



COVER SHEET

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The Role of Open Content Licences in Building Open Content Communities: Creative Commons, GFDL and Other Licences¹

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1. Introduction – Copyright Licensing and Online Community Building

This article seeks to highlight the unique and fundamental interaction between the legal notion of providing permission to reproduce or communicate copyright content (copyright licensing) and the building of open user generated online communities such as ccMixter and Flickr. As much of the information and content that is found in online communities – especially text, images, music and film – is subject to copyright, it can only be reproduced or communicated to the public with the permission of the copyright owner.² Copyright licensing therefore plays a fundamental role in the development and day to day functioning of these online communities. In this way, copyright plays the role of a constitutional principle which delineates the rights to reuse expression.

Communities based around the sharing and exchange of copyright material rely on a set of basic norms to determine how that expression is to be treated. Each community may have different norms, and not every community has explicitly considered and constructed its norms, but they exist nonetheless. These include, but are not limited to, questions of:

- reuse – when it is acceptable to copy and build off another's expression;

1 This is a revised version of a paper presented by Professor Brian Fitzgerald at the *Creative Citizenship Symposium* hosted by Charles Darwin University and the Australian National University in Alice Springs in September 2006. The authors wish to thank Jessica Coates, manager of the Australian Creative Commons Clinic for her valuable input.

2 This is subject to narrow restrictions relating to fair use/dealing, statutory licences and miscellaneous exceptions, which allow for some forms of unlicensed reproduction and communication for certain purposes.

- redistribution – when a piece of copyright material can be removed outside of the community for other purposes;
- manner and style – how individuals are to credit others in their use of copyright material;
- interoperability – which pieces of copyright material may be used with which others;
- permission – when is it necessary to ask for permission to use a piece of copyright material, and when it is not.

Sometimes, the development of these norms is fluid and informal. Often, however, each of these norms is explicitly defined in a copyright licence, which restricts the ability of individuals to re-use or communicate copyright material if they do not follow the terms and conditions.

One of the most significant developments in copyright licensing in the last ten years has been the rise of open content licences, like the Creative Commons³ licences. These open content licences, set out the rights which all users of the licensed material have automatically upon receipt of the material. They usually allow verbatim distribution at the very least, and often allow modifications, but may also impose restrictions upon the commercial use, geographical area of use, or re-licensing by the user. In selecting an open content licence, a community clearly sets out the ground rules for the open interaction with copyright material between participants.

Our thesis is that open content licensing, through its non-discriminatory operation, transparency of terms, and automated and generic operation, has become the cornerstone of many user generated online communities. Creative Commons licensing provides an archetypal example of copyright licensing being utilised in this way as a tool of community building.

After providing an overview of Creative Commons licensing, the remainder of this article highlights five examples of online communities where open content licensing is being utilised to underpin a vibrant exchange of copyright material in order to provide a stable and lawful environment of reuse. In managing the rights of each copyright owner through the use of open content licences these communities build a certainty of interaction that would not otherwise be available. In this sense the open content licenses provide a legal structure for building trust within the community.

2. Background – the Creative Commons

In 2002, Professor Lawrence Lessig of Stanford University (USA) and a number of his colleagues, frustrated by the fact that the technology offered so much but that negotiability of copyright material under law was so cumbersome, came up with the idea of the Creative Commons. Lessig's vision was for a space in the Internet world where people could share and reuse copyright material without fear of being sued – a creative commons. In order to achieve

3 See <<http://creativecommons.org>>.

this creative commons a simple yet very effective licensing model was created, drawing inspiration from Richard Stallman and the free software movement. The idea was to ask copyright owners, where they were willing, to agree or give permission for their material to be shared through a generic license that acted as permission in advance.

For example, if someone were to place a photograph on their website without any explicit licence text, there would be no clear permission for others to reuse that photo. However, if the owner set out the terms upon which others could reuse the photo, those downstream users would not have to ask for further permission as long as they obeyed those terms and conditions. Creative Commons provides a recognisable symbol that is linked to a standard form legal licence, which provides permission to use the photo (or other work) under certain conditions:⁴



Illustration 1: CC Symbol, sourced from the Creative Commons Licence Chooser <<http://creativecommons.org/license/>>.

