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# From Rules in Use to Culture in Use – Commoning and Infrastructuring Practices in an Open Cultural Movement

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**Abstract:** This paper explores how design and commoning practices can contribute to sustaining open cultural commons and guarding against enclosure. Based on a long-term engagement with a cultural movement, the author examines how design activities can strengthen interaction and participation in commons-like frameworks, and describes commoning and infrastructuring practices that can support commons culture. By critically reflecting on the development of a local Finnish chapter of the OpenGLAM (Galleries, Libraries, Archives and Museums) movement, the paper contributes to the ongoing discussion of design as infrastructuring in complex and open-ended socio-technical settings.

**Keywords:** Commons, Commoning, Culture, Infrastructuring

## Introduction

Digitalization has affected nearly all aspects of our society, albeit in different ways. For cultural and memory institutions, it has created enormous potential to expand public access to their (digital) holdings and establish and renew collaborative relationships with visitors. Along with the digitizing of cultural heritage, new digital tools are also creating novel ways for people to access, appropriate and reinvent culture. Despite these developments, cultural and memory institutions are not providing as much access as they could to their digitized collections (Bellini, et al. 2014), nor are they creating good conditions for people's creative re-use activities (Terras, 2015). For some commentators, this situation is turning into the enclosing of important parts of our cultural heritage (cf. Boyle, 2009; Hyde, 2010). This enclosing has been viewed as stemming from reasons that range from conflicting intellectual property rights, a lack of resources and knowledge inside organizations, to an unwillingness



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to share authority or control over their digital cultural heritage and even the fear of losing possible revenue opportunities (Verwayen, et al. 2011). The international OpenGLAM movement aims to assist galleries, libraries, archives and museums in identifying these challenges, raising awareness and finding ways to provide open access to their digital cultural heritage. In this article, I study the case of a local chapter of the OpenGLAM movement (AvoinGLAM) and its journey toward fostering the emergence of a more diverse cultural commons in Finland, by documenting and reflecting upon some of the commoning attempts of this network and related design practices.

The work presented here builds on traditions that see design as an open and collective process of designing practices together – in particular, recent thinking that draws on conceptual tools surrounding the concept of the commons – to better understand new modes of participation, production and designing. The relationship between commons and design has been used to investigate collaborative creation and production (Elzenbaumer, 2014; Björngvisson, 2014; Seravalli, 2014) and has been used as a useful device for informing new discourses of participation in contemporary settings (Marttila, et al. 2014; Teli, 2015). The work is also linked to insights from community-based participatory design research that has identified a need for understanding the implications of new forms of politics and practices (DiSalvo, et al. 2012; Le Dantec & DiSalvo, 2013; Björngvisson, et al. 2010/2012; Hillgren, et al. 2011) that see design as concerned with infrastructuring. This paper thus contributes to the discussion on commoning and infrastructuring in Participatory Design by bringing insights and findings from the experiences of a value-driven cultural movement. The paper highlights the complexity of infrastructuring cultural commoning activities and shows how questions of ownership and the use of common resources are not only impacted by rules and regulations but also by cultures surrounding the infrastructures. It looks into the strategies of ongoing infrastructuring and how they aim to support and nurture cultural commoning activities, as well as the process of becoming of the open cultural commons in Finland.

The empirical material is based on long-term engagement (four years), action research (e.g., interviews with key actors/organizations, designing and organizing workshops, hackathons and other activities of the network) and personal reflections on these experiences. In analyzing the materials, I ask: What kinds of design principles, practices and commoning activities contribute to the co-designing, building and sustaining of open cultural commons? The article begins by briefly introducing the concept of *cultural commons* and *commoning*, followed by a description of the case. Thereafter, I analyze the everyday commoning practices of the movement and the *design as infrastructuring* activities as they occurred within the movement. I conclude with a discussion on the importance of culture to creating commons.

