I haven't been to the Louvre. But I know what the Mona Lisa looks like. I haven't been to the Uffizi Gallery. But I know what the Birth of Venus looks like. I've seen these paintings in art books and projected on slides in an art history class. I've seen them on television and in movies. I can summon an image of scores of artworks that I have never stood in front of, and I can do this because of the invention of the camera.

Before photography, the public had little opportunity to view works of art in any number, because the works were inaccessible -- isolated in museums, churches, palaces, and private collections spread around the world. By reproducing art, the camera allowed artworks to be in two places at one time, allowed artworks to travel to the viewer rather than requiring the viewer to travel to the art. One 19th century art critic hailed photographic reproduction as the end of the "old selfish aristocratic days of hoarding."

Not only does reproduction allow the public to see art, reproduction allows the public to use art. Sometimes the use is a Matisse sweat shirt, selling for $24.99. But other times, reproduced art illustrates a book on medieval dress or demonstrates a lecturer's point about the differences between Italian and Dutch portraiture. In the artistic tradition of appropriation, art is incorporated into other artworks. Or maybe it's stuck on the refrigerator door to preserve a memory.
According to John Berger, transforming art works into easily reproducible, usable images, wrests art away from the few specialized experts, away from any religious or ruling class preserve, and gives it to the populace to apply to their own lives. Instead of museums, Berger suggests, we should have personal bulletin boards, papered with "letters, snapshots, reproductions of paintings, newspaper cuttings, original drawings, postcards." No one here really wants to eliminate museums, but what Berger describes through the lens of the art critic, is the legal concept of the public domain, which for works of visual art has practical meaning only because of photographic -- and now digital -- reproduction.

The Copyright Clause of the United States Constitution envisions and the Copyright Act establishes a time when the exclusive rights granted writers, painters, and sculptors are released to the public. The works become public domain, and the public may freely reproduce, adapt, distribute, perform, and display the works or copies of them. The end of the copyright monopoly and the release of rights to the public was designed to balance the goal of protecting artists' interests in the fruits of their labor with the competing but equally desirable goal of granting the public "free access to materials essential to the development of society."

Public-domain artworks have a different life from public-domain literary and musical works. Because Shakespeare is in the public domain, directors can portray As You Like It as occurring on a cattle drive in the Old West or set Taming of the Shrew, as I recently saw it, in the 1920s, with Padua as Oxford and Petruchio's country home in Canada, complete with moose heads repeatedly popping out through the scenery. Not only can the directors stage their own interpretations of Shakespeare, they can do so without paying royalties to the Folger Shakespeare Library.

Public-domain works of visual art lead a more sheltered and restricted life. Museums see themselves as both guardians and beneficiaries of the public-domain works in their collections, and they wield aesthetic and financial control over them by controlling their photographic reproductions. This is possible because an artwork is a tangible, unique object, unlike the Shakespeare script, and its owner controls physical access to its content.

Museums can and do establish rules for what occurs in their galleries. Some forbid photography entirely. Others permit only the kind of photography that will produce unpublishable results. Some instruct visitors that they may use their own photographs for personal purposes only, while others require visitors
to sign camera permits in which they agree not to reproduce, publish, or
distribute any images they have shot inside the museum.

As stewards of art for the public, museums must make works available to the
public for use. So museums routinely hire photographers to make
photographs and transparencies of the works in their collections and will
license or rent these images to scholars and others, for a one-time use, for a
fee, and subject to various limitations.

And then, and this is the clever part, the museums assert that the
photographic reproduction of the artwork is itself a copyrighted work and that
the museum holds the copyright to the reproduction. By controlling access to
the original artwork, so that the public cannot make its own direct copies, and
also asserting a copyright in the only usable photographic reproductions of a
public-domain image, the museum manages to control the public's ability to
exercise its rights in a public-domain work.

In other words, the museums manage an end-run around the concept of the
public domain and end up with something close to a copyright in public-
domain art images by claiming copyrights in their photographic copies. In fact
it's better than copyright. It's more enduring. Has your time run out? Take
another picture. This really straps educators who cannot always afford the
fees on their academic budgets. But the issue isn't just financial. It is also
aesthetic. The museums are controlling how images may be used by the
restrictions they place on use of their reproductions.

