Beyond The Fair Use Fallacy:
A Copyright Primer for Planetarians

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There are few areas of law that cause as much public confusion as that of copyright. As widespread changes in technology make it easier and cheaper to create, manipulate, and transfer content, and as our economy moves from one of the industrial age to one of the information age, copyright is quickly becoming a centerpiece of our modern vernacular.

Despite increased public interest in copyright, few truly comprehend how copyright law works or what, exactly, it protects. Particularly in the context of education, misconceptions about copyright law abound. Terms like “fair use” are often thrown around with little understanding of what they actually mean or how they actually apply to a particular situation. This article endeavors to demystify the major principles of copyright law by providing a conceptual framework with which planetarians can attempt to answer copyright related questions.

It is important to realize, however, that this article is not designed to substitute for professional legal advice. This article aims only to provide a general background of some key concepts of copyright law which many planetarians are likely to encounter. Because virtually every copyright-related question must be considered within the context of the unique scenario in which it arises, you should consult a qualified attorney for guidance in specific situations.

What’s a Copyright?
A copyright is a government grant of limited rights to an author to use or authorize others to use his or her “original works of authorship” (17 U.S.C. § 102(a)) during a finite period of time. Copyright protection is based on the theory that creators will be more likely to generate new works of authorship if they are guaranteed the right to exclusively use their works. This exclusive-use period creates an economic advantage in creators, which allows them to recoup their investment in innovation and enjoy the fruits of their labor.

After the limited period of exclusive use, the work falls into the public domain, allowing anyone to use the material without first obtaining permission. Copyright law then, at least in theory, is designed to promote creation of new expression as well as establish and grow a rich public domain.

The notion of copyright law finds its origins in the late fifteenth century with the introduction of the printing press. Since that time it has been refined and developed into the relatively complex body of law we have today. In the United States, copyright law dates back to the birth of the nation. Article I, Section 8, Clause 8 of the Constitution gives Congress the authority to create patent and copyright law.

Over the years, Congress has exercised its constitutional authority to develop comprehensive schemes of copyright protection. The most recent incarnation was established by the Copyright Act of 1976. Today, the Act and its various amendments are codified in Title 17 of the United States Code.

Copyright protects several categories of “works of authorship” including literary works, musical works, dramatic works, pantomimes and choreographic works, pictorial, graphic, and sculptural works, motion pictures and other audiovisual works, sound recordings, and architectural works.

For an average planetarium, that means that virtually everything used in a typical show is copyrightable - slides and other images fall into the pictorial, graphic and sculptural works category, the sound track is a sound recording, while the printed script and any accompanying production notes would fall under the literary works category.

For works created on or after January 1, 1978, copyright protection is automatic for any works that are fixed in a tangible medium of expression. Thus from the moment you finish a particular piece of work, it is protected by copyright. Even your notes, doodles, and indiscriminate markings are technically protected by a copyright. Note, though, that if something is not in tangible form, it may not be copyrighted. The words spoken during a live planetarium show, for example, are not copyrightable unless they are written down somewhere or are being transcribed, videotaped, or otherwise fixed in some tangible medium of expression.

Currently, copyright protection lasts for the life of the author plus an additional 70 years. In cases where there are multiple authors, the copyright lasts for 70 years beyond the life of the longest lived author. Where the work was prepared anonymously or pseudonymously, or when the copyright is owned by an employer (when works are created within the scope of an individual’s employment), the copyright extends for 95 years after the year of first publication or 120 years after creation, whichever is shorter.

In short, for all intents and purposes, everything is copyrighted by someone, somewhere, and it lasts for an extremely long time.
Government Works

There is one exception to the above statement that “everything” is copyrighted. Works created by the federal government are not subject to copyright protection and may be used freely. The government is not precluded from owning copyrights that are transferred to it, however. Also, this provision does not apply to state or local governments.

Many planetarians are already familiar with this rule, as it is the reason why most NASA imagery, for example, is in the public domain. The one caveat that exists, however, is work prepared by government contractors or partners - they are permitted to obtain copyright protection, even if the work was created using government funds or support.

The Classroom Exemption

Recall that copyright is a grant of limited rights to authors. To ensure that copyright law remains true to its underlying policy goals, Congress included a number of exceptions to the rights of authors. Of particular importance to planetarians is the so-called “classroom exemption” found in Section 110(1) of the Copyright Act.

