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Open cultural production and the online gift economy: The case of Blender by Julia Velkova

Abstract

The economies of the Internet are largely driven by sharing. Much of it is often veiled in a celebratory discourse that emphasizes how sharing artifacts online through gift exchanges removes hierarchies and creates broader access to public knowledge, such as in projects of free culture and open source software development. The article critically interrogates these assumptions and the gift economy of open cultural production more generally. Using a practice called open source animation film making, developed by Blender, an organisation at the core of the largest open source 3D computer graphics community, this paper shows that the discourse surrounding free culture online has largely misunderstood the complexity and ambiguities of the economy below the cultural politics of openness. With the help of classical theories of gift and value I discuss issues of debt, obligation, status, discipline, and social hierarchies created by exchanging online a variety of digital artifacts of different value, such as software, culture, and labor. This article shows that the wealth of open cultural production relies on combining multiple dimensions of gifting with fiscal and hidden forms of capital, producing a culture of secrecy in parallel to that of openness.

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Introduction

The economies of the Internet are largely driven by sharing. Practices that underpin the so called 'sharing economy' today range from distributing pirate content online, to self-marketing through social media, to exchanging private accommodation such as through couch-surfing (John, 2016). For decades, though, some of the greatest changes in the circulation of digital wealth online have been introduced by the diverse practices of hackers, artists, and digital entrepreneurs who have been calling for more openness, solidarity, and sharing on the Internet. Starting with the free and open source software movement that took momentum in the 1990s, and followed later by the proponents of free culture in the early 2000s, the idea of creating wealth online through making public code, knowledge or culture has been a persistent ideal and cause of social action for many. Practices of alternative journalism, such as the case of Indymedia or hacktivism (Lievrouw, 2011; Dunbar-Hester, 2009; Coleman, 2015), open data initiatives (Baack, 2015), and digital artistic practices (Morgan, 2013) have embraced sharing and legal tools such as the GNU/GPL and Creative Commons licenses to make a claim for openness in their respective domains.

Open culture, open source, open content, open science, open farming: in its multiple variations, openness online has tended to mean the proliferation of practices that are more participatory, transparent, accessible, useful and usable, in turn enabling more openness (Pomerantz and Peek, 2016). Many of these practices have been celebrated as creating new forms of collaboration and economic activity that promote egalitarianism by rejecting hierarchies in favor of relations based on reciprocity (Benkler, 2006). They have further revived a gift economy online based on the exchange of objects and services through non-remunerated, free labor (Terranova, 2000).

The effects of these gift economies of openness have been repeatedly noted to be in democratising knowledge, creating online spaces of access for independent experiments with creativity, remixing, and remixability (Hess and Ostrom, 2011; Björgvinsson, 2014; Rennie, 2005; Lessig, 2004; Berry and Moss, 2006).

A problem of this, to a large extent, celebratory discourse has been that it has suppressed a critical debate about the ways in which this open gift economy functions; who benefits from it and how; and what remains out of sight, hidden deeply under the paradigm of openness. Some attempts to do such analysis have been undertaken in research on the communities of free and open source software development which has stressed the role of gifting for acquiring reputation online as a form of personal capital (e.g., Bergquist and Ljungberg, 2001; Berdou, 2011; Barron, 2013). It remains unclear, though, how this economy of open gifts and power gets mobilised in practices beyond software development, such as those of open cultural production. What kind of gifts are exchanged in the online *cultural* economies of gifting; how do they trigger the creation and distribution of wealth and power among their participants; and how dependent are they on mobilising diverse forms of capital? Considering that the cultural production of symbols and meaning represents today one of the largest and most powerful industries (Hesmondhalgh, 2009), it is essential to interrogate critically the ways in which their alternative modes of production function, in particular those that embrace openness and sharing online as key ideals.

This paper addresses these questions through an analysis of the workings of the Blender Institute, a well established Amsterdam-based for profit organisation. Since its official registration in 2008, it has been committed to making 'open 3D projects,' predominantly animation shorts that have been enjoying large popularity online.

Using a modified version of multi-sited ethnography, I spent about a year in diverse locations online and off-line doing participant observation of the latest open 3D project that the organisation created, *Cosmos Laundromat* [1], an ambitious 3D animation film of professional quality released online in August 2015. In addition to this fieldwork, I also did approximately 35 qualitative interviews between 2013 and 2015 and had multiple informal conversations with team members of present and former Blender Institute projects, their fans, as well as other digital creators who have been trying to make open animation films after being inspired by the work of the Blender Institute.

Figure 1: *Cosmos Laundromat*, by the Blender Institute, 2015.

In the analysis that follows I show how the emancipatory discourse that surrounds free culture online has neglected the complexity of the gift economy beneath the cultural politics of

openness. With the help of classical theories of gift and value, I outline three aspects of gifting on which the economy and wealth of open cultural production relies, namely the utilitarian value of digital gifts; the ability of the gift to produce status; as well as its capacity to discipline. These three aspects, present in each gift exchanged online, illuminate a spectrum of values that the gift embeds, namely use value, bonding value, entertainment and sign value, and exchange value. Some of these values, as I will demonstrate, become more evident than others in the circulation of particular objects online. In their totality, they embed the participants in this gift economy in a struggle for power, status, and recognition online that is based on the creation of debt and is oriented not only towards a 'common enemy,' such as the cultural industries, but also towards each other.

