuras, creating extraordinarily detailed paintings of flowers and insects, and scenes filled with realistic effects of light, shadow, and color. By extending the reach of sight the new optical instruments prompted the realization that there is more than meets the eye. But they also raised questions about how we see and what it means to see. In answering these questions, scientists and artists in Delft changed how we perceive the world.

In *Eye of the Beholder*, Laura J. Snyder transports us to the streets, inns, and guildhalls of seventeenth-century Holland, where artists and scientists gathered, and to their studios and laboratories, where they mixed paints and prepared canvases, ground and polished lenses, examined and dissected insects and other animals, and invented the modern notion of seeing. With charm and narrative flair Snyder brings Vermeer and Van Leeuwenhoek—and the men and women around them—vividly to life. The story of these two geniuses and the transformation they engendered shows us why we see the world—and our place within it—as we do today.

Eye of the Beholder was named "A Best Art Book of the Year" by Christie's and "A Best Read of the Year" by *New Scientist* in 2015.

Eye of the Beholder: Johannes Vermeer, Antoni van Leeuwenhoek, and the Reinvention of Seeing Details

Date : Published May 17th 2016 by W. W. Norton Company (first published March 9th 2015)

ISBN : 9780393352887

Author : Laura J. Snyder

Format : Paperback 448 pages

Genre : History, Science, Art, Nonfiction, Art History, Biography, History Of Science

 [Download Eye of the Beholder: Johannes Vermeer, Antoni van Leeuw ...pdf](#)



[Read Online Eye of the Beholder: Johannes Vermeer, Antoni van Lee ...pdf](#)

**Download and Read Free Online Eye of the Beholder: Johannes Vermeer, Antoni van Leeuwenhoek,
and the Reinvention of Seeing Laura J. Snyder**

From Reader Review Eye of the Beholder: Johannes Vermeer, Antoni van Leeuwenhoek, and the Reinvention of Seeing for online ebook

Joyce says

An intriguing study of optics--early history and then the imaginative uses made of optics by artist Johannes Vermeer and father of microbiology Antoni van Leeuwenhoek. As a fan of Vermeer's art, I found the explanations--the close study of his paintings in terms of his use of light and the effects on emotion and tone--to be absolutely fascinating. Van Leeuwenhoek's studies were equally intriguing, although I admit I couldn't listen to some of the experiments done by him, his contemporaries, and earlier scientists. Lovely prose and images. Not certain audio is the best format, as I wanted to look at the pictures described, even those I knew well, to understand the discussion better (although I'm not certain there are prints in the book either.) Marston has a lovely alto voice that suits the material perfectly. Great narrator, except for some mispronunciations of place names. The Dutch and Latin passages certainly seemed fluent and correct. The book makes a good companion to the documentary on the same subject (well, no van Leeuwenhoek), Tim's Vermeer.

Anna says

I really like the central thesis that Van Leeuwenhoek and Vermeer were using optical devices to see what previously had been unseen. Van Leeuwenhoek was always looking through microscopes at anything he could lay his hands on and Vermeer used the camera obscura to look at how colours change under different light conditions. Laura Snyder doesn't really know if there was any relationship between the two who lived in the same area of Delft at the same time (although they were born at the same time, Vermeer died much younger). The narrator was terrific - this is the kind of book that needs a really great narrator or the listener's mind wanders.

Nandu Machiraju says

I picked up this book because the National Gallery of Art was hosting a Vermeer (and other Dutch masters) exhibit, and I wanted to gain some insight into Vermeer before I went to the exhibit. Sadly, I barely scraped the surface before going to the exhibit. I did, however, watch the Penn & Teller movie, Tim's Vermeer (highly recommend). Although Snyder does not take on Tim Jenison (of Tim's Vermeer) directly, it would appear they have conflicting views on Vermeer's methods. If you want to dip your toe in the controversy over Vermeer's methods, that movie and this book probably would be a decent combo.

Anyway, as for this book, it was a two for one. It covers the life and work of Johannes Vermeer and Antoni van Leeuwenhoek. Exclusively evaluating their achievements, they do not appear to share much: van Leeuwenhoek invented microscopes to study microscopic organisms, and Vermeer painted scenes and everyday life with startling accuracy. Snyder's pitch though is that these two innovators of their respective crafts knew each other, may have influenced each other, embody the milieu of Dutch scientific discovery at the time, and represent a change in the way people thought and approached innovation. First, they spent a significant portion of their lives within walking distance of each other in the town of Delft. Second, they shared numerous personal and professional connections. Third, they both experimented heavily with

emerging lens technology to enhance their work, which suggests that they may have influenced each other. Anyway, Snyder makes those connections between the two throughout the book.