## **Cultural Commons and Commoning**

Commons-related research has a long and established interdisciplinary tradition, and it has branched out in many directions from its roots in the study of shared natural resources and

the communities around them (see e.g., Ostrom, 1990; Hess, 2008). Commons are often simply described as shared resources in which all parties have an equal interest and that are vulnerable to social dilemmas (Ostrom, 1990; Hess & Ostrom, 2007). Potential problems are located often in the use and especially in the over-use of shared resources, and in issues of free riding and vandalism (Hardin, 1968). In a seminal study, Ostrom (1990) analyzed more than 80 case studies of small- or medium-scale natural resource commons and identified eight “design principles” that were present in cases of long-enduring and robust commons. These principles included aspects of monitoring and collective-choice agreement (Ostrom, 1990). One of the key findings of this research tradition is that a rich and very specific set of rules has been in use in resilient commons over a long period of time, and the rules were well matched to local needs and conditions, as well as respected by surrounding authorities (Hess & Ostrom, 2007, p.7).

Since scholars began to study the “information commons” and the “knowledge commons” in the digital age, there has been increasing interest in understanding what commons could mean in other environments, such as that of cultural production (cf. Hess, 2008; Hess 2012; Madison, et al. 2010; Bertacchini, et al. 2012; Björgvinsson, 2014). Such “new commons” refer often to intangible and cumulative resources, such as knowledge pools and digital resources, which are not depleted by rivalry or overconsumption, and commons arrangements to overcome social dilemmas (Hess & Ostrom, 2007). Knowledge commons are sometimes used to refer to “institutionalized community governance of the sharing, in some cases, creation, of information, science, knowledge, data, and other types of intellectual and cultural resources” (Frischmann, et al. 2014). The renewed interest in commons among scholars and practitioners emerged due to an increased threat of the commodification of culture and knowledge resources, as well as social problems and conflicts related to online resources and networks (Hess, 2012).

In general, cultural commons have been referred to as cultures expressed and shared by a community, and as evolutions of cultures as a form of shared resources (Bertacchini, et al. 2012.) Cultural commons have also become a favored concept for discussing the phenomena of everyday people taking part in the processes and practices of culture institutions (e.g., crowdsourcing practices, see, e.g., Ridge, 2014) and as a device for pursuing change (Edson, 2015). While culture commons are indeed quite broad, in this paper, I will mostly focus on the cultural resources that cultural and memory institutions are responsible for preserving and creating access to, and the practices related to them. Nevertheless, I understand “cultural commons” to be evolving commons, cumulative in nature, where various positioned groups and individuals negotiate the value, creation, use and governance of diverse cultural resources. These participatory cultures not only shape our common cultural heritage and memory but also create knowledge commons and common-pool resources. It is important to notice that the discussion on cultural commons that are tangible (e.g., collections of museums) has mostly revolved around the moral and legal ownership(s) of cultural heritage artifacts (Bruncevic, 2014; Bertacchini, et al. 2012), focusing on the appropriation and enclosure of cultural sites. In relation to digital cultural commons, a threat

of enclosure arises not from the overconsumption of tangible cultural heritage artifacts but rather from debates over who has the rights – moral and legal – to access and use these resources (cf. Boyle, 2009; Hyde, 2010; Benkler, 2013). The questions of ownership in connection to digital cultural commons have spawned debates on two fronts: (a) What should be preserved in digital form, and (b) who can access and use it, and under which terms (i.e., copyrights, Digital Rights Management systems) (e.g., Marttila & Hyyppä, 2014b). These two questions are at the heart of the work of AvoinGLAM, to which I will return later. The people managing commons or being part of a commons movement are often addressed as “commoners”, recently described through the act of “commoning” – a term used to point to contemporary efforts to create a “commons culture” sustained by partnerships between actors (Pór, 2012). In short, commoning can be described as an ongoing collective action for meeting shared goals and needs (Bollier & Helfrich, 2015). It emphasizes the active nature of commons and the presence of active commoners who are taking part in the creation and maintaining of local and global commons. Initially, the term was coined as an attempt to highlight people’s activities connected to commons, rather than addressing commons only as a resource (Linebaugh, 2009). Hence, the concept of commoning highlights the idea that commons can be governed only through active social relationships; it foregrounds the social practices, traditions and rituals linked to commons (Bollier, 2014; Bollier & Helfrich, 2012). Bollier and Helfrich (2015) even stipulated that in order to understand or build any theoretical frameworks on commons, one has to “enter into a deep and ongoing engagement with the everyday practices and experiences of commoning.” I will follow this invitation through a personal reflection on the AvoinGLAM movement, which I present next.