Not least, this paper shows that gift exchanges are not enough to make a successful open cultural project. Fiscal and other forms of capital get subtly mobilised in order to override the gift economy or gain a dominant position in it. The complexity of these exchanges ultimately makes evident that it is not anybody that can become a producer of digital culture today, contrary to the common belief of the proponents of open culture that this is possible through more openness and sharing online.

The Blender Institute: Who they are and what do they do

The Blender Institute has become widely known among cyberculture fans, digital artists, and hackers for its original open source animation films. In 2007, the organisation made *Elephant's Dream* (see [Figure 2](#)) and proclaimed it to be 'the world's first open movie.'

Figure 2: *Elephant's Dream*, by the Blender Institute, 2007.

With a budget of 120,000 euros, this 11-minute 3D animation short was:

a story about communication and fiction, made purposefully open-ended as the world's first 3D "open movie". The film itself is released under a Creative Commons license, along with the entirety of the production files used to make it (roughly seven gigabytes of data) ... The software used to make the film is the free/open source animation suite Blender along with other open source software, thus allowing the movie to be remade, remixed and re-purposed with only a computer and the data on the DVD or download. [2]

Since then, the Blender Institute premiered online a new open source animation short each second year, with *Big Buck Bunny* (2009), *Sintel* (2011), *Tears of Steel* (2013), and *Cosmos Laundromat* (2015) following *Elephant's Dream*. The organisation also hosted the creation of *Caminandes*, an open animation series made as a 'project for fun' by a few animators in the studio in the time between these productions. Enjoying a large popularity online, the films have

been watched more than 15 million times on YouTube alone [3].

The Blender Institute has been creating these open films with the explicit purpose to develop and improve independent, open source technical infrastructure for professional computer graphics production, in particular the 3D animation suite Blender: "If you want Blender to become a real software to be used in a film studio, what else are you going to make? We do it [a movie] to make the software better," [4] a Blender Institute employee stated.

For each film, an original script gets written by a professional scriptwriter. The script develops the plot in such a way as to include the creation of scenes that are either technically very difficult or impossible to make with the existing version of the Blender software. In this way, each new open film requires the software to be rebuilt and extended further.

For each open film of the Institute, a team of animators, programmers, technical artists or visual effects creators experienced in the Blender software get invited to participate. The selected team does not work for free, and neither does it collaborate online from different parts of the world, contrary to the popular claims that free digital culture is made predominantly by volunteers who work remotely through a so-called peer-production model (Benkler, 2006). Rather, individuals are employed on temporary contracts and gathered in Amsterdam for the duration of the production in order to guarantee the professional quality of the films:

You cannot get a good quality with crowdsourcing. We try to do something of the quality of Pixar and Dreamworks, and you cannot get this with crowdsourcing. How do you do it? And we want this quality. We know we don't have the resources, we are not Dreamworks, but if we work efficiently, find smart solutions, work in this team, functional, then ... [5]

One of these smart solutions has been to trigger an online gift economy through sharing multiple digital artifacts online, an aspect that I elaborate upon in detail further down.

The organisation is a rather unusual actor in the field of open cultural production. Its films are pre-financed with the help of crowdfunding which is collected from its own audiences and users of the Blender software. Public cultural funding and corporate sponsorship by Valve Corporation, Google, Intel, and Dell, among others, complement the crowdfunding. Despite being registered as for profit, the Blender Institute shares under a Creative Commons license its open films, the software through which they are made, their individual media components, and relevant video training demonstrating how to recreate technically innovative or difficult parts of its films.

In a certain sense, this approach is contradictory to both the logic of the creative industries and to the frameworks of open cultural production. The creative industries employ artists and technicians and capitalise on their work through expropriating and commodifying the symbolic content that they create in order to generate surplus value (Hesmondhalgh, 2009; Bolin, 2011; Huws, 2014). The industry, as a rule, does not share its technology, training courses or digital assets for free on the Internet because selling such content and keeping it proprietary is crucial for their business model to work. On the other hand, open culture projects, such as Wikipedia, have generally relied on the unpaid labor of many volunteers to produce its open, publicly available free content. The Blender Institute combines elements of both models, mobilising resources and institutions from both spheres in order to produce each of its open films (Velkova and Jakobsson, 2015). A notable peculiarity is that the Blender Institute hires selected qualified digital artists and programmers and obliges them to create and share their work online. In this way, the organisation seems to act as a benevolent, philanthropic institution that raises funds in order to make public culture out of idealist, altruistic goals. As I show later, such an investment is, in fact, very strategic.

In the course of a decade, the cycle of raising funds, making an open film, sharing the technology, training, and the placing of media content online has created a notable wealth for the organisation. Today, it has a large pool of skilled digital artists, programmers and other contributors who work professionally with Blender in diverse industries. The Blender software has also created a user base comparable to other similar commercial equivalents, such as Autodesk Maya and 3D Studio Max (Velkova, 2016b).