As I mentioned, I bought this book to learn more about Vermeer. I scored the added benefit of learning about van Leeuwenhoek. It's a fascinating read about that period. For the casual learner (like myself), it breaks up the intensity of reading an entire biographical book about an artist by cutting into biographical sequences about a scientist. For those reasons, I recommend.

My only quibble is that the author veers a bit into other subjects from time to time. It's for a purpose. But once Snyder veers, she covers the material fully before she returns to her original point. The reader ends up benefitting from some fulsome vignettes of other scenes or characters throughout the book. But, at times, I felt like the digressions overwhelmed the story.

Peter Goodman says

"Eye of the Beholder: Johannes Vermeer, Antoni van Leeuwenhoek and the reinvention of seeing," by Laura J. Snyder (Norton, 2015). Snyder here mines a slightly earlier period and a different country from "The Philosophical Breakfast Club." Here she argues that in Delft, the Netherlands, during the second half of the 17th century, Leeuwenhoek and Vermeer developed a dramatic new way of seeing the world, through microscopy and painting. The context: the slowly developing understanding that light moves through space, that the eye does not radiate the things that we see. She provides a great deal of detailed context on the development of theories of sight, increased understanding of perspective, the invention of the camera obscura, which enabled artists and "natural philosophers" to see the world more clearly than ever before. A great deal of the book is tendentious: "Vermeer probably knew Leeuwenhoek because they lived close together in the same small city, they moved in the same circles, L was V's executor, they probably did this or that," etc etc. A great deal of supposition---supported by much fact, but supposition nonetheless. Still, fascinating. How V probably used the camera obscura for his later works as they grew in detail, how his use of paint and color to indicate shadow and light became increasingly subtle, how he focused on intimate moments in the lives of women, etc. Also, the development of the telescope and microscope; how Galileo and his contemporaries had to learn how to understand what they were seeing: how Galileo used his understanding of perspective to realize that what he was seeing on the surface of the moon were shadows caused by mountains, not a smooth, mottled surface. How they were led and influenced by Francis Bacon and Robert Hooke. Bacon the anti-Cartesian: give me actual physical evidence, repeat the experiments, don't use mind and reason alone to explain the world. L. developed a microscope and was obsessed with what he saw, shaving thinner and thinner slices of plants, animals, etc. and drawing what he saw with accuracy that is still extraordinary today. L's tremendous discovery: there were millions of tiny animals living in an invisible microscopic world, in every drop of water, in just about everything including us. I particularly love Snyder's analyses of V's paintings: how he painted shadows on shadows, used hints of color to influence what we think we see, how he painted the same things (one map, for example, used three times) to show different phases of light, how he layered pigment—how the pigments were made, etc. A very rich book, suppositions notwithstanding. Engaging, very clearly written, enjoyable---though I had to read it in small doses because there was so much there.

<http://laurajsnyder.com>

Miquel Codony says

(4,5/5)

He disfrutado mucho y me he sumergido más en el pasado que con casi cualquier novela histórica. La autora hace un trabajo de reconstrucción estupendo y combina magistralmente aspectos de la historia del arte con otros de la historia de la ciencia. La estructura alternante del libro (entre Van Leeuwenhoek y Vermeer) funciona muy bien y Snyder sabe equilibrar muy bien (con prudencia y transparencia) las partes más especulativas con las más documentadas. Siendo un texto nada superficial, lleno de información y riguroso, también es una lectura amena y absorbente. Realmente, me quito el sombrero.

Realmente, si tuviera que irme a vivir al S. XVII haría todo lo posible por acabar en los Países Bajos...

No tardaré casi nada en empezar otro libro de la misma autora, "The Philosophical Breakfast Club". Me he quedado con ganas de más. Y con ganas, también, de recuperar el ciclo barroco de Neal Stephenson.

Brett Thomasson says

One of the things that we sometimes overlook when we tell the stories of the way the world we know came to be is how much of it happened at the same time. We look at this development or that discovery in isolation and often don't consider the other things that may have been going on at the time, perhaps even in almost the same place.

Laura Snyder's 2015 *Eye of the Beholder* bridges one of those gaps by observing the way that different people in the Netherlands in the 17th century began using lenses for their different work. For painters, such as the famous Johannes Vermeer, lenses were part of devices that allowed them to develop better means of showing perspective in their work. For naturalists, such as Antoni van Leeuwenhoek, they created a way of observing the world at a level never before possible.

