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The William and Flora Hewlett Foundation
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An Evaluation of Private Foundation Copyright Licensing Policies, Practices and Opportunities

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An Evaluation of Private Foundation Copyright Licensing Policies, Practices and Opportunities

"The big opportunity with open licensing is far more practical: it has the potential to dramatically increase the impact, reach and scale of the ideas we invest in as a foundation. Good content, technology and research released under an open license is far more likely to be picked up, used and recirculated than materials that require permission for use."

Project Goals and Overview

This project is a joint effort of the Berkman Center for Internet & Society at Harvard University, The William and Flora Hewlett Foundation, the Ford Foundation and the Open Society Institute, with funding from Hewlett and Ford. The Berkman Center, in close collaboration with a working group of representatives from Hewlett, Ford and OSI, gathered data and information from a variety of public sources and a select number of private foundations to explore how foundations treat the ownership and licensing of copyrights for the works they fund, either directly or indirectly.

Funding from private foundations results each year in the creation of large numbers of works of all kinds, ranging from books, articles, reports, and research summaries to educational materials and textbooks to photographs, works of visual art, films, videos, and musical compositions and recordings to software code, computer programs and technical systems to many, many others. These works include materials created by grantees with foundation support, works created for or on behalf of foundations by consultancies and contractors, and works produced by staff members of the foundation itself. Virtually all of these foundation-supported works are protected by copyright. For many of the works to have maximum impact and value and to fulfill the philanthropic purpose for which the foundations funded them, they need to be published and disseminated to the appropriate audience, often widely. Before that can happen, however, the owner of the copyright in the work must give permission – generally a copyright license -- for anyone else to publish it, as well as to copy, share, redistribute, remix or otherwise reuse it.

¹ Mark Surman, "How We Work: Open Licensing," May 2008, Shuttleworth Foundation, *available at* http://www.shuttleworthfoundation.org/about-us/our-philosophy/how-we-work/open-licensing, and attached to this Report as Appendix B.

This project seeks to shed light on how foundations and their grantees license the many types of copyrighted works created with foundation support. It examined both traditional licensing approaches and the extent to which foundations are aware of and are starting to use so-called "open" licenses such as Creative Commons (CC) licenses or the General Public License (GPL). In particular, we examined a number of examples where foundations have begun to take advantage of these new licensing models, taking various steps to encourage or ensure that their own staff, their consultants and their grantees license the materials they produce in a free and open way.

The project identified and analyzed a variety of significant potential benefits from open content licenses for foundations and their charitable goals. We also assessed various concerns raised by foundation staff about the use of open licenses in different contexts. Working from these real-world experiences and staff perceptions, the project sought to identify a set of conditions and factors that can help foundations evaluate when and where the use of open licenses could further their mission and their day to day work, and where such licenses are less likely to be useful or appropriate.

Our goal at this initial stage of the project was to gather information from a relatively limited group of foundations and to identify a number of real-world case studies in order to begin to evaluate carefully the questions of potential benefits versus drawbacks of open licenses and the contexts in which they occur. To help obtain the necessary information, the Berkman Center utilized the services of the FDR Group, a nonpartisan public opinion research firm, to carry out a qualitative research study. In March and April, 2009, FDR conducted in-depth, in person or telephone interviews with over 30 program officers, legal staff and communications staff and others in eleven private charitable foundations or similar organizations where copyright licensing issues arise.² The survey gathered information on the current state of copyright licensing practices, on participants' knowledge of and experience with open content licenses, and on their reports and assessments of the benefits and concerns of such licenses.³ The key findings and recommendations of the survey are incorporated in this Report.⁴

²

² The 11 foundations are: The Andrew W. Mellon Foundation, The Christensen Fund, The Ford Foundation, The Gordon and Betty Moore Foundation, The John D. and Catherine T. MacArthur Foundation, Mozilla Foundation, Omidyar Network, Open Society Institute, The Robert Wood Johnson Foundation, the Shuttleworth Foundation, and The William and Flora Hewlett Foundation. In addition, Berkman Center staff interviewed a representative of a twelfth organization, the Knight Foundation.

³ The focus of this project is solely on copyright and copyright licensing practices. Although foundation support often leads to the creation of other intellectual property (IP) such as patents and trademarks, we have not considered at this stage how foundations and grantees deal with, or should deal with, IP other than copyrights.

⁴ The full FDR Report can be accessed and downloaded at http://cyber.law.harvard.edu/publications/2009/Open Content Licensing for Foundations

This Report, prepared by the Berkman Center in collaboration with the foundation working group, reflects the results of this first round of information and data gathering through the foundation survey and through a variety of independent research. Our hope is that the information in this Report and the experiences and case studies it analyzes can serve as a starting point for conversations with and within foundations about open licenses and their potential benefits. Our goal is to stimulate proactive, thoughtful and informed considerations, grounded on sound research, data and experience, of the relative merits of open licenses in various settings and the best ways to encourage such licenses in those cases where their use would provide significant benefits but not create significant problems. The Report concludes with a series of recommendations to help foundations begin to undertake these conversations and to examine their own licensing needs and practices. These considerations can facilitate foundations finding ways of taking advantage of the emerging opportunities open licenses present to enhance the foundations' reach, effectiveness and impact.

Copyright and "Traditional" Licensing

Copyright law provides a set of exclusive rights to the author or creator of virtually any kind of original expressive work, including written works; musical and audio-visual works; graphic and visual arts; architectural works; computer software and programs; and many more. Copyright protects only expression, not ideas, and does not protect mere facts.

While the specifics of copyright law vary from country to country, in general copyright grants to the author or creator of a work a set of exclusive rights that only the copyright owner of a work may exercise during the term of the copyright. Everyone else is excluded from most uses of the work; anyone who wants to make such uses must first obtain permission or a license from the owner. This system is often referred to as "all rights reserved."

The "bundle" of exclusive rights granted by copyright in the United States includes the rights: ⁵

- > to make copies of the work
- to distribute copies of the work
- > to publicly display the work
- > to publicly perform the work, including making digital audio transmissions
- to create derivative works based on the work to recast, transform or adapt it

⁵ In the U.S., these rights are set forth in Section 106 of the Copyright Act, 17 U.S.C. § 106.

Although these exclusive rights are granted for a "limited time," currently in the U.S. that time is very long: The copyright in works created on or after January 1, 1978 lasts for the life of the author plus 70 years. In order to be protected, a work does not have to be published; instead, copyright protection begins as soon as the work is "fixed in a tangible medium of expression" – that is, reduced to a material form (depending on the type of work, this often means written down or recorded). No formal registration is required; the work is considered automatically protected by copyright as soon as it is "fixed."

The fact that a work is openly posted on the internet and can be viewed and downloaded from there does not ordinarily change its copyright status or the exclusive rights of the owner, beyond the fact that it may create an "implied license" that allows users to view, read, listen, or watch the work. But for all other uses, potential users must still, as with all copyright protected works, first obtain permission from the work's owner before exercising any of the exclusive rights.⁶

The author or creator of a work usually owns the copyright in that work. In some cases, however, the work will be deemed a "work for hire" that is not owned by its creator. Works for hire include works prepared by an employee (*not* an independent contractor) within the scope of her or his employment and works specially ordered or commissioned for certain designated uses and created by an independent contractor, where the parties sign an express written agreement specifying that the work is for hire.⁷ In these cases, the copyright is owned by the employer or the entity that hired the independent contractor.

A copyright owner can assign or transfer the copyright entirely to another person; such full transfers must be done in writing. Owners also may retain ownership of their copyright but authorize others to exercise some or all of the exclusive rights listed above by granting a license. A non-exclusive license, or permission, is relatively easy to grant. The license can be written or even oral, and can specify which specific activities or uses are permitted. Licenses frequently grant some rights but not others, limit the rights to particular regions or time periods, etc. A potential user who wishes to do any of the things exclusively reserved for the copyright owner is required to individually seek such permission from the copyright owner before using the work. Otherwise, unless that use is a fair use, it may constitute copyright infringement.

"Open" Licenses

1. What are open licenses?

⁶ An important but limited exception to the requirement of obtaining advance permission to use copyright works is the so-called "fair-use" or "fair-dealing" doctrine, which allows some copying, distribution, adaptation or display of the work without permission if certain conditions are met (for example, a professor may use part of an article in a classroom presentation, or a book critic may quote limited portions of a book in a review). What is and isn't fair use is determined on a case-by-case basis, however, and the law is often far from clear in particular instances.

⁷ See Section 101 of the U.S. Copyright Act, 17 U.S.C. § 101.

If traditional copyright and licensing reflect an "all rights reserved" approach, "open" or "open content" licenses reverse this default. With an open license, the owner grants blanket permission for a range of uses up front, usually in a simple statement placed on the work. Potential users are then free to use the work in all of those ways under the conditions specified, without the burden of locating the owner and securing individual permission and without the payment of any royalties. The creator of the work still owns the copyright; using an open content license doesn't mean giving up all "rights" to the work but rather intentionally deciding the ways and conditions under which others can use the work and telling potential users those conditions in advance. As a result, open licenses are often characterized as "some rights reserved." As described by Creative Commons, their open licenses "are not an alternative to copyright. They work alongside copyright, so you can modify your copyright terms to best suit your needs."

By granting up-front, blanket permissions, open licenses free up the works they cover for immediate and broad use, reuse, redistribution and sometimes remixing or repurposing, eliminating the time, cost and inefficiency of users having to ask for specific permission. Open licenses permit knowledge and learning to be widely shared and more readily adapted or built upon, thereby ensuring both broad access to information and creative, innovative use of that information in ways that substantially benefit the public good. For the sponsoring foundation, this will often translate into greater reach, impact and effectiveness for the work it funds and greater achievement of its philanthropic goals and mission.

The variety and use of open licenses has skyrocketed in recent years in large part because of the dramatic increase in all types of creative works available in digital form and because of the growth of ubiquitous networks for easy and widespread distribution of such works, primarily the internet. By virtue of their digital form and presence online, such works are easy for people to search for, use, copy, share, modify or remix and then redistribute. As just noted, however, "traditional" copyright approaches prevent users from doing almost all of these things without advance permission of the copyright owner. Put another way, "simply placing digital resources on a website, without any licensing information . . . does not necessarily make these resources truly accessible to users of the resource. From the standpoint of the public, this content must be assumed to be fully covered by copyright and therefore permission from the rightsholder needed for use and re-use of the resource." Open licenses provide that permission, and any conditions for it, up front and in a simple and easily understood manner. In a world where vast amounts of digital content are instantly available, open licenses remove a major barrier to efficient copying, sharing, reusing, reworking, repurposing and remixing of that material where the owner so desires.

⁸ Creative Commons, "What is CC?," available at http://creativecommons.org/about/what-is-cc

⁹ Eduserve, Snapshot study on the use of open content licences in the UK cultural heritage sector, October 2007, available at http://www.eduserv.org.uk/research/studies/~/media/Foundation/studies/cc2007/final%20pdf.ashx

There are numerous types of open licenses for both software and other content. ¹⁰ Among the most widely used and accepted are Creative Commons licenses and GNU licenses from the Free Software Foundation, summarized below.

2. Creative Commons Licenses

Creative Commons,¹¹ an organization founded in 2001, offers a standardized set of flexible open licenses that are designed to be simple for creators and users to understand and easy for creators to apply to their work. Creative Commons estimated that over 150 million CC-licensed works had been made available worldwide as of the end of 2008,¹² with the total today closer to 250 million, including over 100 million CC-licensed photos alone on the photo site flickr.¹³

Creative Commons' basic licenses, used for virtually all types of content except software code, allow creators to state to the world, up front and on a blanket basis, that they give permission for certain uses of a particular work. All of the different versions of CC licenses grant permission for users to copy, distribute, display, publicly and digitally perform the works, make verbatim copies of them into another format, and incorporate the works (in unmodified form) into collective works so long as proper credit is given to the original creator. On top of these standard permissions, creators also can choose to specify three primary conditions -- Non-Commercial, No Derivatives and Share Alike -- that limit how their content is used by others.¹⁴

- Attribution. You let people copy, distribute, display, perform, and remix your copyrighted work, as long as they give you credit the way you request. All CC licenses contain this property.
- Non-Commercial. You let people copy, distribute, display, perform, and remix your work for non-commercial purposes only. If they want to use your work for commercial purposes, they must contact you for permission.
- Share Alike. You let people create remixes and derivative works based on your creative work, as long as they only distribute them under the same Creative Commons license that your original work was published under..
- No Derivatives. You let people copy, distribute, display, and perform only verbatim copies of your work not make derivative works based on it. If they want to alter, transform, build upon, or remix your work, they must contact you for permission.

¹⁰ For a description of a variety of other licenses, see, e.g., Lawrence Liang, A Guide to Open Content Licenses (2004), Chapter 5, available at http://pzwart.wdka.hro.nl/mdr/research/lliang/open content guide/06-chapter-5/; Free Software Foundation, Licenses, available at http://www.fsf.org/licensing/licenses/

¹¹ http://creativecommons.org/

¹² http://wiki.creativecommons.org/Metrics

¹³ See http://www.flickr.com/creativecommons/

¹⁴ http://creativecommons.org/about/licenses

David Wiley of BYU has characterized the four primary types of activity that can be allowed by open licenses (depending on the particular license) as "the four Rs." 15

- Reuse Use the work verbatim in its original condition
- Revise Alter or transform the work to make it better or more useful to the user
- Remix Combine the (original or altered) work with other works to create something that is better or more useful for the user
- Redistribute Share the original work, the reworked work, or the remixed work with others

As Wiley notes, these activities build upon one another; thus, "reusing involves copying, displaying, performing, and making other uses of a work just as you found it. Reworking involves altering or transforming content, which one would only do if afterward they would be able to reuse the derivative work. Remixing involves creating a mashup of several works - some of which will be reworked as part of the remixing process - which one would only do if afterward they would be able to reuse the remix."16

¹⁵ David Wiley, "Open Education License Draft," iterating toward openness, August 8, 2007, available at http://opencontent.org/blog/archives/355

Creators can choose to place various combinations of these conditions on their works. There are six basic CC licenses that incorporate these combinations, and users can pick the one that best fits what they want to allow others to do with their works:¹⁷

© 0	Attribution	This license lets others distribute, remix, tweak, and build upon your work, even commercially, as long as they credit you for the original creation. This is the most accommodating of licenses offered, in terms of what others can do with your works licensed under Attribution.
© 0 0 v 5a	Attribution Share Alike	This license lets others remix, tweak, and build upon your work even for commercial reasons, as long as they credit you and license their new creations under the identical terms. This license is often compared to open source software licenses. All new works based on yours will carry the same license, so any derivatives will also allow commercial use.
© O O	Attribution No Derivatives	This license allows for redistribution, commercial and non-commercial, as long as it is passed along unchanged and in whole, with credit to you.
© (1) (8)	Attribution Non-Commercial	This license lets others remix, tweak, and build upon your work non-commercially, and although their new works must also acknowledge you and be non-commercial, they don't have to license their derivative works on the same terms.
© 0 0 0 17 to 56	Attribution Non-Commercial Share Alike	This license lets others remix, tweak, and build upon your work non-commercially, as long as they credit you and license their new creations under the identical terms. Others can download and redistribute your work just like the non-commercial, no-derivatives license, but they can also translate, make remixes, and produce new stories based on your work. All new work based on yours will carry the same license, so any derivatives will also be non-commercial.
© 080 BY NO NO	Attribution Non- Commercial No Derivatives	This license is the most restrictive of the six main licenses, allowing redistribution. This license is often called the "free advertising" license because it allows others to download your works and share them with others as long as they mention you and link back to you, but they can't change them in any way or use them commercially.