The open films of the Blender Institute have inspired many other creators around the world to try to make their own open animation films. After *Elephant's Dream*, numerous other 'open movie' projects were launched around the world, such as *Morevna* and *Lampibata* in Russia; *Arshia* project in Iran; *Chamba Swathanthra* in India; *Tube* in the U.S. [6], with new initiatives being frequently launched. Yet, it is striking that the majority of these projects have never reached completion. They have either taken another form over time or redefined their goals and ambitions. Even more striking is that despite the open films of the Blender Institute being widely

watched online and being open for remixing or further development, there are barely any such remixes made, neither by its own community of fans, audience, and users, nor others. The few remakes that can be found online are mainly replacements of the soundtrack to some of the open films. How can this happen if the idea of sharing media online under alternative to copyright licenses seems to be aiming at precisely the reverse effect? What is the purpose of sharing so much and such diverse digital artifacts if nobody wants to or can not take the most significant of these gifts, the open animation films, and remake them?

Gifts of value

Gift economies function to a large extent in public. They are much more visible than the market-driven ones: "Gifts are given in a context of public drama, with nothing secret about them" [7]. The public aspect of gifting makes it possible to subject the gift and its donor to public scrutiny, affect his or her reputation, and produce hierarchies of power. In this respect, when creators of digital culture mobilise openness and copyleft institutions in order to create 'free culture' online, they do not do something radically new if seen narrowly in the context of how gift economies operate. On the contrary, openness and a high degree of publicity are necessary in order to make gift exchanges function at all.

In his classical work on the gift, Mauss (2002) argues that creating and distributing wealth in the form of gifts represents a total system of exchanges that includes objects, people, emotions and beliefs. Gift exchange may appear as a benevolent act of "generosity, freedom and autonomy" [8], but it is always strategic — it helps maintain social order, solidarity, social hierarchies and power. At the same time it also represents a mechanism for challenging established systems of social order, by confronting them with gifts. Jean Baudrillard (1981) observes that this particular duality of the gift makes it simultaneously a form of positive communication and agonistic confrontation, one that obscures a struggle for power, prestige, transformation, and humiliation under the veil of benevolent gift giving (Merrin, 2005).

The gift economy is based on symbolic exchanges through which social relations and hierarchies are established and maintained (see Bolin, 2011; Baudrillard, 1981; Baudrillard, 2001; Mauss, 2002). Any gift therefore has *bonding value* (Godbout and Caillé, 1998; Skågeby, 2008) that is expressed precisely in the ability of the gift to create and establish relations. Symbolic exchange embeds the donor and the recipient in a relation that obliges the recipient to reciprocate the gift at a further occasion, or otherwise become a subject indebted to the donor.

From this perspective, the gift can never lead to egalitarianism. Such assumptions, commonly expressed in relation to the online gift economies, are misleading. Sharing online, or making things public, always implies an asymmetry between two parties; it presupposes a subject for whom things are made open and shared (Tsoukas, 1997) and one who is made indebted. Gift economies are, hence, inherently based on the generation of debt, the repayment of which produces social relations (Graeber, 2011). A question that needs to be addressed, then, is about the nature of obligations and debt in the gift economies of online open culture.

Jean Baudrillard (1981) introduces four types of values that can be part of an object — use value (when an object is used instrumentally); exchange value (when an object is a commodity); symbolic value, which could also be called bonding value (in the case of gifts); and sign value that designates status. In the particular case when an object is made into a gift, all of these value categories are implicitly embedded in it and make possible symbolic exchange. As Baudrillard [9] notes, any random object can become a gift, but once it does, it establishes a relationship through its bonding value. At the same time, it also carries with it use value, sign value, and can even become a commodity [10]. These properties of the gift are crucial for producing relationships and social hierarchies, but they can manifest themselves to a different degree in different contexts. Acts of reciprocity are then usually about acting on one or several of these value forms.

For gift exchanges in online contexts there are some specifics that need to be noted. Bergquist and Ljungberg (2001) suggest that a distinct feature of the gifts made in the online digital economy is their lack of a designated recipient:

Gifts are often not given to anyone in particular. They are made public (on Web pages) and thereby made available to anyone who cares to make use of them. An application or some information does not really become a gift until someone finds it and makes use of it. If a giver manages to get attention, people will turn the things offered into gifts, which means that a relationship is created

between the giver and the user. [11]

Skågeby (2008) refers to such gifts as “pure gifting” that represent a one-way mode of transfer which makes the obligation to reciprocate more ambiguous and difficult to trace directly. Gifts of this kind usually aim primarily at demonstrating the power of the donor expressed through the ability to give. The return that is potentially expected for such acts of generosity is status, or sign value, that may not necessarily come from any potential gift recipient, but primarily from acknowledgement by peers or broader social groups.

Gaining reputation through non-designated gifts online can nevertheless help the donor attract attention to other objects that he or she distributes online, either as gifts or as commodities through which stronger bonds could be established and debt created: “As gifts do not imply a monetary compensation, virtual community gift giving is managed through acknowledgement: the giver is ‘paid’ by the community by receiving a certain amount of fame and respect.” [12]

Hence, in online contexts there exists a certain degree of uncertainty with regards to what kind of and how strong social bonds and obligations a gift may produce, although it always affirms or increases the prestige of its donor simply through the act of giving. Baym (2011) has noted this effect among musician communities for whom gifting online helps to expand their range of audiences and endow their cultural products with credibility.