## **Open Culture and AvoinGLAM**

The term “free culture” is a key element of Lawrence Lessig’s (2004) thinking on the rise of the digital information society and the digitalization of our everyday life. It describes how people increasingly create new, collaboratively produced cultural artifacts by building upon found content online. One of the key arguments of Lessig’s books (2001/2004) was that current intellectual property laws threaten to suffocate creativity and make people’s everyday media remix and sharing practices illegal. Instead of free culture, Lessig contends that we live in a “permission culture,” in which people can only design and create new cultural artifacts with permission from authors from the past. The Creative Commons initiative was built on this insight; it offers a design infrastructure in the form of a licensing framework and tools that can enable people to share their works with more flexible terms than that of the existing copyright regime. Creative Commons introduced a set of predefined rules for global cultural commons, which are now applied to more than 1 billion works (Creative Commons, 2015).

Coinciding with this development, large digitalization and conservation projects run by cultural and memory institutions have formed and made large digital collections of our shared culture and history available. Unfortunately, in most cases, these digital vaults are not made available or accessible to the general public, even when the copyrights of the

original artworks and cultural artifacts have expired. The idea of the OpenGLAM was born against this backdrop (December 2011) (see also Baltussen, et al. 2013). It later became an initiative of the Open Knowledge Foundation (now Open Knowledge, OK), which “promotes free and open access to digital cultural heritage held by Galleries, Libraries, Archives and Museums.”<sup>1</sup> Soon after, actors in different countries founded local chapters focusing on local stakeholders and institutions. One of these is AvoinGLAM, which was founded in Finland in the spring of 2012. The mission of AvoinGLAM is to support cultural and memory institutions to open up data and content, and develop more open and transparent work practices and organizational cultures. Furthermore, AvoinGLAM promotes meaningful public access to open cultural content and stimulates the re-use of these digital cultural heritage artifacts.<sup>2</sup>

During the past four years, the AvoinGLAM initiative and network has evolved and organized different activities, events and projects. By now, the participants of the network are impossible to count, as, e.g., we do not have a membership policy, nor do we track the people who have participated in our events.<sup>3</sup> The following schema presents selected commoning key efforts in a linear continuum: foundation building, creating a shared knowledge base and resources, framing conditions for creative re-use, and fostering and sustaining cultural commons. At the same time, while delivering a descriptive account of the case, I aim to draw attention to some of the design activities undertaken in this process of co-designing commons.

### *Building Foundations*

AvoinGLAM was officially launched in an event titled “Towards Open Culture and Art” targeted to Finnish culture and memory institutions in August 2012. In addition to the launch of the initiative, the event served as a platform by which to collectively map and understand the current state of activities and projects related to open culture in Finland, and for institutions to bring forward their challenges and obstacles in opening their digital holdings for a wider public. The event was designed by me and the core team in two parts: first, introductory presentations on what could be understood as open culture and open cultural data, and second, a co-design workshop for the network, in which participants would go through five different assignments in groups, – e.g., mapping the “levels of openness and

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<sup>1</sup> OpenGLAM is also a global network (not limited to its institutionalization in OK) of people and organizations aiming to open up content and data held by GLAM institutions. In addition, OpenGLAM has a working group that is advised by an international group of experts. The publicly most known and visible parts of the movement are the active OpenGLAM mailing list and [openglam.org](http://openglam.org).