Permission becomes a given on the conditions specified. While it might seem simple, this notion of automating permission in advance was a revelation which has led to a simplification of the negotiation of usage rights. This is particularly important on the internet, where it is not always easy to find and contact the copyright owner. This type of advance licensing has subsequently given enormous flexibility and life to online communities that thrive on a constant repurposing of user generated content.

i. Creative Commons Licensing and Open Content Licensing⁵

CC licenses are part of a genre of licenses that are used to negotiate legal rights in digital content. For example, Wikipedia, uses the open content license known as the GNU Free Documentation License (GFDL). Many other types of open content licenses exist; however, the CC licenses have gained significant attention and popularity over the last three years. Compatibility of content licensed under the different licenses is a key issue for the future.⁶

4 Image sourced from the Creative Commons Licence Chooser <<http://creativecommons.org/license/>>.

5 See generally <<http://creativecommons.org/>>.

6 See further: "Lawrence Lessig on Compatibility" <<http://creativecommons.org/weblog/entry/5709>>.

Unlike the GNU General Public License (GNU GPL) from which they took their inspiration, the Creative Commons licenses are not designed for software, but are intended for use in relation to other kinds of creative copyright material: websites, educational materials, music, film, photographs, blogs etc. Along with the text of the various open content licenses, the project has developed metadata that can be used to associate creative works with their license status in a machine-readable way.

In addition to certain “baseline” rights and restrictions which are included in all Creative Commons licenses, the copyright owner can choose a number of licensing options, which can be used alone or in combination.

ii. Baseline features

The following features are common to all Creative Commons licenses: ⁷

- licensees are granted the right to copy, distribute, display, digitally perform and make verbatim copies of the work into another format;
- the licenses have worldwide application that lasts for the entire duration of copyright and are irrevocable;
- licensees cannot use technological protection measures to restrict access to the work;
- copyright notices should not be removed from all copies of the work; and
- every copy of the work should maintain a link to the license
- attribution must be given to the creator of the copyright work (BY).

iii. Optional features

Copyright owners can choose from among the following optional license conditions:

- **Non-commercial (NC):** others are permitted to copy, distribute, display and perform the copyright work - and any derivative works based upon it – but for non-commercial purposes only;
- **No derivative works (ND):** Others are permitted to copy, distribute, display and perform exact copies of the work only and cannot make derivative works based upon it;
- **Share alike (SA):** Others may distribute derivative works only under a license identical to that covering the original work.⁸

⁷ “Base Line Rights and Restrictions in All Licenses”
<<http://creativecommons.org/about/licenses/fullrights>>.

⁸ Note that the “Share alike” option only applies to derivative works and is incompatible with the “No derivative works” option.


By mixing and matching these elements, copyright owners can choose between the following six core licenses:

- **Attribution (BY)** - This is the most accommodating of the licenses offered, in terms of what others can do with your work. It lets others copy, distribute, re-use and build upon your work, even commercially, as long as they credit you for the original creation.
- **Attribution-Non-commercial (by-nc)** - This license lets others copy, distribute, re-use and build upon your work, as long as it is not for commercial purposes and they credit you as the original author.
- **Attribution-Share Alike (by-sa)** - This license lets others re-use and build upon your work even for commercial purposes, as long as they credit you and license any derivative works under identical terms.
- **Attribution-Non-commercial-Share Alike (by-nc-sa)** - This license lets others re-use and build upon your work, as long as it is for non-commercial purposes, they credit you and they license their new creations under identical terms.
- **Attribution-No Derivatives (by-nd)** - This license allows use of a work in its current form for both commercial and non-commercial purposes, as long as it is not changed in any way or used to make derivative works, and credit is given to the original author.
- **Attribution-Non-commercial-No Derivatives (by-nc-nd)** - This is the most restrictive of the six core licenses. It is often called the "advertising" license because it only allows a work to be copied and shared with others in its original form, and only for non-commercial purposes and where credit is provided to the original author. This license does not allow the creation of derivative works, or the use of the work for commercial purposes.