Gifting online can also discipline the participants in the exchange by obliging them to conform to community norms of behaviour or standards of productivity. These obligations are enforced through reward mechanisms that are implemented either by the donor or by a “gifting technology,” as Skågeby (2008) calls it, a technical platform that produces rewards that give sensorily or affectively intense experiences to donors and recipients alike (Jarrett, 2015). I will call the latter aspect of the gift ‘disciplining,’ a quality that obliges the donor to keep giving. Such gifts may appear oriented to an external audience, but they serve the primary purpose of governing the social and cultural practices of those that employ them, as I demonstrate further on.

To sum up, the gift produces social relations and status through obligations to give back more than one has received, creating a loop of exchanges based on debt. To the extent that the gift is defined by the situations and relationships through which it is exchanged (Skågeby, 2008), certain transfers could happen in ways so that just some of the abovementioned aspects of the gift economy get foregrounded, while others can remain functioning in a more subtle way. In the analysis that follows, I will use the Blender Institute’s production of open films as an example through which to discuss in detail the forms of debt, obligations, and relationships that are established in the online gift economy of open cultural production.

Software: A useful gift

For each of the open films that the Blender Institute has created, the organisation has gifted online five types of artifacts using a GNU/GPL or a CreativeCommons license. These are the software through which each film has been made; the documentation of each open film’s production process; video tutorials; the audio and graphic digital assets that comprise the films; and the open films themselves.

The transfer of software and video tutorials as gifts may create the impression that these artifacts are non-designated because potentially anybody could use them. In practice, though, they are so specialised that they *are* narrowly targeting individual digital artists, aspiring 3D animators, and small studios who search for powerful, cheap or gratis digital tools for making professional computer graphics media. These gifts seek, therefore, to establish bonds with a narrow group of media creators. They tend to do so by foregrounding mainly the use value of software and tutorials.

In computer graphics, media production software is a tool for work, a digital instrument through which media is created. As I have discussed elsewhere (Velkova, 2016a), the software that the Blender Institute shares, Blender, is valued by digital artists for it is free of charge yet a powerful instrument that can be tuned to the specifics of individual creative practice. These considerations reflect a narrowly pragmatic reasoning that makes evident the self-interest and possibilities for individual gains that a creator can make by taking and using instrumentally these particular gifts. They are not significant for expressing altruism as commonly believed to be the case for practices of sharing software (Raymond, 2000; Baytiyeh and Pfaffman, 2010). Rather, gift exchanges of this kind represent a more humanistic way of pursuing self-interest than through market exchanges (Bollier, 2001).

To appreciate software as an instrument leads to the extension of its user and developer community and creates skilled labor with a narrow specialisation that can create digital media with Blender. In return for using this software, creators reciprocate through so called 'contributions' that consist in making functional extensions or repairing the software (Velkova, 2016a). An interesting form of repaying debt to the Blender community is when artists hire developers to develop and gift back software features. In this case, gift recipients mobilise financial capital in order to free themselves from the gift relationship, and turn themselves into donors who gain decision-making power influencing the development of software (Velkova, 2016a).

An important category of artists in this context are those who use the software, but do not have either the skills nor the financial means to develop it further. To accept by just consuming, without giving anything back, is equivalent to becoming a client and servant. It is "to become small" [13]. The ways in which such artists reciprocate is symbolic — they also contribute with their labor by reporting bugs or requesting new software features in online forums such as the widely popular Blender Artists [14]. Such contributions are of less worth than actually fixing bugs or making new features, but they nevertheless help the Blender Institute to set priorities for the future development of the software. In this process, the type of contribution made determines the place one achieves in the hierarchy in the community, giving some individuals more power and status over the software and over part of the community, while some remain at the bottom.

When the requests for features become too many or too controversial, the Blender Institute intervenes by making its next open film and settles some of the disputes by incorporating those requests that it considers most important:

<developer> the bottleneck is not *ideas for features*. We really
have lists of features to take years of dev ...
<julia> so making a film is really a way to choose
<developer> yes, you only listen to ~5 people ... that works :)
[15]

The variety and nature of contributions given back by digital creators in exchange for using Blender reconfigures dynamically the power hierarchies in the community. In order to re-declare its supreme power over the whole community, the Blender Institute decides unilaterally which features will be prioritised for further development and materialises this decision by making a new open film and gifting it away. Producing an open film represents a ritual that needs to occur with certain frequency within the community in order to resolve the internal conflicts and disagreements within it, but is also important in order to generate a new round of digital gifts to be circulated in order to affirm and legitimate the decision-making power of the Blender Institute.

Culture: A gift for consumption and status

Two other types of objects that the Blender Institute shares online are the digital media assets and the open films that it creates. Their aim is to make an artistic statement, demonstrate the skill of its creators, and the uniqueness of the technology, the development of which they push forward. They also express a hope that other digital creators could use the assets of the film and make a derivative work from them, embedding them in the reciprocal obligations of the gift exchange. To the extent that these digital artifacts produce culture, their main function is to create and circulate symbols, images, and meaning (*cf.*, Hesmondhalgh, 2009). Similarly to software, an open film and its aesthetic components have use value which appears in acts of consumption, such as when media is enjoyed as entertainment, appreciated, debated, remade, or spread further (*cf.*, Bolin, 2013).