<sup>2</sup> At the beginning, AvoinGLAM was a project of Aalto ARTS, Media Lab that branched out to a small group of likeminded people working with the same themes (Salgado & Marttila 2013; Marttila & Sillanpää 2014). Later, when the Open Knowledge Finland association was founded in 2013, AvoinGLAM became a thematic working group of the association. Yet close ties to the university have remained. Initiating AvoinGLAM in the university was a conscious choice for ideological and practical reasons: universities, as organizations, (should) represent the idea of free and open knowledge; for me, as the founder, it was important that the initiative not be tied only to a person but also to an institution. On the practical side, since I worked in the university, I was able to secure some seed funding to establish the initial social and technical infrastructure upon which to build the group.

<sup>3</sup> Some indication of the Finnish network is the amount of members in the AvoinGLAM Facebook group. In March 2016, there were over 320 people in the public group.

participation” of the organization they represented, or discussing the practical application of "principles of openness." These five assignments included diagrams (framework drawings) and a set of step-by-step written guidance questions.



*Picture 1 Participants of the Towards Open Culture and Art workshop thinking together about how to build an accessible and open cultural heritage institution.*

After this event, similar workshops were organized in six different cities in Finland that brought together representatives from local libraries, archives and museums. Workshops were organized in collaboration with a local cultural institution, and often by invitation from the local partner.

Several findings were made by staging workshops and seminars to co-construct shared language and understanding, and lay the foundations for open cultural commons in Finland: Actors across the cultural domains (e.g., libraries and archives) identified similar challenges and obstacles. Firstly, there was a lack of awareness and strategies for intellectual property rights. Most organizations do not hold the copyrights to their collections, and obtaining the rights is laborious and expensive. Secondly, there is a lack of knowledge, skills and experiences related to digital technologies and open data. Many organizations lacked in-house competences, and often the digital platforms, tools and services in use had been outsourced to a third party, preventing small-scale pilots and experiments from taking place within the organization and inhibiting organizational learning. Thirdly, the organizational support and organizational cultures that are conducive for open cultural practices were lacking. The workshop participants felt that their organizations' current work practices and processes did not support openness and/or opening content and data. Change would be needed, both in the organizations' practices and in their employees' work roles and tasks

(see Salgado & Marttila, 2013, for a more elaborated account of the findings). Fourthly, there was surprisingly little collaboration between actors and sectors – even if the involved cultural institutions were physically located next to each other. This led to the conclusions collaboration needs to be strengthened in the Finnish cultural sector and that a network that is not domain specific (e.g., for libraries or for archives) but reaches across existing domains and their specialized professional organizations will be able to build a platform for commoning that would enable collective learning and sharing.

These findings became a cornerstone of the AvoinGLAM work and guided my personal design and commoning activities in the working group, projects and movement.

### *Creating a Shared Knowledge Base and Common Resources*

Since there was a great need to increase the level of knowledge and skills regarding open cultural data and content, as well as to gain more experience with novel digital technologies and services, the network decided to train itself. Inspired by a Dutch master class concept,<sup>1</sup> AvoinGLAM organized a 5-month course on mastering issues surrounding open culture and data, and on learning and exploring, in practice, how to open-up a portion of their collection for a broader public. Over 20 participants from different GLAM institutions throughout Finland took part in the course. The participating organizations released cultural data and/or content, and made it available either under a Creative Commons license or under Public Domain Mark. This project also produced an online course on P2P University<sup>2</sup> and a guidebook (Marttila & Sillanpää, 2014) on how to open up cultural data and content. The main focus, however, was to provide a structured means for sharing principles and knowledge about how a GLAM institution can be more open, a checklist for opening data and for mapping an organization's current and future activities.

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<sup>1</sup> The Open Cultuur Data network was established in September 2011, and the first master class followed the next year. More information can be found on [www.opencultuurdata.nl](http://www.opencultuurdata.nl).