Each Creative Commons license is expressed in three ways:⁹

1. the **Commons Deed**, that is, a simple, plain-English summary of the license, together with the relevant icon/s that indicates the scope of permitted use;

9 See <creativecommons.org/about/licenses/meet-the-licenses>.


 **creative commons**


Attribution-ShareAlike 2.5 Australia

You are free: 


- **to Share** -- to copy, distribute, display, and perform the work
- **to Remix** -- to make derivative works

Under the following conditions:

 **Attribution.** You must attribute the work in the manner specified by the author or licensor.

 **Share Alike.** If you alter, transform, or build upon this work, you may distribute the resulting work only under a license identical to this one.

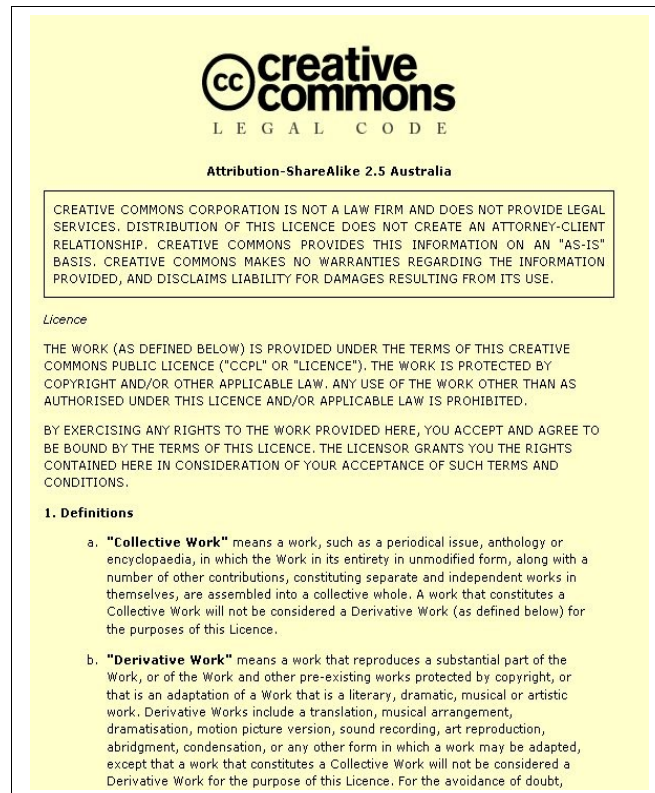
- For any reuse or distribution, you must make clear to others the license terms of this work.
- Any of these conditions can be waived if you get permission from the copyright holder.

[Disclaimer](#) 

Your fair use and other rights are in no way affected by the above.
This is a human-readable summary of the Legal Code (the full license).

<<http://creativecommons.org/licenses/by-sa/2.5/au/>>.

2. the **Legal Code**, that is the dense legal “fine print” license document; and



<http://creativecommons.org/licenses/by-sa/2.5/au/legalcode>.

- the **Digital Code**, that is, metadata that highlights what license is attached to the content.¹⁰