Relying on the museum practice of asserting copyrights in photographic
reproductions, digitizers such as Corbis have applied for and been granted
copyrights in their digital reproductions. This is a significant move, because in
the future digital images will be the primary means of reproducing art.

So, are photographic and digital reproductions truly copyrightable? The
answer to this question lies in the constitutional and statutory requirement of
originality. Both the constitution and the copyright act limit copyright protection
to "original works of authorship." Without originality, a work is not
copyrightable.

Museums have assumed they are protected because originality is a very low
threshold. A standard formulation is that a work is original when it "owes its
origin to the author, meaning it is independently created and not copied from
other works." You'd think that the "not copied from other works" part of the
definition would automatically mean that the museum photograph of a
Rembrandt is not copyrightable because it is copied from another work. However, the Copyright Act recognizes "art reproductions" as a type of "pictorial, graphic, and sculptural work" that may be copyrighted.

So, what is an original reproduction?

To answer this, you must first understand that copyright protection in art reproductions is known as a "thin copyright." The copyright act protects only those elements of the reproduction that are not copied from the underlying work. By limiting protection to the uncopied parts of the reproduction, the Copyright Act explicitly seeks to keep reproducers from using their copyrights in reproductions to affect copyrights in or public-domain status of the works they have reproduced.

Step number one, then, is to determine whether the work contains uncopied elements. Next, the court must determine whether the uncopied parts of the reproduction are sufficiently original to merit copyright protection. Because of the special nature of the copyright in reproductions, the test for the originality of the uncopied parts is not simply the "owes its origin to" test.

Courts have applied two standards. The first standard requires the copyright claimant to demonstrate a substantial, distinguishable variation between the reproduction and the original work. In Alfred Bell v. Catalda Fine Arts, the plaintiff had commissioned and copyrighted mezzotint engravings of well-known, public-domain paintings from the 18th and 19th centuries, including Gainsborough's Blue Boy and Lawrence's Pinky. The defendant produced and sold color lithographs of the plaintiff's mezzotints. When the plaintiff sued for copyright infringement, the defendant argued that the plaintiff's mezzotints lacked sufficient originality to satisfy the Copyright Clause and so were not entitled to copyright protection.

The Southern District of New York and then the Second Circuit on appeal both disagreed. The District Court explained that "Congress in the Act, and the Copyright Office in the regulations adopted pursuant to the Act, recognize that there may be in reproductions of works of art an artistic element distinct from that of the original work of art." That distinct artistic element satisfies the constitutional requirement of originality, and so it is that distinct artistic element the law protects.

The district court concluded that the engraver's handling of the painting in another medium was original, that the process of using lines and dots and shading to express what was in the painting created a distinct artistic element.
The second circuit agreed and required new elements that were a "contribution from the author, something more than a 'merely trivial' variation, something recognizably his own." Subsequent case law has refined the Alfred Bell definition to require a "substantial variation."

Changes in color and changes that have been motivated by greater ease in mass production have been found too trivial to merit protection. For example, a manufacturer claimed that its foam Statue of Liberty hats were original because the spikes were uniform, but the spikes on the actual Statue of Liberty are not. The court responded, "You did this because it was easier, not to express an artistic viewpoint, and so it's not original."

Because the court in Alfred Bell found originality in the handling of the paintings in a new medium, the question arose in later cases whether handling in a new medium was per se original, but the case law has determined that it is not. This issue arose when the Bridgeman Art Library sued Corel for allegedly infringing its copyrights in transparencies of public-domain artworks. Bridgeman defended the originality and thus the copyrightability of its transparencies by arguing that its transformation of the paintings to the photographic medium "established sufficient variation from the underlying works to support originality." The Southern District of New York disagreed, relying heavily on L. Batlin & Son v. Snyder, a 1976 case in which the parties disputed the originality of plastic Uncle Sam Banks that reproduced public-domain iron mechanical banks. The copyright claimant relied on Alfred Bell and claimed that by handling the banks in the new medium of plastic, he had created an original work.