This exception essentially permits instructors and students to publicly perform copyrighted works, without consent of the copyright owner, “in the course of face-to-face teaching activities of a nonprofit educational institution, in a classroom or similar place devoted to instruction.” Like virtually all legal doctrines, however, this seemingly simple phrase leaves ample room for interpretation.

A review of the legislative history behind this section reveals that Congress did not intend to suggest that the instructor and students must actually see each other, but they must be “in the same building or general area.” The “face-to-face” language is merely designed to specifically exclude electronic transmissions. Planetarium use of copyrighted materials would therefore probably meet the face-to-face requirement.

Congress further noted that “teaching activities” specifically excludes performances or displays “that are given for the recreation or entertainment of any part of their audience.” The copyrighted work must actually be used in the process of delivering instruction, not merely to accent a lecture or presentation. In a planetarium setting, live shows that take the form of an interactive lecture or discussion-based presentation are more likely to lean towards meeting the teaching activities requirement whereas a pre-recorded show falls further away from the intent of the “teaching activities” language.

Similarly, audience composition may also be a consideration. Audiences comprised substantially of students would tend towards a teaching activity, whereas public shows may be deemed recreational in nature. Using copyrighted materials merely to improve the aesthetic quality of a program, irrespective of audience or type of show, would almost certainly be considered “recreation or entertainment” and therefore not fall within the scope of the classroom exemption.

Finally, the “classroom or similar place devoted to instruction” phrase is essentially designed to confine the display or performance “to the members of a particular class.” This requirement is also tricky in a planetarium setting. In circumstances where the planetarium is effectively being used as a classroom, this requirement would probably be satisfied. But most planetarium facilities also present a variety of public shows during which time the planetarium is not functioning as a classroom, leading one to reasonably conclude that the classroom exemption may not apply.

Considering the requirements of the classroom exemption, some uses will fall squarely within the bounds of the provision, whereas others will fall into the proverbial “gray area.” For those cases where you are uncertain about or uncomfortable with your review of the relevant facts and their application under the exception, it is important to consult with an attorney.

Fair Use

The classroom exemption applies only to the public performance and display rights and applies only in a small number of circumstances. In cases where your intended use of content does not fall within the classroom exemption, the doctrine of fair use may be helpful.

The phrase “fair use” has become widely known in the education community but unfortunately, it is frequently used incorrectly to mean any permissive use of copyrighted material without authorization of the copyright owner. Fair use is actually a specific and statutorily defined exception found in Section 107 of the Copyright Act.

Contrary to popular belief, fair use does not grant educational users carte blanche to use copyrighted materials without compensation or permission. Instead, the statute articulates the following test, which requires a user to consider and balance four factors:

1. The purpose and character of the use, including whether such use is for commercial or non-commercial purposes;
2. The nature of the copyrighted work;
3. The amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
4. The effect of the use upon the potential market for or value of the copyrighted work.

Rights conferred by § 106 of the Copyright Act

What’s In A Name?

The singular word “copyright” is actually a misnomer, as a copyright actually confers upon its owner several different rights. These include the right to reproduce, to prepare derivative works (e.g. a foreign language translation of a book, a movie based on a novel, etc.), to distribute copies, to publicly perform, and to publicly display.

During the period of copyright protection, only the copyright owner or those authorized by the copyright owner may exercise these rights. Exercise of one or more of these rights without permission is an infringement of the copyright which can subject the infringer to substantial financial detriment. In certain narrowly defined situations, copyright infringement can carry criminal penalties including imprisonment.

The rights may be subdivided, meaning for any particular work, one party may, for example, own or have the right to reproduce while another party has the right to publicly perform a particular work.

The Copyright Clause of the Constitution. Courtesy: U.S. National Archives and Records Administration.
mercial nature or is for nonprofit educational purposes;
2. The nature of the copyrighted work;
3. The amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
4. The effect of the use upon the potential market for or value of the copyrighted work.

The first factor is relatively straightforward. While one may consider the educational or nonprofit nature of a particular use, it does not have any determinative value alone. Educational use weighs towards a finding of fair use whereas commercial uses lean towards finding against fair use.

When considering the first factor, courts have also looked to the transformative nature of the use. Uses that employ copyrighted material to change or adapt (e.g. to create a parody) weigh more in favor of fair use than those which simply take the copyrighted work and exploit it in total.

Note that just because a planetarium is a nonprofit organization does not immediately turn the first factor towards a finding of fair use. The test calls for one to consider the nature of the use of the copyrighted work. Use of a work in a show for which admission is charged could be viewed as a commercial activity even though it is being conducted by a nonprofit entity.