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<!--Creative Commons License--><a rel="license"
href="http://creativecommons.org/licenses/by-sa/2.5/au/"></a><br/>
work is licensed under a <a rel="license"
href="http://creativecommons.org/licenses/by-sa/2.5/au/">Creative
Commons Attribution-Share Alike 2.5 Australia
License</a>.<!--/Creative Commons License--><!-- <rdf:RDF
xmlns="http://creativecommons.org/licenses/by-sa/2.5/au/"
>
<http://creativecommons.org/license/>.

```

3. Case Studies

In this section, we will consider a number of online communities which make use of open content licences. These communities are not just one-way providers of content, but are forums for user-led innovation, where the participants drive the creation of the materials that are made available, often, but not always, in a collaborative manner. We will examine the benefits which these communities derive from granting permission to use their content in advance. The

¹⁰ For further information see: "Creative Commons Developers – Using Creative Commons Metadata" at <http://creativecommons.org/technology/usingmarkup>.

unique needs of the various communities studied provide an important insight into the flexibility of open content licensing and the factors which should be taken into account when determining the constitutional rules of a community.

i. ccMixer – various CC licences

ccMixer is a community music remixing site which features remixes and samples licensed under Creative Commons licences. ccMixer provides the facilities for users to search, store, and sample audio files for use in their own works. Importantly, however, it also provides detailed tracking of the iterations and history of any given sample. For example, with a few simple clicks, a user can see how his or her saxophone solo has been subsequently reused on the site. Another user can listen to a mix of a particular song, and drill down to examine which samples were used to create it.

The ability to view sample history is important not only to satisfy the attribution requirement of the Creative Commons licences, but also to add transparency to the community processes. Musicians are able to see how their works are being used, and can again track the various interpretations given to their works by others. By examining the history of tracks, other users can learn from the techniques of artists they admire, or gather ideas for new mixes and compositions.

The sense of transformation on ccMixer is impressive. Musicians upload small snippets of songs, a cappella versions, drum loops, guitar riffs, saxophone solos, and final mixes. Each of these can then be used by any number of other musicians, drawing inspiration from each other. The site abounds with examples of particular mixes which achieve popular acclaim, and the reinterpretation of those mixes by other artists. For example, user SilviaO uploaded an a cappella track under a CC Attribution-NonCommercial licence:

A breakup song. The feeling one has after the other one is gone and you have made up your mind about forgetting everything related to him/her. Learning to forget to move on... A bitter way to say goodbye.¹¹

Almost immediately, the a cappella version is put to music sourced from other artists on the site. The creative interpretations of SilviaO's original vocals varied greatly between mixes, from jazz versions¹² to dark speed metal versions.¹³ SilviaO and others review all of these new tracks, and post comments about how they think it turned out. The remixes often take the original artist's work in a completely different direction, creating something unexpected which the original artist would never have made themselves. In a comment to a remix, SilviaO

11 SilviaO, "Desaprendere", ccMixer <<http://ccmixter.org/media/files/silviao/6225>> (19 June 2006).

12 Kcentric, "Desaprendere feat. Silvia O (KC's Silky Jazz Mix)", ccMixer <<http://ccmixter.org/media/files/kcentric/6248>> (22 June 2006).

13 Aamu, "Desaprendere (Toxic Blood Mix)", ccMixer <<http://ccmixter.org/media/files/aamu/6782>> (10 August 2006).

remarks:

Strange universe the one you created, heavy and dark... One of those twists I have never expected to take by myself. Interesting... ;-)¹⁴

Sometimes, the remixers provide an interpretation that encapsulates the mood of the original piece, as shown by SilviaO's comments to a remix by audiomesh and efx:

I've always dreamt of having some dark song as the music Tricky creates. This mix is as close as I imagine that idea could be developed. The lyrics are sad and poignant... so the music you built around really helps to deliver the message. I really love your work. Gracias.¹⁵

In one case, SilviaO is inspired by one of the mixes, and decides to re-record vocals over the remix of her original vocals:

Really interesting! You left me singing at your music... Let's see if I can make an idea I have now.¹⁶

The remix culture, supported by the permissive granting of copyright licences, flourishes through interpretations and reinterpretations by members of the community. SilviaO summarises the benefits of this communal sharing, in commenting on mixers by another user:

I'm really amazed by the love you have placed in each of these mixes. I think this is the idea behind CCMixer, and for me it's been really amazing.

You know how hard this process of making music is. And CCMixer has given me back my confidence in my work.

This particular mix is mind blowing! I love it, the mood, the atmosphere... and the complete universe you built around my voice.

A pleasure to work with all of you, gifted people! I love to be part of this, and to have inspired so much from you all.¹⁷

This particular example shows just a small cross-section of the activity that is taking place at remix sites like ccMixer. While Creative Commons licences are by no means a