¹⁷ *Id*.

Whichever CC license is chosen, attribution or credit to the original author or creator is *always* required.¹⁸ In addition, all CC licenses require that later users retain the copyright notice on all copies of the work, link to the original license from copies of the work (for online uses), not alter the terms of the license, and not use technological measures to restrict other licensees' lawful uses of the work.¹⁹ The basic licenses described above are designated as "unported" or "jurisdiction agnostic," meaning they are generic and can be used worldwide. In addition, CC has "ported" its licenses to 52 countries to take account of their actual copyright laws and procedures.²⁰

Under Creative Commons and most other open licenses, the creator/copyright owner can always grant potential users permission to make other uses of a work beyond those specified in the open license. For example, a user could contact an author and negotiate an agreement to allow commercial exploitation of a work that is otherwise licensed as NC (non-commercial). Finally, CC licenses allow users to insert metadata into digital copies of the licensed works so that the licenses are machine readable, which makes them (and all other CC-licensed materials) searchable by standard web search tools. This makes searching for, locating, and disseminating CC-licensed open works simple and effective.

As an example, a copy of the least restrictive, unported CC 3.0 license is attached as Appendix E.

3. The GNU Free Documentation License (FDL or GFDL)

Another leading open license for text-based works is the GNU Free Documentation License (FDL or GFDL)²² from the Free Software Foundation. While the FDL was originally designed for software manuals and other reference materials (typically that accompany GNU open source software), it can be used for any text-based content. Wikipedia, for example, until recently used the FDL for all of its articles and other written content.²³ The FDL allows users to copy, redistribute and modify or adapt a work for either non-commercial or commercial purposes. The major condition imposed by the FDL is that the license and copyright notice must be retained with the work and that no additional

¹⁸ CC also has recently begun offering an additional legal tool, which it calls "CCO," to permit copyright owners, as much as the law will allow, to dedicate their work to the public domain by waiving all copyright and similar rights in the work and, as a backup, granting the public an unlimited license to use the work for any purpose. See http://wiki.creativecommons.org/CCO

¹⁹ Creative Commons, Baseline Rights, available at http://wiki.creativecommons.org/Baseline Rights

²⁰ See http://creativecommons.org/international/

²¹ CC has recently started offering a standardized way of combining one of the basic CC licenses with additional, up-front, individually specified rights through its "CCPlus" licenses. See http://wiki.creativecommons.org/Ccplus#Use Cases

²² http://www.fsf.org/licensing/licenses/fdl.html

http://en.wikipedia.org/wiki/Wikipedia:Copyrights. Beginning in May 2009, however, Wikipedia has decided to move from the GFDL to the Creative Commons Attribution/Share-Alike License (BY-SA) as its primary content license in order to make its content more interoperable with existing CC-BY-SA content and easier to re-use. See "Wikimedia Foundation announces important licensing change for Wikipedia and its sister projects," May 21, 2009, available at

http://wikimediafoundation.org/wiki/Press releases/Dual license vote May 2009

conditions may be applied. Derivative works are permitted, but all copies and derivatives must also be licensed under an identical (FDL) license. Thus, the FDL is fairly similar to a Creative Commons BY-SA license.

4. The GNU General Public License (GPL)

For licensing software programs and code rather than text, images, music and similar content, one of the most widely used open licenses is the GNU GPL²⁴ from the Free Software Foundation. In simplest terms, the GPL authorizes potential users of software code to run the program or use the software for any purpose, to change or adapt the code to make it better or more useful to the user, to redistribute copies of the code to others, to improve the code and share or distribute improvements to others.²⁵ Like the FDL, the GPL is known as a "copyleft" license in that it requires any redistribution of the original code, or any distribution of modifications to that code, to be licensed with the same GPL terms.

Foundations' Current Licensing Practices

The survey found that the most common foundation copyright practice was for foundations to allow their grantees to hold the copyright for the work they created but also to include language in the contract or grant agreement that permitted the foundation to reproduce and disseminate the work if necessary. Thus, for example, one typical policy, from the MacArthur Foundation, provides that, "while copyright to the Grant Work Product will ordinarily remain with the grantee, the Foundation will require that it be granted a no-cost assignable license to use or publish the Grant Work Product. The Foundation will exercise the license only if the grantee does not or cannot provide for broad and prompt dissemination consistent with this Policy . . . [and] may forego a license if the Foundation is reasonably satisfied that other appropriate arrangements will be implemented that will assure prompt public dissemination of the Grant Work Product."²⁶

Most of the foundations represented in the survey interviews consider the copyright for work done by consultants on behalf of the foundation, and work created by foundation staff, to belong to, or require it to be assigned to, the foundation, where it is then licensed under a traditional copyright approach. This practice appeared to be fairly uniform and no evidence of resistance was noted in the interviews, with one exception. One program officer who was particularly knowledgeable about open content licensing and is a proponent of the use of Creative Commons licenses expressed the view that, because her foundation advocates for open content licensing and strongly recommends it among its grantees, foundation employees should be permitted to choose a Creative Commons license for the intellectual property that they create as well.

²⁴ http://www.fsf.org/licensing/licenses/gpl.html

²⁵ http://www.fsf.org/licensing/licenses/quick-guide-gplv3.html

MacArthur Foundation, Policies: Intellectual Property Arising Out of the Use of Foundation Funds, available at http://www.macfound.org/site/c.lkLXJ8MQKrH/b.4804425/ and attached as Appendix H.

Some foundations reported that, if there is reason to believe a grantee (or some other entity) will profit commercially from foundation-supported work, the foundation may craft language into the contract that will entitle it to some share of the proceeds or will ensure that the work will be made available to the public at low or reasonable cost.

A number of foundations had written policies concerning copyright and other IP. As described in the next section, only three foundations formally require that grantees or consultants use open content licenses in some circumstances. Others report that they may sometimes or always recommend that grantees consider an open content license and/or encourage them to do so. Some foundations make it a point to talk with grantees about licensing during the initial stages of grant making, while others ordinarily do not address such issues explicitly. For those that do, typically, any conversations about copyright licensing that take place with grantees, including conversations regarding possible use of open content licenses, tend to be initiated by program officers. They are deemed closest to the project, and it was generally understood that they would know what type of licensing arrangement would best serve the goals of the grant. Participants felt it would be unusual for a foundation's lawyers to initiate discussions about open licensing with a grantee. Rather, legal staff typically takes part in the licensing process by drafting the necessary and appropriate contract language and legal and program staff then work together to resolve any issues. To the extent that a foundation has an intellectual property policy, legal staff would be responsible for drafting it.

Participants in the interviews repeatedly spoke about the importance their foundation places on dissemination of the work product that results from its funding, as well as the attention and resources that are spent maintaining their Web sites and making work product accessible. Some foundations seem to believe that a commitment to broad dissemination is essentially equivalent to providing "open" content. For example, the web sites of the Ford, MacArthur and Robert Wood Johnson Foundations all include language stating, in essence, that much of the information on the sites may be accessed, viewed, downloaded and perhaps copied or reprinted for non-commercial and personal use. But these general permissions fall short of what is typically permitted by CC and other open licenses – for example, they do not appear to authorize sharing or redistribution, nor adapting, modifying, reworking or building upon the material. In fact, the survey findings indicate that it was the exception rather than the rule for a foundation to require or encourage *actual* open content licensing either for its own material or by grantees.

Instead, when dissemination is the goal, foundations tend to measure success by focusing on the number of copies printed or the tally of hits on a web site, rather than by also trying to include subsequent, "viral" redistribution or innovative improvements or modifications of the works that could result from open licensing. In contrast, the interviewees who were most familiar with open licensing viewed dissemination as a starting point, but also described the critical importance of the free flow of information in both directions, of users being able to change, translate and improve upon information – a way of working where progress is measured not just by the number of copies or hits but also by how extensive the use or reuse of the same piece of information is, or the number of times and ways it inspires or provides the building block for other iterations and innovations.

Although viral spread and reuse/remixing may be difficult to quantify with precision, respondents felt that steps to encourage and facilitate such innovation are likely to enhance the ultimate distribution, value and impact of a work.

Examples of Foundations Requiring Or Encouraging Open Licenses

The survey revealed that knowledge about open content licenses varied widely among the interview participants, from many who had merely "heard of it" to some who were somewhat familiar to a few who were very knowledgeable. Overall, at many foundations there is still a somewhat limited awareness of and familiarity with open licenses and little or no actual experience using such licenses in the course of the foundation's work. Open licenses represent a relatively new approach to copyright, one that has grown along with the widespread availability of works in digital form and the exponential growth of the internet as a means for rapid, worldwide distribution. Particularly for established foundations with settled copyright policies, open licenses may offer a new opportunity to better achieve a foundation's charitable goals and mission, but that opportunity likely will require the foundation to take time to become familiar with, to study and consider, to experiment with and to begin to adopt open licenses in ways that make sense for that foundation's needs.

Already, a number of foundations report that they from time to time discuss open licenses with grantees, and may support grantees that choose to use open content licenses (Ford, Christensen and Moore are examples). As of today, however, only three foundations have policies or practices that *mandate* the use of open licenses by their funding recipients or within the foundation or by its consultants. Two other foundations actively encourage the consideration or use of open licenses, and two have begun considering some open licensing requirements but have not yet adopted such a policy.

While limited in number, the experiences of the three foundations that currently mandate the use of open licenses provide valuable lessons and insights to other foundations about the benefits of such licenses and the feasibility of grantees using them. These experiences also provide the basis for developing a framework upon which other foundations can begin to consider the value and appropriateness of open licenses for their own work.

1. The Shuttleworth Foundation

The Shuttleworth Foundation, a South African philanthropy founded in 2001, focuses on social and policy innovation in education and technology. As a relatively new foundation, Shuttleworth has broadly embraced an open licensing philosophy and open models that were gaining prominence at the same time the foundation was emerging. Its approach is one of broad openness: "Everything that the Foundation creates, funds or helps with should be open sourced. This means: under an open license; available in an open format; and accessible

from a public web site, always. All of our consulting and grant contracts require this."²⁷ Shuttleworth's open licensing policy applies to all types of works that are made publicly available, including written materials, research results and software. The use of open licenses is a natural fit with Shuttleworth's express commitment to "open philanthropy: using community, transparency and other open source principles to create a better world" and its belief "in open innovation. It is core to the society we want to build."²⁸

Shuttleworth adopted an open licensing approach beginning in 2004. It has since studied and evaluated its policy and many of the difficulties it faced in ensuring that the policy effectively served its intended purposes. This lengthy process of experimentation with and introspection over how best to implement an open licensing policy is discussed in detail below and is the subject of Shuttleworth's own "How We Work" whitepaper (attached as Appendix B).

Shuttleworth's current licensing policy²⁹ states that:

The Foundation is committed to opening intellectual resources created or cocreated by the Foundation, in Foundation projects or with Foundation funds (Foundation resources). Intellectual resources include software, project reports, manuals, research results and the like which are ready to be communicated to the public.

Foundation resources shall be open resources as far as reasonably possible. Resources are open resources when they are available for revision, translation, improvement and sharing under open licences, open standards and in open formats, free of technical protection measures.

All Agreements entered into by the Foundation which include the creation of resources shall ensure that the resources are open resources, and shall record how the Intellectual Property in the resources is owned and licensed.

* * * * *

Software created by the Foundation, in Foundation projects or with Foundation funds is released under the GNU General Public Licence, or other suitable Free Libre Open Source Software (FLOSS) licence.

Copyright works, other than software, are released under appropriate open licences; Creative Commons Attribution Share-Alike licence (CC_BY SA) or

Mark Surman, "How We Work: Open Licensing," May 2008, Shuttleworth Foundation, available at http://www.shuttleworthfoundation.org/about-us/our-philosophy/how-we-work/open-licensing.

²⁷ Shuttleworth Foundation "Approach to Licensing" FAQ, *available at* http://www.shuttleworthfoundation.org/media-centre/frequently-asked-questions

²⁹ Shuttleworth Foundation, Statement of Principle: Open Resources, *available at* http://www.shuttleworthfoundation.org/about-us/our-philosophy/open-resources-policy, also attached as Appendix A.

the GNU Free Documentation licence (GNU FDL), or into the Public Domain.

Shuttleworth's policy is clearly stated in writing and is reflected in standard consulting and grantee contract templates that lead to standard contract language in grant agreements. Shuttleworth's Master Memorandum of Agreement used with grantees requires that intellectual property created in the course of or pursuant to a specific project vest in the Foundation and that the grantee assigns all resulting IP to the Foundation. Similarly, its standard Consultancy Agreement provides that the copyright in any works developed by the consultant will be owned by Shuttleworth, but that it will license the work under a Creative Commons license, permitting both Shuttleworth and the consultant to "freely copy, distribute, display and perform, make derivatives and make commercial use out of any part" of the work. Shuttleworth reports that these open licensing obligations are often a focus of discussions as the contracts are developed. Shuttleworth also requires that any work-product on which it collaborates with another entity be openly licensed, and has declined opportunities to work jointly on projects where the partner would not agree to open licensing or required a nondisclosure agreement for their work.

2. The Knight Foundation Knight News Challenge

A recent initiative of the Knight Foundation's Journalism Program, the Knight News Challenge³³ is a five-year program that aims to provide at least \$25 million in funding to experimental community news and social media projects working on "innovative ideas that develop platforms, tools and services to inform and transform community news, conversations, and information distribution and visualization."³⁴ The News Challenge supports the development of software and technology tools as well as wide variety of content and new business systems and models.