<sup>2</sup> The course can be accessed at <https://courses.p2pu.org/en/courses/2641/content/5710/>.





*Picture 2 The Open Cultural Data Master Class participants met once a month for contact teaching and collaborative work. In addition, the master class had a field trip to London to learn from pioneering OpenGLAM organizations. Here, the participants are imagining creative re-use scenarios in the British Library.*

Producing a master class, as a funded project of AvoinGLAM, changed the dynamics of the movement and required careful consideration about how to govern and manage different activities. It was also the first time that people were hired for AvoinGLAM and for the Open Knowledge Finland (OKFFI) association. As the person responsible for the project's design, I also became accountable for its execution. The key challenges here were how to balance the paid work and the so-called voluntary activist work and determining what kind of mechanisms to implement to ensure a fair and sustainable movement. Some structures were implemented: OKFFI adopted a policy of open/public budgets and plans for its projects; also, a same-salary principle was implemented for the AvoinGLAM projects to ensure and communicate to the movement that all skills and work efforts are appreciated and valued equally.

### *Framing Conditions for Creative Re-Use*

The master class was a success by many accounts, as the participants and their organizations produced common pools of open cultural data and content. They also gained know-how and shared knowledge in the process. Yet the AvoinGLAM movement still lacked good local examples of the benefits of opening data, or of how people could use the new resources. To produce these examples, we developed an initiative, Hack4FI, to increase the creative re-use of open digital cultural data. Hack4FI – Hack your heritage! branched out from the Danish initiative Hack4DK and followed the same guiding principles as the original one, but adapted

them to the local conditions. The Hack4FI – Hack your heritage! hackathon was organized in February 2015, and more than 50 people engaged in appropriating Finnish open digital cultural heritage over a weekend. This diverse group of coders, designers, artists and representatives from cultural heritage institutions produced more than 20 concepts, mock-ups and prototypes – both digital and tangible ones – and had six weeks to finalize their works and submit them the Hack4FI competition. The process ended with a gala, during which the final works were presented to the public and awarded by a jury of experts.



*Picture 3 The first Hack4FI – Hack your heritage! hackathon brought together a diverse group of creative minds to design and develop new cultural works by re-using open digital cultural heritage.*

From my perspective as a designer, the hackathon was aimed at creating conditions for fruitful collaboration, exchange of ideas, knowledge and networking. To aid this, the collaborative infrastructural design repertoire included an analogue people’s wall, collaborative documents for shared notes, project documentation and presentations. These commonly created and cumulative resources were made publicly available online. The hackathon was designed to have multiple tracks, with each track having a preselected facilitator who could freely organize its work and schedule. However, the participants also had the freedom to organize themselves around a question, theme or project. Most of the participants did not choose a track but instead formed groups organically that were guided by a shared interest. The overall frame of the hackathon was intentionally designed to be loose and open, giving the participants the freedom to familiarize themselves with the

themes, the open data and content made available and the other members, as well as to form groups and develop ideas together.

### *Sustaining and Scaling Commons*

The AvoinGLAM movement has grown in size and contributed its share, to the point that today a majority of Finnish cultural heritage institutions have some initiative aimed at opening up their digital collections to the public or are planning to do so (OpenGLAM Benchmark Study, 2015; Sillanpää, 2015). Importantly, the movement has scaled from being a working group toward becoming a vibrant and distributed movement, with multiple actors that have various objectives and motivations. We have moved from a collection of institutional arrangements for common-pool resources to a cultural commons with recognition and acknowledgement in Finland.<sup>1</sup> However, needless to say, the AvoinGLAM movement has faced many similar social dilemmas as other many initiatives operating in similar settings. Issues such as voluntary/paid efforts are recurring, especially in the context of contributions that require a long-term commitment or are considered dull and laborious (e.g., reports, surveys), resulting in the same people often doing the heavy lifting. Another problem is commercial appropriation, where third parties republish the open content released by GLAM institutions and claim rights to them. Currently, the sustainability strategy of AvoinGLAM is to advocate for a national open-culture policy for cultural heritage institutions in Finland that would give guidelines and recommendations for a licensing framework, accessibility and so forth (Sillanpää, 2015).