14 SilviaO, Reviews for "Desaprendere (Toxic Blood Mix)" by Aamu, ccMixer <<http://ccmixter.org/media/reviews/aamu/6782#14610>> (10 August 2006).

15 SilviaO, Reviews for "desaprendere(verisimilitude rmx)" by audiomesh <<http://ccmixter.org/media/reviews/audiomesh/7179#15494>> (20 September 2006).

16 SilviaO, Reviews for "Set music to the moon" by _ghost, ccMixer <http://ccmixter.org/media/reviews/_ghost/6342#13451> (30 June 2006); SilviaO created two further mixes in response to _ghost's interpretation: SilviaO, "Desaprenderé (Fantasma de Luna)" <<http://ccmixter.org/media/files/silviao/6445>> and SilviaO, "Desaprenderé (Fantasmas Lunares)" <<http://ccmixter.org/media/files/silviao/6446>>.

17 SilviaO, Reviews for "Desaprendere (Darkroom Remix)", ccMixer <<http://ccmixter.org/media/reviews/mactonite/6552#14209>> (22 July 2006).

necessary precursor to creative remixing, they do help to set the local norms of permissive remixing and proper attribution, both of which seem to be important to foster creativity and allow for communal review and tracking of mixes.

ii. Flickr – various CC licences

Flickr is another example of a popular community based site which makes use of open content licences. Flickr is a photography site, which provides a simple interface to allow users to upload, store, sort, search and share their digital photos. What makes Flickr so interesting, however, are the community building tools that the site provides. It is not just a web based file upload site, but also a tool for meeting new people, discovering interesting images, forming groups of people with similar interests, giving and receiving feedback on photos, and simply chatting.

When a user uploads a photo to Flickr, they are presented with a number of licensing options. They can do nothing, in which case the photo is badged as 'all rights reserved', and viewers will have only an implied licence to view the photo. Alternatively, a user may select one of the six standard Creative Commons licences, choosing to allow users to use the material freely with certain optional restrictions. The use of Creative Commons licences serves two main purposes on Flickr. Firstly, it allows users who find interesting material that they would like to reuse to be able to do so without seeking extra permissions or licences from the copyright owner. It removes a level of complexity in the search for digital imagery. This is accordingly useful for increasing the exposure for Flickr users, and increasing Flickr's popularity overall.

More interestingly, however, is the way that Creative Commons licences are used within the Flickr community, as a method for a user to allow and encourage the reinterpretation of his or her photographs. By placing a Creative Commons licence on a photo (except for the No Derivatives licences), a user is granting permission at the outset for other users to build on their photos (at least non-commercially). Digital photography is a particularly interesting medium for such experimentation – an image recorded at the time a person depresses the shutter on a digital camera is often just the start of a radically creative process. By providing the source image, users open the door to the creation of many varied other works.

In a recent exhibition hosted by Creative Commons Australia, some Flickr users explained why they used Creative Commons licences. User woowoowo notes:

I don't do this for a living, so I like to share my work around – I love the way the net encourages respectful sharing between like-minded people. Creative Commons gives me the confidence to share in the knowledge that I will be recognised for my work.¹⁸

¹⁸Woowoowo, submission to the Creative Commons Australia Salon, 29 November 2006 <<http://www.flickr.com/photos/leprecon/>>.

Flickr user Misteriddles uses Creative Commons licences because of the ability to make use of other people's photos:

As my experiments in photomanipulation have increased I have found access to others' images very useful. Consequently, it is only fair that I put some source material back into the community for others to use in their own experiments.¹⁹

More than just allowing others to remix images without further permission, the use of Creative Commons licences and user groups on Flickr provides a more communal atmosphere. The author of an image is often interested in the iterations their images go through at the hands of others, and the different visions and interpretations that others can make of their works. User Cyron notes the benefits that open content licensing brings to Flickr:

I choose to use Creative Commons on most of my images because I'm a big fan of the open, sharing community found on Flickr, which exists, at least in part, because of their inbuilt CC support.²⁰

This brief cross-section of Flickr users who use Creative Commons licences shows that different users have different motivations to release their work under open licences. Through the support of CC licences, Flickr allows the members of its community to set their own rules for sharing and remixing. Where repurposing is allowed, users are encouraged to post their modified images back on Flickr, to the praise and commentary of the other users. In this fashion, remixes of Flickr images stay primarily on Flickr, and the ability to follow and discuss changes builds a sense of community. While there is still significant discussion, voting, and play based around non-Creative Commons licensed photos, the added ability to copy, remix, and incorporate imagery into new works greatly increases the participatory nature of the site.

iii. National Library of Australia