Over the last two years, the News Challenge has funded more than 35 projects in the U.S. and abroad. A few examples include: the MIT Center for Future Civic Media, ³⁵ a project aimed at encouraging civic and community news experiments through the development of new software tools and technologies, social systems and websites, and community building; Everyblock.com, ³⁶ a series of "hyperlocal" websites in 11 U.S. cities that collect and publish in innovative ways a variety of block-by-block or neighborhood-by-neighborhood government information, news articles, blog entries, assorted Flickr photos, online restaurant and business reviews, lost and found postings from Craigslist, etc.; and the

³⁰ See Shuttleworth Foundation Master Memorandum of Agreement and Consultancy Agreement, IP-related excerpts, attached as C.

³¹ *Id*.

Mark Surman, "How We Work: Open Licensing," May 2008, Shuttleworth Foundation, available at http://www.shuttleworthfoundation.org/about-us/our-philosophy/how-we-work/open-licensing

³³ http://newschallenge.org/

http://newschallenge.org/about

³⁵ http://civic.mit.edu/

³⁶ http://www.everyblock.com/

Citizen Media Law Project,³⁷ a Berkman Center affiliated program that provides a variety of online legal resources; education and advocacy relating to free speech, newsgathering, intellectual property, and other legal issues faced by individuals and organizations involved in online and citizen media; and legal education and legal assistance resources for civic media entities.

Knight's News Challenge includes a broad requirement that all work product developed by the grantees be made available on an "open source" basis through either Creative Commons licenses or the GPL. The News Challenge policy specifies that, for all Knight winners and projects,

the intellectual property be shared with the world. By entering the contest you agree to share those rights with the world in line with open-source, open-standard philosophy. . . . By open-source we mean a digital open-source platform that uses a code base that can be used by anyone after the grant period to either replicate your project in their community or to build upon it. You will own your platform, but you will have to share under GPL or creative commons licensing.

[With] regard to making your entire project open and available to the public we mean the following: You'll need to share the intellectual property you create with the world. If you want to discuss how to create cell phone documentaries, for example, you'll blog about it. If you make pilot cell phone documentaries in a specific city, you'll share any source code and the process for how you created your project. If you create a national alliance of people who make cell phone documentaries, you'll make the technology available to all of them.³⁸

To effectuate its general policy, Knight inserts appropriate contract language into its News Challenge grant agreements requiring grantees to use appropriate open licenses. Current contract terms are as simple as "All instructional guides and case studies will be licensed with a Creative Commons license" and "the software will be open-source and released free before the end of the grant under GPL license."

As a result of Knight's open source policy, all of the written and audiovisual content, software code, technologies, systems and tools developed by its grantees will be available for anyone else in the world to use to pursue the same or similar project, to adapt to new purposes or fields, or to build upon to make something completely new. The Citizen Media Law Project, for example, publishes hundreds of detailed reports and analyses of legal threats and lawsuits involving civic media, all under a CC Attribution-Noncommercial-ShareAlike license. ³⁹ Lawyers, researchers, citizen journalists and anyone else working in this

³⁷ http://www.citmedialaw.org/

³⁸ Knight News Challenge FAQs Do I hold the intellectual property rights for my idea? and What do you really mean by "open source"?, *available at* http://newschallenge.org/questions.html

³⁹ http://www.citmedialaw.org/faq/what-your-copyright-licensing-policy

area can read, copy and redistribute this content, or adapt or incorporate any of these materials into their own work or projects, so long as what they do is non-commercial, they distribute the remixed work under a similar license, and they give proper credit (attribution) to the CMLP.

3. The Mellon Foundation

The Mellon Foundation indicated in its survey responses that, when it funds the development of software code (as opposed to text-based works, images, music, video, etc.), it always requires that the code be licensed under some form of open license. While Mellon does not have standard or template agreement language for this issue, it does include language requiring open licensing that is specific and tailored to each relevant grant. Mellon does not require a specific license, just an open one.

4. Open Society Institute

One of the key foundation supporters of open access in a variety of contexts has been the Information Program within OSI. That program, including its Access to Knowledge initiative, seeks to enable greater access to knowledge, particularly in poorer countries, to help create free and open online access to scholarly publications, and to advance intellectual property reform and open knowledge, among many other goals.⁴⁰ The Information Program is a good fit for the use of open content licenses, which are natural extensions of the Program's grant giving in the areas of open access and IP reform. While the survey indicated that the Information Program does not currently *require* grantees to use particular kinds of licenses, it has for many years actively educated its grantees about and encouraged them to use open licenses, partly by discussing the value and operation of such licenses during the grant-making process.

This approach reflects the Information Program's belief that grantees should not simply follow the traditional copyright path but should instead make a considered and informed choice about the way they want their works to be used and why. Moreover, given the nature of the Information Program's grantees, many of them are already familiar with open licenses and recognize their benefits without the need for substantial education and encouragement. Similarly, OSI's Open Access initiative recognizes the importance of funders in general ensuring that the materials they sponsor are openly available: "Our ultimate goal is to have the funding agencies require that all of the research they support is published in open access journals or available in open access repositories."

Focusing attention on open licenses can have indirect effects as well. The survey noted an instance where an OSI staffer in another program saw the success of open content licenses in the Information Program area and now wants to take similar steps in this other

⁴⁰ http://www.soros.org/initiatives/information/focus/access

⁴¹ Melissa Hagemann, program manager of OSP's Open Access Initiative, quoted in OSI Stories: Open Access to Scientific Research—Sharing Information, Saving Lives, January 28, 2008, available at http://www.soros.org/initiatives/information/focus/access/articles-publications/articles/openaccess-2007-0419

program. The Information Program, with its years of experience with open licenses, sees itself as trying to play a positive role in inspiring other parts of the foundation to embrace open licenses. Recently, OSI has begun to license the contents of its web site using a Creative Commons license.⁴² Work products created by consultants that appear on OSI's Web site are also usually licensed under a CC license.

5. The MacArthur Foundation

The MacArthur Foundation does not mandate the use of open licenses or publication in open access journals or repositories, insisting only that grantees provide the foundation with a license to use or publish the work which MacArthur will exercise "only if the grantee does not or cannot provide for broad and prompt dissemination consistent with this Policy [to ensure that the Grant Work Product furthers charitable purposes and benefits the public]."⁴³ However, MacArthur does urge grantees to consider open licensing and open access; its Intellectual Property policy specifies that "Grantees are also encouraged to explore opportunities to use existing and emerging internet distribution models and, when appropriate, open access journals, Creative Commons license or similar mechanisms that result in broad access for the interested field and public."⁴⁴

6. Open Educational Resources

Hewlett, OSI, Mellon, Shuttleworth and other foundations have in the last few years been major forces behind a new initiative that seeks to capitalize on the value of open access to and licensing for educational materials. "Open Education Resources" or OER refers to a vast array of research, learning and teaching materials including complete courses, textbooks, audio and video content, exercises, exams, software, and various other resources related to learning. The OER movement dates back to 2001 and the launch of MIT's OpenCourseWare (OCW) project, ⁴⁵ jointly funded by the Hewlett and Mellon Foundations, which was aimed at making all of MIT's course materials freely available online. Roughly 200 institutions now offer their own version of OpenCourseWare content and web sites and have joined together in the OpenCourseWare Consortium. ⁴⁶

In addition to Hewlett and Mellon's longstanding funding, OSI and the Shuttleworth Foundation helped convene the *Open Sourcing Education* meeting in Cape Town in September 2007. The resulting Cape Town Open Education Declaration emerged to express principles,

⁴² OSI's web site utilizes a CC NC ND license; see http://www.soros.org/about

MacArthur Foundation, Policies: Intellectual Property Arising Out of the Use of Foundation Funds, available at http://www.macfound.org/site/c.lkLX]8MQKrH/b.4804425/

⁴⁴ *Id.* Peter Suber's interpretation is that, "while the Foundation uses the language of encouragement, the policy operates more like a mandate with case-by-case exceptions." Open Access News blog, December 19, 2008, available at http://www.earlham.edu/~peters/fos/2008/12/macarthur-foundation-adopts-oa-mandate.html

⁴⁵ http://ocw.mit.edu/OcwWeb/web/home/home/index.htm

^{46 &}lt;a href="http://www.ocwconsortium.org/home.html">http://www.ocwconsortium.org/home.html. For older examples, see The William and Flora Hewlett Foundation, Open Educational Resources Initiative, November, 2005, *available at* http://www.hewlett.org/download?guid=773880cd-54de-102c-ae2b-0002b3e9a4de

strategies and commitments to spur the open education movement.⁴⁷ Starting with the belief that "everyone should have the freedom to use, customize, improve and redistribute educational resources without constraint," the Declaration calls on various players in the education system, including authors and publishers, to make their educational materials available on an open basis, that is, "freely shared through open licences which facilitate use, revision, translation, improvement and sharing by anyone."⁴⁸ The Declaration also advocates that all taxpayer-funded educational resources "should be open educational resources."⁴⁹

One example of the power of open licensing of educational materials is Rice University's Connexions project, ⁵⁰ funded by Hewlett, Shuttleworth and others. Connexions' goal is to "reinvent how we write, edit, publish, and use textbooks and other learning materials" by creating a repository of textbooks and similar educational content that, though the use of the broadest Creative Commons attribution license, can be freely created and uploaded, copied and customized, remixed and repurposed, and redistributed in various forms. ⁵¹

Another prominent example, also supported by Hewlett and the National Science Foundation, is the PhET Interactive Simulations project at the University of Colorado at Boulder. PhET provides a large variety of simulations to help the teaching and learning of physics, chemistry, biology, earth science and math. The simulations are "interactive tools that enable students to make connections between real life phenomena and the underlying science which explains such phenomena," and they give students the ability to see scientific concepts visually, by "animat[ing] what is invisible to the eye through the use of graphics and intuitive controls such as click-and-drag manipulation, sliders and radio buttons. [They] also offer measurement instruments including rulers, stop-watchs [sic], voltmeters and thermometers. As the user manipulates these interactive tools, responses are immediately animated thus effectively illustrating cause-and-effects relationships as well as multiple linked representations (motion of the objects, graphs, number readouts, etc...)." The

interactive simulations are licensed under either CC BY (attribution-only) license or the GPL. Users – students, educators, schools, publishers, vendors, et al. –can freely use or redistribute the interactive simulations for both commercial and non-commercial purposes, and the source code for simulations can be used, modified and redistributed.⁵³

OER projects have not yet typically included explicit foundation mandates that grantees use open licensing, only that they make materials publicly available.⁵⁴ At the same time, the key to these specific projects and to the entire open education resources movement is the ability to host and distribute digital material on the internet and the corresponding freedom

⁴⁷ http://www.capetowndeclaration.org/

⁴⁸ Cape Town Open Education Declaration: Unlocking the promise of open educational resources, *available at* http://www.capetowndeclaration.org/read-the-declaration

⁴⁹ Id.

⁵⁰ http://cnx.org/

⁵¹ Connections FAQ, available at http://cnx.org/aboutus/faq

⁵² http://phet.colorado.edu/about/index.php

http://phet.colorado.edu/about/licensing.php

⁵⁴ According to Hewlett, its OER program and grantees "work toward creating more flexible copyright and licensing systems to make more information available to the public." http://www.hewlett.org/oer

to disseminate, copy, reuse, and remix that material, freedom that is provided by open licenses such as Creative Commons and the GPL.⁵⁵ To preserve this freedom and power, Creative Commons recommends that all funders who support the production of educational resources should adopt policies that require, or at least strongly encourage, grantees "to disseminate such resources under Creative Commons licenses in order to maximize their reach and impact."⁵⁶

In July, 2009, President Obama announced the "American Graduation Initiative," a \$12 billion dollar effort to reform U.S. community colleges. One major component of the initiative is the creation of a new "online skills laboratory" that will develop educational software and "open online courses," with a goal of making the courses "freely available." According to Catherine Casserly, until recently the head of OER at Hewlett and now at the Carnegie Foundation for the Advancement of Teaching, the open online courses "will be freely available for use as is and for adaption as appropriate for targeted student populations. The materials will carry a Creative Commons license." 58

Although most OER funders don't yet require that sponsored materials be openly licensed, OER nevertheless reflects an important recognition by foundations of the value and benefits of openness. One survey respondent described Hewlett's broad engagement with and commitment to OER as a powerful example of a traditional foundation entering into the realm of Creative Commons licensing as a "test bed" for ultimate evolution into openness.

Examples of Foundations and Other Funders Requiring Open Access or Open Licenses

Although only the few private foundations summarized above require or regularly advocate for the use of open licenses, an increasing number of foundations and other institutional sponsors and government funders have begun to mandate or encourage some level of open access, usually to research results and scholarly publications. Open access publishing, while technically distinct from open licensing, is closely related to it in philosophy, purpose and effect. One of the leading advocates for open access, Peter Suber, describes open access publishing or literature as "digital, online, free of charge, and free of

⁵⁵ Information on some of the specific licenses being used in this context is reported in ccLearn, What Status for Open? An Examination of the Licensing Policies of Open Educational Organizations and Projects, December 15, 2008, *available at* http://learn.creativecommons.org/wp-content/uploads/2009/01/license-mapping-report-15 dec -2008-black-and-white-v2.pdf

⁵⁶ Creative Commons, ccLearn Recommendations, Increase Funding Impact, *available at* http://learn.creativecommons.org/wp-content/uploads/2009/04/cclearn-recommendations-increase-funding-impact-05-apr-09.pdf. Creative Commons has recently launched a new Division, ccLearn, to help "minimize legal, technical, and social barriers to sharing and reuse" of educational resources. http://learn.creativecommons.org/

http://www.whitehouse.gov/the_press_office/Excerpts-of-the-Presidents-remarks-in-Warren-Michigan-and-fact-sheet-on-the-American-Graduation-Initiative/

⁵⁸ http://creativecommons.org/weblog/entry/15818

unnecessary copyright and licensing restrictions."⁵⁹ The goal is the free exchange of scholarly ideas, research results and discussion for the purpose of facilitating and accelerating scholarship in a wide range of fields.⁶⁰

Open access for academic and scholarly articles can mean that the articles are openly available in several ways, primarily publication in an open access journal; deposit in an online, digital repository of articles that is freely available to anyone to access and read; and/or publication on the author's individual or institutional home page. More importantly for the current discussion, open access can be divided into two basic types depending on whether the "openly available" placement in a repository is or is not accompanied by an open license for the work. Suber labels the latter, where works are merely placed into repositories with traditional copyright treatment and without open licenses, as "gratis" open access or OA. On the other hand, he characterizes works that are made available online in an archive or repository and covered by an open license such as CC, as "libre" OA. 61

The distinction is important: "Gratis OA removes price barriers but not permission barriers. It makes content free of charge but not free of copyright or licensing restrictions. It gives users no more reuse rights than they already have through fair use or the local equivalent. Libre OA removes price barriers and at least some permission barriers. It loosens copyright and licensing restrictions and permits at least some uses beyond fair use." Thus, combining open access requirements with mandates to grant open license rights allows for higher levels of reuse, redistribution and remixing or building upon. Nevertheless, even limited gratis open access is a substantial step forward from the existing status quo. As the program director of OSI's Open Access Initiative has described, these efforts have the potential to "help create online access to scholarly publications free of charge, so anyone . . . can read, download, copy, distribute, print, search, and link the full texts of articles and use them for any lawful purpose. Removing existing access barriers to the journals . . . will accelerate scientific research efforts and allow authors to reach a larger number of readers."