The second factor is designed to recognize that “some works are closer to the core of intended copyright protection than others.” (Campbell v. Acuff-Rose Music, 510 U.S. 569, 586 (1994).) Works that are based substantially on factual material are afforded less protection, and use thereof is more likely to be fair. Works that are more creative or artistic in nature are afforded greater protection, which weighs against a finding of fair use.

The third factor simply looks to the amount of the work taken relative to the work as a whole. To photocopy a poem from an anthology, for example, would probably weigh in favor of fair use, whereas to duplicate the entire anthology would likely weigh against fair use. This is one area that gives rise to many of the fair use misconceptions. Traditional wisdom found on many web sites suggests that there are solid rules about how much of a copyrighted work may be taken - the “8 bar” rule for music, or the “10% rule” for books, for example. Unfortunately, no such rules exist. The quantity of material taken must be considered along with the other three fair use factors.

Finally, the fourth factor considers the effect on the market for the copyrighted work. Because the very essence of copyright is to protect authors’ economic incentive to create, if the use is likely to result in an adverse effect on the sales of the copyrighted work, the fourth factor would weigh against fair use. Duplicating a particular poem from the anthology in the above example is not likely to harm the market for the anthology as a whole. The fourth factor would therefore weigh in favor of fair use. If a teacher were duplicating pages from a consumable workbook that would otherwise be purchased by the school, however, the fourth factor would weigh against fair use.

Just like the classroom exemption analysis some proposed uses of copyrighted material will fall directly within the fair use guidelines, but many are close calls. If ever in doubt, as always, it is important to seek the advice of an attorney skilled in copyright issues for guidance relevant to your specific situation.

Getting Permission

This article has focused largely on exemptions to copyright protection and cases where you may lawfully use material without express permission of the copyright owner. It is important to always remember, however, that the safest way to use the copyrighted content of another is to obtain permission to use it.

Obtaining permission for many materials can be as simple as asking for it. Because planetariums are generally noncommercial in nature, you may be able to obtain the permission you need for free or for a nominal charge.

Even if you request permission on the phone or by e-mail, be sure to get the copyright owner’s permission in writing. A signed letter or fax is best, but e-mail will typically suffice. Written permission is essential even if you request permission and discuss your proposed use by telephone. As movie magician Sam Goldwyn once quipped: “An oral contract isn’t worth the paper it’s printed on.”

A similar way to avoid potential copyright problems is to use royalty-free content. As the name implies, royalty-free products involve the user paying a one-time fee for unlimited use in a particular context. Examples of royalty-free materials in clude stock imagery and many production music libraries.

An Important Word of Caution

Many copyrighted materials that are sold for particular purposes are not actually owned outright by the purchaser. Rather, the purchaser is simply licensed to use the materials. A common example is computer software, where the end user does not actually own the purchased program, but instead owns the right to install and use the program on a particular computer. Because the license term is usually a lengthy period, it seems as though the product was purchased and is now “owned.”

Note, though, that when a license agreement is present, the terms of the license generally override the exemptions in the copyright law. In other words, it is possible to “contract around” the various productions discussed here.

This has critical ramifications for many planetarium products – it means that show packages, music libraries, video clip libraries, and anything else that requires a license, even a royalty-free license, is bound by the terms of that particular license agreement.

For example, suppose a show package license agreement includes a provision that prohibits use of the show’s visuals outside of the actual performance of the show itself.

While ordinarily, independent use of those images may be justifiable under the classroom exemption or the fair use doctrine, because the license expressly prohibits such use would be unlawful. It is therefore of paramount importance to read and understand license agreements associated with shows or other planetarium content.

Conclusion

It bears mentioning again that this article is not a substitute for legal advice; it is intended to provide a working knowledge of the general principles of copyright and an analytical framework to help determine when certain copyright exemptions apply. Every legal situation is different and concepts like classroom exemption and fair use can become technical and the results uncertain. Unfortunately, there are no bright line tests and no hard and fast rules.

To date, no United States court has ever adjudicated a copyright infringement claim against a planetarium. Moreover, the author was unable to identify any planetarian that had been threatened with litigation over a copyright issue. Still, understanding copyright law is quickly becoming essential for anyone involved with using or creating content. Although copyright infringement claims against planetariums are rare or even presently nonexistent, such is not a license to ignore the rights of copyright owners. Ongoing or widespread copyright infringement within the planetarium community could potentially lead to increased enforcement vigilance, particularly as the “copyright industries” become more and more reliant on licensing revenue as a source of income. Planetarians and related professionals must therefore be familiar with their rights and responsibilities when using copyrighted content to ensure compliance with applicable laws.