In January 2006, the National Library of Australia (NLA) launched its *Click and Flick* project. This project is part of the NLA's Picture Australia portal, which allows users to search through over 1 million images across Australia and New Zealand. Users are asked to upload their photos to Flickr, and then submit their photos to one of two categories, "Australia Day" and "People, places and events". The NLA builds off the ease of use and the high public profile of Flickr to encourage submissions from a much broader range of photographers than would otherwise be possible.

The National Library encourages authors to license their submitted photos under a Creative Commons Attribution-NonCommercial licence. Intuitively, an open licence aligns with the ideology of the archive – that anyone can access, reuse, and sometimes modify the submitted

¹⁹ Misteriddles, submission to the Creative Commons Australia Salon, 29 November 2006
<<http://flickr.com/photos/misteriddles/>>.

²⁰ Cyron, submission to the Creative Commons Australia Salon, 29 November 2006
<<http://www.flickr.com/photos/cyron/>>.

images. Interestingly, however, one of the primary reasons the NLA suggests that contributors use an open content licence is because of the benefits that the NLA itself draws from these licences. Australian libraries face very difficult problems in clearing copyright permissions for their usage of photos and other copyright material. In order to preserve, maintain, and display their collections, libraries often require the permission of the copyright owner, which can be very difficult to obtain, particularly where the original author is unknown or untraceable.

By encouraging users to submit their photos under a permissive licence, the NLA is ensuring that it will always have the rights to make use of that photo for the purposes it requires. The use of Creative Commons licences also means that the submitter maintains a choice in their licensing options, and the NLA does not need to enter into specific licensing agreements with each copyright owner. Through the use of Flickr and open content licences, the NLA has been able to collect over 11,000 photographs in its first year of operation, about a fifth of which are licensed under a Creative Commons licence. For this pool of material, the NLA has ensured that future users will be able to engage with the archive materials, all located in one convenient location, without having to seek additional licences.

iv. Wikipedia – GFDL

Wikipedia is a collaboratively edited online encyclopaedia (also available on CD). It is perhaps the most famous collaborative community, and provides an excellent resource for information on almost any topic. Anyone can edit the information on Wikipedia simply by clicking 'edit' on any page. New articles can be just as easily created. Wikipedia is remarkable for the high quality of its articles, despite the fact that they are not created by professionals, as are traditional encyclopaedias. While there is certainly some debate as to the accuracy of a number of articles on Wikipedia, these are typically articles which deal with either current events or highly divisive subjects. The great majority of articles on Wikipedia appear to be well written, informative, and generally neutral.

The first question to ask about Wikipedia is the obvious one: how can an encyclopaedia written entirely by anonymous amateurs on the internet be a reliable reference source? The answer is complicated, and varies depending on the importance one places on the proportion of articles which are clearly biased or inflammatory. One thing that is clear, however, is that the best articles are those which have been edited and reviewed by a large number of people. Through intense public scrutiny and peer review, articles often develop from the personal opinion of one author to a polished, neutral, and fully rounded article at least the equivalent of any commercially created encyclopaedia.

By allowing many different people to edit any given article, Wikipedia is building off an insight gleaned from the free and open source software community. Creators of free software have

long known that the more people are able to inspect and modify software, the stronger the software will be. Linus's Law, named after Linus Torvalds, the creator of the Linux kernel, and coined by Eric S Raymond, famously states that "given enough eyeballs, all bugs are shallow".²¹ In this way, Wikipedia is able to maintain generally high standards by entrusting the editing of articles to a large number of distributed individuals. Mistakes, inconsistencies, and omissions are quickly spotted. The process is not always either trouble or error free, but the errors tend to average themselves out as competing interests and points of view reach compromise or consensus.

What makes Wikipedia interesting for our purposes is its use of open content licences as an integral part of its process. All of the material available on Wikipedia is available under the GNU Free Documentation Licence (GFDL), which is a copyleft open content licence originally designed for software manuals and related documentation. By uploading any changes to Wikipedia's website, each author agrees to license their material under the GFDL. The GFDL accordingly functions as the basic rule for people who wish to use Wikipedia in any way other than merely reading articles. Through the use of the GFDL, the Wikipedia community encourages any user to make copies of the articles for their own uses, as well as editing and sharing articles back to the community.

The use of the GFDL sets, at the outset, basic norms which are quite unusual. Instead of it being rude or reprehensible to change someone else's work, it becomes encouraged. Through this norm, the contributors to Wikipedia are generally persuaded not to be offended when their work gets edited, whereas they may otherwise have had a more closed attitude towards their writings.

v. Second Life