The movement to open access, at least for academic articles and research, is significant. "More and more funding agencies directly encourage grantees to deposit articles arising from funded research in OA repositories. Today, more than 30 funding agencies

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⁵⁹ Peter Suber, "The Opening of Science and Scholarship," Publius Project essay, February 5, 2009, *available at* http://publius.cc/opening science and scholarship. Suber is currently a Fellow in Open Access at the Berkman Center. See http://cyber.law.harvard.edu/newsroom/Suber Sandvig

⁶⁰ As far back as 2004, Suber proposed a "Model Open-Access Policy for Foundation Research Grants," available at http://www.earlham.edu/~peters/fos/foundations.htm

⁶¹ Peter Suber, "Open access policy options for funding agencies and universities," SPARC Open Access Newsletter, Issue #130, February 2, 2009, , *available at* http://www.earlham.edu/~peters/fos/newsletter/02-02-09.htm#choicepoints

⁶² Id.

⁶³ OSI Stories: Open Access to Scientific Research—Sharing Information, Saving Lives, January 28, 2008, available at http://www.soros.org/initiatives/information/focus/access/articles-publications/articles/openaccess-2007

encourage this kind of OA, and public funding agencies in 10 countries positively require it (including the US National Institutes of Health, the world's largest, as of January 2008)."⁶⁴

1. The Wellcome Trust

The Wellcome Trust, a major supporter of medical and health-related research in the UK and worldwide, provides over £600 million in funding every year. Wellcome has adopted an express policy of support for "open and unrestricted access to published research" from its grantees. Wellcome grantees' research output is typically "new ideas and knowledge . . . [published] in high-quality, peer-reviewed journals." Wellcome's open access policy is based on a fundamental belief that,

maximising the distribution of these papers - by providing free, online access - is the most effective way of ensuring that the research we fund can be accessed, read and built upon. In turn, this will foster a richer research culture. The Wellcome Trust therefore supports unrestricted access to the published output of research as a fundamental part of its charitable mission and a public benefit to be encouraged wherever possible. ⁶⁶

Beginning in October 2006, Wellcome specifically implemented its open access policy through language in its standard grant conditions, which provide that "All research papers that have been accepted for publication in a peer-reviewed journal, and are supported in whole or in part by the Grant, must be made available from UK PubMed Central as soon as possible, and in any event within six months of publication, in line with the Trust's Open Access policy." UKPubMedCentral is the UK version of the US PubMed Central, 68 a free and unrestricted digital archive of biomedical and life sciences journal literature directed by the U.S. National Institutes of Health (NIH). UKPubMedCentral aims to "create a stable, permanent and free-to-access digital archive of the full text, peer-reviewed research publications (and datasets) that arise from research funded by the Wellcome Trust" and other funders. 69

2. The Howard Hughes Medical Institute

Effective January 1, 2008, the Howard Hughes Medical Institute (HHMI) adopted a policy requiring that all articles on which any of its laboratory heads is a major author be

67 Wellcome Trust Grant Conditions, October 2007, available at http://www.wellcome.ac.uk/stellent/groups/corporatesite/@sf central grants admin/documents/web do cument/wtx026668.pdf

⁶⁴ Suber, "The Opening of Science and Scholarship," Publius Project essay, February 5, 2009, available at http://publius.cc/opening-science-and-scholarship

⁶⁵ http://www.wellcome.ac.uk/About-us/Policy/Policy-and-position-statements/WTD002766.htm

⁶⁶ *Id*.

⁶⁸ http://www.pubmedcentral.nih.gov/

⁶⁹ See Wellcome Trust Authors' Guide and FAQ, *available at* http://www.wellcome.ac.uk/About-us/Policy/Policy-and-position-statements/WTD018855.htm.

made "freely available and downloadable on-line" within six months of publication. ⁷⁰ For publications in biological or biomedical sciences journals, the article must be available through PubMed Central within six months. For cases where the laboratory head is a co-author but not a major author, or where a major author is an HHMI employee under the supervision of a laboratory head who is not a major author, then the policy "strongly encourages" the laboratory head to "advocate that the publication and supplementary materials be made freely available and downloadable on-line within six months of publication."

3. The Canadian Health Services Research Foundation

The Canadian Health Services Research Foundation (CHSRF) supports management and policy research in health services and nursing and engages with health-system decision makers to support and enhance their use of research evidence when addressing health management and policy challenges. In 2008, CHSRF adopted a "Policy on Open Access to Research Outputs" that requires all grantees who receive funding from the Foundation for research and related activities to "make every effort to ensure that the results of their research are published in open access journals (freely available online) or in an online repository of published papers, within six months after initial publication." The CHSRF's requirement is directly linked to its mandate to promote the diffusion and use of evidence generated with its support and to work "diligently to remove barriers (real or potential) to accessing the results of research, particularly where access may be limited by factors such as ability to pay or affiliation with institution libraries."

In order to ensure this open access to the results of research funded by CHSRF, its policy requires that all research funded after October 1, 2008, should be "limited to online publication on/in websites of the Foundation, co-sponsors, and administering organizations; open access journals; or journals where the publisher may not make its content immediately openly accessible, but where the publisher agrees to archive the paper in an open access repository (for example, institutional repository or PubMed Central) within six months after initial publication."

⁷⁰ HHMI Research Policies: Public Access to Publications (SC-320), available at http://www.hhmi.org/about/research/sc320.pdf

⁷¹ *Id*.

⁷² http://www.chsrf.ca/about/index e.php

⁷³ http://www.chsrf.ca/funding opportunities/documents/OpenAccesstoResearchOutputs.pdf

⁷⁴ *Id.* The CHSRF's FAQ elaborates on the values that drove its policy adoption, including that, "open access to research indicates that we, as an organization, acknowledge the growing importance and potential of digital technologies and the internet in allowing instant exchanges of knowledge between researchers and research users. . . . [O]pen access encourages the transparency of, and access to, [CHSRF] funded research results by the widest audience possible, without barriers. Greater dissemination and use of peer-reviewed research will serve to enhance the timeliness and impact of sponsored health services and policy research." *Available at* http://www.chsrf.ca/funding_opportunities/open_access_e.php. See also http://www.earlham.edu/~peters/fos/2009/04/oa-mandate-at-canadian-health-services.html

4. **NIH**

The NIH open access policy is indeed the largest and most significant requirement of open access today. The legislation signed into law in late 2007, NIH was required to mandate open access for all publications based on NIH-funded research effective April 7, 2008. The legislation directing the policy was relatively straightforward:

The Director of the National Institutes of Health shall require that all investigators funded by the NIH submit or have submitted for them to the National Library of Medicine's PubMed Central an electronic version of their final, peer-reviewed manuscripts upon acceptance for publication, to be made publicly available no later than 12 months after the official date of publication: *Provided*, That the NIH shall implement the public access policy in a manner consistent with copyright law.⁷⁶

The NIH policy is the first open access mandate from a major U.S. public funding agency, and its coverage is substantial: NIH is the largest funder of scientific research (other than classified military research) in the world, its 2008 budget was roughly \$28 billion, and its funded research results in 80,000 peer-reviewed articles per year, or 219 per day. The policy has now been made permanent. Significantly, this policy had been voluntary for several years prior to the 2008 change; as discussed in more detail below, the effectiveness of the voluntary program had been extremely limited.

5. Major Universities

Alongside the NIH policy, a growing number of universities have begun mandating open access by requiring that all scholarly publications – typically academic articles and similar materials, though usually not books, published by faculty authors – be deposited in open access repositories. Suber's review of open access notes that, "more and more universities directly encourage authors to deposit their peer-reviewed journal articles in the university's OA repository. Today, more than 30 universities encourage this kind of OA, and more than a dozen positively require it." Among those requiring that faculty deposit articles in university repositories and grant rights to the university to make the articles available in publicly accessible repositories are the Harvard Faculty of Arts and Sciences, Harvard Law School and the Harvard Kennedy School of Government. Following on these initial

⁷⁵ Peter Suber, An open access mandate for the National Institutes of Health, *Open Medicine*, Vol 2, No 2 (2008), *available at* http://www.openmedicine.ca/article/view/213/135

⁷⁶ National Institutes of Health. Revised policy on enhancing public access to archived publications resulting from NIH-funded research (2008), available at http://grants.nih.gov/grants/guide/notice-files/NOT-OD-08-033.html

Peter Suber, "An open access mandate for the National Institutes of Health," *Open Medicine*, Vol 2, No 2 (2008), *available at* http://www.openmedicine.ca/article/view/213/135

⁷⁸ http://grants.nih.gov/grants/guide/notice-files/NOT-OD-09-071.html

⁷⁹ http://osc.hul.harvard.edu/OpenAccess/policytexts.php

efforts, MIT, ⁸⁰ Stanford's School of Education ⁸¹ and a number of other institutions have adopted similar, mandatory policies. ⁸²

These policies typically operate in an opt-out fashion: that is, they provide for an automatic license to the university for all faculty works, authorizing the university to deposit those works in an open university repository and to make them available to others in various open, non-commercial ways. In cases where the faculty member wishes to publish an article with a publisher that refuses to permit the grant of the limited license to the university to make the open access possible, the faculty member can request a one-time waiver of the policy – essentially an opt-out provision. While these policies typically are more "gratis" than "libre," they often provide the universities with the legal authority to authorize a variety of non-commercial uses and reuses of the work that are much closer to what would be achieved by releasing the content directly with an open license.

Other Open License Examples

Among the millions of examples of organizations and individuals that have chosen to release the works they create under open licenses such as CC or the GPL, many involve grantees of private foundations voluntarily using open licensing for the supported works. Open licenses allow these creators to increase the reach and visibility of their work and to magnify its impact in ways they could not achieve with traditional copyright licensing. A small handful of examples are useful to illustrate this impact:

1. Global Voices

Global Voices⁸³ is an extensive online community of more than 200 bloggers around the world who "aggregate, curate, and amplify the global conversation online," assembling and publishing translations and reports from blogs and citizen media globally but particularly in areas and for communities that are little covered by international mainstream media. From the beginning, Global Voices recognized that "sharing our content with both non-commercial and commercial publications is the best way to make the voices of bloggers around the world heard by as many people as possible. This is one of our most important goals." By using the most open of the Creative Commons licenses, the 3.0 Attribution, Global Voices made it easy for mainstream commercial publications and other media outlets, as well as anyone else, to reuse its content, all the while ensuring full attribution to Global

MIT open Access Policy, available at http://info-libraries.mit.edu/scholarly/faculty-and-researchers/mit-faculty-open-access-policy/oapolicyprocedures/oa-policy-faq/

⁸¹ http://ed.stanford.edu/suse/faculty/openaccess.html

A comprehensive list of institutions and funders worldwide that impose some form of open access publication or repository deposit requirement on affiliated authors is available on the eprints ROARMAP (Registry of Open Access Repository Material Archiving Policies), available at http://www.eprints.org/openaccess/policysignup/

http://globalvoicesonline.org/

⁸⁴ Global Voices attribution policy, available at http://globalvoicesonline.org/about/global-voices-attribution-policy/

Voices as the original source. This strategy has effectively resulted in Global Voices' reporting being quoted or republished in numerous mainstream media outlets. Meanwhile, Global Voices has achieved exceptional reach, visibility and credibility as a primary source of news and information about many underserved parts of the world.

2. openDemocracy

Funded by the Ford Foundation and others, openDemocracy⁸⁵ is an independent online magazine that "aims to build the open source model for news analysis and opinion." It describes itself as offering global perspectives on current issues, fostering democratic debate, and "seeking to build an informed community committed to the values of human rights, free speech and democracy." Beginning in 2005, openDemocracy made available hundreds of articles by authors including Kofi Annan, Anne-Marie Slaughter, John le Carré, Ian McEwan, and Siva Vaidhyanathan under Creative Commons licenses. Vaidhyanathan observes that "practically, the use of these [CC] licences grant participating openDemocracy authors (including myself) more control over how their works will echo through the world of digital text. They will encourage free republication and dissemination of their articles in non-commercial media across the globe."

3. Bloomsbury Academic

Bloomsbury Academic is a new imprint of the Bloomsbury Publishing Group. It is pursuing an innovative business model in which it will publish what it describes as peer-reviewed, scholarly "world class research-based books across the humanities and social sciences." Bloomsbury Academic will publish in both traditional book form and commercial e-book format, but also will put its books online, available for free download under a Creative Commons non-commercial license. Among its first offerings is *Remix: Making Art and Commerce Thrive in the Hybrid Economy*, by Creative Commons founder Lawrence Lessig. Bloomsbury Academic's goal in part is to try to establish that traditional print copies of books can co-exist with freely licensed digital copies and that their model is financially sustainable. 90

4. Museums and Other Cultural Heritage Entities

Open licenses also have been used increasingly by museums, archives and other "cultural heritage" organizations, some of them foundation supported, to make readily available their extensive collections of texts, artworks, films, video and the like. One example is the Isabella Stewart Gardner Museum in Boston, which several years ago began

⁸⁵ http://www.opendemocracy.net/

⁸⁶ http://wiki.creativecommons.org/OpenDemocracy

^{87 &}quot;Creative Commons: Making copyright work for democracy," available at http://www.opendemocracy.net/media-copyrightlaw/creativecommons 2596.jsp

⁸⁸ http://www.bloomsburyacademic.com/about_us.htm

⁸⁹ http://www.bloomsburyacademic.com/pub_remix.htm

⁹⁰ Creative Commons, "An Interview with Frances Pinter of Bloomsbury Academic," October 20, 2008, available at http://creativecommons.org/weblog/entry/10100

offering for download free "podcast" recordings of some of its classical music concerts performed live in the museum in a series it called "The Concert." The Museum chose a CC non-commercial, no-derivatives license to allow listeners to freely copy, share and publicly perform the music widely but not alter it or use it commercially. While there is no way to measure the "viral" spread of the music, the direct impact has been dramatic, with over 1 million downloads in the first two-and-a-half years of the program. The Museum views the podcasts as "a new way to bring the museum's programming to a worldwide audience" that directly further Isabella Gardner's vision of a museum "for the education and enjoyment of the public forever."