The Second Circuit rejected this argument, reasoning that any time a work is translated into another medium, trivial variation will necessarily occur, and that such necessary variation cannot be attributed to the reproducer who did not independently evolve the medium. Protecting the variations that occur solely because of a change in medium (it's flat because it's a photograph; it's luminous because it's on a computer screen) would produce the "ludicrous result" that the first person to reproduce a public-domain artwork in a different medium thereafter obtains a monopoly on the underlying work in the medium of the reproduction (because these would be flat or luminous also and therefore infringing). The court explained that "to extend copyrightability to minuscule variations would simply put a weapon for harassment in the hands of mischievous copiers intent on appropriating and monopolizing public domain work."
The Bridgeman case reaffirms generally that translation to a new medium does not automatically establish originality and states specifically that the changes in a photographic reproduction that are inherent to the change of medium do not constitute originality.

Distinguishable variation, though, is not the only test available. In the 1959 case of Alva Studios v. Winninger, the Southern District of New York established an alternate test. In that case the plaintiff had laboriously and accurately reproduced the Carnegie Institute’s casting of Rodin's Hand of God in a smaller size. When a competitor also marketed reproductions of the Hand of God, the plaintiff sued for copyright infringement, and the defendant who claimed it had copied the Met's original casting of Hand of God responded that the plaintiff's reproduction was not original and hence not copyrightable.

Indeed, plaintiff's reproduction was so accurate, it couldn't satisfy the substantial variation test, so the court made up a new test that Plaintiff could satisfy. A work is original if it is created by the reproducer's "own skill, labor, and judgment without directly copying or evasively imitating the work of another." Subsequent case law has refined the definition to require "true artistic skill" and not simply the use of "great effort and time."

This is not an appropriate test for the originality of art reproductions, and the reasons could fill a separate talk. Briefly, there is the problem that most art reproductions, unless made by a photocopy machine, do require skill, labor, and judgment. The skill test could bestow copyright too freely.

The Cliff Notes version of my concerns is this. All reproductions require skill, so it is difficult for a court to tell when the skill has crossed the line into protectible skill. Also, it's difficult to determine what is protected by this test, since nothing new is created in the works it protects. All the accurate reproduction does is to commodify the art. It does not put any new image out there that wasn't there before. If it protects skill, that permeates the entire work, which causes the further difficulty that the skill standard can be used to monopolize public-domain images and harass subsequent reproducers of original images.

The next question is whether photographic and digital reproductions of two-dimensional artworks would satisfy either the substantial variation test or the skill, labor, and judgment test. The answer should be no.

Under the variation test, a copyright claimant could point to differences between the reproduction and the original artwork. But if the variations are not
distinct, artistic elements, substantial changes rather than mere by-products of reproducing the art in another medium, they will not satisfy the test. In addition, the grant of copyright protection must not affect the public-domain status of the original work being reproduced.

How, then, is a photograph or digital image different from the painting it copies? The color in a photograph or digitally produced image cannot be true to the color in the painting. A photograph shows the colors of a painting from a fixed angle and in a fixed light, and subtleties and variations within color are lost. The range of palate that film and printing inks can capture is more limited than the range of pigments available to the painter. This difference is not a new contribution from the reproducer but a dilution of the original produced by the inadequacy of the copying medium. It is not a "distinct artistic element" deserving protection. In a case involving reproductions of public-domain Wizard of Oz lithographs, even deliberate, distinct color changes were not substantial enough to be copyrightable. Protecting the resulting color dilution in a photographic or digital reproduction of a work of art would create a monopoly on color differences necessitated by the limitations of the medium and thus prevent subsequent reproductions in the medium, which would of necessity contain the same limited palate.

The surface of a reproduction is different from the surface of a painting. The texture and bulk of the paint is replaced by flat glossy paper or a glowing screen. But again, this is a dilution of the effect of the original necessitated by the switch to the new medium. It is not the result of the reproducer's "own artistic viewpoint," as required by some of the cases.

Photographic and digital reproductions are smaller than the originals, but in the Hand of God case, reduction to a smaller size was not enough to satisfy the test.

We know, too, from the Uncle Sam bank case and from Bridgeman Art Library v. Corel that merely reproducing the painting in the photographic medium does not automatically satisfy the originality requirement.