Second Life is a free-form graphical virtual environment created by Linden Labs. In it, participants can socialise and create nearly anything they can imagine. Participants can purchase virtual land off Linden Labs or other players, upon which they can build houses, shops, or any number of artistic projects. Residents of Second Life can either create their own materials from scratch using the in-world building tools, or they can purchase the creations of other users. Second Life has a flourishing economy based on virtual real estate and the sale of commodities, particularly clothing and other objects for avatars (the digital representations of the participants).

Unlike many other virtual worlds, Second Life allows participants to retain intellectual property rights in their creations. Many creators within Second Life choose to retain full copyright in their creations, preventing other users from copying or modifying their works, and allowing them to treat their creations as commodities to sell to other users. Interestingly, the economy

²¹Eric Steven Raymond, "The Cathedral and the Bazaar" (2000)
<<http://www.catb.org/~esr/writings/cathedral-bazaar/cathedral-bazaar/>>.

in Second Life is primarily based around the artificial scarcity of virtual commodities. In order to allow this economy, the intellectual property paradigm has been imported from the real world, but in its translation, it applies to all objects in the virtual environment, and applies nearly perfectly. In Second Life, unlike in the real world, the cost of creating, for example, a table, is simply the cost of creating the first instance of the table. Human creativity is the main scarce resource.²² However, the benefits of an economy not linked to scarcity are not fully explored, because artificial scarcity is imposed on the majority of objects. In such a situation it would be rational to expect a services based economy to develop, but this has not yet been the case. While custom designs and creations do form a significant portion of the market, the economy appears to be primarily driven by the exchange of virtual commodities.

One of the consequences of basing an economy on artificial scarcity is the inherent vulnerability it is exposed to. In November 2006, the vulnerability of the economy was exposed on a massive scale. An open source tool designed to help creators make backups of their works, called CopyBot, was introduced into the virtual world by malicious users, who used the tool to make and save copies of commercially available clothing and items without permission.²³ Many stores in Second Life immediately closed shop in protest. A debate raged between participants who regard Second Life as primarily an (insecure) e-commerce platform, and participants who regard it as a more free-form social space not necessarily limited to the sale of commodities. The shopkeepers urged Linden Labs to close its source to make it more difficult for outside programmers to create potentially dangerous interoperable functionality. The other side of the debate noted the near technical impossibility in securing the system from malicious intrusion, the desirability of increased functionality developed by the open source groups, and the beneficial role played by open source hackers in exposing security weaknesses in the system.

Linden Labs eventually declared that using CopyBot was a violation of the Terms of Use, and could result in removal from the system.²⁴ It also pledged to help people who felt aggrieved to launch proceedings for copyright infringement in the US courts. Linden, in doing so, was careful to re-affirm its support for the open source programmers who had developed CopyBot and other interesting interoperable programs. Many users still feel upset that Linden Labs did not do more to prevent copyright infringement, but others agreed that Linden Lab should follow its policy of creating only a platform, and allowing individuals to negotiate and enforce their own rights.

22 The other scarce resource in Second Life is a 'prim limit', which is a limit imposed by Linden Labs on the number of objects or parts of objects a resident can create. Land purchased from Linden Labs comes with the right to build additional prims, encouraging users to purchase sizable blocks of land with monthly upkeep fees.

23 Wagner James Au, "Copying a Controversy", New World Notes (15 November 2006) <http://nwn.blogs.com/nwn/2006/11/second_life_clo.html>.

24 Robin Linden, "Copyrights and Content Creation in Second Life" (13 November 2006) Second Life Blog <<http://blog.secondlife.com/2006/11/13/copyrights-and-content-creation-in-second-life/>>.

One interesting phenomenon that has come out of this policy is that users are free not only to commodify their work, but also to release it under an open content licence. There are a growing number of participants within Second Life who make their creations available under Creative Commons licences. The reasons they do so are varied, but interestingly, they largely avoid the vulnerabilities of the commodity-form business model. These creators are either not economically motivated, or are realising the value of a service based economy, where artificial scarcity is not required. For these users, there is no need to sell each instance of one of their creations; they may have evolved other business models, or may be amateur producers who do not rely on those sales for their income.

At any rate, an increasing number of Second Life participants are releasing their creations on open terms. The use of Creative Commons and similar licences in Second Life has a very significant effect on the economy and the way participants interact with each other. Intuitively, there is a large difference between commercial commodity exchange and non-commercial sharing, and this affects the way people relate to each other. Small communities in Second Life spring up around sharing, playing, appropriating, and reusing the creations of others.