### **Design as Infrastructuring**

Information infrastructures have a fundamental role in our contemporary life (Star & Ruhleder, 1996) and naturally also affect how commons can be managed and used. These infrastructures include the multiple layers of social, material, technical and political structures in our societies. Seeing design as infrastructuring (Karasti & Syrjänen, 2004; Karasti & Baker, 2004) has stemmed from the importance of drawing attention not to *what* an infrastructure is but *when* and *how* infrastructures become and for whom (Star & Ruhleder 1995, see also Star & Bowker, 2006; Ehn 2008; Karasti 2014). Design as infrastructuring has been used as a strategy for forming publics (DiSalvo, 2009; Le Dantec & DiSalvo, 2013; Lindstöm & Ståhl, 2014) and supporting movements through participatory design (Björgvinsson, et al. 2010/2012; DiSalvo, et al. 2012;). Björgvinsson connects infrastructuring and cultural commons, and points out that the approaches share the relationship between local needs and global or shared needs, as well as the issues of governance and negotiating agreements (Björgvinsson, 2014, p.191). This body of scholarly work provides a good point of departure for understanding the need for infrastructuring in commons-like frameworks. Due to the limits of the article format, these debates are not

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<sup>1</sup> For example, the Open Cultural Data Master Class received the honorary prize “Archive Act of the Year” 2014, and AvoinGLAM has received funding from the Finnish Ministry of Culture and Education.

closely reviewed or elaborated here; for an excellent overview grounded in Participatory Design, see Karasti (2014).

The concept of “infrastructuring commons” has been linked to collaborative and open modes of design and cultural production, and to how infrastructuring in explorative socio-technical environments requires new ways of thinking, designing and commoning (Marttila, et al. 2014; Björgvinsson, 2014; Seravalli, 2014). Informed by my experiences with AvoinGlam, I will now illustrate what kind of commoning and infrastructuring activities happened and contributed to the open cultural commons. Commons in the cultural realm naturally consist of diverse interrelated infrastructures: everything from IT infrastructures to legal frameworks, cultural heritage systems, social practices and shared resources. For the purposes of the paper, I will focus on commoning practices and efforts of infrastructuring these in relation to three different types of shared and collaboratively produced common-pool resources (CPRs).

### *From Common-Pool Resources to Commons*

Three common-pool resources (CPRs) – digital collections, shared knowledge and networks – are especially interesting in connection with building an open cultural commons in Finland. The commoning practices associated with these CPRs became sites where co-design activities took place, allowing me to reflect on the co-designing of open cultural commons, the role of designers in the infrastructuring activities and the tensions that arise in commoning activities and that foreground social dilemmas and power relations.

#### THE OPEN DIGITAL COLLECTION OF CULTURAL HERITAGE AND DATA.

This common-pool resource, a digitized inventory, can be seen as a distributed repository of content and data that is released by cultural and memory institutions. These resources are managed and governed by many different stakeholders, e.g., the institutions themselves, the so-called users (e.g., designers, developers, researchers, artists and educators) of the digital content and the administrators of the platforms upon which these commons and commoning activities rely. These collaborative commoning activities vary from management to use and to creative activities, e.g., the social enrichment of metadata, which can be voluntary (rating, adding comments, descriptions) or involuntary (e.g., use statistics, system data), or the “creative re-use” of content (Marttila & Hyyppä 2014a) (cf. also Botero, et al. 2010). Each of the digital repositories and social platforms has its own rules in place (e.g., licenses, terms-of-use, community guidelines) in addition to laws and regulations (e.g., copyrights, privacy laws). Often, people in cultural digital commons engage in so-called “everyday resistance” (an original term coined by Scott (1985) to describe forms of cultural resistance and non-cooperation), e.g., ignoring copyright and license requirements, or providing the wrong personal information. These acts seem to stem from people’s moral and political considerations; although they are actively engaged in the digital cultural commons, they have not been allowed to take part in producing the rules according to which, e.g., copyrights or digital platforms function.