Some authors have expressed hopes that such gifts in the context of the Internet economies can drive forward a new wave of creativity through remixing (Manovich, 2005; Lessig, 2004). Such hopes are, however, misleading, or at most of interest for merely a marginal group of artists. A range of Blender fans and users I interviewed admitted that they would be reluctant to reuse or remix any of the characters, images or films of the Blender Institute because, even if they are shared freely, they remain signed, carrying the creative energy of their authors:

I could use that, but I would feel more comfortable if I design my own project, my own characters. If you design a character, you will design it for your product ... For example, you can have a picture

of Batman here. You can use Batman inside some animated series. You can use Batman in every chapter of the series, but it won't be the original Batman, it will be an adaptation. To make such adaptation is very complicated. [16]

Another animator admitted that he did not like gifting the artistic creations of the Blender Institute because their characters lose their identity when somebody else uses them for other purpose. The problem he sees is that the original author *will always need to be credited*, no matter if the adapted character is used "on a slot machine or in a porn movie — they will still credit you, despite that the character will have nothing to do with the original except in visual appearance." [17]

To remix a gift of online culture means to remove the social energy and the personal investment made in this particular gift, but to keep giving back, reciprocating to its author. Taking an artistic creation made by someone else produces a forced social relation which the receiver must pay back by acknowledging the original author. In a market economy, such an obligation could potentially be erased through the mechanisms of fiscal exchange and intellectual property rights regulation. Yet, in a gift economy, sharing objects of culture online enforces the creation of bonds even when they may not be desired by the donors. This is one of the reasons why some artists reject the possibility of reusing gifted digital art and insist on making their own, as the quote above shows.

Another aspect of the gift exchange is the implicit status that it gives to its donor. When a creator uses Blender software to make an original film, he or she contributes to strengthen the reputation of the software. When an audience consumes the Blender Institute films, or remakes them, it again contributes to affirming the status and prestige of its creators. Exploiting the use (and potentially exchange) value of the gift contributes to increasing its sign value, or the status, of its donor.

Therefore, the greater variety of digital gifts that are circulated by one donor online, such as the Blender Institute, the greater power it accrues. In some cases, gifts can obtain excessive proportions and then the act of sharing becomes an act of public humiliation as it makes it impossible for others to reciprocate and to return something valuable back, so that they remain always in debt. Reciprocating with writing code, making digital art with Blender, or even reusing some of the digital assets that the organisation shares can never match the total sum and value of the gifts that have been shared by the Blender Institute, and can therefore never represent a challenge to its established prestige, solidifying a relation based on unpaid debt.

One way to challenge the power of such a powerful actor would be to try to make open animation films, software, and tutorials and gift them online, reproducing the model of the Blender Institute but creating a different community and a separate gift economy. Such attempts have so far largely failed, an issue which I discuss later.

Another way is by overriding the gift, bond, and debt politics by bringing in fiscal wealth, for example, by claiming sponsorship of the Blender Institute's open films. Sponsorship is always accepted by the Blender Institute and rewarded with a mention in the film credits. The position which one's name will take in the list of credits in the end depends on the amount of money donated to the film, establishing yet another hierarchy in the community, that of financial patrons. Such a reward is, of course, symbolic and insufficient to match the value of the financial donations. In this way, financial capital puts the Blender Institute in debt, while its donors remain outside of the circle of gift exchanges that the organisation nurtures.

Public labor: The disciplining gift

The last type of digital artifacts that the Blender Institute shares is a public record of the production process of making a film, namely the labor it incorporates. In the course of making its last film, *Cosmos Laundromat*, a record of the production process was made through regular livecasts on YouTube called internally 'The Friday Weekly' (see [Figure 3](#)). In the course of one year, each Friday, at 6 p.m. all team members and present guests gathered in front of a Web camera in the Blender Institute office in Amsterdam and reported to an "imagined" (cf., Marwick and boyd, 2011) and often absent online audience what each one of them had accomplished during that particular week.

Figure 3: *Cosmos Laundromat* team reports weekly progress on YouTube, May 2015.

Programmers presented the code that they have been working on; artists demonstrated concept art, animation in progress, sketches of models; and I was also obliged to share what I had been doing in the office for the week of my fieldwork (e.g., Velkova, 2015). Despite all the seriousness with which these meetings were treated internally, there was much to wonder about their function, in particular in relation to the subjects towards whom these gifts were meant.

On a normal day, the viewers of the live stream ranged between none and a dozen. There were no attempts to secure a good quality for the livecast, in contrast to the otherwise high production values that were set for the films. The video was streamed with a cheap Web camera and a microphone borrowed from one of the team members. Video editing was absent. The material that ended up on YouTube was hours of low quality recording in which 10 to 12 people were mundanely reporting in great detail about their work, a format that was not aimed at capturing a potential audience. The team occasionally reflected internally about the purpose of the Friday Weeklies. Some suggested that they were possibly aimed at attracting potential investors to the production. Others were critical, suggesting that it was only the 'hardcore' fans who were interested: "you are not attracting investors with showing a 1.30hrs of unedited, low-quality, bad video" [18], one team member commented. In the course of the production year, the Blender Institute made 45 such live streams [19].