In a world where nearly everything consists of copyright digital content, copyright policy has an enormous impact. The choice of licence affects not only the business models of creators, but also the entire social structure. The use of an open licence removes artificial scarcity, and opens up the potential benefits of an environment only limited by creativity (at the expense of commodity markets). Participants in Second Life can use their choice in selecting copyright licences to shape the very texture of their environment.

4. Conclusion – Open Content Licensing as Constitutional Foundation

While copyright licensing is rarely associated with the governance and formation of communities, it does play a very significant role. The terms upon which community members are allowed and encouraged to use and reuse copyright material are critical for both online communities and real-world media and expression-driven communities. Open content licences provide a way for communities to allow their content to be reused, both within and outside the community, while imposing some restrictions on that reuse.

In building and maintaining any community, virtual or real-space, regional or international, serious consideration must be given to the norms of interaction between members of that community. The rules selected by and for the community will affect the level of participation, the willingness to share and build off other's works, the manner in which participants interact, and, critically, the long term sustainability of the community. Where the interactions between individuals primarily involve copyright material, one of the best ways to articulate these rules is in one or more copyright licences which apply to the expression created by or submitted to the community. Open content licences in particular provide a dynamic facility for sharing

content in the fast paced, serendipitous and collaborative environment of user generated online communities.

Although resort to open content licensing can be derided as reifying the notion of property and turning every social relation into a legal relationship there is little doubt that some of the most interesting user generated online communities have embraced the notion with tremendous effect. Ultimately, ignoring the certainty and clarity – and constitutional foundation - that an open licensing model can bring to an online community which is built around the reuse of copyright material, leaves open the potential for an unhappy community disintegrating through law suits, bad blood and distrust. As we increasingly inhabit worlds in which expression and communication (discourse) is channelled through digital content and its iterations the power of open content licensing in community building will become much more apparent.

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Brian is a well-known intellectual property and information technology lawyer. He has published articles on Law and the Internet in Australia, the United States, Europe, Nepal, India, Canada and Japan and his latest (co-authored) books are *Cyberlaw: Cases and Materials on the Internet, Digital Intellectual Property and E Commerce* (2002); *Jurisdiction and the Internet* (2004); *Intellectual Property in Principle* (2004). Over the past five years Brian has delivered seminars on information technology and intellectual property law in Australia, Canada, New Zealand, USA, Nepal, India, Japan, Malaysia, Singapore, Norway and the Netherlands. In October 1999 Brian delivered the Seventh Annual Tenzer Lecture - Software as Discourse: The Power of Intellectual Property in Digital Architecture - at Cardozo Law School in New York. Through the first half of 2001 Brian was a Visiting Professor at Santa Clara University Law School in Silicon Valley in the USA. In January 2003 Brian delivered lectures in India and Nepal and in February 2003 was invited as part of a distinguished panel of three to debate the Theoretical Underpinning of Intellectual Property Law at University of Western Ontario in London, Canada. During 2005 Brian has presented talks in Germany, India and China and was a Visiting Professor in the Oxford University Internet Institute's Summer Doctoral Program in Beijing in July 2005. He is also a Chief Investigator of the ARC Centre of Excellence on Creative Industries and Innovation (CCI). He is also Project leader for the DEST funded Open Access to Knowledge Law Project - OAK Law Project, looking at legal protocols for open access to the Australian research sector. His current projects include work on digital copyright issues across the areas of Open Content Licensing and the Creative Commons, Free and Open Source Software, Fan Based Production of Computer Games, Licensing of Digital Entertainment and Anti-Circumvention Law. Brian is a Project Leader for Creative Commons in Australia. From 1998-2002 Brian was Head of the School of Law and Justice at Southern Cross University in New South Wales, Australia and in January 2002 was appointed as Head of the School of Law at QUT in Brisbane, Australia.

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His background is in both law and computer science, holding undergraduate degrees in Law and IT from QUT, and having worked as a computer programmer before moving to legal research. He has recently completed a Masters of Laws (research), in which his thesis examined the transformative use of copyright material in Australia. He is involved in several research projects including Creative Commons Australia, research into legal issues of Free and Open Source Software, computer games (with particular reference to massively multiplayer online environments), and collaborative commons-based production.

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