THE RESERVOIR OF SHARED, COLLABORATIVELY PRODUCED KNOWLEDGE.

Engaged people with a shared interest in the cultural commons form a knowledge base through, e.g., sharing stories, experiences, examples, tools and ways of addressing recurring problems. In the beginning of AvoinGLAM, people from the cultural and memory institutions often asked for “good examples” and cases of re-use of open content/data, or scenarios describing what value opening up would bring to the institutions, its user groups and to society at large. Two online groups were set up to nurture the sharing practices (the public AvoinGLAM Facebook group and the closed Google+ group for the Open Cultural Data Master Class). These groups quickly developed practices for sharing and accumulating knowledge among the participants, replacing help requests to a central node by a shared pool of knowledge. Shared guidelines, principles and good practices rapidly became a backbone for the local and international movement, and extended into the public as discussions marked as #AvoinGLAM/#OpenGLAM on social media.

Commoning activities in the digital open cultural commons are not always as simple as nurturing the sharing of posts on social networking sites. In AvoinGLAM, participation often required skills and practices that were foreign to many of the actors involved, such as the collaborative asynchronous writing/editing of online documents (through, e.g., Etherpad or shared Google documents) and the practice of sharing unfinished outputs publicly with peers and professional networks, which was often very different from organizational practices. In order to participate in the co-construction of the cultural commons and benefit from the common-pool resources, some people had to quickly adopt an entirely new working culture, adopt new technological tools and be convinced that an attitude of openness could benefit their work.

In the international OpenGLAM working group, we initiated a process to share our ideas, visions and knowledge by collectively producing OpenGLAM’s principles. Our aim was to provide a statement describing the OpenGLAM organization and, at the same time, provide criteria against which organizations could map their activities. Even if commoning activities could be guided by commoners’ moral compasses, our experience was that both organizations and commoners needed principles and definitions to align their activities with others in the movement, as well as a shared vocabulary and knowledge base to talk about the directions of their moral compass. In addition, shared resources for various projects and open collections were compiled and maintained on the [openglam.org](http://openglam.org) website.

As cultural practices become an element of open-ended design interventions, the use of language should not be overlooked in creating and sustaining commons-like frameworks. In both AvoinGLAM and OpenGLAM, we aimed to construct a shared language and create a set of shared understandings precisely through collectively defined terms that I thought to be relevant for the movement (e.g., What do we mean by openness? What is open cultural data/open content?) to build upon the Open Definition ([opendefinition.org](http://opendefinition.org)), which was developed in an open, collaborative process, published and maintained online by Open Knowledge.

#### THE COMMUNITY AS COMMONS.

The knowledge, skills and practices of people in the movement form a dynamic resource that the movement lives from and can tap into. As an example, when a member of the network has a problem or needs help, she can pose the question on the public Facebook group to seek an answer or guidance. Even if tied to a specific time and people, such discussions are archived and can be accessed later. In a way, the network becomes a commons. In the feedback interviews with the participants of the Open Cultural Data Master Class, most of the interviewed participants (17/20) stated that the most influential and important part of the course was the community of people that was forming in the course. In parallel to the course, many of the participants self-organized Wikipedia courses in their organizations and held meet-ups with peers.