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has a “Lunar History,” explaining how features were formed, why we went to the landing sites we did, or how differing eyepieces change the view of the relevant landscape. Kelsey uses a format similar to an amateur astronomer’s “star-hopping,” starting at an easy-to-find feature and moving around with respect to that point to find other areas of importance.

There are only two points about this book that I found a bit weak. The first appeared to be Kelsey’s desire to show the features through each type of telescope, so some of his sketches show east to the right, others show it to the left; in fact, there are many double pages where each page’s sketch is opposite the other. It was difficult to determine if he should have just decided on a convention and let the reader figure out the orientation for himself. Also, there are several photographs of the Moon. Unfortunately, some of them are bright and washed-out, and the relevant features are hard to make out. For example, Proclus in Photo 2 seems more like a white smudge than a crater. Perhaps the use of a lunar filter would have made these images stand out in more detail.

“(this) book is a great way to become introduced to the landscape of our nearest celestial neighbor. Through 12 ‘expeditions,’ (the author) slowly goes through the varied and increasing illumination from a 3-day old Moon to its full phase.”

However, as an introduction to the Moon and its myriad mysteries, this book is great. Not only was it a good read, but I could see it become a mini-Bible for a amateur or school astronomy clubs looking for an observing project. Its reading level is basic enough for all ages; therefore, everyone should be able to follow, and enjoy, this first look at our lunar landscape.

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**How Many Pieces of Toilet Paper Do I Need To Get From Here to the Nearest Star?**


Reviewed by April Whitt, Fernbank Science Center, Atlanta, Georgia, USA.

When George Reed mentioned that he had a new book coming out, and I recalled all the times I’ve used his “cosmic art-toons” in planetarium programs and in teaching classes, I asked for a review copy immediately. While the price seems a bit high for a 168-page paperback, I’d still recommend it to anyone with a gift shop, anyone with students aged 10 to 100, and anyone who wants a book that is easy to read and amusing as well.

The back cover describes the book well. To paraphrase, “Everyone has questions about our universe. The questions range from the creation of the universe to the effect of the moon on human behavior. But few people want long answers. Short, simple explanations with some humor are so much better. This book ... is a light, informal, introductory but scientifically accurate approach to aspects of astronomy that are not always found in books on the subject.”

Based on 20 years of his popular newspaper columns, the book is organized in a question-and-answer style that allows the reader to “start anywhere in the book and move in any direction” (another paraphrase). Chapters discuss objects in the day and night skies, telescopes, seasonal constellations—most from a northern hemisphere perspective, astronomers from history and aliens from outer space.

I’ve already used the section about meteorites, comets and near-Earth objects to reassure the public that asteroid 4179 Toutatis is not a threat.

Units of measure are usually expressed in both metric and “standard” versions. The analogies are excellent. The cartoon illustrations are amusing. The book is a great resource.

Let the reader beware, however. There are a number of numerical mistakes (M31 is farther than the printed light years, and in the conversion of miles to kilometers for the circumference of Earth an extra zero is listed); and I’m pretty sure Meteor Crater is in the Arizona “desert” rather than “desert.” If you’re recommending this book to a student, remember to check the math.

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(Copyright, continued from page 40)

The notion of copyright was included in the Constitution because the founders of the United States recognized the importance of promoting a diverse array of expression. While the complexity of the copyright code sometimes seems like it does more to chill than to promote expression, with the proper background knowledge and understanding of copyright and its underlying principles and goals, the ability to navigate the waters of copyright can become second nature and a powerful component of the planetarian’s toolbox.

The author wishes to thank Jim Beaber and Thomas G. Field, Jr., for their assistance with this article.

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and where to find them. John holds the position of Historian of the Middle Atlantic Planetarium Society and is also a Fellow of the International Planetarium Society.

The next deadline for the applicants of “A Week in Italy for an American Planetarium Operator” is April 15, 2005. For more details go to the following website: http://www.colibrionline.it/MG/Week_in_Italy.htm.

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Signing Off

Thank you to all those people who sent me news this time. That really made my job a lot easier. The best way to advance our profession and refresh our spirits is to keep sharing information and inspiration!