The subject of these gifts was arguably not an external audience, but the team members themselves. Its purpose was to increase their work efficiency and discipline them. The artists in the production were generally positive about these livecasts and they were a source of an experience of good, just work (cf., Hesmondhalgh and Baker, 2010). The business models of the media industries presuppose that the work of artists is expropriated and commodified. Much creative work that is made in this process gets rejected, and is never shown in public. A 3D modeller who worked on *Cosmos Laundromat* admitted that the livecasts each Friday were very important for him because they offered the chance to show what he works on, something that he could not do at his previous work at a large computer graphics corporation:

In big companies sometimes you make huge projects that might not even go published — and you can not show anything, no part and put in your demo reel. So you basically can spend two years on stuff which will never be shown. At [the company] we have not released what we have made. I worked half a year, but it didn't fit the brand, it was too aggressive — not family friendly — reasons can be anything. Also, they can be testing what we can do — but not necessarily release it. [20]

To keep creative labor secret means to humiliate the artist, and make her powerless. The gift

which an artist makes by giving his creative ideas to a company cannot be compensated merely through a salary or material rewards, especially because artists maintain very strong sense of ownership of their work even after it has been expropriated (Huws, 2014). Some Hollywood corporations have created consolation gifts to compensate their artists for this humiliation. A team member of *Cosmos Laundromat* told me that Disney used to have an internal award for the person who spent most time on things which did not make it into the final film [21]. In *Cosmos Laundromat*, a similar system for rewards was triggered with the help of the YouTube livecasts that generated constant individual labor exposure.

Despite being perceived as rewarding, as Jarrett (2015) notes, such rewards can mobilise affect and emotions in order to discipline and to conduct politics of exclusion through norms. The gift, and practices of public disclosure generally, is “not only about clarity and insight but, also and simultaneously about boundaries, regulation, and control ... [transparency] is wrought with power.” [22]

The Friday Weekly established a rhythm, structure, and pace for the film production, which from the outside seemed rather spontaneous and unstructured. The Friday livecast created intensities of pressure and obligations among the participants to actually have something to share, to present, to report, and to admit progress in a very accessible form, on a weekly basis. Each individual was put under peer-pressure to create and share as much as any other team member or else have a public explanation on the YouTube livecast suggesting why little was reported and shared.

Stress and pressure were common and the production team had almost no life outside the studio. After a week of conflicts about the artistic vision in the film, a team member shared the relief that his Friday presentation would be together with another artist “so it eases a bit the stress, and there’s a nicer vibe now with the arrival of X too, new blood always helps.” [23] At another occasion, a team member was self-critical when admitting to me that he had not managed to do that much during the working week. The sense of guilt and concern were apparent and triggered his thinking about how to compensate for the lower productivity with intensified work in the next days to come. Building on Foucault, Flyverbom, *et al.* (2015) have called this form of self-control regularizing, meaning that processes of self-examination and confession can penetrate the whole social and work practice of subjects, leading to internalising and normalising self-regulation as a form of self imposed control.

Despite the official hours of presence at the Blender Institute being set to between 11 a.m. and 4 p.m., there was rarely anyone going home before midnight or being absent on weekends on the occasions when I was there. There was no direct demand to work so much, but most artists and programmers used the late night hours either to work more on the film or to improve their skills and develop hobby projects, such as designing models for 3D printing, board games, or coding for fun. These long hours of work and dedication to productive activity epitomise how a disciplining gift ritual boosts productivity while retaining senses of freedom and emancipation among creative workers, a practice arguably normalised in the cultural industries today (Ross, 2004).

The gifts of public labor shared online further obliged the *Cosmos Laundromat* team to engage in self-reciprocity. Every Friday livecast meant that the next Friday had to bring more and better work, as well as gifts online. This closed loop of auto-gifting makes it worth recalling Claire Birchall’s (2011) observation that openness can become a moral project, one which creates positive effects but also carries a totalitarian outlook: “Transparency cannot easily accommodate those who want to be exempt from its project, those who want to remain not merely private, but singular.” [24]

This remark summarises rather precisely my own experience of forceful embeddedness in the gift economy of open cultural production triggered by the Blender Institute. I was granted access to do participant observation of the production of *Cosmos Laundromat* in Amsterdam under the condition that I document and make public my observations in the studio, as well as my research process and results. I was advised by the *Cosmos* producers to start a blog on which some of the material used for this paper, as well as reports from my fieldwork, reflections, and papers in progress were made available [25]. The demand to share my work online as a gift defined my debt and enforced an obligation on me to ‘pay back’ for the gift I received, namely access to the production. In this way, I also was embedded in the cycle of giving, receiving, and returning. The demand to share my work also made me into a donor within the online gift economy. The problem of such obligation is that it is not voluntary, but enforced, and that it is impossible to say when a debt is repaid. No matter how many texts I have put online on my blog, it was hard to say when that would be sufficient. I have been asked further to present my findings orally to the community during a yearly conference, or become a subscriber to a new ‘cloud’ service that the Blender Institute developed. Once bonds are established through symbolic exchanges such as gifts, it is very difficult to break them. Instead, the bond merely triggers more gift exchanges,

strengthening the power and prestige of the main donors and expanding the online gift economy.