A recent study of cultural heritage groups in the UK indicated that many of them were beginning to put all or parts of their collections online. Roughly half of those surveyed were aware of Creative Commons or other open licensing options, and about half of that number were either using an open license of planned to so in the future. An earlier study of UK public sector entities, including various major museums and archives, concluded that open licenses can play an important role in encouraging the use and reuse of digital material. Discovery of digital resources is becoming simpler, but it is rare that these discovered resources explicitly display the permitted uses to which their owners agree."

The study concluded that libraries and other organizations hoping to encourage reuse of their materials should license them for reuse "unless there is a justifiable reason why they should not," that the reuse "should be as unconstrained as possible -- for example, resources should be made available for commercial reuse as well as non-commercial reuse wherever possible" and should include the ability to "modify the resource and produce derivative works from it," and that others should be permitted to redistribute the licensed materials worldwide. The report also recommended that materials should be made "directly available and discoverable electronically whenever possible."

The Value of Open Licenses for Foundation Works

Based on the information and findings from our survey and the powerful lessons of the open access and OER experiences reviewed above, we conclude that the use of open content licenses for works created by foundation grantees, as well as foundations' own work products and those of their consultants, would provide substantial benefits to foundations in achieving their charitable goals and missions. In the words of one survey participant, "open

⁹¹ http://www.gardnermuseum.org/music/podcast/theconcert.asp

⁹² http://www.gardnermuseum.org/press_releases/2009/music/PodcastMillionthDownload_051209.pdf

⁹⁴ Eduserve, Snapshot study on the use of open content licences in the UK cultural heritage sector, October 2007, available at

http://www.eduserv.org.uk/research/studies/~/media/Foundation/studies/cc2007/final%20pdf.ashx

95 Duncan Barker, A. Guadamuz, J. Hatcher, and C. Waelde, *The Common Information Environment and Creative Commons* (2005), at 9, available at http://www.intrallect.com/cie-study/

⁹⁶ *Id.*, at 9

⁹⁷ Id.

licenses and open source are the gifts that keep on giving," ensuring the broadest and fastest dissemination of the valuable ideas, practices, works, software code and other materials the foundation's funding helps to create, and the use of those materials to create even more and newer works by building upon them. Similarly, another participant reported, open licenses for foundation-supported works "spread the learning" and help to minimize other foundations having to duplicate efforts or investments, and other grantees having to "reinvent the wheel."

No foundation has more carefully considered or more extensively engaged in the use of open licenses for foundation-supported work than Shuttleworth. Its lengthy and critical analysis of its experience with open licenses carefully considered the impact of such licenses on its core mission and concluded:

"Early on, we made a decision that what we do and fund should be under an open license. Our goal was to make it easy for people to use, adapt and improve whatever our staff and partners created. We wanted maximum viral impact, and we saw open licensing as the first step in this direction.

* * * * *

[Open licensing] has the potential to dramatically increase the impact, reach and scale of the ideas we invest in as a foundation. Good content, technology and research released under an open license is far more likely to be picked up, used and recirculated than materials that require permission to use. Simply having to ask for permission either deters or slows people down when they are looking for materials to use. Open licensing takes this inefficiency away and increases the likelihood that your materials will be used. This is especially important for small bits of research, blog postings, podcasts, photos and the like which, over time can help build up a global pool of open knowledge that others can use to build great things. 98

Participants in the survey who were familiar with open licenses understood and acknowledged that open licensing is in synch with a charitable foundation's basic mission to disseminate learning, knowledge and resources for the public good and can lead to a larger and stronger impact in core areas about which the foundation truly cares. One participant explained that the values and goals of foundation philanthropy, including wide distribution of work, broad participation and transparency, "mesh nicely and naturally" with those of open source communities.

This impact has been described in the context of open access publishing as "contributing to the advancement of scholarly endeavour by preventing duplication of effort and establishing a knowledge base on which others can build. In other words, maximizing the

⁹⁸ Mark Surman, "How We Work: Open Licensing," May 2008, Shuttleworth Foundation, available at http://www.shuttleworthfoundation.org/about-us/our-philosophy/how-we-work/open-licensing

impact of research effort." This contribution need not be limited to just academic research and publications, but rather will often apply quite broadly to many types of works and activities typically funded by foundations.

An example developed by Creative Commons is instructive. Imagine that a foundation has invested millions of dollars for grantees to create high-quality educational resources that it hopes will be widely and freely used, and those materials are now available online and elsewhere. But access is not enough; unless the materials are made available with an open license such as Creative Commons, would-be users won't know what if any uses beyond reading they are allowed to make of the materials and, as a result, the materials won't be widely copied, shared, translated, incorporated into other materials, or improved upon in the way the funder likely originally intended. Moreover, even if some users do go ahead and build upon or improve the materials for their own use, they will be afraid to share or distribute their improvements because they have no way of knowing if such sharing is allowed. 100 Instead, their further innovations and contributions will remain hidden rather than bringing further benefits to a wide set of users. If, on the other hand, the original materials were licensed with a CC or other open license, users would have a clear, up-front statement of what is allowed and under what conditions. This advance permission would eliminate the uncertainty and the hesitancy described above. The likelihood of broad and creative use, reuse and improvement would be increased, and the reach and impact of the foundation's investment would be magnified and leveraged.

In addition to foundations, grantees themselves also can often benefit from the use of open licenses in many of the same ways. For authors, for example, the broad dissemination and use of their works made possible by open licenses, coupled with full attribution to them as the creator of the materials, can increase their visibility, credibility and impact. Grantees, of course, are always free to choose to use open licenses on their own without being encouraged or required to do so and, as the examples cited above indicate, many do. But grantees, just like foundations and other creators, frequently are unfamiliar with Creative Commons, GPL or similar licenses; may be uncertain about how they work or how they affect the creator's control over their work; and may not fully understand or appreciate the likelihood of greater dissemination, visibility and impact such licenses can bring. Having open licensing become a standard part of the discussions between foundations and grantees and an approach that foundations increasingly encourage will lead many grantees to appreciate these benefits. In other cases the grantee may not perceive a strong benefit to itself, but the benefit to the foundation and its goals will still be substantial. These foundation benefits may often be significant enough to warrant requiring or at least strongly encouraging the use of open licenses even where the grantee is uncertain or reluctant.

⁹⁹ JISC/OSI Journal Authors Survey Report at 10, available at

http://www.jisc.ac.uk/uploaded_documents/JISCOAreport1.pdf

¹⁰⁰ Creative Commons, ccLearn Recommendations, "Increase Funding Impact," available at http://learn.creativecommons.org/wp-content/uploads/2009/04/cclearn-recommendations-increase-funding-impact-05-apr-09.pdf (emphasis in original).

The key benefits to foundations from open licensing of the work they fund can be summarized as:

- Furthering the core components of the foundation's philanthropic mission.
- Serving to expand the size and speed of the dissemination and visibility of supported work in ways that mere placement of those works on grantee or foundation websites rarely could, because of the "viral" spread of materials that open licenses allow. The foundation is able to "do more good with the same money." To take an analogous example from the open access context, studies in more than a dozen disciplines show that "OA articles are cited 50-250% more often than non-OA articles published in the same issues of the same journals," and have greater impact than those not freely available, a trend that appears to be increasing over time. Thus, for example, the Wellcome Foundation sees unrestricted access as a "fundamental part of its charitable mission and a public benefit."
- Enhancing distribution and use of foundation works by greatly increasing the ease and lowering the transaction costs of users obtaining "permission" to share and reuse the works. In the absence of open licenses, users have to seek specific, individual approval for most uses or distribution, a process that often delays or deters such uses.
- Increasing the impact of the foundation's funding even more when the open license permits the work to be freely tested, translated, combined, remixed, repurposed or otherwise built upon, potentially by many subsequent researchers, authors, artists or other creators anywhere in the world, as the basis for new innovation, discovery or creation. Allowing broad adaptation and follow-on innovation can provide a magnification or leveraging of the original foundation funding that would be difficult to achieve otherwise.
- Leveraging and extending the reach and impact of the original funded work to an even-greater degree in developing countries through the ready spread and sharing of knowledge and the freedom to reuse, remix and build upon the knowledge in ways that may be uniquely valuable to local users.
- > Serving to bring a broader group of users, scholars or institutions into the creative process, stimulating immediate exchanges of ideas, knowledge and research among researchers or researchers and research users, provoking

Peter Suber, "The Opening of Science and Scholarship," Publius Project essay, February 5, 2009, available at http://publius.cc/opening-science and scholarship; see also Eysenbach G (2006), "Citation Advantage of Open Access Articles," PLoS Biol 4(5): e157. doi:10.1371/journal.pbio.0040157, available at http://www.plosbiology.org/article/info:doi/10.1371/journal.pbio.0040157#pbio-0040157-b003

Harvard OSC open access FAQ, available at http://osc.hul.harvard.edu/OpenAccess/policy.php
103 Wellcome Foundation Position Statement, available at http://www.wellcome.ac.uk/About-us/Policy-and-position-statements/WTD002766.htm

conversation and fostering the development of new collaborations and communities.

- Educating other foundations, grantees, creators and civil society about the existence and value of copyright and open licenses. Foundations' open licensing discussions and policies can play an important role in more broadly informing and encouraging others to consider licensing works in an open fashion.
- Ensuring throughout that one of the core imperatives for most grantees and foundations, proper credit to them as the source of the work, is always retained through the attribution requirement in open licenses.
- Permitting grantees of foundations that use them to retain some control over their works and specify many of the particular ways in which the works can, and cannot, be used, including for only non-commercial purposes, or only for sharing but nor modification or remixing, etc. Different priorities dictated by particular works, programs or subject areas can be accommodated

Why not? At the end of the day, a foundation can perhaps best advance its own consideration of open licenses by asking, and then examining carefully, whether there are specific and credible reasons *not* to encourage or require that a particular work it funded be made available through an open license. In many cases the answer to that question is likely to be "no." In such cases, a foundation will benefit itself and the public good by seizing the new opportunities that open licenses present and beginning to take concrete steps toward adopting them.

In other cases the answer may be "yes," where there are specific characteristics of the work or the grantee or the situation that make open licenses inappropriate or not beneficial. In these cases, maintaining a traditional copyright approach is an easy option. But the existence of some instances where open licenses are not appropriate should not itself be seen as a reason to eschew open licenses generally for other types of works or grantees or situations. As detailed in the following section, legitimate objections to open licenses can be recognized and accommodated where appropriate while still utilizing open licenses and reaping their potentially significant value in other instances. Open licensing should rarely be an all or none decision.

Why Foundations May Hesitate to Use Open Licenses

The survey asked interviewees to describe any obstacles they had faced when evaluating open content licenses or any concerns a foundation might encounter if it were to consider using them. Their responses, plus additional research, revealed a number of possible explanations for why foundations and their program and legal staffs may not have given greater consideration to the use of open licenses for their grantees' and consultants work and their own materials. These possible concerns ranged from lack of knowledge about or comfort with open licenses to misconceptions about the legal implications of such licenses

to concerns about loss of control and income to fears of grantee resistance to worries limited to specific subject areas such as indigenous or cultural knowledge. Some of these concerns apply both to the use of open licenses and traditional copyright licenses. Many of the concerns can be addressed and resolved fairly readily in many cases, while others may provide credible reasons to think carefully about open licenses in particular situations and to consider the possibility of exceptions to any openness requirement where they are justified by those circumstances.

1. Lack of Awareness or Knowledge

The survey revealed, not surprisingly, that familiarity with and knowledge about intellectual property matters in general and open content licenses in particular among foundation and grantee staff ranged from very little, to misinformed, to fully aware and intentional. Copyright licensing was an important priority for several of the participants who actively advocate for open licensing, but many others appeared to view copyright and licensing concerns as very low priorities among countless higher ones, matters about which they had never been given sufficient reason to learn or care. Several interviewees believed that most of their colleagues and co-workers would know very little and probably never have thought about appropriate licensing considerations. According to some of the more knowledgeable participants, widespread lack of information within foundations about open licenses is a significant explanation for the lack of greater consideration or adoption of open licenses for foundation work; that alternative is simply absent from most program officers' tool-kits.

At the same time, the experiences of the interview participants who are most familiar with open content licensing and its benefits reveal that better information tends to significantly increase interest in and support for open licenses; foundation and grantee staff who are exposed to open content licensing are more likely to consider it.

2. Inertia and Resistance to Change

This lack of information about open licensing alternatives to traditional copyright increases the likelihood that foundation staff will simply stay with the status quo rather than take steps to consider or adopt open licenses. The survey indicated that, in combination with limited knowledge, inertia was a powerful factor. As one interviewee put it, a typical strategy is 'to cling to what you know' and to continue on the safe and familiar path of least resistance. Because relatively few in the study group were experienced with open content licenses and their benefits, and because few had been given any concrete reason to be actively dissatisfied with the status quo, they felt no urgency to consider something new.

Moreover, since knowledge of open licenses and their possible role in foundation work is limited, many foundation staff may resist considering any change in licensing because of concerns that it will create more work for them or lead to implementation problems in areas that are working well now. Because many foundation staff don't have a fully informed sense of what open means, they may worry that open licenses would cause their foundation to lose all control of its grantees or their work. At the same time, some staff don't have a sense of

the degree to which openness can benefit their mission and, often, their grantee's goals as well. Some participants alluded to an 'if it ain't broke, don't fix it' mentality as a related reason that open licensing doesn't receive greater attention and adoption at foundations.

There was some belief among the more informed participants that program officers who were less familiar with technology and the role of the internet and digitization in expanding distribution of and access to information were more likely to resist or fear alternatives such as open content licenses. Some advocates for open licensing also suggested that resistance might be stronger among legal staff (some specific legal concerns are addressed in items 11 and 12, below).