The first used a "camera obscura" and the second a microscope. The camera obscura involves projecting an image onto a surface by using light and lenses. The same basic theory operates in movie theaters still today, even if the light sources are far more complex. Van Leeuwenhoek's microscope placed an item behind a single lens and moved it until its magnified image appeared clearly in that lens. Modern optical microscopes use compound lenses and a different light source, and van Leeuwenhoek did not invent the device. He was one of the first to use it so widely in natural observations, though.

And as Laura Snyder points out, both of these things happened at more or less the same time just a few city blocks from each other in the city of Delft in the Netherlands. *Eye* discusses the way people began to develop lenses that altered what they saw -- bringing the distant close, as Galileo and others did. It then works through how lenses aided painters as the technology of the camera obscura improved, and in parallel chapters describes how van Leeuwenhoek improved on a microscope design that let him and others see the very small in detail not before possible. Dr. Snyder ties this together with some meditations on how changes like these affected the way that people thought of "seeing," closing her book with some reflections on the philosophy of sight and how it continues to both change today and still depend on developments that Vermeer and van Leeuwenhoek represent.

Unfortunately, *Eye* does all of this in messy fashion that clearly calls for better editing and a tightened vision of just what it wants to do. The discussion of which painters did and didn't or might and might not have used a camera obscura meanders far too much. So does speculation on how the different figures of the story

interacted, and Snyder's exploration of some paintings by Vermeer and others isn't served by their absence from the pictorial section of the book. Dr. Snyder obviously did significant research (the endnotes section is almost a fifth of the book) but seems to have hurried in weaving that research into a directed narrative. A couple of long and uncharacteristically thoughtful Amazon reviews highlight some more technical problems with the way she discusses both Vermeer and his work, even though some of those things would not be apparent to the casual reader.

Over the past 20 years or so, relatively brief and popular books have explored how some aspects of our modern world, now taken for granted, came into being only after some long and difficult work. They often provide a little food for philosophical thought, speculating on how these developments changed the way people saw their world almost as much as they changed how things were done. Many of these are excellent work; Dava Sobel's 1995 *Longitude* is an example. Dr. Snyder may have aimed for such with *Eye of the Beholder*, but her scattered narrative and sometimes overly chatty style significantly weaken her effort.

Original available [here](#).

Denise says

Challenging non-fiction (at least for me) about the changes in the European world during Vermeer & van Leeuwenhoek's lives. The author does a nice job of not overstating anything, constantly stating that maybe, it can be thought, perhaps, it is likely, etc. since much of what she writes is conjecture. Not without reason, but there is no direct evidence to support many of her ideas. Did Vermeer & van Leeuwenhoek know each other? How did they each use the camera obscura?

But there are definitive conclusions that she does draw - these men were significant in their society. The book reads in some parts like a who's who of Western Europe in the 17th century with anyone who did anything science or art related mentioned.

For someone who mostly reads fiction, this was hard work. I'm glad I read it, even if much of it was over my head.

Recommend for science & history geeks. For me, I was reading more to learn about Vermeer & art, so all the van Leeuwenhoek was bonus material.

Rick Elinson says

As a retired biologist who included van Leeuwenhoek in my lectures, I was interested to read Snyder's comparison between van Leeuwenhoek and the artist Vermeer. I appreciated Snyder's presentation of evidence, especially her keeping the book grounded in it. A theme of some current historians is to expand their expositions by conjecture, speculation, and flights of fancy. Snyder wants very badly to show direct connections between Vermeer and van Leeuwenhoek, who were contemporaries in Delft, and makes a good circumstantial case, ultimately without a smoking gun.

My one complaint is that a book on "seeing" is under-illustrated. Vermeer and van Leeuwenhoek lived very near to each other, and there is an old map of Delft included. The map is not readable, however, so it is not useful for seeing the locations mentioned. Snyder goes into detailed descriptions of aspects of Vermeer's paintings. Some of those descriptions should have been illustrated by blow-ups of the relevant parts.

Similarly labeled illustrations of more of the organisms that van Leeuwenhoek found would have enhanced the reader's appreciation of his contributions.

Israel Montoya Baquero says

Una auténtica maravilla de ensayo.

Cass says

Really enjoyed the topic and the thoroughness of the research. I came across this book as a way to learn more about Leeuwenhoek, who had captured my curiosity as an environmental educator, more than once. I sort of glossed over the Vermeer parts, but liked how they were woven in together. The author was occasionally redundant and had pages of information that I thought was irrelevant...but was easy to gloss over.