Secrets of the open gift economy

The online gift exchanges that I have so far discussed form a complex system for creating and managing capital in the Internet economy of open culture. Gifts that emerge as having predominantly use value need to be produced and circulated online in order to create independent software infrastructures under the control of its users, as well as to expand the range of qualified techno-artistic labor force that can work with it and participate in making open films. Mobilising this cultivated labor and infrastructure, digital artists create media content that they also share as a gift, as a statement of the wealth and prestige of its authors. Finally, the successful creation of this so important media content is dependent on the third aspect of the gift, its ability to discipline and self-reciprocate, motivating and managing the efficiency of the carefully selected labor force in open cultural projects.

One aspect that can easily be forgotten in this context is the question about what remains hidden behind so much openness and gifting in public. Since 2008, an animation community in southern Siberia, Russia has been trying to replicate the gifting model of the Blender Institute and establish a 2D animation community using a similar approach. The initiator of the project, Konstantin Dmitriev remembers: "Ton [the founder of the Blender Institute] inspired me in 2006. Through *Elephant's Dream* I saw how things can be." [26] However, after nearly 10 years of experiments, Dmitriev admits:

The potential of Creative Commons is not revealed because there are only very few strong players in relation to resources ... You need to be able to be comparable to the Blender Institute — you need to have an infrastructure, rendering in order to be able to do it, and your creative potential needs to be able to introduce something new in order to do a remix. [27]

Dmitriev's remark is useful for illuminating four hidden forms of capital which were not circulated in the gift economy but upon which the success of the Blender Institute open film projects has been contingent.

First, specific infrastructure, particularly the hardware power that the Blender Institute has managed to obtain and increase in the course of making its open films has never been gifted away, nor commented much upon. While the organisation gifted its software infrastructure, it has never tried to distribute its hardware power nor its alliances with large manufacturers of computer graphics equipment such as Dell, Intel or emerging renderpower actors such as Qarnot computing.

At the start of *Cosmos Laundromat*, the Blender Institute had at its premises an autonomous rendering cluster consisting of 30 mid-end computer graphics workstations and several high-end machines (dual Xeons with 65GB RAM) donated primarily by Dell which, even though not considered internally as being of great value, were essential for computing the animation made for most of the duration of the production. In the final stages of *Cosmos Laundromat*, when higher requirements for the output quality of the graphics were needed, its demands for computing power were satisfied by making a barter deal with the French startup Qarnot Computing. The company donated access to 200 mid-end rendering computers located in Paris, offering computation services for free, in return for testing a new service of heating homes with data. The deal helped the Blender Institute make a drastic saving from the costs of hiring computation power which is otherwise one of the greatest expenses in making computer graphics media. In this case, the industry initiated gift politics by donating the hardware and establishing ties with the Blender Institute.

Access to such computing power for free is not normally available to the average media producer who would start experimenting with making open media. Instead they would need to buy it from commercial services, such as those offered by Google or Amazon, or find alternative ways, such as through open source services as those provided by renderfarm.fi. Possessing such power is a great advantage that has been undercommunicated.

A second moment that remained hidden was a ritual that followed the Friday Weekly livecast. It was called the Monday kick-off meeting. One of the team members explained the difference through a change in the attitude of the producer: "If Ton is soothingly happy on Friday, he is not that on Monday." [28] The Monday meetings scrutinized the productivity of the team, set goals,

and questioned individual members' approaches to solving problems. The tone of the meetings was often authoritative and steered the team strongly towards ever increasing productivity and performance. Ideas were rejected, roles reassigned, conditions of work renegotiated. These closed-door meetings were obviously an internal managerial technique through which the producer of the film affirmed his power and hierarchical status, making it very clear that all of the team members were employees who had to adhere to production plans, budgets, and be ever more efficient. This employment relationship represented, therefore, a second type of capital that was mobilised to guarantee the efficiency of the open gift economy.

Thirdly, the internal conflicts in the production, and the ways in which the team managed to overcome them, were never disclosed. Conflicts between artistic and technical visions, changes in the production team, lay offs, as well as ways to manage discontent from decisions of the director or the management were issues that were never made public online. Keeping conflicts hidden represented an important way to keep a positive image of the production and maintain trust among the community supporting it in its success. It did little, however, to help an external public learn how such conflicts could be productively dealt with, and to gain from others' errors. Hence, valuable know-how and internal dynamics were hidden as a way to maintain a positive image, and represents the third form of capital being used.

Lastly, a concern with the financial economy of the project has been present ever since its beginning. The budget of *Cosmos Laundromat* exceeded a million euros. To the extent that it relied on unconventional means of funding such as crowdfunding and subscriptions to a cloud service that has been developed in the course of making the film, money had to keep being raised in the course of the production. Much energy was spent internally solving problems related to the development of technical infrastructure for managing the monetary flows of the project and as much on attempts to raise more funds. Yet these efforts were seldom commented upon or disclosed. Administering and increasing financial capital remains crucial for the success of these projects and demonstrates how its use is necessary to complement gift exchanges.