3. Sustainability – Concerns That Grantees May Lose Revenue

Some survey participants expressed concerns that encouraging or requiring grantees to make their work product freely available under some form of open license could hurt grantees' sustainability by denying them potential revenue streams or other opportunities for profit or cost recovery that they otherwise might exploit under a traditional licensing approach. The hope that grantees or grant-sponsored programs could eventually become self-sustaining was a major concern for some survey participants but not of much import to others. Some expressed concerns that open licensees could make it difficult for a grantee to make a living – for example, revenue from works created by an artist or photographer or musician through a foundation-funded program might be an important part of their income. Others thought that revenues from materials funded by the foundation might be needed by the grantee to carry out valuable educational or charitable activities or to benefit a particular community at issue. Finally, a few worried about a foundation itself foregoing the possible but unlikely chance of recouping some of its investment if a funded work resulted in significant profits.

There are likely to be particular instances where foundation support may lead to the creation of a product or service that would provide significant revenue if it were licensed to others for money. First, however, such situations seem likely to be relatively few in number where foundation funding is involved, and whether or not they occur is likely to vary a great deal by type of grantee, type of work, overall goals of the project and funding, etc. Second, open licenses such as CC typically permit grantees to offer their work openly and for free for many users and many uses with certain conditions, but also to enter into separate revenue-generating licenses for that work with different conditions. In other words, releasing a work with on open license does not mean the owner can't also make money from

For example, in the education resources context, "only a very small number of professors ever make money on textbooks. Everyone thinks they are going to hit, but most don't." Hewlett Foundation, "Foundations: A Q&A with Catherine Casserly, Program Officer, Open Educational Resources," November 2007, available at http://www.hewlett.org/news/foundations-a-q-a-with-catherine-casserly-program-officer-open-educational-resources

As noted earlier, the new "CCPlus" licenses allow an easy way to grant some of the usual CC rights but also to provide up-front, individually specified rights. See http://wiki.creativecommons.org/Ccplus#Use Cases

other licenses for it. Third, grantees can use a noncommercial (NC) license to prevent others' commercial exploitation of their work while still exploiting the work for profit themselves; the "NC" applies only to licensees and the creator remains free to use or license the work however else it chooses. ¹⁰⁶

Finally, in some cases, alternative business models may be available that would permit grantees to make money and even be for-profit entities while still releasing foundation-supported work product freely and openly. In the study, the Knight Foundation, noting the parallels to companies that make money from open source software, pointed to opportunities for grantees to make revenue from enhancing, packaging and providing services or consulting based on or around software whose code was openly licensed under the GPL. Similarly, in the educational context, "there are other models emerging. There's a for-profit company planning to make textbooks available for free and makes its money selling the supplemental materials like flashcards for mobile phones." Finally, as noted above, Bloomsbury Academic is working to establish that commercial print copies of books can co-exist with openly licensed digital copies in a financially sustainable way. 108

4. Sustainability - Concerns About Costs of Archiving and Maintaining Access

Several survey interviewees brought up a different form of sustainability. While they acknowledged the value of making foundation-supported works widely accessible and licensing them openly so that others can use and build on them, they raised concerns about the ongoing funding or revenue streams that might be needed to maintain and archive all of this open content in a truly accessible way for the long term. These participants noted that "open" typically requires more than being freely licensed or publicly available. Instead, someone often will need to ensure the resources are available to preserve openly licensed content over time and to continue its widespread dissemination. As noted by Shuttleworth in its self analysis, "in many cases, we've simply lost track of materials our partners have created. They may be open, but no one can find them. Not even us." 109

Some participants wondered whether foundations should require or even recommend that a grantee use an open content license if funding will not be there to support ongoing maintenance. Otherwise, some authors or creators may fear the potential costs or burdens over time of ensuring that their works that have been openly licensed and are in repositories or archives are updated or refreshed as they otherwise might be. 110

See Creative Commons FAQ: Can I still make money from a work I make available under a Creative Commons licenses?, available at http://wiki.creativecommons.org/FAQ

^{107 &}lt;a href="http://www.hewlett.org/news/foundations-a-q-a-with-catherine-casserly-program-officer-open-educational-resources">http://www.hewlett.org/news/foundations-a-q-a-with-catherine-casserly-program-officer-open-educational-resources

¹⁰⁸ Creative Commons, "An Interview with Frances Pinter of Bloomsbury Academic," October 20, 2008, available at http://creativecommons.org/weblog/entry/10100

Mark Surman, "How We Work: Open Licensing," May 2008, Shuttleworth Foundation, available at http://www.shuttleworthfoundation.org/about-us/our-philosophy/how-we-work/open-licensing

See, e.g., Marshall Smith & Catherine Casserly, The Promise of Open Educational Resources, The Hewlett Foundation (2006), at 2, available at http://learn.creativecommons.org/wp-content/uploads/2008/03/changearticle.pdf

These may be important questions when contemplating complete open access "systems," but they aren't particularly important to the immediate issue of whether or not works should be released under open licenses. More importantly, concerns about effective archiving and organization and ensuring availability over time arise whether the works are licensed "openly" or under a traditional copyright license. The initial decision to use an open license doesn't itself create greater needs for preservation than would a more traditional licensing approach. Instead, it is largely the act of making works available in a digital archive or repository¹¹¹ that leads to worries about ongoing maintenance, not the particular license that is placed on the work in the archive. Ultimately, however sustainability in this sense is almost certainly enhanced to a great degree by the use of an open licenses because of the explicit authorization and implicit encouragement they provide to make copies and to "archive" those copies all over the world's biggest repository, the open world wide web. Moreover, licenses such as Creative Commons make it easier to search for and locate openly licenses works, providing a built-in means of keeping track of works.

5. Potential Loss of Control – Human Rights Material

Survey participants raised the possibility that some grantees involved in producing human rights-related publications or other materials might be concerned that having to license those materials under open licenses would deprive them of the ability to control disclosure of or access to the materials they create, such as reports, interview summaries and the like. In particular, some expressed worries that funded human rights work often will require a higher level of privacy or security – for example, the need to protect the identities of informants or investigators to ensure their safety. Some grantees in the human rights area may feel that traditional copyright protections and license restrictions are more effective legal means to preserve such control.

Once again, similar concerns about disclosure and privacy can arise under traditional copyright licensing as well as under open licenses. The traditional approach would be to avoid licensing or disclosing the material altogether. With an open licensing approach, where protecting privacy or the identities or safety of individuals is a priority, the use of such licenses probably is not appropriate since they would inevitably result in publication and disclosure. Even so, a foundation could still use or require open licenses as a general matter, but provide an exemption or "opt-out" from the open licensing policy in cases where disclosure of certain materials would present privacy or safety concerns.

To the extent that concerns about human rights materials relate less to the disclosure itself and more to potential co-opting or misuse of such materials, both open licenses and traditional copyright can prevent someone from using or republishing research, reports or other content without proper attribution to the original source. All Creative Commons licenses require that users of the licensed works give full attribution to the original author or creator, in a manner specified in the license, whenever works or parts of works are shared, distributed or (depending on the license) incorporated into new works. The work cannot

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¹¹¹ These preservation concerns also arise, albeit usually to a lesser extent, with physical works in non-digital archives.

legally be copied and passed off as the work of someone other than the creator; if someone uses the work without attribution, the creator can has a legal claim. This is no less true with open licenses than it would be with traditional copyright. In addition, CC and other open licenses let the owner choose which rights users can exercise and which are reserved, permitting an owner to prohibit certain unwanted activities, such as commercial use of the modification or alteration of the original material. This is similar to the control provided by traditional copyright, though it is true that an owner's ability to limit how material is used and to prevent undesired uses is greater under a traditional approach.

6. Potential Loss of Control – Traditional or Indigenous Knowledge

Another area where open licensing raised similar concerns about loss of control and unwanted disclosure and access involves foundation support of grantees whose work product includes culturally sensitive materials such as traditional or indigenous knowledge, practices, customs, products, etc. Where such works are involved, there may be good reasons for exercising greater control over any distribution or use to ensure that groups do not have their cultural materials exposed, misused, co-opted or otherwise tainted in ways they wish to prevent.

For example, the Christensen Fund often supports projects involving indigenous peoples. In many cases, one of the goals of its grants is to protect the natural resources, culture, stories, languages, etc., of the people under study. Open disclosure of certain traditional knowledge -- for example, the location of a sacred site or the traditional medicinal uses of a plant – could harm the indigenous community. Visitors might disturb the site or a pharmaceutical company might appropriate the healing knowledge for its own profit. In more extreme cases, foundations might fund a community to preserve or organize its own traditional knowledge but respect that community's wishes that the information not be shared at all with outsiders, even the funder.

In cases such as these where communities may want to collect and archive their cultural materials for preservation and for their own use but have strong reasons for wanting to prevent disclosure to others, open licenses likely would not be appropriate. Once again, however a foundation could still generally use or require open licenses but provide the opportunity for an exemption or "opt-out" in cases of appropriate need to effectively protect the sensitive cultural material.

In other cases, the concern about indigenous materials may be less absolute; nevertheless, "it is often important that cultural heritage organisations retain some control

As detailed more fully below, open licenses are enforceable in court and violations of the conditions they impose can be remedied with an injunction. See Jacobsen v. Katzer, 535 F.3d 1373, 1382-83 (Fed. Cir. 2008), available at http://www.cafc.uscourts.gov/opinions/08-1001.pdf

In addition, as Peter Suber notes, while open access and digital availability do not make plagiarism more likely, they may well make it easier to detect. See Peter Suber, "A field guide to misunderstandings about open access," SPARC Open Access Newsletter, Issue #132, April 2, 2009, item 19, available at http://www.earlham.edu/~peters/fos/newsletter/04-02-09.htm#fieldguide

over the use of their resources."¹¹⁴ In such instances, open licenses such as Creative Commons provide simple, standardized ways to impose restrictions on how the material is used. For example, if maintaining the original condition or integrity of a work is important, a no derivatives (ND) license can be used. Or a non-commercial restriction can be imposed by using a (NC) license to prevent unwanted commercial exploitation of the work. The Christensen Fund reports that it is careful to educate its grantees about the pros and cons of various licensing options as well as alternatives that could be used to protect the intellectual property of the people they study, and its code of conduct explicitly asks grantees how they intend to use the data they collect.

7. Potential Loss of Control - Confidentiality, Anonymity, Proprietary Data

Foundations and grantees may at times deal with work product that contains data, research details, or other information that is confidential, commercially sensitive or proprietary, or the disclosure of which might violate individuals' privacy or anonymity. These materials, which are likely to be relatively infrequent in most foundation funding, are inappropriate for open licenses in much the same way as certain indigenous knowledge materials described immediately above. Once again, however, the concerns arise from the nature of the material itself and from the risk of it being made public under any license, not from unique to open licenses.

Legitimate needs to protect confidentiality or anonymity can be adequately addressed through policies that permit exemptions in appropriate cases to any policy or obligation to make work publicly available in an open fashion. Sensible open licensing policies can and should be designed to provide appropriate exemptions in special situations such as these, to safeguard confidential or proprietary information where necessary while still achieving the benefits that come from open access and dissemination in all the other cases where such concerns are not present. Ideally, such policies would still encourage grantees to release non-confidential portions openly, restricting only that subset of information that cannot be safely shared.

For example, the Shuttleworth policy "recognises that at times there are specific compelling reasons for explicit exemptions to these principles in respect of particular resources. The decision to exempt a resource from any of the open access principles and the justification for the exception will be recorded. The extent of each exemption from the open licensing, open standards, open format and freedom from 'technical protection measures' principles will be specifically justified, and recorded." ¹¹⁶

Eduserve, Snapshot study on the use of open content licences in the UK cultural heritage sector, October 2007 at 4, available at

http://www.eduserv.org.uk/research/studies/~/media/Foundation/studies/cc2007/final%20pdf.ashx

Shuttleworth Foundation, Statement of Principle: Open Resources, available at http://www.shuttleworthfoundation.org/about-us/our-philosophy/open-resources-policy

8. Potential Loss of Control – Less Ability to Track Distribution of Work Product

Some participants worried that licensing work on a free and open basis could impede the grantee's or foundation's ability to measure the distribution of the work involved. Since the whole point of open content licenses is that one user is free (and usually encouraged) to share and redistribute the work to many others, counting the actual dissemination would be impossible. With traditional copyright licenses, on the other hand, tracking distribution could be easier where the material was licensed only to a small number of users or distributors.

However, as the Shuttleworth Foundation asked rhetorically, "is it more valuable to loosely observe that you've had a huge impact because people are using and sharing what you've funded, or to rigorously track the fact that you've had almost no impact at all? Is it better to know all your possibilities for impact in advance, or to open things up so that people can evolve what you've funded into ideas and impact that you could never have imagined?" The Knight Foundation similarly embraces the potential for impact and innovation that can come from the unplanned, unanticipated, even unimagined uses (and users) made possible by open licensing, even if those uses can't be immediately or precisely tracked. In any event, CC licenses have machine-readable features that can be embedded in digital copies of the work actually enhance the ability to track use and derivatives of the work. As more and more users apply these elements of CC licenses correctly, this ability to track will continue to increase.

9. Potential Loss of Essential Publishing Opportunities

Concerns were expressed that foundations would not want to adopt an open licensing policy that could cause a scholar whose tenure, reputation or career prospects may depend upon publication in certain prestigious scholarly journals to be denied the opportunity to publish in those journals due to the journals' refusal to accommodate the foundation's licensing preferences. Not surprisingly, this is a frequently raised issue in the scholarly publishing open access context as well and one to which there are strong rebuttals.¹¹⁸

First, there often will be substantial direct benefits to authors from open licensing, including faster and greater impact, visibility and dissemination and increased rates of citation; these counterbalance to a greater or lesser degree concerns about publishing in open journals that may be seen as less prestigious or credible. Second, in instances where publication in a particular journal is deemed essential but the publisher refuses to accept a work that is the subject of an open licensing or open access requirement, the availability of exemptions or "opt-outs" from an open licensing requirement would avoid any harm. In fact, most current open access policies allow for just such an exemption from the policy where necessary to ensure "essential" publication, and sensible open licensing policies can

Mark Surman, "How We Work: Open Licensing," May 2008, Shuttleworth Foundation, available at http://www.shuttleworthfoundation.org/about-us/our-philosophy/how-we-work/open-licensing

¹¹⁸ See, e.g., Peter Suber, "A field guide to misunderstandings about open access," SPARC Open Access Newsletter, Issue #132, April 2, 2009, item 20, available at http://www.earlham.edu/~peters/fos/newsletter/04-02-09.htm#fieldguide

do the same. Third, over time, as the prevalence of open access requirements, journals and practices continues to increase, the number of instances where "essential" publications do not allow open licenses will become steadily lower.