I appreciated the glossy color photo pages, but wish that more of Vermeer's paintings were shown, as I had to look many of them up while reading to get a reference.

Overall, very thorough, and I would recommend this to any science teacher, or art teacher, or traveler going to Holland, or historian.

Jrobertus says

This is an interesting and scholarly book that deals with the scientific revolution and the cluster of genius of the early 17th century Dutch Republic. It mainly focuses on Vermeer and Leeuwenhoek, who lived across the street from one another and facilitates description of the larger issues. Lens grinding was all the rage and allowed people to extend their senses via telescopes, microscopes and the camera obscura. Using the device revealed unexpected details of the world and in addition to seeing these details people had to learn to interpret them with an objective eye. For example, when Galileo saw the moons of Jupiter and disrupted what many wanted to believe about the order of the universe,, many skeptics refused to even LOOK at what he saw – don't confuse me with facts! The Royal Society was created and with the influence of Bacon and directorship of Hooke prorogated the scientific method. Leeuwenhoek was a major force here since we was a meticulous experimentalist, developing new ways of using microscopes and also developed novel ways of calibrating microscopic size. Hooke had published the Micrographia before Leeuwenhoek published anything, but Hooke showed tiny details of things that could be seen with the naked eye, like lice. Leeuwenhoek was the first to see a world of living things that could ONLY be seen with a device and radically altered the way we think about the world. Vermeer used the camera obscura to allow detailed painting that also showed the way we see things, especially the role of light and reflection. Although this book was published in 2015 it makes no mention of the experiments described in the wonderful movie "Tim's Vermeer" which convincingly showed how the artist used a variety of optical devices to literally copy a scene. I was aware of the artistic, commercial, and scientific contributions of the tiny Dutch Republic but this book really drives it home, It was a truly amazing time and place that made a disproportionate contribution to creating the modern world.

Judith says

Having read this book I will look at Dutch art of the 1600's in an entirely new way. What better recommendation for reading this book? Snyder writes very carefully to reconstruct the social, economic, and intellectual worlds of Delft, the Netherlands, and England (and to a certain extent other countries/polities of Europe. Like Vermeer she is able to describe so that we can see clearly the worlds these two men lived in; a good historian, she carefully distinguishes between what is fact, what is reasonably likely a reconstruction, and what is speculation founded on incomplete data. She explains clearly what were the instruments (newly being employed by more scientists and artists, but not necessarily newly invented) so that the reader can understand how they worked, what were their dis/advantages, and how we can perceive that Vermeer and other artists were using them. While I had known something of van Leeuwenhoek before reading this book, I now understand more clearly how remarkable an "inquirer" as he termed it, he was, how skilled a technician, how modest, and how tenacious in his search for new worlds to see. Snyder links together the invention of the telescope and Copernicus' "seeing" the heavens (several decades earlier) with the use of the camera obscura and other devices so that artists could see the world of their daily lives and with the use of the microscope to see tiny worlds unimagined in so vivid a way that one understands why the subtitle is "the reinvention of seeing." I highly recommend it.

Charlene says

I don't know why I was under the impression that this was historical fiction. It's not. I really should have added it to my list of books to read sooner. What a rich and wonderful history of both Johannes Vermeer and Antoni van Leeuwenhoek. The author serves partly as a time traveling sleuth to understand if there might have been a relationship between Johannes Vermeer and Antoni van Leeuwenhoek. To do this, she sifts through and parses research done by others but has conducted quite a bit of novel research of her own -- that sometimes disagreed with other experts who reasserted this possible connection. The argument she assembled is both beautiful and compelling. In constructing her argument, she told the story of Johannes Vermeer and Antoni van Leeuwenhoek's separate lives, the story of the people living in their town, and entangled it with the history of painting and the history of the microscope. How brilliant! What a joy to read.

Lynn says

This is an interesting exploration of how the artist Vermeer and the scientist Leuwenhoeck changed our way of seeing. The author is very circumspect over whether they actually knew each other, but it seems they probably did. It dragged in places, but that may be because she was covering similar ground. I like her idea that our brain as well as our eyes have to be trained to see.

Blanca says

No sé qué decir de esta maravilla aparte de que ME HA ENCANTADO.

La traducción me ha parecido fantástica, la edición de Acantilado de 10 con las notas donde tienen que estar, y no al final...

Bajo mi punto de vista es un libro para todo el público, no teniendo por qué ser uno amante de la pintura y/o las ciencias naturales.

Top shelf!!