All these dimensions made evident that the transparency of one reality of the project knowingly eclipsed another dimension of it. The gifts being shared online were both too great to enable others to reciprocate them in their totality and at the same time obscured how hidden forms of capital were mobilised and strengthened the power positions of the Blender Institute. There was generally a lack of self-reflection within the production of these issues, neither was there debate about the potential need to disclose them. The lack of such reflexivity raises the question to what extent a concern with helping more actors to enter the scene of open and free cultural production was actually present, and to what extent the politics of gifting and secrecy were used to stabilise Blender Institute's own position in the field, keeping other actors in open cultural production in a subjected position.

Conclusion

This paper mapped three central aspects of the gift exchanges that take place online, namely their use value, sign value and disciplining power. These aspects are enacted to a different degree in symbolic exchanges of gifts online and produce sub-hierarchies within online communities, always maintaining asymmetries of power. The social bonds that get established in the process can vary in intensity, yet they always lead to an increase in the sign value of the gift and the status of its donor among a community.

This article showed further how fiscal and other forms of hidden capital can be subtly mobilised in order to override the bonds created by gift exchanges and reconfigure established hierarchies. Hence, fiscal capital functions as a complement to the gift economies online and can both strengthen them, leading to a greater production and circulation of digital gifts, but also weaken them by rearranging the hierarchies and putting powerful actors in debt.

I also demonstrated that these gift economies are crucially reliant on keeping certain forms of capital out of circulation as a gift. A conclusion that can be drawn from the case discussed here is that open cultural production is based on a dialectic attitude towards gifting. It rejects opaque, non-public culture, but it represents a strategic opaque culture itself, in a constant and ambivalent process of negotiating what is to be shared online and what not. Organisations such as the Blender Institute confront the cultural industries with their own gift economy, yet confront other creators of open culture who remain always in debt and have limited possibility to match their wealth. The result is, as is the case for the Blender Institute, a nearly monopolistic position in the open 3D graphics field, maintained by eliminating competition from within.

Lastly, the rhetorics of openness and practices of gifting can create, outwardly, the false

impression that access to software, Internet connections, and media content of high production values are enough to make a successful open film and gain recognition online. This paper showed the fallacy of this assumption and suggests instead that the project of the open gift economies is neither about egalitarianism, nor about democracy, but ultimately about power created through moral politics of debt that mixes gift exchange with other forms of capital.

About the author

Julia Velkova is a Ph.D. candidate in Media and Communication Studies at Södertörn University in Stockholm, Sweden. In her dissertation project she explores forms of autonomy, value creation and power enacted within techno-artistic practices that are centred on building independent media production infrastructures and content in the domain of digital media commons. Her broader research interests are on computer cultures, the politics of infrastructure and Internet governance.

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Notes

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2. *Elephant's Dream*, at <https://vimeo.com/1132937>, accessed 25 March 2015.
3. "Blender Foundation on YouTube," at <https://www.youtube.com/user/BlenderFoundation>, accessed 14 July 2016.
4. Interview with production assistant, March 2014.
5. Interview with producer, August 2014.
6. See Morevna, at <https://morevnaproject.org/>, accessed 14 July 2016; Lampibata on YouTube, at <https://www.youtube.com/watch?v=TIYmXzITpGw>, accessed 14 July 2016; Tube project, at <https://urchn.org/work>, accessed 14 July 2016. Information about Arshia project and Chamba Swathantra is available in my personal archive, as their respective Web sites are down.
7. Mauss, 2002, p. xviii.
8. Mauss, 2002, p. 29.
9. Baudrillard, 1981, p. 65.
10. See Velkova and Jakobsson, 2015; Berdou, 2011; Jarrett, 2016 for detailed discussions of the gift as a commodity which there is no space to discuss here.
11. Bergquist and Ljungberg, 2001, p. 313.
12. *Ibid.*
13. Mauss, 2002, p. 95.
14. Blender Artists, at <http://www.blenderartists.org/forum/showthread.php?298932-Blender-UI-Mockups-and-Ideas-Requested>, accessed 14 July 2016.
15. Excerpt from an IRC interview with a Blender developer, November 2014.
16. Marco Adamante, animator from Spain, interview, October 2014.
17. Interview, May 2015.
18. Interview with *Cosmos Laundromat* team member, February 2015.
19. *Cosmos Laundromat* Friday Weeklies at <https://gooseberry.blender.org/category/weeklies/>, accessed 14 July 2016.

- [20.](#) Interview, December 2014.
- [21.](#) Field notes from an informal conversation with a *Cosmos Laundromat* team member, December 2015.
- [22.](#) Flyverbom, *et al.*, 2015, p. 387.
- [23.](#) Field notes from an informal conversation with a *Cosmos Laundromat* team member, December 2015.
- [24.](#) Birchall, 2011, p. 12.
- [25.](#) <http://phd.nordkonst.org>, accessed 14 July 2016.
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