10. Concerns About Publisher Fees for Open Access

In the open access context at least, some publishers insist on the payment of a fee for placing a publication into an open access repository or for adjusting their standard copyright licensing agreement to permit the author to do so. Numerous questions have arisen as to how institutions and funders should react to such demands from publishers and who, if anyone, should pay such fees, and some survey participants worry that a foundation open licensing mandate might at times cost authors or grantees money in order for them to be published.

This is necessarily a much broader and more involved topic that the scope of this report, but as a general matter authors who publish in such fee-based journals often may not have to pay the fees themselves because their institutions provide the necessary funds, or the funder may permit grantees to pay out of grant funds (and may even provide additional funds for such payments), or certain journals may offer fee waivers or discounts where ability to pay is an issue. The Wellcome Trust and CHSRF policies described earlier each provide that the foundations may provide additional funds for such open access fees. The second reposition of the second reposition reposi

11. Concerns About Perceived Legal Risks

Shuttleworth's open licensing review identifies foundation lawyers as perhaps the most frequent source of objections to the use of open content licenses. ¹²¹ In the view of Shuttleworth and some survey participants, many foundation lawyers have been trained in traditional copyright and have not yet had the opportunity to have much or any experience with open licenses. Thus, they may start from a point of not appreciating how open licensing operates, what advantages it may offer and how well it can mesh with overall foundation mission and goals. As a result, some participants believe, lawyers with limited open licensing experience may be less comfortable than others with the idea of considering a novel licensing approach and more prone to want to continue to rely on the tried and true copyright approaches with which they are familiar. Moreover, some survey participants felt that, by training and perhaps nature, lawyers are cautious. Any foundation's Office of General Counsel, after all, is charged with protecting the foundation from harm, not necessarily with facilitating an unfamiliar public good, and this caution may lead to a reluctance to consider or embrace open licenses.

¹¹⁹ Id., item 12; Peter Suber, "Open access policy options for funding agencies and universities," SPARC Open Access Newsletter, Issue #130, February 2, 2009, , available at

http://www.earlham.edu/~peters/fos/newsletter/02-02-09.htm#choicepoints

120 See http://www.wellcome.ac.uk/About-us/Policy/Policy-and-position-statements/WTD002766.htm; and CHSRF Open Access Policy, available at

http://www.chsrf.ca/funding_opportunities/documents/OpenAccesstoResearchOutputs.pdf

Mark Surman, "How We Work: Open Licensing," May 2008, Shuttleworth Foundation, available at http://www.shuttleworthfoundation.org/about-us/our-philosophy/how-we-work/open-licensing

Lawyers, some said, may raise a variety of "vague, unspecified risks" from using or requiring the use of open licenses. 122 For example, the survey reflected that perhaps the major concern among legal staff was the possibility of the foundations being sued for copyright infringement based on the use of open licenses. Participants noted that many foundations are seen as having deep pockets and might make good targets for lawsuits, and both legal staff and program officers were troubled by the thought that their licensing practices might expose their foundation to accusations of infringement that could put the institution in jeopardy.

The survey respondents did not explain the basis for the concern that open licenses might increase the risk of infringement liability for foundations. There are a couple of possibilities for what they might have meant, though neither appear to raise significant legal concerns. First, the worry might be a copyright infringement claim could be caused by a grantee's supported work itself -- for example, where the grantee copied or included others' copyrighted works in his own without permission or fair use. In cases where the foundation effectively acts as a publisher or distributor for grantees' works (i.e., by hosting them on its web site), the potential magnitude (but not the likelihood) of this kind of infringement liability for the foundation, some assert, may be greater with an open license. This might occur because the "viral" spread that is one of the major advantages of an open license means that there will be many more copies of the work distributed. More copies distributed could mean more "instances" of potential infringement, and thus perhaps more damages, than if the foundation simply put the work up on its website for reading and individual downloading. But this appears to be a speculative worry at best. The survey revealed that many foundations already put grantees' work on their web sites and encourage downloading. If foundations had a well-founded fear of increasing the possible number of infringements for works they distribute, this publication would be unlikely to occur. Moreover, although there are now roughly 250 million CC-licensed works in circulation, we have not encountered a single instance where viral distribution of such works under the CC license led to a finding of increased infringement or damages.

The second possible worry may be that foundations that themselves distribute works, either on their web sites or otherwise, are more vulnerable than conventional publishers because they typically do not carry the same insurance against infringement that publishers do and do not require creators to warrant that their work is original and that they have obtained all necessary permissions, as publishers typically do. Even if these differences are true, however, any risk is again the result of the foundation acting as the publisher, not of the particular license that is applied to the materials. The risk, to the extent it exists, arises from the foundation distributing content without the same insurance and assurances as a traditional publisher, and should exist whether or not an open license or a traditional license is used.

Consequently, the concern that using, encouraging or requiring the use of open license might increase a foundations' legal risk of copyright infringement appears to be

¹²² *Id*.

misplaced and speculative. The widespread use of CC licenses in many different contexts does not appear to have yet led to any of the sorts of problems that appear to underlie this concern.

Overall, in the great majority of cases, the legal bottom line for foundations is likely to be the same as that reached by Shuttleworth after its years of evaluation of and experience with open licenses:

"There is no real legal reason not to adopt an open licensing policy." 123

There were also some statements from respondents that the legal staff might perceive moving to open licensing as creating a complex and time-consuming task for the lawyers who had to implement such a move and draft the necessary contract language. For example, if the components of an open license are confusing or simply unfamiliar – for example, what qualifies as "non-commercial" use under CC licenses is not completely clear — then lawyers may worry about added burden and risk. While some learning and adjustment is inevitable, in fact the task of adopting an open-licensing approach in grant or consultant agreements is unlikely to be particularly challenging in most cases, especially where a foundation chooses to use or encourage a standard open license such as CC or the GPL. It is a relatively straightforward matter of inserting contract language into grant agreements that specifies what materials are covered and how they must be licensed.

In many cases, the necessary language need not be much more involved or complex than some version of "Grantee agrees to make all foundation-funded works available to the public under a Creative Commons [or similar] license of Grantee's choosing" To the extent that a foundation believes it should have a process for grantees to seek waivers or exemptions in appropriate cases, only a slight addition along the following lines may be needed: "Grantee may seek an exemption from this requirement by making that request in writing at [appropriate time] and specifying the reasons justifying the requested exemption." A more elaborate but still quite straightforward example is provided by the Shuttleworth examples in Attachment D. While many variations on this basic language are possible, the concepts and drafting would ordinarily be straightforward for experienced foundation legal staff.

12. Concerns About Enforceability of Open Licenses

Some participants believed that some foundation hesitation to consider open licenses stems from uncertainty over whether or not they are enforceable, or are as enforceable as traditional copyright licenses. In fact, open licenses are designed to be legally enforceable. While there has not been a great deal of case law thus far, one recent decision from the United States Court of Appeals for the Federal Circuit, *Jacobsen v. Katzer*, solidly concluded that open source licenses such as the Artistic License and, by implication, similar open content licenses like Creative Commons, can be enforced through copyright infringement

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¹²³ Id. (emphasis added).

lawsuits rather than simply through contract law.¹²⁴ The Court held that copyright owners who license their work with open licenses are entitled to seek an injunction for copyright infringement if the user violates the conditions specified by the license.¹²⁵ A Dutch court had previously held in 2006 that CC licenses were enforceable under that country's laws.¹²⁶

Some participants in larger foundations were also more likely to talk about enforcement in a slightly different sense, noting that some foundations have hundreds of intellectual property agreements to administer. They wonder whether it is feasible to effectively and efficiently manage so many agreements and whether grantee agreements and contracts have genuine meaning if there are essentially no resources allocated to enforcing them. To the extent this is a valid concern, it is one that is presented by both open and traditional copyright licensing, and is unlikely to be more of an issue if open licenses are adopted.

13. Conclusions

In summary, a number of the concerns expressed about open licensing policies raise legitimate issues that foundations should consider in the specific contexts of their particular grantees, their particular priorities and needs, and the particular types of works involved. Many of the other concerns, however, appear unlikely to create real problems in a meaningful number of instances. Their persistence is more likely attributable to the fact that many grantees and foundations are relatively uninformed and inexperienced with open licenses and don't have a realistic appreciation for whether they might cause problems or how readily those problems could be avoided or mitigated.

Educating grantees and consultants about open licenses and their benefits, and providing an accurate assessment of why they are unlikely to harm grantees in the relevant situations is an important step in the process of considering open licenses and understanding how their use can advance the interests of a foundation's mission and the public good. Where valid concerns are identified for particular types of works or particular grantees or programs, they can be addressed in a number of ways: by using open licenses but utilizing some or all of the limitations built into them, such as restrictions on commercial use or derivative works; by permitting appropriate exceptions or opt-outs to an otherwise general policy of open licenses use where there is a demonstrated need; or by carving out particular types of works or grantees or programs altogether from open policies that cover the rest of the foundation's activities. While there will always be exceptions and situations needing special treatment, in the majority of cases the concerns analyzed above should not create significant impediments to adopting open licenses.

¹²⁴ Jacobsen v. Katzer, 535 F.3d 1373, 1381-83 (Fed. Cir. 2008), available at http://www.cafc.uscourts.gov/opinions/08-1001.pdf; see also http://creativecommons.org/press-releases/entry/8838

¹²⁵ Id.

¹²⁶ http://www.creativecommons.ca/blog/?p=165

Some Practical Considerations in Evaluating the Use of Open Licenses

From the study, a few broad issues and some potential lessons regarding how a foundation might move toward open licenses emerged. These lessons are worth sharing because they help to inform the overall process for a foundation to begin thinking about the use of open licenses and identify some of the primary issues a foundation would need to consider. ¹²⁷

1. Adoption Can be Incremental, Reflective and Tailored

First, the Shuttleworth Foundation's experience demonstrates that even the best of intentions and strong dedication to the idea of ensuring open licensing and access will not always be enough to achieve maximum results. Shuttleworth began in earnest in 2004 with an "open licensing principle," but realized along that way that this did not mean it had a "functional open licensing policy." While its goals and policy were clear and simple, the policy was not written, the commitment to use open licenses was essentially tacit and details were left to discussion during contract negotiations with grantees and consultants.

As a result, Shuttleworth often had difficulty getting grantees to actually use open licenses for their works. Some grantees, unfamiliar with open licensing, would balk at their use during contract discussions, requiring lengthy and difficult negotiations, while others would appear to agree but then refuse to use an open license once the works were completed. 129 As a result, Shuttleworth reviewed and then overhauled its program and the current policies and requirements described above. Achieving consistent benefits from open licensing came only after its procedures were made more systematic and express. Standard contract language was drafted and used, and openness obligations were clearly stated in standard consulting and partnership contract templates. 130 The Foundation's previous general requirements about works needing to be "open" were clarified with concrete details: "software, reports, manuals, research results and other materials must e released under an open license and posted using an open format on a publicly accessible web site." And specific licenses - GNU GPL for software and CC Attribution Share Alike Generic 3.0 for all other works -- were required except in cases where alternative versions could be specifically justified.¹³² This experience suggests that the evaluation, design and implementation of an open licensing policy will be part of an individualized and customized

Peter Suber has addressed many implementation specifics in detail in various publications, including "Open access policy options for funding agencies and universities," SPARC Open Access Newsletter, Issue #130, February 2, 2009, , available at http://www.earlham.edu/~peters/fos/newsletter/02-02-09.htm#choicepoints

Mark Surman, "How We Work: Open Licensing," May 2008, Shuttleworth Foundation, available at http://www.shuttleworthfoundation.org/about-us/our-philosophy/how-we-work/open-licensing

¹³⁰ Shuttleworth Foundation, Statement of Principle: Open Resources, available at http://www.shuttleworthfoundation.org/about-us/our-philosophy/open-resources-policy http://www.shuttleworthfoundation.org/about-u

¹³² *Id*.

process for each foundation. It also affirms the notion that a foundation can move gradually and incrementally to explore and experiment with open licenses before settling on any ultimate policies for broad use.

In addition to the need for clear and consistent written policies and unambiguous contract language in grant agreements, Shuttleworth identified three key issues to focus on in considering open licenses: ¹³³

- The choice of a particular appropriate license (Shuttleworth uses CC and prefers a license like CC BY SA for maximum viral impact).
- ➤ Ownership creating proper incentives for the owner to spread and maintain open content.
- Accessibility the need for a clear plan to ensure easy access and archiving.

2. Require or Encourage? Opt-Out or Opt-In?

A common question about open licensing policies is whether the foundation or other funder should mandate that grantees *must* use open licenses, should strongly encourage them to do so, or should merely discuss the options with them but leave any final decisions up to the grantee. Each of these options is viable in appropriate circumstances and each represents a significant improvement from the status quo for many foundations. Moreover, each of these options can represent an incremental step on a path of evolution, rather than revolution, toward greater openness.

Foundations certainly need not feel that they can only begin a move toward open licensing by abruptly adopting an open license mandate. Instead, the process can begin much closer to where a foundation finds itself now and proceed in a stepwise fashion, as described below, exploring the ways in which the new opportunities presented by open licenses can be beneficial and best implemented. Different paces and different ending points may be appropriate for different foundations or different programs

Ultimately, however, the evidence from a variety of sources indicates that some form of mandatory participation is more effective at ensuring consistent use and thus at achieving the broad benefits that can come from open licenses. For example, Shuttleworth reported that, before its open licensing policy was made a written and explicit part of its contracts, grantees were inclined to argue about using such licenses, or ended up not using them even where they had said they would. Similarly, in adopting its largely mandatory open access policy (which still allows individual opt-outs), Harvard recognized that "experience has shown that mere exhortations have little effect on authors' behavior. For instance, before Congress made it a requirement, participation in the NIH Public Access Policy was optional. During that period, there was only a 4% level of compliance. Second, experience in many areas has

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Mark Surman, "How We Work: Open Licensing," May 2008, Shuttleworth Foundation, available at http://www.shuttleworthfoundation.org/about-us/our-philosophy/how-we-work/open-licensing

shown that opt-out systems achieve much higher degrees of participation than opt-in systems, even while remaining noncoercive [because of the ability to opt out]."¹³⁴

The major impediment in most cases to mandatory use of open licenses is the concern that, in particular situations, such a license will harm a grantee or other party in any of the ways analyzed above. As we have seen, however, these concerns can effectively be resolved by tailored opt-out or exemption provisions that recognize cases of genuine risk or hardship, as in the exception procedure in the Shuttleworth policy. ¹³⁵

Consequently, Creative Commons advises (in the context of OERs, but equally applicable to most types of works created by grantees, consultants or employees with the support of foundations), that merely encouraging the broad dissemination of resources is not enough to lead to significant improvements in access and use. In their view, to be effective, open educational resource policies

must call for some form of open licensing. Otherwise, the resources are not open because copyright law's default "all rights reserved" will govern the terms of use. As a result, users will have to ask for permission for a range of uses. They are unlikely to do so, and the educational impact of the resources will be significantly diminished. 136

Thus, the most reliable and substantial benefits to foundations are likely to come from adopting policies that mandate the use of open licenses in all appropriate instances. Even so, considerable benefits can still be obtained from policies that strongly encourage grantees to consider open licenses, or that at least engage grantees in informed, deliberate and thoughtful conversation and deliberation about appropriate licensing. Over time, these more limited approaches can evolve into more mandatory policies if that fits a foundation's situation . . . but the beginning can be modest and the path evolutionary.