Because the inherent and therefore trivial differences of color, texture, and size permeate the photographic or digital reproduction, a court cannot possibly isolate distinct, protectible differences. Consequently, permitting copyrights in photographic and digital copies of art would threaten rights to the underlying works, because the reproduction as a whole would have to be protected, and subsequent reproductions of the original could falsely but convincingly be accused of infringing the reproduction. If reproduction #1
contains only those differences inherent in a photographic reproduction, and reproduction #2 contains only those differences inherent in a photographic reproduction, reproduction #2 will look just like reproduction #1, and reproducer #1 can accuse reproducer #2 of infringement. But if reproduction #1 had contained substantial differences, and reproducer #2 had copied the original public domain work, the second reproduction would not contain the differences of the first, and a court would be able to tell that the second reproduction did not infringe the first.

Given the very poor chances of succeeding with the substantial variation test, museums and digitizers are more likely to argue that they deserve copyright protection because of their skill, labor, and judgment. This was the Bridgeman Art Library's second argument. Photography requires talent and therefore the transparencies are original, the lawyers argued. The court disagreed, and it did so without exploring the skill required for copy photography but instead by examining the purpose of copy photography and the resulting image. "The point of the exercise," the court wrote, "was to reproduce the underlying works with absolute fidelity." This made them "slavish copies," undeserving of copyright. The "slavish copy" idea is not new to the Bridgeman case. Even in the Hand of God case, the court said that where the skill and effort involve "direct copying" the skill test is not satisfied. Some reproductions, however skilled, must fall into a category of "mere copies" that cannot be protected. As the Uncle Sam bank case explained, when a reproduction is a "mechanical" or "mere slavish" copy, it is not copyrightable.

The documentary photographer of two-dimensional works of art strives to make accurate copies, faithful to the original. The value of the copies is that they do not interpret or add or change, because the purpose of photographing two-dimensional works of art is largely to provide information about the work or a usable substitute for the work.

The camera or computer is merely a sophisticated, mechanical copying device. The surrogate image provided is a slavish copy, slavish in every detail so that it can serve its purpose of providing accurate information about the image in the two-dimensional work. The accurate copy is achieved through a mechanical process -- either photography or digital scanning. As these are copies not only slavish but mechanical, digital and photographic reproductions should not be copyrightable. They should fail the skill test before the issue of skill is ever reached.

If the court does address the skill issue, it should find that photography and digital scanning do not involve the kind of skill the test requires. In Hearn v.
Meyer, a 1987 case involving Wizard of Oz lithographs, the Southern District of New York found that Michael Hearn's year-long, painstaking recreation of the lithographs did not satisfy the originality requirement. Using pen and ink on acetate, Hearn drew every mark by hand two or three times to produce a single color and traced or redrew every color. To produce secondary colors, he printed primary colors on top of each other. At each stage he pulled proofs to check the register and density of color and continually redrew and reapplied mylar. Despite these laborious and skilled efforts, Hearn failed to demonstrate the level of originality and skill that afforded protection to the Hand of God reproduction.

This does not bode well for the photographers and digitizers. Physical skill, special training, and "sheer artistic skill and effort" have been ruled not enough to substitute for substantial variation. I can find no copyright claimant other than the plaintiff who reproduced Hand of God who has succeeded under this test. All other copyright claimants under this test have lost.

In Hearn v. Meyer, the court observed that the reproduction of the Rodin required "more than just the skill of the artisan doing the reproduction; it took great creativity as well as skill to interpret, project and transpose the original Rodin work, in order to create a scale model thereof." Copy photography of two-dimensional art objects requires no projecting or transposing and demands as little interpretation as possible.

Given the ease of the digital scanning process, digitizers will probably emphasize the technical expertise and creativity involved in making adjustments to pattern, brightness, contrast, and color after the scan is made. This, though, is a routinized process, and the technician's greatest contribution is time. But case law tells us that great effort and time are not enough and true artistic skill is required. A court should not find sufficient originality in digital image capture to support originality.

Under either test, photographic and digital reproductions are not original and therefore not copyrightable. When these copyrights fall, the quasi-copyrights in the public domain works they reproduce also fall, and the public domain is safeguarded. And yes, sometimes that just means that novelty companies can put great works of art on neckties and night lights and refrigerator magnets. But it will also free teachers to project public-domain images on individual viewscreens in their classrooms or post them on course Web pages. It will allow scholars to use royalty-free works in books. It will let artists continue the tradition of appropriating and building from the work of artists who preceded them.