Close community ties, friendships and tight collaborations, however, might also have a negative effect on the movement's sustainability and scalability. Literature on "communities of practice" has shown that people who engage in a collective process of learning and knowledge exchange develop a shared language, shared procedures and conventions that make it difficult for people outside the community to join (Lave & Wenger, 1991). Language is the key to constructing network power relationships and is thus important for the non-hierarchical aims of open culture movements. Values, morals and attitudes are communicated through rhetoric and are embedded into people's everyday practices. To give a mundane example, the working group chose not to have "leaders" but "contact persons" in order to communicate and institute flat hierarchy structures and to encourage spontaneous, self-organized groupings or clusters. This practice, however, became unsustainable when AvoinGLAM took on externally funded projects and was invited to take part in policy work or to represent the network in more formal settings (e.g., steering groups).

## Conclusions

Commons are often seen as governed and managed through a set of rules-in-use. Rather than explicitly defined and stated, these rules tend to arise from social practices and interactions among people – this is one of the key design principles of robust and sustainable commons (Ostrom, 1990). In the cultural environment, commoning activities and cultural practices increasingly rely on digital platforms and social networking sites governed by often commercially motivated rules and laws that commoners have not been able to negotiate themselves (cf. Marttila & Hyyppä, 2014b). Therefore, they are not always well matched to local needs and conditions, and are aimed at sustaining profits rather than sustaining viable commons. To give a concrete example, many Finnish cultural institutes released parts of their digital collections onto Flickr – the image and video hosting website – and often, if the copyrights permitted, on the Flickr Commons. After releasing this open/no-known-copyrights cultural heritage, some institutions<sup>1</sup> realized that third actors were selling

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<sup>1</sup> For example The Society of Swedish Literature in Finland and Gallen-Kallela museum have reported on the public AvoinGLAM Facebook group that the photographs they have released on Flickr could be purchased on stock photo web services Alamy.com.

the released pictures on another Web service, illegally claiming rights to these images. Despite institutions' requests for these pictures to be taken down from online shops, the practice of watermarking and selling photographs continues. Related to this, dilemmas occur when commoning takes place on commercial online platforms. Most of AvoinGLAM's online activities happen on Google services and Facebook, which means that locally created and nurtured cultural commons are subjected to the commercial interests of these corporations. Furthermore, the practices of these corporations create tensions between commoning practices toward open cultural commons and corporations' commodification of culture and citizen engagement (such as by generating use data) (Kitchin, 2016). This creates a dilemma when working to build robust open cultural commons: one of the key design principles – that those who are affected by the rules should be able to participate in modifying them – is thus beyond what commoners can influence, if they choose to use digital collaboration tools. This forces the actors in cultural commons to seek alternative measures for sharing and boundary setting.

Blomley (2014) has argued that commons do not have to be governed through rules, but can be “a moral and political commons, justified and enacted through a *language* of rights and justice” (p.318, my emphasis). People's moral compasses often guide their commoning activities, as described by the concepts of “matters of concern” (Latour, 2004) and “matters of care” (de la Bellacasa, 2011). This concern and care include, as we have seen, activities to circumvent or set aside rules and regulations. In this way, the legal commoning question is also a political and moral question, namely: who has the rights to our common culture? This question cannot only be answered in the abstract but needs to be answered in daily practice, including language practice. In the AvoinGLAM case study, it becomes evident that organizations and commoners need guiding principles and definitions, as well as common commoning language and practices, which they can use to align their current and future activities and negotiate the internal as well as external (legal and commercial) pressures that work toward enclosure.

This paper has interrogated which commoning activities and infrastructuring design principles and practices played a role in creating a movement towards open cultural commons that seems to be sustainable. Based on my analysis of the AvoinGLAM case I propose that in co-design and commoning processes of open cultural commons, we should work through infrastructuring a “commons culture,” rather than mainly through designing legal and regulatory or technology infrastructures (e.g. licensing frameworks, Web hosting services). Building commoning principles, vocabularies and ideals that actors (organizations and individuals) can use to define their identities can be complementary to setting rules that external authorities would respect. As this paper has shown, an infrastructuring design approach that works toward open cultural commons can thus not only build upon the traditional commoning principles of rules-in-use but be extended to encompass culture-in-use.

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