3. Which License?

Among the foundations that use or consider open content licenses, some specify the general type of license, such as Creative Commons, but none require a *specific* license – for example, a CC BY SA. Instead, those foundations normally give a grantee the option to choose any one of the several Creative Commons licenses, or perhaps one of another type of open license, as the grantee sees fit. Shuttleworth Foundation, for example, specifies the use of particular categories of open licenses – Creative Commons or or GNU FDL licenses

Harvard University, Office of Scholarly Communication, Policy FAQ, available at http://osc.hul.harvard.edu/OpenAccess/policy.php. See also Peter Suber, "Open access policy options for funding agencies and universities," SPARC Open Access Newsletter, Issue #130, February 2, 2009, Item 1, available at http://www.earlham.edu/~peters/fos/newsletter/02-02-09.htm#choicepoints ("the NIH experience proved the failure of requests and the success of mandates, for funding agencies.")

Shuttleworth Foundation, Statement of Principle: Open Resources, available at http://www.shuttleworthfoundation.org/about-us/our-philosophy/open-resources-policy

¹³⁶ *Id.* (emphasis in original).

for non-software $works^{137}$ -- but also recognizes that there may be instances where alternative licenses are more appropriate.

While permitting grantees some choice may have advantages, so does ensuring a degree of consistency. Creative Commons regularly touts the value of standardization and simplicity represented by its licenses – a small family of simple licenses, with accessible deeds and recognizable icons that quickly reveal what rights and conditions are associated with any work. Creative Commons also encourages the use of CC BY Attribution-only licenses wherever possible, while recognizing that funders or creators may in some situations have a justifiable need to impose additional restrictions such as NC-non-commercial only or ND-no derivative works. The more restrictive the licenses, the fewer uses and reuses will be possible, and the more likely that an incompatibility with other licenses may arise down the road. For example, the share-alike CC BY SA requires that all subsequent works in which it is included be released with the same SA license. This can cause problems where works with other conditions are combined with SA works at a later stage.

While there may be a temptation to opt only for non-commercial licenses for foundation-sponsored works, the Global Voices example described earlier is a good reminder that there may well be cases where a foundation's or a grantee's purposes would be well served by permitting content to be picked up and redistributed by commercial as well as non-commercial users. Again, an individualized assessment that considers the type of materials at issue and the overall foundation and grantee goals is important to choose the proper license to achieve those goals.

4. Open and Accessible Formats and Technologies

Shuttleworth also recognizes the importance not only of distribution in publicly accessible locations such as open access repositories or websites, but also of having the materials be in an *open format* that can be readily accessed. Much of the intended benefit of open licensing of works could be lost if those works are not accessible to the public, or if they are in a proprietary format that limits users' abilities to access, share and, where permitted, modify or remix them to create new works. In particular, various forms of digital rights management (DRM) or technical protection measures (TPM) could, if placed on works created with foundation support, undermine the goals of requiring open access and open licensing. The Shuttleworth open licensing policy expressly requires that works the Foundation funds be free of such DRM or TPM measures. Creative Commons licenses prohibit licensees from adding or employing any TPM or DRM in CC-licensed works that

¹³⁷ Shuttleworth Foundation, Statement of Principle: Open Resources, available at http://www.shuttleworthfoundation.org/about-us/our-philosophy/open-resources-policy

¹³⁸ Creative Commons, ccLearn Recommendations, Increase Funding Impact, available at http://learn.creativecommons.org/wp-content/uploads/2009/04/cclearn-recommendations-increase-funding-impact-05-apr-09.pdf.

Mark Surman, "How We Work: Open Licensing," May 2008, Shuttleworth Foundation, available at http://www.shuttleworthfoundation.org/about-us/our-philosophy/how-we-work/open-licensing

Shuttleworth Foundation, Statement of Principle: Open Resources, available at http://www.shuttleworthfoundation.org/about-us/our-philosophy/open-resources-policy

would prevent subsequent users from accessing or using the work or exercising the rights provided by the license.

Examples of major, successful open access publishing repositories that utilize open formats include PubMed Central and the recently created Harvard DASH repository¹⁴¹

Conclusions and Recommendations

Most private foundations studied in this project are still at an early point in considering or beginning to adopt the use of open licenses for the works their own staff, consultants or grantees create with foundation support. This is not surprising given that open licensing is a relatively new phenomenon. However, the experience of foundations that have already begun to use, encourage or require open licensing, as well as a thorough analysis of the benefits and possible drawbacks of open licenses, confirm that open licenses present valuable opportunities that foundations should begin to seriously consider exploiting. Open licenses promise significant value for foundations and for the public good, and often for grantees as well.

However, foundations need not change their current licensing approaches or policies overnight nor immediately adopt open mandates to take advantage of these new opportunities. Rather, a foundation can take an incremental approach, beginning with careful consideration of the possible benefits and potential drawbacks of open licenses in that foundation's particular situation and fields. This analysis can flow naturally into a range of outreach efforts, including conversations with partners and grantees about licensing options, benefits and objections. Program officers in particular are ideally situated to reise and explore these issues with grantees. Their conversations may identify areas where adopting open licensing would be immediately beneficial and create little objection or burden, as well as other areas where greater adjustments need to be made or a more nuanced approach may be required. Conversations often will lead grantees to be more informed and intentional in the choices they make about licensing, and over time the foundation may conclude that it has enough knowledge, experience and confidence to begin encouraging grantees in certain areas to use open licenses, and then perhaps to begin requiring their use.

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¹⁴¹ http://osc.hul.harvard.edu/DASH/dash-about.php

In an effort to develop a set of principles and approaches that could motivate and facilitate foundations to begin to examine their own licensing needs and practices, we make the following recommendations, broken down into (1) steps to raise awareness and develop intentionality in the foundation sector generally and, (2) steps for individual foundations to engage in their own consideration and evaluation of the appropriateness of open licensing in the context of their particular programs and grantees.

1. Within the Foundation Sector

Lack of information, knowledge and experience concerning open licenses are among the primary factors affecting foundations' willingness to consider using and requiring the use of such licenses. Consequently, educational and informational efforts aimed at increasing awareness in the foundation sector of open licensing generally, and of its potential benefits and synergies specifically, are of high value.

- It is important for both foundations and their grantees that create works to begin to think carefully and in informed ways about how to get the most value and impact from those works while still ensuring that they are used properly, fairly and consistent with the foundations' and grantees' underlying missions.
- Thoughtful and intentional decisions about how to license foundation-supported works currently happen only in a limited number of cases. The status quo prevails, often for no reason other than inertia, and generic contract language regarding copyrights is often used in place of genuine consideration or conversations about best practices between foundations and their grantees and consultants or within foundations.
- Merely beginning conversations about open licensing can yield benefits throughout the sector. Opening up discussions about the goals and impact of different copyright licensing approaches, and whether or not concerns about them are warranted, can have unintended, "viral" effects. Shuttleworth, for example, describes how these types of conversations have deepened its partners' understanding of "the whole innovation cycle" and led to partners beginning to use open licenses even in non-funded projects and in agreements with others besides Shuttleworth. 142
- More broadly, foundation outreach and conversations about licensing options can serve to help educate foundations, staff, grantees and civil society at large about copyright and open licensing issues. These are matters about which every digital citizen today needs to be informed. The more that foundations discuss and, in particular, begin to embrace open licensing, the more this public education function will be served.

¹⁴² Mark Surman, "How We Work: Open Licensing," May 2008, Shuttleworth Foundation, available at http://www.shuttleworthfoundation.org/about-us/our-philosophy/how-we-work/open-licensing

- The foundation sector should develop and draw meaningful lessons from a larger number of case studies of instances where foundations have successfully used open licenses to advance their goals and priorities, as well as any instances where genuine difficulties or drawbacks have arisen in their use.
- Deeper explorations and understandings of the benefits of open licensing and the synergies with foundations' core missions and goals will lead over time to changes in foundation and grantee culture. These changes are a natural and inevitable part of an ongoing shift within the foundation world and in the world in general toward greater openness and sharing.

2. Considerations for Individual Foundations

For individual foundations, the move toward greater awareness of the possible benefits, opportunities and concerns presented by open licenses for their work may include some or all of the following steps:

- Reviewing the program areas within the foundation and developing informed, deliberate determinations about where within these programs open licenses might be appropriate and can best be leveraged to enhance the foundation's reach and impact. Different programs, types of grantees and types of works may yield different determinations or require different approaches to implementing open licenses.
- This review process should include discussing licensing options, benefits and objections with grantees and potential grantees. While foundations typically do not want to be perceived as forcing their grantees to license works in ways that may not be in a grantee's best interest, these conversations can yield critical information for both the foundation and the grantee about the *actual* benefits and risks from open licensing in particular contexts and situations. In any case, foundations do have compelling interests in ensuring that the fruits of their grants achieve the widest dissemination, the broadest reach, the greatest impact, and the most follow-on innovation, even if these goals may sometimes be at odds with certain grantee preferences.
- In order to determine the full range of benefits that could come from open licensing, the possible genuine concerns or objections to such licenses, and ways to avoid or minimize any real concerns, foundations should analyze questions such as:
 - O What are the goals of the particular project or work product? How important to achieving those goals are broad distribution of the work; possible "viral" spread through authorized sharing and redistribution; further improvements from user adaptation and reworking of and innovation on top of the work, etc.?

- O In what field or program area do the grantee and supported work fall? Some fields, such as information technology or educational resources are more conducive to open licensing than others, such as pharmaceutical research, where patents are likely to play important roles. Other fields, such as indigenous knowledge or human rights work, may present different concerns or require broader exemptions or opt-out possibilities.
- O How likely is the funded-work product to generate substantial revenue, and how important is that revenue to the sustainability of the grantee or the project? Will open licensing substantially impair the grantee's ability to capture those revenues (for example, in some cases open licenses may actually increase awareness of and demand for paid content, or non-commercial restrictions on open licenses may preserve opportunities for the grantee to exploit the work for money)? Could certain open licenses, such as the CC non-commercial license, preserve at least some needed revenue opportunities for grantees?
- O Will harm come to any party as a result of an open license? For example, does the contemplated work product include indigenous or traditional knowledge or human rights materials where exposure or dissemination might cause harm? Does the work include otherwise confidential or proprietary data or ideas or information? If so, can the needs for confidentiality be met through limitations in the type of open license used (for example, no-derivatives) or the amount of material disclosed, or is an exception to any requirement to openly license and share the work necessary to address those needs?
- O Similarly, would the grantee's or creator's career or livelihood be adversely affected in other ways, such as risks to a scholar's tenure prospects by losing the chance to publish in a key journal that refused to accept articles that carried any requirement of open licensing? Are there reasonably equivalent alternative journals that would accommodate at least some form of open license? Would a limited, case-by-case opt-out opportunity solve particular problems?
- o What do potential grantees in this field think about open licenses? Do they raise concerns or objections that are informed, well-founded and specific to their activities, not merely knee-jerk, that the foundation has not adequately considered?
- o For any objections or concerns that are well-founded, how can they be resolved while still allowing for open licenses in most cases or for most grantees or works? Would more limited types of open licenses address the concern (for example, a non-commercial and/or no-derivatives license)? Could exceptions or exemptions be allowed for such cases? Could an optout system for specified cases or situations permit the foundation to capture

as many benefits of open licenses as possible while avoiding most negative consequences?

- Once a foundation decides to pursue the use of open licenses in some situations, the process can be an incremental one of experimentation, evaluation, adjustment and further evaluation. This approach allows an assessment of how the benefits and synergies of open licensing to the foundations mission actually play out in certain contexts, and how any drawbacks or objections can be avoided or managed. The particular approach and policies can evolve as experience and knowledge develop and the foundation obtains first-hand knowledge of what works best for its programs, grantees and mission. Shuttleworth's process of adoption, careful review and revision demonstrate how effective this approach can be.
- At the same time, or in fact well before adopting any requirement that grantees use open licenses, a foundation can work to nurture its own culture of openness. It can consider the use of open licenses for foundation generated work product and online materials except where clear reasons dictate otherwise, and ensure that consultant-created works receive similar treatment.

Perhaps the most important lesson from the experience of the Shuttleworth Foundation, the entity with the most real-world experience analyzing and experimenting with requiring open content licenses for its funded work product, is that the best way to ask the question about open licenses is not when and why, but rather, "why not?"

'We certainly believe that there is enough potential here that others - foundations, governments, research institutes, universities - should be looking at open licensing very seriously. The practical reasons are clear: increased likelihood of impact and scaling for ideas they fund, in ways that could never even be imagined by design. There are also less tangible but equally important benefits that come from the faster feedback loops and the promotion of open, collaborative ways of working. It's worth taking the time to ask: what are my reasons for keeping this or that idea closed? Unless there is a real bottom line reason, set your ideas free." 143

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Mark Surman, "How We Work: Open Licensing," May 2008, Shuttleworth Foundation, available at http://www.shuttleworthfoundation.org/about-us/our-philosophy/how-we-work/open-licensing

APPENDICES

Appendix A: Shuttleworth Foundation Statement of Principle: Open Resources

Appendix B: Mark Surman, "How We Work: Open Licensing," May 2008, Shuttleworth Foundation

Appendix C: Shuttleworth Foundation, Master Memorandum of Agreement and Master Consultancy Agreement, IP-related excerpts

Appendix D: ccLearn Recommendations: Increase Funding Impact

Appendix E: CC Attribution License

Appendix F: GNU FDL

Appendix G: GNU GPL

Appendix H: MacArthur Foundation Intellectual Property Policy